

Introduction

A Revolution, or What?

What is the relationship between nuclear weapons and political outcomes in international relations? Over the course of Cold War policy and scholarly debates, a powerful strain of thinking emerged on this question. This body of thought culminated in the 1980s as the “theory of the nuclear revolution,” often referred to as Mutually Assured Destruction (MAD), and it soon became the dominant theory of nuclear politics. Once nuclear arsenals are sufficiently large and secure against preemptive attack, the theory argues, no state can hope to launch a nuclear war without being utterly destroyed in retaliation – the condition of MAD.

MAD drains all of the competition out of the international system. With victory on the battlefield impossible, the military balance is stalemated: states can no longer be stronger than one another, or exploit their relative strength in international bargaining. Further nuclear capabilities are therefore useless, and the military incentives for arms races and wars disappear. Likewise, because the defender of the status quo holds the advantage in the balance of resolve, challenges to the international order are destined to fail and will not be launched. Peace should prevail between nuclear powers, the status quo should be entrenched, and the traditional motors of great power rivalry should run out of gas.

In short, MAD argues that the relationship between nuclear weapons and politics is stabilizing. Nuclear stalemate incentivizes force postures characterized by *military stability*, where no state has any incentive to attack during a crisis or build up its nuclear forces in peacetime. And this military stability produces diplomatic strategies characterized by *political stability*, where no state will risk war, crisis, or a challenge to the status quo.

The theory of the nuclear revolution gains its overwhelming popularity in part from the stability of international politics after 1945. There have been

no nuclear wars since Nagasaki, only two conventional wars between nuclear armed states, and just a handful of nuclear crises. But while the decline in violence and political confrontation among nuclear states can be interpreted as powerful support for MAD, it is also consistent with explanations based in bipolarity, unipolarity, economic interdependence, and other large-scale international trends, making the prediction of peace difficult to evaluate.

A large part of MAD's theoretical reputation, therefore, stems from its elegant, parsimonious, and logical structure. Its few assumptions are eminently plausible and easy to understand, the sorts of weighty considerations that policymakers can be expected to grasp quickly and feel forcefully in their bones. These core concepts, especially the idea of nuclear stalemate, act as a logical straightjacket: they tightly constrain the types of nuclear policy choices it makes any sense to make, and therefore correspondingly limit the sorts of political outcomes we should expect to see. The nuclear revolution's logic would appear to brook no argument, at least not among rational men and women.

Another source of the general approval for MAD is what seemed to be the empirically obvious character of nuclear stalemate. It was hard to look at the enormous size of Cold War arsenals and imagine a nuclear war that didn't end with a global orgy of fire and death. No matter what clever plans were devised for fighting a limited nuclear war effectively, further escalation would always be possible, making the risks that things would spin out of control high enough to induce extreme caution. Nuclear stalemate appears as a kind of brute fact, one that produces a nearly irresistible force locking rational states into stable force postures.

However, there is one obvious problem with MAD: the Cold War superpowers don't appear to have believed it. The nuclear competition during the second half of the Cold War poses a massive anomaly for the theory, one that is particularly evident on the American side. Instead of pursuing the stable policies predicted by MAD, Washington consistently chose nuclear force postures characterized by *military competition*, which seek to gain military advantages over rivals that could be converted into bargaining leverage in a crisis or time of peace. And while the Cold War blessedly ended without real political instability – a major war, crisis, or challenge to the status quo – its final decades were characterized by acute political competition, as détente collapsed into a renewed diplomatic confrontation that saw both sides making demands for changes in their rival's behavior.

Bizarrely, all this occurred despite long-running arms control negotiations. The Strategic Arms Limitation Talks (SALT) were a notionally cooperative endeavor of high political prominence. Internationally, they formed the cornerstone of US-Soviet détente during the decade of the 1970s, and were advertised as the key to turning the page on the old superpower relationship of mistrust and competition. Domestically, SALT was fiercely controversial in

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America: elements of the right regarded it as little better than surrender to communist power, while elements of the left saw it as little less than the key to preventing world destruction. The reality did not match the hype. The talks periodically produced new agreements, but with little apparent effect on the ongoing competition.

These puzzling outcomes deserve attention. American military behavior during the second half of the Cold War was wildly more competitive than MAD expects across every element of its nuclear force posture. In its *acquisition policy*, America invested heavily in nuclear systems intended to provide military advantages that MAD supposes to be impossible. For instance, Washington sought hard-target counterforce capabilities suitable for destroying large parts of the Soviet nuclear arsenal. Periodically, it also made efforts to acquire missile and civil defenses aimed at protecting the American population from nuclear attack. Counterforce and population defense are the only routes for a state to limit damage to its society in an all-out nuclear war. But MAD argues that, in a world of nuclear stalemate, this is a quixotic goal. So why did Washington apparently pursue it, with remarkable consistency over two decades?

Moreover, American policymakers also pursued a competitive *employment policy*, crafting nuclear doctrine aimed at fighting a protracted nuclear war. They sought to maintain centralized command, control, and communications (C³) for protracted nuclear operations, as well as intelligence, surveillance, and reconnaissance (ISR) assets that would allow them to monitor and plan follow-up strikes in real time. These nuclear strikes were to be integrated with conventional operations to maximize their battlefield results; policymakers also called for the enemy's nuclear forces and C³ apparatus to be targeted, in order to make the adversary less effective at its own battlefield strikes. In sum, the United States increasingly planned for a long nuclear-conventional war fought according to traditional military standards for victory. To MAD, such an objective is deeply misguided, since the battlefield results cannot eliminate the adversary's ability to cause intolerable destruction. Yet Washington acted otherwise.

Last, from the nuclear revolution's point of view, American *arms control policy* during this period is also peculiar. According to MAD, American policymakers may not have had much incentive to pursue arms control, as its financial benefits can be obtained through unilateral restraint. But any arms control accords they did aim at should have been easy to obtain, and if desired, far-reaching in scope and character. Achieving military stability through negotiations should be a cinch: American leaders had nothing to lose and large financial gains in prospect from avoiding wasteful nuclear spending. Yet, with the possible exception of the Anti-Ballistic Missile (ABM) treaty, a decade of intense SALT negotiations achieved little more than force caps at very high numbers. What is more, the effort and political prominence of SALT seems belied by the fierce nuclear competition

occurring simultaneously. MAD has no explanation for why Cold War arms control became the *Seinfeld* of great power politics: a wildly popular show about nothing.

To be fair, the failure of MAD to explain American nuclear force posture during the Cold War did not escape the notice of the theory's advocates, for whom the theory's logic was first and foremost a means of critiquing, rather than explaining, American nuclear policy. When they sought to address the issue, theorists of MAD relied upon a number of hypotheses to explain the anomaly, which might be loosely grouped together under the rubric of "domestic politics." In essence, they held that military organizations and hawkish political factions have often been able to wrest control of American nuclear policy. These domestic forces from below override the national interest in a stable nuclear force posture – which is perceived by executive branch leaders cognizant of MAD – in favor of competitive policies that serve their own parochial interests in organizational autonomy, material wealth, or ideological gain. These domestic political hypotheses all had an ancient and honorable pedigree in explaining other national security phenomena, but were often applied in a post hoc way. Moreover, they were seldom rigorously laid out or fully investigated.

A great deal turns on how the anomaly of America's late Cold War nuclear policy is to be explained. The stabilizing logic of the nuclear revolution now permeates a wide swath of international relations scholarship, across a number of different questions and research programs. If the logic of the nuclear revolution turns out to require revision, the implications of that fact could ripple throughout a number of literatures and scholarly communities.

For instance, Nuno Monteiro's important theory of unipolarity makes MAD an anchor concept, using the possession of secure second-strike nuclear forces to distinguish between different types of states and to explain the durability and stability of a hegemonic power distribution.¹ The whole idea of the offense-defense balance stems from the example of secure nuclear arsenals, held to be the ultimate defensive weapon.² Nuclear weapons play an important role in Andrew Kydd's formal models of the security dilemma, helping to explain variation in trust, mistrust, and cooperation between states during the Cold War.³

¹ "Major powers already have, in a nuclear world, guaranteed survival for the foreseeable future." Moreover, "The nuclear revolution is a condition of possibility of a durable unipolar world," without which "a unipolar world would quickly disappear." Nuno P. Monteiro, *Theory of Unipolar Politics* (New York: Cambridge University Press, 2014), 101, 50.

² "Nuclear weapons created a revolution for defensive advantage." Charles L. Glaser, *Rational Theory of International Politics: The Logic of Competition and Cooperation* (Princeton, NJ: Princeton University Press, 2010), 258.

³ "When each side has many nuclear weapons that can survive a first strike ... even states with substantial revisionist goals will effectively be security seekers." Andrew H. Kydd,

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The nuclear revolution also does heavy lifting in areas beyond structural theories of the international system. Stephen Brooks and William Wohlforth use its logic to demonstrate the importance of prestige as a motor force for competitive behavior among states, even amid the dangers of nuclear escalation and despite the assured security of nuclear plenty.⁴ Dale Copeland invokes the nuclear revolution to frame the importance of research on economic interdependence as a source of conflict.⁵ MAD also looms large in John Ikenberry's theory of international institutions, eliminating classic security threats and locking in the extant institutional order.⁶

Finally, the nuclear revolution is often invoked by competing interpretations of the past and prescriptions for future policy. The debate over the end of the Cold War continues to rage, but realist⁷, liberal⁸, and second-image reversed⁹ arguments all agree that MAD's transformational logic was fundamental to the Soviet Union's shift in foreign policy. Some interpreters of the disasters of 1914

Trust and Mistrust in International Relations (Princeton, NJ: Princeton University Press, 2007), 33–34.

⁴ “With the acquisition of secure second-strike capabilities by the 1960s ... the nuclear argument for insecurity could be turned on its head into a powerful argument for ultimate security.” Stephen G. Brooks and William C. Wohlforth, *World Out of Balance: International Relations and the Challenge of American Primacy* (Princeton, NJ: Princeton University Press, 2008), 54.

⁵ “In the nuclear age, competition over resources and markets offers one of the few ways rational great powers might be drawn into militarized struggles that could escalate to war.” Dale C. Copeland, “Rationalist Theories of International Politics and the Problem of the Future,” *Security Studies* 20, no. 3 (July 1, 2011): 447.

⁶ “The presence of nuclear weapons ... alters the logic of balance.” States with “a nuclear deterrent ... do not need to worry about war and domination by the leading state ... Deterrence replaces alliance counterbalancing.” Furthermore, nuclear weapons mean that “The status quo international order led by the United States is rendered less easily replaced. War-driven change is removed as a historical process.” G. John Ikenberry, *Liberal Leviathan: The Origins, Crisis, and Transformation of the American World Order* (Princeton, NJ: Princeton University Press, 2011), 130.

⁷ In addition to material factors like the globalization of production and Soviet economic decline, “Nuclear weapons are also clearly important” for the change in Soviet grand strategy, as they “provide[d] a margin of safety that made adopting retrenchment at this time easier for many [in Moscow] to swallow.” Stephen G. Brooks and William C. Wohlforth, “Power, Globalization, and the End of the Cold War: Reevaluating a Landmark Case for Ideas,” *International Security* 25, no. 3 (2000): 13, n. 22.

⁸ “Nuclear weapons ... played a powerful pushing and pulling role in the Soviet Union's external environment. Nuclear weapons posed a largely new set of constraints and opportunities with far-reaching implications for the perennial search for security.” Daniel Deudney and G. John Ikenberry, “Pushing and Pulling: The Western System, Nuclear Weapons and Soviet Change,” *International Politics* 48, no. 4–5 (September 2011): 500.

⁹ “A relatively peaceful nuclearized environment fostered liberalization and decentralization within the Soviet Union and the Soviet bloc.” Kenneth A. Oye, “Explaining the End of the Cold War: Morphological and Behavioral Adaptations to the Nuclear Peace?,” in *International Relations Theory and the End of the Cold War*, ed. Richard Ned Lebow and Thomas Risse-Kappen (New York: Columbia University Press, 1995), 59.

are quick to caution that the existence of nuclear weapons must narrow our search for lessons.¹⁰ Likewise, advocates of restraint¹¹, selective engagement¹², and primacy¹³ propose very different grand strategies, but rest their arguments on a common premise: MAD radically changes our expectations for future international politics and the threats and opportunities it will present to the United States.

Similarly, it matters a great deal for the future of world politics and American public policy what kind of logic produced the extraordinary nuclear competition in the second half of the Cold War. If MAD plus its domestic adjunct theory explain these developments, then we can expect a fairly quiescent trajectory for international relations, with nuclear weapons stabilizing politics between global and regional powers at the highest level. However, there would also be cause for extreme vigilance with regard to the United States' forthcoming nuclear modernization. With a price tag that could exceed a trillion dollars over a multi-decade time frame, vested military interests behind it, a coalition of congressional supporters, and vocal ideological cheerleading in both parties, the anticipated modernization bears an eerie resemblance to the one that transformed world politics in the 1970s. Substantial restraints will need to be placed on it if we are to avoid a similar fate.

In contrast, if there were strategic rationales behind the late Cold War nuclear competition, then the future of international relations may be substantially more competitive. The intensifying diplomatic friction between China and the United States may give rise to nuclear competition. So, too, may the renewed confrontation between Moscow and Washington come to take on a nuclear dimension. In Asia, Pakistan and India may have to navigate a thicket of competitive incentives as new technology threatens arsenals of relatively modest size. At the same time, the strategic rationale behind nuclear modernization would be much stronger, and some improvements in nuclear technology could represent the best way to navigate a challenging international environment.

¹⁰ "Nuclear weapons significantly change the equation, rendering many of the concerns faced by powers in the lead-up to World War I moot." Ja Ian Chong and Todd H. Hall, "The Lessons of 1914 for East Asia Today: Missing the Trees for the Forest," *International Security* 39, no. 1 (2014): 15.

¹¹ "Nuclear weapons assure great power sovereignty – and certainly America's defense." Eugene Gholz, Daryl G. Press, and Harvey M. Sapolsky, "Come Home, America: The Strategy of Restraint in the Face of Temptation," *International Security* 21, no. 4 (Spring 1997): 6.

¹² "If the American-Soviet experience of the Cold War is a reliable guide, then surely nuclear deterrence is a powerful pacifier . . . Despite this argument, the United States should remain in Eurasia." Robert J. Art, *A Grand Strategy for America* (Ithaca, NY: Cornell University Press, 2003), 210.

¹³ Brooks, Wohlforth, and Ikenberry argue that "If wars of territorial conquest were the only security problem that mattered, then nuclear weapons would indeed have the wondrous qualities . . . and the optimistic conclusions . . . [that other strategies draw from them] would be valid." They prefer the name "Deep Engagement" to Primacy. Campbell Craig et al., "Debating American Engagement: The Future of U.S. Grand Strategy," *International Security* 38, no. 2 (2013): 194.

The gaping discrepancy between MAD's predictions of stability and the reality of competitive outcomes – in what is surely the most important historical case of nuclear rivalry – cries out for explanation, and thus for a concomitant reexamination of the nuclear revolution. This book aims to meet that challenge. This introduction has framed the puzzle and given some key definitions.

Next, in Chapter 1, I confront the nuclear revolution on its own terms: as a theory most concerned with positing what rational nuclear behavior looks like, and only secondarily interested in explaining the actual nuclear policies of states. I argue that MAD's austere and powerful logic actually ignores important implications of its assumptions, blurring the theory's predictions of military and political stability.

Even more importantly, as I explain in Chapter 2, MAD's concept of nuclear stalemate is empirically flawed as applied to the second half of the Cold War. The Cold War nuclear balance was *delicate*: stalemate was less entrenched, with more potential to be misunderstood, than MAD would allow. The implication of these arguments is that the nuclear revolution, properly understood, predicts at least some amount of nuclear competition between the Cold War superpowers.

In Chapter 3 I offer a new theory to explain the intensity and type of competition we ought to expect. In the abstract, a delicate nuclear balance could be consistent with either modest or severe competition, and arms control might serve to manage uncertainties about nuclear stalemate more cheaply than arms racing. I contend that policymakers' assessments of their state's *comparative constitutional fitness* – its internal constraints on arms racing and arms control, relative to the adversary – will shape their mix of cooperative and competitive policies, and the type of nuclear policies they are likely to pursue.

Chapter 4 offers a research design for investigating the competing hypotheses, turning MAD, its domestic political adjunct, and my own theory into testable predictions. It also provides capsule summaries of Chapters 5–8, which themselves evaluate these predictions against evidence from American nuclear force posture during the most pivotal years of the late Cold War nuclear competition: 1969–1979.

The upshot of this exercise is that the common wisdom surrounding the theory of the nuclear revolution is almost exactly backwards. MAD is generally held to be a logically powerful theory that perhaps suffers from occasional empirical difficulties. But in fact, the theory's logical structure contains imperfections that complicate its easy predictions of stable military policy and pacified diplomacy. The case for nuclear stalemate is usually regarded as incontestably obvious, especially in a Cold War setting with thousands of weapons on each side. But in fact, even during the Cold War, the political impact of nuclear stalemate depended on technological and perceptual uncertainties that made the nuclear balance more delicate, and its meaning more fluid, than MAD admits.

Moreover, in the analysis of nuclear policy, domestic interests are ordinarily invoked to provide an account of how pathological forces overwhelmed the national interest as perceived by statesmen. In truth, though, comparative constitutional fitness concerns illustrate that domestic politics can often serve as a source of nuclear restraint, rather than as a competitive accelerant. Above all, the book shows 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.