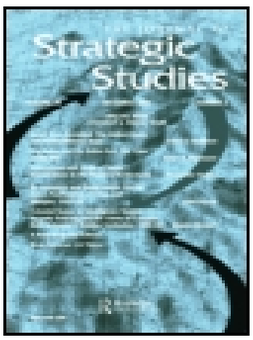

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The myth of the nuclear revolution: Power politics in the atomic age

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BOOK REVIEW

The myth of the nuclear revolution: Power politics in the atomic age, by Keir A. Lieber and Daryl G. Press, Cornell University Press, Ithaca, 2020, $29.95 (hardcover), 1-169 pp. i-viii, ISBN 978-1-5017-4929-2

In Memoriam: Nuno P. Monteiro

There are two ways to think of the nuclear revolution. One of them is the simple destructiveness of a general war fought with ballistic missiles and thermonuclear weapons. No one has put this better than Daniel Deudney:

> In an age when the term "revolution" is used indiscriminately, few have hesitated to use such language with full seriousness to describe the impact of nuclear weapons upon the state-centered world security order. This sense of the revolutionary stems from certain awesome facts that are beyond controversy: nuclear science and technology have given us the capability to wreak violence at an unprecedented scale and speed. To find historical analogies for a full-scale nuclear war one must look to great cataclysms like the Fall of Rome, the Mongol Invasions, the Black Plague, the European Invasion of the Americas, and the world wars and imagine several of them occurring at once and greatly compressed in time, perhaps into a single afternoon.[1]

A general nuclear war, fought in the all-out manner of other major wars like World War Two, would not only wreak this kind of destruction in days, if not hours; it could also eradicate human civilisation forever and possibly even kill every human being and most other forms of life on the planet. It hard to see how anyone could deny that this constitutes a revolution, and the authors of the book under review here, Keir Lieber and Daryl Press, do not try to do that.

It is the second way of thinking about the nuclear revolution that comprises the real debate, and this is how it has shaped the practice of international politics. Earlier theorists, most notably Robert Jervis, argued that the prospect of nuclear omnicide would discourage the world's states, and especially those in possession of nuclear arsenals, from competing with one another intensively. They would avoid serious security competition and war: international politics at the great-power level would settle into a condition of stability and peace.

This claim has led many scholars interested in this second way of thinking to question how 'revolutionary' the nuclear revolution actually has been. During the late Cold War, as Brendan Rittenhouse Green has clearly demonstrated in a recent book, the United States abandoned the policy of Mutual Assured Destruction (MAD) and sought nuclear superiority over the USSR, apparently a plain disconfirmation of

[1]Daniel Deudney, 'Nuclear Weapons and the Waning of the *Real*-State', *Daedalus* 124 (Spring 1995), 210.

Jervis's theory.[2] And in the post-Cold War era, as the present authors under review argue, the U.S. is pursuing new counterforce and defence systems with the evident aim of achieving war-winning capability against nuclear rivals, such as Russia and China. If the nuclear revolution has so radically transformed international politics, these scholars insist, why have nuclear powers, and especially the United States, continued to engage in intense security competition with their rivals and sought to deploy war-winning nuclear arsenals?

It is an exceedingly important question. In *The Myth of the Nuclear Revolution*, Lieber and Press develop a careful answer. Operating from the structural realist assumption that states face a world of constant danger and security competition with their major rivals, they make two overarching claims. The first is that the development of nuclear missiles and thermonuclear bombs during the Cold War did not completely transform international politics. To be sure, nuclear weapons make deterrence far easier to achieve and the prospect of general war far more grim, but the world has not changed as radically as proponents of the nuclear revolution claim. The second, as we have already noted, is that in the post-Cold War era new military technologies may soon enable states, namely the US, to wage nuclear war without initiating a global apocalypse, either by using very small nuclear weapons in a minor war, or by launching a counterforce attack against a larger rival that would eliminate its ability to retaliate. We should note at the outset that we do not intend to dispute the book's technical claims that the US may be on the verge of developing such war-winning military capabilities, and therefore will not be engaging with some of the book (parts of chapters 3–4) in any detail. For the purposes of our argument, we concede this point. Rather, we will deal with the book's two larger, if sometimes implicit, claims: that the nuclear revolution has not transformed international politics; and that for the first time, the United States can and should reject nuclear stalemate and seek the ability to wage a winning nuclear war.

(1) The Myth of the Nuclear Revolution?

In the first part of their book, Lieber and Press make several points that seek to show that international politics under the spectre of nuclear war is not all that different from pre-nuclear eras. We have chosen three that are clearly contestable, and will deal with each in turn.

The first point deals with problem of annihilation. As everyone agrees, a nuclear war threatens not simply to deliver defeat to an attacked nation but to eradicate it completely. While this might be debatable with respect to continental-size nations like the US, Russia, or Canada, it is not when it comes to compact countries like Japan, Great Britain, or the Czech Republic. The British Prime Minister Harold Macmillan told President Eisenhower at the height of the Berlin Ultimatum crisis in 1959 that 'eight bombs' would put an end to the United Kingdom, and it is likely that in the event of a general war the Soviet Union would

[2]See Green, *The Revolution that Failed: Nuclear Competition, Arms Control, and the Cold War* (Cambridge University Press, 2020)

have targeted Britain with many times that number. Such an attack would have killed just about everyone in that country and destroyed its political and economic institutions beyond repair. Is this not a revolutionary development?

Lieber and Press maintain that is not: nations at war have been annihilated before. It was a common practice in the classical world, most notoriously at Melos and Carthage; during the Second World War the allies bombed Germany and Japan into submission, and the Soviet Union ravaged its sector of Germany and other states during the war's last days. 'Yet the possibility of suffering such serious losses,' Lieber and Press state, 'did not deter the combatants from going to war' (p. 13).

This is not a convincing argument. On one hand, the sacking of city-states of Carthage and Melos was a *political* decision, made by leaders intent on punishing their adversaries; other defeated states during the Greek and Roman empires suffered far less, and had the leaders of these two city-states known for sure what was coming they might have made different decisions. On the other, while it is true that (west) Germany and Japan were viciously attacked by their enemies during World War Two, it is equally true that they were hardly annihilated and indeed prospering not long after 1945. That would not have been the case with Great Britain after a general nuclear attack.

There is a larger point. The difference between annihilation in the pre-nuclear era and nuclear annihilation today is that the latter is a function of the weaponry itself. Rome's brutalisation of Carthage was not about the weaponry the Romans deployed but their determination to eradicate a recalcitrant enemy. The situation could not be more different in a putative nuclear war. Had the United States and the Soviet Union gone to a general nuclear war, they would have destroyed not simply one another but allied states, like Poland or Italy, without necessarily having any interest whatsoever in punishing these, or indeed any nation's, populations. It would be nothing other than an unavoidable consequence of a large-scale nuclear war. This is a revolutionary development that distinguishes the nuclear era from previous ones.

A second point is one often used by nuclear revolution sceptics, from many different sides of the debate: that nuclear states have been attacked before. If Egypt and Syria were so afraid of nuclear retaliation, why did they attack Israel? Argentina sought to take the Falkland Islands from Great Britain, another nuclear power. In late 1950, China entered the Korean War: its main adversary was the United States. This demonstrates, Lieber and Press maintain, that the fear of nuclear attack is not as powerful as revolution advocates claim.

This argument, made too often, simply does not speak to the relevant claim made by nuclear revolution advocates: that nuclear powers will not wage major war upon one another, for fear of unleashing a conflagration that would kill not only themselves but trigger the kind of apocalypse described by Deudney. Since the beginning of modern international history, large powers have repeatedly attacked others with the aim of defeating and conquering them. This happened twice in the space of 30 years during the early twentieth century, but has not happened, or even come very close to happening, since then. If the fear of nuclear war explains this, as Lieber and Press seem to acknowledge (p. 18), it also surely constitutes a revolutionary development in international politics.

The final point is perhaps the most important one. This is the assertion that the pursuit of arms-racing and nuclear superiority by major powers, though again primarily the United States, demonstrates in itself the fallacy of the nuclear revolution. Lieber and Press make their case clearly:

> We are seventy-five years into the nuclear era, and nuclear-armed states are still competing as if they lived in a pre-nuclear world. Could it really be that leaders are *still* misperceiving the core strategic factors that allegedly define the nuclear age (p. 5, italics in original)?

This argument, echoing that made by Green and others, assumes that when states make important decisions, like building lots of nuclear weapons, and they do so consistently over years, it must be rational and strategic. There are two crucial problems with this assertion. On one hand, in referring to 'nuclear-armed states' it does not distinguish between military planners and political decision-makers. The U.S. military developed plans to win nuclear war throughout the Cold War. Yet when the possibility of actual war loomed, for example during the Berlin and Cuban crises, the United States made major concessions to the USSR in order to avoid war, despite its massive nuclear superiority at that time. After Cuba, American and Soviet leaders steered clear of direct showdowns for the rest of the Cold War. They did so because they lived in a nuclear world.[3] If 'states' mean military bureaucracies, and not their political leaders, then perhaps Lieber and Press's claim may be true. But that is an odd way to define a state.

On the other hand, the very claim that any policy adhered to over decades must be strategic is also debatable. The United States refused to recognise communist China for thirty years, and there was no shortage of supporters of this policy who defended it upon strategic grounds. Then it abandoned that policy, and the isolation of China is now seen by most historians as a mistake driven primarily by domestic politics. For roughly twenty years, the US regarded the survival of South Vietnam as a core national security interest, and it fought a ground war for a decade to pursue this goal. American leaders repeatedly argued throughout this period that staying in Vietnam was strategically rational and important. Then the US abandoned South Vietnam, and the war is widely seen today as an irrational disaster.

These examples, and others that could be mentioned,[4] show that it is entirely plausible that a state might pursue a particular policy, even for a long time, for reasons that turn out to be not strategic and rational. As Dwight D. Eisenhower suggested sixty years ago, this is particularly likely to occur when the policy relates to basic issues of national security, and when it at the same time provides employment, wealth, and influence to powerful leaders and constituencies.[5] We are not claiming here that the US decision to engage in nuclear security competition during the late Cold War or in the contemporary era *must* be attributed to the

[3]As John Mearsheimer recently put it, there was no nuclear war during the Cold War 'because nobody in his or her right mind, would start a war given the possibility of nuclear Armageddon.' Interview in *The Asahi Shimbun* 17 August 2020, at http://www.asahi.com/ajw/articles/13629071.

[4]For another argument along these lines, see John J. Mearsheimer and Stephen Walt, *The Israel Lobby and U.S. Foreign Policy* (Norton, 2007).

[5]On the connections between the military-industrial complex and US nuclear policy, see Stephen Walt, 'It's Time to Fold America's Nuclear Umbrella,' *Foreign Policy online*, 23 March 2021.

military-industrial complex, and cannot have been driven by genuine strategic reasons. This is a very difficult argument to prove. Rather, we contend that the Lieber and Press claim that consistent behaviour over the years demonstrates, *eo ipso*, strategic rationality is clearly disproven by many counter-examples and appears to rule out by assertion other explanations. It runs the risk of tautology.

The Defensive Realist Stability, and Offensive Realist Instability, of MAD

On their way to demonstrating the myth of nuclear revolution, Lieber and Press investigate 'how much is enough' to preserve stalemate among nuclear-armed states. This they present as a technical question with multiple parts. How many weapons with what specifications must survive a first strike in order to guarantee devastating retaliation? How survivable are the nation's second-strike weapons? What degree of survivability is sufficient to deter others' aggression?

The authors treat this question of how the quantity and quality of nuclear fire power affects strategic stability as a technical question with two extremes: 'even small, potentially vulnerable arsenals are enough,' or 'nuclear-armed countries [must] build truly survivable arsenals' grounding 'assured retaliation' (32). They deviate from earlier studies by analysing the impact of Soviet arms build up on US strategy, rather than vice versa. Furthermore, they assess the efficacy of deterrence under conditions of peace and war.

They identify four US theories of deterrence: existential deterrence, minimum deterrence, assured retaliation, and assured destruction. They then provide a chronology of the development of US strategic postures: 1945–1949, US nuclear monopoly; 1950–1955, Soviet existential deterrent; 1956–1960, Soviet minimum deterrent; 1962–1964, Soviet assured retaliation; 1965–1990, mutual assured destruction. Lieber and Press argue that despite appearances to the contrary, including the fallacious 'Missile Gap' alarmism of the late 1950s, that US defence analysts 'had accurate intelligence assessments of existing Soviet strategic forces' (49).

The implication here is that it is strictly a technical question of 'how much is enough.' It is not a question of policy choice, for example between whether defensive realism (Robert Jervis) or offensive realism (John Mearsheimer) provides a more efficacious security posture. Lieber and Press assume that US strategic intelligence is complete, and that defence officials' response to that intelligence is fully rational. They hold that assured retaliation and assured destruction will both result in competitive security politics. In the first case nations vie to achieve assured retaliatory capability, and to deny it to others. In the second case, security competition is intense because states will seek damage limitation capabilities as well as greater offensive capability.

Lieber and Press argue that during the early Cold War, the US planned an overwhelming preemptive strike on the Soviet Union were they to threaten attack (57–58). With increasing nuclear parity between the two countries, the US had to settle for assured retaliation in the 1960s. The US realized threats of initiating general nuclear war were incredible because they were suicidal. Therefore the US

explored limited nuclear options to be integrated into a flexible response and graduated war plan (53). Even in the 1960s, US leaders upheld the goal of winning a war against the Soviets through a 'rapid nuclear disarming strike' (63). Counterforce weapons were developed to challenge the Soviets' assured retaliatory power.

Satisfied that the US strategic response to the Soviets throughout the Cold War demonstrates the instability of mutual deterrence via assured retaliation or destruction, the authors move on to argue that security competition in this dynamic, and unstable, equilibrium can be reversed. As a step to making this argument they conclude there were defence pessimists who endorse a strategic stance consistent with offensive realism. These pessimists take two actions which Lieber and Press deem rational: they endorse limited nuclear options to introduce into conventional conflict; and they back this flexible response approach with 'substantial nuclear capabilities' to achieve escalation dominance (96, 104). Here they accurately discuss the US persistent rejection of mutual assured destruction in favor of striving to achieve strategic dominance. Yet they refer to the Cold War years 1965–1990 as characterized by MAD (48). This is a curious, and telling, assertion. The authors have argued that despite the existential condition of mutual assured destruction, US defence pessimists, who controlled nuclear policy by 1980, in fact treated nuclear war as winnable and developed weapons capability and a strategic posture to support their aim.

Lieber and Press position themselves as neutral social scientists analysing the US response to USSR nuclear weapons development to conclude that the nuclear revolution is a myth. Intense security competition throughout the Cold War, they argue, proves nuclear weapons do not offer nations the promise of stable security, even given their acquisition of a secure second-strike capability. Their evidence is the US response to Soviet military innovations. Although they acknowledge the United States turn to flexible response and limited nuclear options, they fail to recognize or discuss the fifth nuclear strategy of preparing to fight and win a nuclear war (p. 140, fn 4). Thus they fail to recount the intense nuclear security debate within the US between proponents of assured retaliation, and advocates of the war fighting school advocated by Albert Wohlstetter, Herman Kahn, Colin Gray, and James R. Schlesinger during the last three decades of the Cold War. Perceptions about the precarity of MAD supported concrete bureaucratic steps to shift the US strategic posture away from accepting the stalemate imposed by assured destruction. James Schlesinger, Secretary of Defence under Richard Nixon, was a chief architect of the war fighting stance. He played a fundamental role in shifting Jimmy Carter's erstwhile support of the MAD doctrine to that of the offensive countervailing posture with the Commander in Chief's signature on Presidential Directive 59 in 1980.

This historical evidence, which Lieber and Press interestingly do not mention, complicates their straightforward account that intense security competition underneath mutual retaliatory capability refutes the concept of nuclear revolution. This is not only because the US decision to pursue a countervailing strategy in the 1970s belies their claim that the period 1965–90 was defined by mutual assured destruction. Even more important is the fact that this new strategy was

not advocated as a response to new Soviet technological and military capabilities, but rather was a policy choice based upon political factors unrelated to the nuclear balance. This undermines the authors' claim that the United States declined to overturn MAD during the Cold War because of technological limitations and the size of the Soviet arsenal.[6]

In the end, their assessment of US nuclear policy during the Cold War is unclear. Did the two Cold War superpowers engage in an intense security competition during its last three decades under a condition of MAD, as they state in the book and also in their famous 2006 article, 'The End of MAD?'[7] Or did the United States decide to pursue a war-winning strategy in the late 1970s, which by definition entailed a rejection of MAD and the associated logic of the nuclear revolution? And if the latter answer is correct, why do they not discuss it at all in the book?

The question is not just an academic one. The United States found itself after the end of the Cold War in a position of tremendous preponderance, unprecedented in the history of modern international relations. Its erstwhile rival, Russia, was in free fall after the USSR's collapse, and China remained a modest military power. Other powerful states around the world were allied with the US. But America could not translate its preponderance into primacy, because both Russia and China retained their second-strike nuclear arsenals, making it too dangerous not only to invade either state but even to seriously coerce them.

The obvious way to overcome this problem, of course, is to develop a war-winning nuclear policy for the post-Cold War world. And as Lieber and Press show better than anyone else, the United States has gravitated toward this objective over the past two decades with its acquisition of advanced new weaponry, defence systems, and sensory and other counterforce technologies. Supporters and critics of MAD alike all acknowledge that it only holds if states possess invulnerable second-strike arsenals. If the United States becomes able to eliminate that condition with technology, then MAD does come to an end, as the two authors precisely argued in 2006.

The problem here, even more so than in the late 1970s, is that such a policy cannot in any way be characterised as *defensive*. Neither China nor Russia possess or are seeking to possess a nuclear arsenal that could prevail over the United States, so by pursuing a war-winning strategy the US would be clearly announcing its interest in global primacy. This would be a policy choice, not a response to Russian or Chinese capabilities. Indeed, and following Lieber and Press's own reasoning, China's ongoing commitment to a basic nuclear deterrent and Russian political and economic weakness means that the conditions could not be more suitable for the re-establishment of Schelling's and Jervis's defensive, and

[6]See, e.g., Brian Auten, *Carter's Conversion: The Hardening of American Defense Policy*, (University of Missouri Press, 2009). Green argues in *The Revolution that Failed* (pp. 214–20) that the Carter administration move toward a countervailing posture was a consequence of new US interpretations of Soviet nuclear doctrine and civil defence policy, neither of which were new Soviet hard military capabilities.

[7]Lieber and Press, 'The End of Mad? The Nuclear Dimension of US Primacy', *International Security* 30 (Spring 2006), 7–44. In this piece the authors were more candid about connecting war-winning strategy to US primacy, as the title indicates. Also see Lieber and Press, 'The New Era of Nuclear Weapons, Deterrence, and Conflict,' *Strategic Studies Quarterly* 7 (Spring 2013), 6.

mutually stable, condition of MAD. If the United States rejects that, it will be because it chose to do so, not because it had no alternative.

An implausible, almost surreal, disinclination to acknowledge that the US is facing a strategic choice about what to do about its nuclear policy, and that what it decides to do will be far more important than anything else in affecting the policies of other nations, pervades much of the book. In their conclusion Lieber and Press state that a 'policy implication' of their analysis is that, 'in some cases,'

> countries will work hard to create truly survivable retaliatory forces, while their rivals will strive to hone counterforce capabilities to keep those retaliatory forces vulnerable. For example, we expect that China will continue to add significant nuclear capabilities (such as new mobile missiles) to its arsenal, as well as bolster its command-and-control capabilities—all part of a traditional path to developing a secure, survivable second-strike force. In turn, the United States will continue to modernize its nuclear arsenal and develop offensive (e.g., long-range precision conventional strike systems) and defensive (e.g. missile defence) means to *counter* Chinese retaliatory capabilities.[8]

For example? IR scholarship has long been plagued by prescription masquerading as description, but this passage takes the cake. The United States is a preponderant unipole which at present spends more on its military than the next ten or so nations combined. It is the only state on earth which now, or in the foreseeable future, could possibly 'hone counterforce capabilities' in order to make other large states' 'retaliatory forces vulnerable', as everyone even vaguely familiar with nuclear politics today knows. The debate in Washington about what nuclear posture the US *should*, not 'will,' adopt, a debate in which Lieber and Press themselves have long been active participants, is how determinedly the US should pursue war-winning capabilities over other large nuclear states.[9] No other nation is having this debate or is even capable of doing so. Moreover, everyone knows that China's future nuclear decisions will be made entirely *in response* to what the United States does, because if the US develops the capability to 'counter' Chinese retaliatory forces, China will become vulnerable to US predation, and it will surely take the necessary steps to deal with this threat that any Realist student of international relations would expect.[10]

Committing fully to a comprehensive war-winning strategy therefore will not only cost the US untold billions of dollars in new military spending over the next years and decades; it is also likely to trigger an arms race and intense security competition with China that the latter state has signalled over decades it would prefer to avoid. Following this dangerous course of action is a policy choice the United States does not have to make, particularly given the fiscal demands

[8] *Myth of the Nuclear Revolution*, pp. 127–28, italics added.

[9] On the contemporary debate in Congress about nuclear policy, see Joe Cirincione, 'How a Hearing on nuclear weapons shows all that's wrong with US foreign policy making,' *Responsible Statecraft*, 20 May 2021.

[10] On this point, see Charles Glaser and Steve Fetter, 'Should the United States Reject MAD? Damage Limitation and US Nuclear Strategy Toward China', *International Security* 41 (Summer 2016), 49–98.

created by the Covid-19 pandemic and the massive domestic programmes the new Biden administration has embarked upon. This is precisely why the question is so heavily debated in Washington. Lieber and Press have long made a powerful case that new US technological capabilities threaten to overturn MAD. However, their prediction of a policy outcome for which they have long advocated damages the logical consistency of their argument.

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