The Elusive Dream of a Nuclear-Free World

Amy F. Woolf

REVIEW OF RICHARD RHODES
The Twilight of the Bombs: Recent Challenges, New Dangers, and the Prospects for a World Without Nuclear Weapons
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In the opening lines of The Twilight of the Bombs, Richard Rhodes notes, “when the ice broke on the river of history in the final years of the Cold War, the world had lived with nuclear weapons for almost half a century.” Rhodes chronicled the early years of this era in his first two books, The Making of the Atomic Bomb (1986) and Dark Sun: The Making of the Hydrogen Bomb (1995). He reported on the latter years of the Cold War and the collapse of the Soviet Union in his third volume, Arsenals of Folly (2007). In each of these books, Rhodes combined detailed technical information about nuclear weapons programs and policies with interviews and insights from the scientists, politicians, and citizens who populated key events of the nuclear age. His approach produced books that not only introduced a complex topic to readers with little knowledge of the weapons or their history, but also added depth and detail to the knowledge of those more familiar with the history of nuclear weapons.

With The Twilight of the Bombs, Rhodes seeks to conclude his four-part history of the nuclear age, covering the years between the first Gulf War in 1991 and the beginning of the Obama administration in 2009.

Amy F. Woolf is a specialist in nuclear weapons policy at the Congressional Research Service. The views expressed here are those of the author, and do not necessarily reflect those of the Library of Congress or the Congressional Research Service.
During the first five years of this post-Cold War era, while the United States and Russia agreed to reduce their nuclear arsenals, “a new wave of nuclear proliferation appeared to be surging through the second and third tier of nations.” But he argues that a focus on the decade’s dangerous trends in proliferation “incorporated only a limited view of post-Cold War challenges and opportunities.” He states that “another perspective revealed [a] realistic opportunity…to move toward drastic reductions in the number of nuclear weapons in the world,” with “the end of the Cold War and its transformative aftermath” making it possible to imagine us “moving to a world free of nuclear weapons.”

Rhodes chronicles a number of episodes and events describing what may be viewed as a path to a world free of nuclear weapons. Many of these demonstrate progress on this path; some display stubborn resistance to a world where nations may reduce their reliance on, and eventually eliminate, their nuclear weapons. Some of the stories, such as the U.S. effort to build a case for war against Iraq in 2002 and 2003, are familiar to both experts and casual observers. Others, such as the story of India’s path to nuclear testing in the late 1990s, are less well-known, even among students of nuclear weapons and nonproliferation policy. Rhodes fills his accounts with insights and details provided by the participants themselves. These accounts add detail and texture to the stories, going beyond the news reports and reminding the reader of the drama that unfolded during these episodes and events.

*The Twilight of the Bombs* is divided into four sections. In the first, he describes Iraq’s pursuit of nuclear weapons in the 1980s, Iraq’s invasion of Kuwait in 1990, and the start of the bombing campaign by the United States and its allies in January 1991. Unlike most histories of the war, however, he focuses on the discovery and bombing of Iraq’s nuclear facilities. He follows this with an in-depth discussion of the dismantlement and inspection regime instituted by the International Atomic Energy Agency (IAEA) and United Nations Special Commission (UNSCOM) after the war. He offers insightful accounts of the bureaucratic politics that affected these organizations. He also adds detail to some relatively well-
known episodes in the post-war process, including the case where UN and IAEA inspectors discovered thousands of documents at an Iraqi facility and were prevented from leaving the parking lot for four days. Readers may remember the CNN interviews with David Kay during this siege; Rhodes’ narrative takes the reader far more deeply inside the story.

The second section opens with an account of the aborted coup in Moscow in August 1991, when hard-line Soviet officials sought to remove President Mikhail Gorbachev from power. The coup failed, but it set into motion a process that would lead to the splintering of the Soviet Union and the creation of four new states—Russia, Ukraine, Belarus, and Kazakhstan—in possession of nuclear weapons. The collapse of the Soviet Union ignited concerns about the loss or theft of Soviet-era nuclear weapons and nuclear materials. Rhodes details how then Senator Sam Nunn of Georgia led efforts in the U.S. Congress to establish programs that would help Russia and the other former Soviet states control and eliminate these weapons and materials. The United States still spends more than USD 1 billion each year on nonproliferation and threat reduction programs, helping to keep nuclear weapons and materials out of the hands of rogue nations and non-state actors.

The third section of the book opens with one final chapter on U.S. threat reduction efforts in the former Soviet Union. It relates how the United States worked to convince each of the non-Russian republics to return the nuclear weapons on their soil to Russia and to join the 1968 Nuclear Non-Proliferation Treaty (NPT) as non-nuclear weapons states. The chapter tells of Operation Sapphire, when the United States secured and removed 581 kilograms of highly enriched uranium from Kazakhstan. The remainder of the third section reviews other episodes in nuclear weapons and nonproliferation history. Some of these incidents—like the 1994 negotiations that convinced North Korea to suspend its nuclear program—were covered in the press at the time, while others—such as the history of South Africa’s nuclear weapons program and its decision to eliminate its small stock of weapons in 1990—are far less well-known, even
among nonproliferation scholars. This chapter also relates the tale of the “flash over the Indian Ocean” in the late 1970s, when satellites detected evidence of a possible nuclear explosion and later analyses revealed that Israel might have tested a nuclear device.

The fourth section returns to Iraq in 2002 and 2003, focusing on the Bush administration’s case for war and the role UN inspectors played in trying to determine whether Iraq had reconstituted its nuclear weapons program. Much of the information in this section is familiar, as this war has been addressed in detail in numerous recent books. Nonetheless, Rhodes reminds his readers of how thin the evidence was for the presence of weapons of mass destruction in Iraq. He specifically notes that the administration’s case on Iraq’s emerging nuclear weapons program was based on two patently false pieces of evidence: the claim that Iraq sought uranium from Niger and the claim that it was importing aluminum tubes for centrifuges to enrich uranium.

The final chapter begins with a brief review of what Rhodes refers to as “the debacle of the George W. Bush years.” Rhodes enumerates several stark reversals on the path towards nuclear nonproliferation and elimination under the Bush administration, including withdrawing from the 1972 Anti-Ballistic Missile (ABM) Treaty, failing to seek ratification of the 1996 Comprehensive Test Ban Treaty (CTBT), and shifting policy toward North Korea, which was followed by that nation’s withdrawal from the NPT and its testing of a nuclear device. This list does not include additional concurrent challenges to nuclear nonproliferation, including the widely recognized failure of the 2005 NPT review conference, the discovery of the A.Q. Khan network that supplied nuclear technology to many nations, and Iran’s continuing uranium enrichment program and possible pursuit of nuclear weapons.

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Despite these setbacks, Rhodes remains optimistic. He notes that the threat of nuclear terrorism and continuing concerns about nuclear proliferation present the world with a “stark choice: eliminate nuclear weapons and secure their fissile explosives or expect them to be used.” He argues that the international community can and should seek to eliminate nuclear weapons. To support his view that pursuers of this goal have
gained momentum in recent years, he quotes a range of sources and opinions, including President Obama’s speech in Prague in April 2009, when he pledged “America’s commitment to seek the peace and security of a world free of nuclear weapons.” He suggests that nuclear abolition is feasible, even if some nations might still seek to acquire nuclear weapons, because, as was demonstrated in many of the stories related in the book, “the world would rise up against cheaters.”

Yet the history of the past decade may not support Rhodes’ conclusion. It is not clear that the United States or the international community are ready to move forward on the path to a world free of nuclear weapons. While the Obama administration has pledged to continue to reduce U.S. nuclear weapons in partnership with Russia, it seems unlikely that it will push for the ratification of the CTBT before the end of its first term; it is also highly unlikely that the Senate would approve that treaty. Moreover, even if the United States and Russia agree to further reductions in their nuclear weapons, it is not clear that France, China, India, Pakistan, or other nuclear weapons states would join the process. Each nation with nuclear weapons has its own security concerns, and most continue to believe that nuclear weapons keep them safe. This calculation may not change until we see significant changes in the international security environment.

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Most nations agree that all are threatened by the possible proliferation of nuclear weapons. But this near-consensus has not solved the problem. North Korea has recently revealed a new uranium enrichment capability, joining Iran on the list of countries with active enrichment programs that can produce fuel for nuclear weapons. Other nations, like Burma and Syria, have shown signs of interest in acquiring nuclear technologies that could, if these nations chose, contribute to the infrastructure needed to develop nuclear weapons. While the international community may yet convince these nations to abandon their nuclear programs, the prospects do not look good at this time.

Although The Twilight of the Bombs documents numerous successes on the path to a world where nuclear weapons play a diminished role in national and international security, it is not clear that this path will even-

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tually lead to a world without nuclear weapons. Support for the goal of a nuclear weapon-free world is by no means universal, and that vision may be receding in many of the nations that actually possess nuclear weapons. The recent challenges might represent an inevitable ebb and flow of progress toward the ultimate goal, or these challenges could indicate that we have reached a plateau. The nations in the international community may work together to contain and reverse some of the most egregious nuclear threats, such as those posed by North Korea and Iran. But these efforts could fail and we might continue to live in a world where some nations have nuclear weapons and a small number of additional nations seek to acquire them.