



Marine Corps University

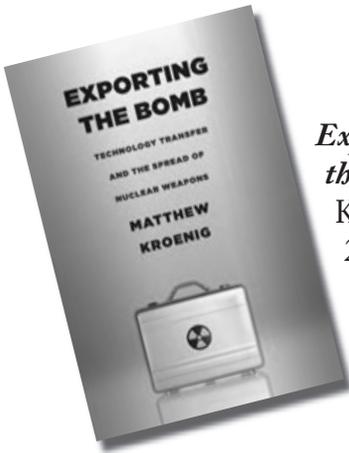
JOURNAL

Volume 3, Number 1

Spring 2012

Marine Corps University Press
3078 Upshur Avenue
Quantico, VA 22134

Book Reviews



Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons. By Matthew Kroenig. (Ithaca, NY: Cornell University Press, 2010. Pp. xii, 233. \$68.50 cloth; \$22.95 paper.)

Why would any state help another gain nuclear weapons? The question is a vexing one. On the whole, both hawks and doves agree that increasing the number of nuclear states, especially in already volatile regions, is not a good idea. Western logic generally dictates that the threat of nuclear warfare is universal, and thus increasing said threat, by increasing the number of nuclear-armed states, is a strategic detriment, not a benefit.

And yet, over the course of the last 50 years, many states have either sanctioned or directly assisted other nations with the development of technology necessary to fabricate nuclear arms (plutonium reprocessing, uranium enrichment, and warhead design). To pick a few salient examples: the Soviet Union (USSR) helped China in the late 1950s; France aided Israel in the early 1960s; Italy assisted Iraq in the late 1970s; China helped both Pakistan and Iran throughout the 1980s; and Pakistan (through the infamous Khan network) aided Iran, North Korea, and Libya through the 1990s and early 2000s. Why?

ALEX WELLERSTEIN is associate historian with the Center for the History of Physics at the American Institute of Physics and a research associate with the Managing the Atom Project, Belfer Center for Science and International Affairs, Harvard Kennedy School of Government. He is currently revising his dissertation, "Knowledge and the Bomb: Nuclear Secrecy in the United States, 1939–2008," for publication.

Matthew Kroenig, a professor of government at Georgetown University who recently served as a special adviser on nonproliferation in the

Office of the Secretary of Defense, grapples with this question directly in *Exporting the Bomb*. Kroenig's theory, which he backs up with pages and pages of empirical calculations, attempts to reframe the strategic assumptions regarding the benefits of proliferation for chronic offenders like France, China, and Pakistan. The argument is, at its core, rooted in an observation that is striking in its simplicity and plausibility: "the spread of nuclear weapons threatens powerful states more than it threatens weak states" (p. 3). It is a strategic argument for why weak states promote the proliferation of nuclear weapons to other weak states: because it destabilizes the hegemony of stronger states.

The argument has a bracing freshness to it in its attempt to generalize a lot of historical proliferation behavior into a predictive model, and in its avoidance of seeing these proliferation activities as the result of bad apples, economic incentives (selling the bomb), or vaguely contingent circumstances. The bulk of the book is taken up with working through the argument, developing an empirical model for it, and discussing how it stacks up against other theories of proliferation when compared both quantitatively, through the use of the model, and qualitatively, through the use of historical case studies.

As a historian with an inherent distrust of using quantitative models to explain political choices, I was most interested in Kroenig's qualitative, historical chapters. His approach seems to work exceptionally well for explaining why Gaullist France aided Israel in the acquisition of the bomb in the 1960s. At least in this case, the archival record appears to bear out the logic of the argument. For France, a nuclear Israel would be an asset, as it would serve to complicate the goals of Egypt, which France saw as a direct security threat because of Egyptian actions in Algeria. Giving Israel the bomb would serve to reorient Middle Eastern politics in a way that would not adversely affect France's interests, even if it did affect the interests of both the United States and the USSR, which lobbied extensively to avoid Israeli proliferation. (The United States only acquiesced to the idea of an Israeli bomb after it was a done deal.)

It is easy to see why power-projecting states like the United States and the USSR thought that proliferation in areas of their interest was not necessarily a positive thing, even if they did, at times, help their allies on the road to the bomb. The USSR assisted China very materially with its nuclear program until the Sino-Soviet split. And though Kroenig does not warrant this as an act of proliferation under his specific definition of "sensitive

nuclear assistance,” the United States essentially accepted that British participation in the Manhattan Project would lead to a bomb for the United Kingdom in the postwar period.

But it is not clear that Kroenig’s argument holds true in every instance of proliferation he surveys. With France, the availability of opened archives makes it much easier to determine who made the relevant decisions and why they made them. The other main case study considered by Kroenig, that of Pakistan and the A. Q. Khan network, is much murkier. While there is much to indicate that very high levels of the Pakistani state were involved to some degree in permitting, if not outright encouraging, Khan’s proliferation activities, it is unclear whether ascribing some sort of strategic logic to the overall activity is the most useful form of analysis. (And with a state as relatively fractured as Pakistan, it is unclear whose strategic logic one ought to be paying the most attention to.) Looking at relative gross domestic products may not reveal the underlying economic motivations in such a situation, for what is a small amount of money for a state may be very enticing for individuals. This sort of nuance is not accommodated for in Kroenig’s model, which tends to abstract states as uniform, consistent entities. Was there a clear strategic logic to the Pakistani proliferation? And whose logic matters the most in such a situation? We cannot know at this point. We may never know for sure. Kroenig’s loose way of getting out of such uncertainties is to argue that his model is “probabilistic,” but it is hard to understand what is meant by that in terms of real-world activity.

These reservations aside, Kroenig’s book is no doubt a valuable contribution to the literature and should be read widely by those interested in the history, present, and future of nuclear proliferation. His argument provides a new approach to the strategic discussions of proliferation that have been raging for some decades now, a way out of the narrow dichotomy of the “more is better” versus “more is worse” debate. American policy makers in particular should take note that appeals to universal dangers may seem like a welcome change to those who would benefit from destabilization of the old order.