

# NUCLEAR REVELATIONS ABOUT THE NUCLEAR REVOLUTION

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**B**rendan Rittenhouse Green has written an important book. *The Revolution that Failed: Nuclear Competition, Arms Control, and the Cold War* raises the curtain of secrecy that has hidden the details of U.S. nuclear policymaking during a dramatic decade in the middle of the Cold War, from 1969 to 1979.<sup>1</sup> Green has discovered a treasure trove of historical data based largely on declassified U.S. government documents. His painstaking analysis demonstrates that the U.S. government never fully accepted that it should, for the sake of “nuclear stability,” forgo counterforce capabilities against the Soviet Union or keep the U.S. civilian population vulnerable to a nuclear attack. Green also demonstrates in a compelling manner that the U.S. government used arms control negotiations to protect military advantages it wanted to maintain against the Soviet Union and to avoid arms racing in areas in which it felt that the United States had domestic political disadvantages.

### **Putting MAD in the Crosshairs**

Green’s first and major target is “the theory of the nuclear revolution” — or what he calls “Pure MAD” (mutually assured destruction) — which, as he puts it, posits that “once nuclear arsenals are sufficiently large and secure against a preemptive attack ... no state can hope to launch a nuclear war without being utterly destroyed in retaliation.”<sup>2</sup> If that is the case, Green asks, why was it the U.S. government’s acquisition policy during this period to invest so heavily in hard-target counterforce capabilities designed to destroy Soviet intercontinental ballistic missiles (ICBMs) and submarine launched ballistic missiles (SLBMs)? Why did the U.S. government craft a nuclear employment policy “aimed at fighting a protracted nuclear war?”<sup>3</sup> And why did the U.S. government pursue an arms control policy aimed at limiting the size and shape of Soviet nuclear forces when MAD would suggest that, once a state has achieved a secure second-strike capability, increases in arsenal size would be pointless? Why did America not just practice unilateral restraint and let the Soviet Union waste resources on redundant, unnecessary

nuclear forces?

Green’s secondary target is what he calls “Parochial MAD,” the theory that while U.S. political leaders may have accepted Pure MAD, U.S. military leaders — imbued with parochial bureaucratic interests in larger arsenals, larger budgets, and creating offensive counterforce doctrines to limit damage in a nuclear war — were able to hijack nuclear policy. Proponents of this theory argue that military leaders, biased by these organizational interests, were able to form alliances with domestic political actors who favored larger arsenals and more advanced ICBMs, submarines, and bombers because of their parochial economic interests. The combined parochial interests of the “military-industrial complex” produced acquisition policy, employment policy, and arms control policy that were more competitive with the Soviet Union than advocates of Pure MAD recommended at the time.

In contrast, Green argues that U.S. political leaders never fully accepted the logic of Pure MAD — that there was a permanent “nuclear stalemate” — and instead, following the influential ideas of Albert Wohlstetter, thought that nuclear weapons created a “delicate balance of terror.”<sup>4</sup> In an independent and impressively detailed technological account of each leg of the nuclear triad (long-range bombers, silo-based ICBMs, and submarine-based SLBMs), Green demonstrates that U.S. leaders had rational reasons to be uncertain about the survivability of these crucial nuclear delivery platforms over time.

Moreover, U.S. leaders feared a second source of instability, which, as Green puts it, manifested itself in the “perceptual delicacy of the Cold War nuclear balance.”<sup>5</sup> U.S. intelligence agencies repeatedly warned that Soviet nuclear doctrine, observed behavior in exercises, and especially Soviet civil defense programs — which produced deep underground shelters for thousands of Soviet party officials — meant that Soviet leaders believed that a nuclear war might be winnable, or at least survivable.<sup>6</sup> He quotes a declassified 1975 National Intelligence Estimate to support this point. The Soviets, the document states, “probably expect their civil defenses to be able to preserve a political and economic cadre and to contribute to the survivability of the Soviet

1 Brendan Rittenhouse Green, *The Revolution that Failed: Nuclear Competition, Arms Control, and the Cold War* (Cambridge: Cambridge University Press, 2020).

2 Green, *The Revolution That Failed*, 1.

3 Green, *The Revolution That Failed*, 3.

4 Green, *The Revolution That Failed*, 28–29; and Albert Wohlstetter, “The Delicate Balance of Terror,” *Foreign Affairs* 37, no. 2 (January 1959): 211–34, <https://www.foreignaffairs.com/articles/1959-01-01/delicate-balance-terror>.

5 Green, *The Revolution That Failed*, 44.

6 On the importance of U.S. leaders’ views of Soviet nuclear doctrine, Green cites my own earlier work. See Green, *The Revolution That Failed*, 30, 45; and Scott D. Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton, NJ: Princeton University Press, 1989).



Union as a national entity.”<sup>7</sup>

In addition, Green argues that the U.S. leadership was also concerned about whether the American democratic political system could effectively compete with the Soviet command economy in an unconstrained arms race. He builds upon the theory of “comparative constitutional fitness,” originally developed by David D’Lugo and Ronald Rogowski in their study of the Anglo-German naval race before World War I, to explain how American political authorities used arms control agreements to restrict the relative size of nuclear arsenals (which they feared the Soviets could excel at) while not restricting qualitative improvements in nuclear delivery technology, such as multiple independently targetable reentry vehicles (MIRVs) or cruise missiles (in which the U.S. had advantages).<sup>8</sup> Green argues that fears about the delicate nuclear balance and a perceived American political inability to compete in a quantitative arms race explain why the United States continued to develop advanced counterforce capabilities and engaged in competitive arms control policies. Contrary to scholars who emphasize the bureaucratic and organizational influences on these outcomes, Green maintains that “the late Cold War nuclear competition occurred because American leaders chose it. They chose it because they thought it served their strategic purposes, not because it was forced on them from below.”<sup>9</sup>

Green writes with verve and humor. He calls Cold War Soviet-American arms control negotiations “the *Seinfeld* of great power politics: a wildly popular show about nothing.”<sup>10</sup> He claims that the United States has a “Houdini-like aptitude for escaping Pure MAD’s predictions” that “place a straitjacket around nuclear competition.”<sup>11</sup> More importantly, he writes with the insight and authority of someone who has read and digested the massive range of relevant documents that have now been declassified. In this light, Green’s book is an important contribution to the literature on the nuclear history subfield that

emphasizes the importance of domestic politics in U.S.-Soviet arms control negotiations.<sup>12</sup> It is also an important contribution to the security studies literature and is an especially helpful complement to the work that has been done on nuclear doctrine, military planning, and deterrence theory that combines sophisticated theorizing with rich empirical study.<sup>13</sup>

### **Three Critiques**

Despite these twin achievements, I see three weaknesses in *The Revolution that Failed*. First, Green’s analysis of U.S. nuclear employment policy overemphasizes the degree to which civilian leaders were in control of the details of nuclear targeting. Political leaders may have made their own nuclear doctrine, but they did not make it just as they pleased. The counterforce doctrine directed by “National Security Decision Memorandum 242” in 1974, which Green analyzes in detail, relied in part on having “withholds” of Soviet national command-and-control targets and major cities to encourage similar restraint on Moscow’s part and to coerce Soviet leaders into ending any limited war without destroying American cities. But, as was later discovered by Gen. Lee Butler and Defense Department official Franklin Miller, the U.S. Strategic Air Command did not implement that directive:

For decades, the military authorities who controlled access to the SIOP (Single Integrated Operational Plan) target base and the protocols employed in its construction thwarted every effort by the OSD (Office of the Secretary of Defense) officials responsible for formulating nuclear weapons targeting policy to gain the insight necessary for overseeing the translation of that policy into the nuclear war plan.<sup>14</sup>

7 Quoted in Green, *The Revolution That Failed*, 165.

8 David D’Lugo and Ronald Rogowski, “The Anglo-German Arms Race and Comparative Constitutional ‘Fitness,’” in *The Domestic Bases of Grand Strategy*, ed. Richard N. Rosecrance and Arthur A. Stein (Ithaca, NY: Cornell University Press, 1993), 65–95.

9 Green, *The Revolution That Failed*, 8.

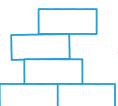
10 Green, *The Revolution That Failed*, 4 (emphasis in original).

11 Green, *The Revolution That Failed*, 26.

12 See, for example, James Cameron, *The Double Game: The Demise of America’s First Missile Defense System and the Rise of Strategic Arms Limitation* (Oxford: Oxford University Press, 2017); and James Cameron, “What History Can Teach,” *Daedalus* 149, no. 2 (Spring 2020): 116–32, [https://doi-org.stanford.idm.oclc.org/10.1162/daed\\_a\\_01793](https://doi-org.stanford.idm.oclc.org/10.1162/daed_a_01793).

13 See, for example, Vipin Narang, *Nuclear Strategy in the Modern Era: Regional Powers and International Conflict* (Princeton, NJ: Princeton University Press, 2014); Nina Tannenwald, *The Nuclear Taboo: The United States and the Nonuse of Nuclear Weapons Since 1945* (New York: Cambridge University Press, 2007); and Lynn Eden, *Whole World on Fire: Organizations, Knowledge, and Nuclear Devastation* (Ithaca, NY: Cornell University Press, 2004).

14 George Lee Butler and Franklin C. Miller, *Uncommon Cause: A Life at Odds with Convention, Vol. 2: The Transformative Years* (Denver, CO: Outskirts Press, 2016), 8.



It was only in the 1980s that Butler and Miller discovered that the Joint Strategic Target Planning Staff, “without informing the Joint Staff or OSD, much less the White House staff ... had decided to define a ‘city’ in such a manner that had the President ordered a strike that included the cities withheld, all of those cities would nevertheless have been obliterated.”<sup>15</sup> In short, the organizational and bureaucratic forces whose influence Green rejects in his critique of “Parochial MAD” had far more behind-the-scenes influence than he acknowledges.

Second, Green’s theoretical framework misses the possibility that some counterforce or “nuclear war-fighting” capabilities might actually enhance operational forms of nuclear stability. Green’s analysis, for example, reveals that U.S. anti-submarine warfare capabilities against Soviet submarines patrolling off U.S. coasts were much more effective than the public or scholars knew in the 1970s or 1980s. But this form of counterforce capability forced the Soviet military to move its submarines back into the “bastions” near the Soviet Union, with the objective of preserving its SLBM second-strike capability. This had the benefit, however, of giving the United States greater warning time of a Soviet SLBM first strike, which provided increased confidence that America could launch strategic bombers on ground alert, as well as command-and control aircraft — including the president’s command post — on warning if necessary. The U.S. command-and-control system was far from perfect, as the history of accidents and near-accidents during the Cold War demonstrates, but U.S. anti-submarine warfare improvements in the 1970s arguably added more stability than Green acknowledges.<sup>16</sup>

My third and final criticism concerns how best to critique the Pure MAD theory. Green focuses on whether the U.S. government followed the prescriptions of such prominent “MADvocates” as Kenneth Waltz, Robert Jervis, and Charles Glaser. But these scholars fully concede that the U.S. government did not follow their advice. MADvocates were promoting a *normative* theory, not a *predictive* theo-

ry. Waltz, for instance, argued that leaders displayed “decades of fuzzy thinking in high places about what deterrence is and how it works.”<sup>17</sup> Jervis, similarly, insisted that “MAD is a fact, not a policy.”<sup>18</sup> And Glaser has consistently maintained that his views about MAD (with respect to both Cold War strategy toward Russia and contemporary strategy toward China) are prescriptive, and not reflective of official Washington thinking.<sup>19</sup>

A better test of MAD theory, therefore, would focus not on whether U.S. government leaders believed in MAD, but rather on whether or not the U.S. pursuit of counterforce capabilities during the Cold War increased the risk of accidental war by creating dangers of mistaken preemption, or what Thomas Schelling famously called “the reciprocal fear of surprise attack” and “the dynamics of mutual alarm.”<sup>20</sup> Given the fortunate fact that there has not been a nuclear war since the use of the atomic bombs against Japan in 1945, scholars will need to be creative. That task will rely in part on counterfactual reasoning, analyzing historical crises, false warning incidents, and close-calls. This approach has already produced a number of debates among scholars who have tried to assess whether nuclear deterrence produced stability or instability during the Cold War, and what effect it has on nuclear rivals today.<sup>21</sup>

Green has set a high standard for how to use declassified documents to test theories and understand government behavior during the Cold War. His insights should also influence future debates about nuclear strategy and deterrence. ●

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15 Butler and Miller, *Uncommon Cause*, 9. On this issue, see also Fred Kaplan, *The Bomb: Presidents, Generals, and the Secret History of Nuclear War* (New York: Simon & Shuster, 2020), 175–97.

16 On accidents, see Scott D. Sagan *The Limits of Safety: Organizations, Accidents, and Nuclear Weapons* (Princeton, NJ: Princeton University Press, 1993).

17 Kenneth N. Waltz, “Nuclear Myths and Political Realities,” *American Political Science Review* 84, no. 3 (September 1990): 731, [https://www.jstor.org/stable/1962764?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/1962764?seq=1#metadata_info_tab_contents).

18 Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospects of Armageddon* (Ithaca, NY: Cornell University Press, 1989), 74.

19 Charles L. Glaser and Steve Fetter, “Should the United States Reject MAD? Damage Limitation and U.S. Nuclear Strategy Toward China,” *International Security* 41, no. 1 (Summer 2016): 49–98.

20 Thomas C. Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), 207; and Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), 221.

21 See, for example, Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (New York: W.W. Norton, 2012); Sumit Ganguly and S. Paul Kapur, *India, Pakistan and the Bomb: Debating Nuclear Stability in South Asia* (New York: Columbia University Press, 2010); and Victor D. Cha and David C. Kang, *Nuclear North Korea: A Debate on Engagement Strategies* (New York: Columbia University Press, 2018).

