

***Arms Control at a Crossroads: Renewal or Demise?***

Edited by Jeffrey A. Larsen and Shane Smith. Lynne Rienner Publishers, 2024, 331 pp.

As recently as January 2022, the 1985 joint declaration by then-Soviet leader Mikhail Gorbachev and US President Ronald Reagan that “a nuclear war cannot be won and must never be fought” was affirmed by Russian President Vladimir Putin, President Joseph Biden, and the leaders of China, France, and the UK—all who represent nuclear powers and hold permanent seats on the UN Security Council.<sup>1</sup> Only a month later, however, Russia’s full-scale invasion of Ukraine led to Putin’s announcement that Russia would suspend its participation in New START, the treaty between the United States and the Russian Federation that limits all Russian deployed intercontinental-range nuclear weapons. With that treaty set to expire in 2026, and agreements like the Conventional Armed Forces in Europe Agreement being suspended by participating states in the aftermath of the invasion, *Arms Control at a Crossroads* asks this question: Does arms control have a future? Editors Jeffrey Larsen and Shane Smith admit that the “prognosis appears grim” (1).

The editors bring academic and policy practitioner experience to their timely and important work. Larsen, a research professor at the Naval Postgraduate School and president of Larsen Consulting Group, has worked at NATO and at Science Applications International as a senior policy analyst. Smith, the director of the Air Force Institute for National Security Studies and associate professor of political science at the Air Force Academy, previously served as a senior fellow at the National Defense University and in the Office of the Secretary of Defense.

Larsen and Smith have compiled a work with 16 separate analyses from experts in the policy, research, and academic worlds. Within the framework of the questioning of the future of arms control and what will be required for it to remain viable, the contributors cover the topic in four parts: foundations and context of arms control, perspectives of the major powers, arms control domains, and the way ahead—the longest of which is the discussion of domains.

The meatiest of the four parts covers the arms control domains, serving not just as a refresher on the issues of nuclear weapons, proliferation and disarmament, and chemical and biological weapons, but the history and status of arms control monitoring regimes. Notably included in this portion of the work is the discussion of emerging technologies, conventional and novel weapons, and the idea of space and cyber-space arms control.

The sections on emerging technologies and conventional weapons are especially laudable considering Russia’s war in Ukraine. Where arms control is often thought of as solely the domain of nuclear weapons, the conflict has shown why buildups of conventional weapons on a border and the need for monitoring new weapons and technology—or old ones used in previously unseen ways—still matter. While increasing

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1. “Joint Statement of the Leaders of the Five Nuclear-Weapon States on Preventing Nuclear War and Avoiding Arms Races,” The White House, 3 January 2022, <https://bidenwhitehouse.archives.gov/>.

nuclear rhetoric and an expiring New START will call for discussing the future of nuclear arms control, NATO and other Western governments are already working to address the need for the future of conventional and emerging arms control. A section discussing cooperative security as arms control by other means is especially insightful.

While perspectives of the United States, Russia, and China are covered, and sections on the return of geopolitics and cooperative security address the roles and actions of presumed or acknowledged nuclear states somewhat, the only—albeit small—area for improvement would be further discussion on the role other current or potential nuclear states will have in the future of arms control, how issues like Israel-Saudi normalization may impact arms control going forward, or how the United States' and Russia's obligations under the Nuclear Non-Proliferation Treaty and America's solidarity with NATO will be affected. As one analysis suggests, if New START expires without replacement, America will face uncertainty not only with Russia but also with its nuclear nonproliferation strategy and solidarity with NATO.<sup>2</sup>

*Arms Control at a Crossroads* is well worth the read for those seeking to understand better the greater arms control landscape surrounding the issue. Newcomers to the topic will become well-versed in the foundations and various domains, and practitioners will be spurred to better understand the geopolitical perspectives and think about new ways forward. At a manageable 331 pages, including references, acknowledgments, and contributor biographies, the book is highly readable for non-experts while being engaging to those with advanced knowledge of the subject. Larsen and Smith remain hopeful that “political leaders will one day again see the utility and value of arms control as a primary tool for managing competition” (2). Stating that arms control is “not quite” dead, Larsen and Smith have curated a compelling case for why, and more importantly how, that could be (1).

**Lieutenant Colonel Jason Baker, USAF**

### ***Space Policy for the Twenty-First Century***

by Wendy N. Whitman Cobb and Derrick V. Frazier. University of Florida Press, 2024, 344 pp.

*Space Policy for the Twenty-First Century* blends political science, science and technology, international relations, and history. The book is a much-needed review of space policy when the domain is seeing growth and a surge in apprehension and excitement. It describes the historical path that the United States and other prominent nongovernmental and governmental actors have taken to arrive at the crucial point for shaping space policy for the century.

Authors Wendy Whitman Cobb and Derrick Frazier, both professors at the School of Advanced Air and Space Studies, are prominent strategists in their field and have well-established backgrounds in the space domain. They argue that there is a constant ebb and flow of actors, including the National Aeronautics and Space

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2. Vince Manzo, *Nuclear Arms Control Without a Treaty? Risks and Options After New Start* (Center for Naval Analyses, 2019), <https://www.cna.org/>.

Administration, the US military, commercial entities, international actors, other US government agencies, and of course, Congress and the president. Throughout space policy, historical events, national security, and the rise of independent actors—such as private space companies like SpaceX and Blue Origin—have shaped, or in some cases not, how policy is determined, and all actors are vying for influence within the space policy realm. The historical precedent established by the Soviet Union and the United States in the Cold War formed a large part of space policy in the past. Yet in the future, the United States' leadership role in space may be challenged, not only by other state actors but also by influential commercial actors who may not necessarily have democracy in mind.

The book's thesis is well supported by historical examples illustrating how the United States and Soviet Union handled early space policy with each other and within their governments. The authors detail every actor within the US government and the implications for space policy, their interactions, and the decisions made throughout history that impacted today's space policy. The book offers significant strong points regarding these actors and their choices as well as how outside influences shaped them—all written in a way that enables a space policy novice to understand the web of entanglement that characterizes its development. Presidents, the national security apparatus, citizen interest, the geopolitical and commercial environment, and democracy all figure into the United States' space policy approach.

Finally, prominent outside actors, like Russia and China, are highlighted throughout the book in critical moments that helped shape US policy, including during cooperation and competition events. The authors' assessment implies that the current US space policy is led by diverse actors who desire different outcomes. The United States may struggle to align these actors to continue leadership in the space domain. Additionally, the United States is at a critical period in some key areas of the space domain, such as satellite technology and space exploration, where commercial entities rather than the US government are in a position to establish space norms. For example, commercial actors such as SpaceX are in a position in some disciplines to establish norms.

For this reason, the United States must come to a more comprehensive policy that addresses these actors and their use of space for commercial activities, one that does not necessarily limit their activities but rather retains space as a cooperative domain for all people of Earth and that approaches future US space activities from a democratic government-led angle versus a commercial one. Such a policy must also balance the risks of US competitors with such activities without surpassing US leadership of space politically, conventionally, and commercially. Finally, the obvious limitation of this space policy analysis is the classified nature of all national security programs, which restricts some of the insight that the authors can provide. Yet this does not detract from their analysis, and the broad picture provided to the average reader does not change.

Given the disarray of current US actors and policymakers for space and the lack of a unified and clear direction in space policy, this book accomplishes quite a feat in dissecting the entire space policy apparatus, from the president down to nongovernmental organizations. *Space Policy* is certainly worth reading for policymakers, national security

actors, historians, space enthusiasts, and space domain operators. It does an excellent job of ensuring that the reader—no matter their field—understands the policy system, foundational international relations theories, and actors. Actors within the space discipline will understand how their field of work is shaped and how we as a civilization have arrived at this point. Excerpts from this book should almost certainly be foundational reading for US Space Force Guardians operating within the space domain.

Still, the book would benefit from a more effective use of acronyms. Throughout the book, acronyms are used quite liberally, sometimes without definition—for example, acronyms that appear early in the book reappear without explanation many chapters later, which can be confusing to readers.

More significantly, although the book provides insight into the many different space actors other than the United States, given China's current rise in the space domain, it would benefit from a longer touch on China in the final "Major Issues" chapter. Contemporary actions by China are described but are not detailed. This is partly understandable given the classified nature of such operations; however, as the authors are undoubtedly aware, there is a swath of unclassified information on China's actions in space. For example, China's major space policy endeavor, the Spatial Information Corridor—part of its Belt and Road Initiative—is not mentioned.

Ultimately, I wholeheartedly recommend *Space Policy for the Twenty-First Century* and appreciate its efforts to consolidate space policy for the greater national security apparatus.

**Master Sergeant Patrick G. Pineda, USSF**

***Pax Economica: Left-Wing Visions of a Free Trade World***

by Marc-William Palen. Princeton University Press, 2024, 309 pp.

The connection between a state's economic ideals, its integration into the world economy and international institutions, and the likelihood of interstate war remain central points of contention in the study of international relations. Marc-William Palen's *Pax Economica* reminds readers that the intellectual debate on these topics long precedes the economic institution-building of the post-World War II era and that these dialogues have had many different and sometimes unlikely torchbearers.

Palen aims to "challenge a wide scholarship that has tended not to look earlier than the 1930s and 1940s to understand the origins of post-1945 economic globalization" (11). In so doing he pushes against the historical consensus as he sees it that "Cold War lenses have blurred the historical depiction of modern left-wing radicalism, displacing the economic peace movement from its previously prominent position" (11). *Pax Economica* is successful in this regard as it presents a rich Venn diagram of overlapping free trade, anti-imperial, and peace interests among some surprising sectors of American and European society between roughly 1840 and 1940.

Palen begins by setting the context in which his book's subjects operated, namely that century of widespread economic nationalism. The American System, so-named by Alexander Hamilton and most forcefully encouraged by German-US economist

Friedrich List, promoted protectionist trade policies and domestic internal improvement projects to advance domestic industries and best exploit colonial markets. These ideas were emulated outside of the United States; France, Germany, Japan, Russia, and the Ottoman Empire all adopted policies much more reminiscent of American protectionism than the free trading of Britain. But the narrative is not only one of trade preferences. Palen recounts an accompanying mindset of “militarism, jingoism, war, and imperial expansion” (50).

Having established the narrative’s antagonist as the American System and protectionist ideas of List and company, Palen tells his story through a self-admitted “motley crew of left-wing free traders,” devoting chapters to liberal radicals, socialists, feminists, and Christians. Readers learn of the seminal role of English free-trade advocate Richard Cobden, the namesake of the 1860 Cobden–Chevalier Treaty, which aimed to improve British and French relations through peace movements in several countries. The book introduces readers to the strange bedfellows of Manchester School liberalism and socialist internationalists. It leads them into the transnational history of feminist peace movements and their connection with free trade ideals. And it traces the origins of the Christian peace movement linking free trade, antislavery, and pacific ideals. Each chapter covers these characters and their changes through a century of political change from the 1840s to the conclusion of World War II.

Ideas occupy a central role in Palen’s work, and it is not always clear how much he intends them to be seen as influential on subsequent actors or reflective of those actors’ otherwise inherent political preferences. The narrative tilts toward the former, showing how ideas grow and how actors emulate, for example, List’s positions on trade protectionism. But ideas do not exist in a vacuum, and it is perhaps an irony in places where economic nationalism takes hold that it is the perception of the interests of a nation’s subset that drives economic nationalism. In this sense one might wonder why certain economic narratives, whether Cobden’s or List’s, take hold among different sectors of society, an investigation that lies outside of Palen’s work.

The eclectic collection of Palen’s protagonists demonstrates both the book’s key historiographic contribution and also the limits of such a narrative. One walks away from Palen’s account with a fuller picture of some of those who carried the globalist banner during a time of widespread economic nationalism and trade protectionism. Readers gain a considerable appreciation for the connective tissue between otherwise disparate groups as the individual chapters show a strong intellectual tradition that cuts across vastly different cleavages within society. In its assembly of such a “motley crew,” however, the boundaries of Palen’s analysis are not entirely clear. Palen has identified groups with something to say about free trade, anti-imperialism, and peace, and in so doing casts the narrative around cosmopolitanism and internationalism. But where these analytical boundaries begin and end is not entirely clear.

On this note several other recent publications add context to Palen’s diverse cast of characters. Eric Helleiner’s *The Contested World Economy: The Deep and Global Roots of International Political Economy* (Cambridge University Press, 2023) and its excellent predecessor, *The Neomercantilists: A Global Intellectual History* (Cornell Univer-

sity Press, 2021), offer a greater comprehensive view of the intellectual history of free trade and protectionism in the modern era. In a similar vein Glory M. Liu's *Adam Smith's America: How a Scottish Philosopher Became an Icon of American Capitalism* (Princeton University Press, 2022) demonstrates some of the intellectual debate over and regional dynamics of trade protectionism in nineteenth-century America, a debate Palen largely glosses over in his characterization of the American System.

While *Pax Economica* does not provide a comprehensive intellectual history of free traders in the late nineteenth and early twentieth centuries, that is not the book's aim. Readers interested in gaining insights into the left-wing groups noted above or the different facets of the long debate regarding the connection between economic integration and war will find rich veins to mine in Palen's book. The book concludes with a chapter pulling the historical analysis into the present, demonstrating that a facility in the history of free-trade narratives provides a deeper understanding to debates that continue to recur today.

Sean Braniff, PhD

*Unwinnable Wars: Afghanistan and the Future of American Armed Statebuilding*

by Adam Wunische. Polity Press, 2024, 224 pp.

*Unwinnable Wars* captures the United States' exasperation with its two-decades-long struggle at armed statebuilding in Afghanistan. Author Adam Wunische, an instructor at George Washington University's Elliott School, served in Army Intelligence and as an analyst for the Central Intelligence Agency (CIA). Wunische's thoughtful critique forces the reader to question the wisdom of reconstructing the Afghan state through military intervention, or what the US military terms "stability operations" (16). Yet Wunische seeks to understand not just "what went wrong in Afghanistan" but also why such operations "never go right" (ix). His central argument is that as the United States decides to engage in such efforts, overwhelming "uncontrollable forces and preexisting conditions" determine the outcome. That is, as armed state-building could not be won in Afghanistan, every other failed attempt at such operations has occurred because the same preexisting structural factors create "overdetermined," inescapable conditions (8).

US operations in Afghanistan from 2001 to the end—when twenty years of blood and treasure were erased in nine shattering days—provide the overarching backdrop for a sociological and structural review of these preexisting factors. While some are ancient in origin, like inaccessible geography or the powerful constructs of race, ethnicity, and religion and the complex dynamics that come with them, other factors—like socioeconomic underdevelopment and interest asymmetry—create conditions that an intervening force cannot unravel.

The book then tackles the effects of time on various actors. This section moves beyond the argument of announced timetables and investigates time as a distinct concept unavoidably connected to all factors. Unfortunately, time favors the reality of those occupied, an understanding the book best captures in the proclamation of one Taliban fighter: "You have the watches; we have the time" (47).

The book then delves into dilemmas that all intervening forces must contend with. Wunische points out that statebuilding for the intervening state is not an existential endeavor, yet the subjugated group is constantly threatened by extinction. The resulting difference in will is often underestimated.

The final piece of groundwork examines the paradoxical nature of intervention itself. Perhaps the most obvious but frequently missed dilemma is dependency. Once an intervening force is introduced, the supported side becomes dependent, thus exacerbating interest asymmetry. The new government needs the United States and its money, and this dependency actively undermines progress. The longer the intervening force stays, the more damage is done. But here is the rub: leaving also inflicts grave damage because the new government is essentially a shell, having relied on US money and institutions instead of building a foundation for itself. The result in the case of Afghanistan was a government that collapsed in just over a week after two decades of statebuilding. Thus, as the book argues, the only way to avoid this trap is to not intervene in the first place.

Throughout these assertions, Wunische uses historical examples of US military intervention from early 1900s operations in Haiti to post-World War II statebuilding efforts. He also uses contemporary and ongoing efforts to show how the foundations for overdetermined failure or success exist in all such armed stabilizing attempts.

After establishing the overdetermined factors, Wunische transitions from a review of the past and presents a framework so policymakers may avoid future mistakes. Critically, he does not articulate the factors as problems to be solved but rather as criteria to judge the probable outcome of armed state-building and, therefore, US intervention in the first place. What starts with a desire to understand ends with the revealed purpose of convincing readers of the need to practice restraint and strategic patience, and perhaps to encourage nonintervention.

*Unwinnable Wars* is an applied case study in structural realism that provides depth to theory and evidence to abstraction. The author presents evidence from public statements of leading officials, data from the Special Inspector General for Afghanistan Reconstruction report, and arguments from leading international relations theorists. He also challenges current literature and common beliefs by diving deeper into the historical record. He directly disputes sources such as former CIA analyst and National Security Council staffer Paul Miller and retired US Army General David Petraeus, former CIA director and commander of US and NATO forces in Afghanistan, who have argued that the United States needed to do more to succeed. Critically, Wunische dismisses arguments that point to current single causal factors of a particular policy or military strategy and ignore the interaction of variables and systems. He refutes leading counterfactual ideas, showing they all miss the underlying determinates.

In presenting a comprehensive framework, *Unwinnable Wars* thus presents and tests its theory against ongoing and recent crises. While it challenges policymakers to understand where the United States would get the most for its effort—although no operations are winnable if the same overdetermined factors are present, intervention may be possible in some areas depending on policy aims—it does not deride indi-

viduals for their choices. Wunische understands that all players are trapped by structures and system pressures.

*Unwinnable Wars* should be on the nightstand of every policymaker, politician, and strategist. It presents the most comprehensive understanding of fundamental elements that overdetermine the success or failure of armed statebuilding. If there is a gap in theory, it is only in categorization. Is empire-building a form of armed statebuilding? Did the United States' expansion westward and destruction of Native Americans constitute stabilizing operations? Wunische cautions against empire-building, implying that it is morally fraught. Although he will likely receive little pushback on that claim, the question remains: If a country is willing to colonize another, can that overcome the overdetermined factors outlined in the book? Or perhaps that line of questioning only illustrates the author's point: the "cult of action" runs deep in US culture and doctrine and tempts policymakers to believe they can figure out a way to make such efforts work (182).

Ultimately, Wunische's evidence-based framework may help future generations make better decisions about the United States' actions in the global arena. *Unwinnable Wars* provides the simple wisdom that perhaps the best choice is never initiating armed state-building.

**Lieutenant Colonel Michael Kissinger, USAF**

***The Return of Great Powers: Russia, China, and the Next World War***

by Jim Sciotto. Dutton, 2024, 368 pp.

In *The Return of Great Powers*, Jim Sciotto provides the insight and perspective one would expect from such a highly connected US journalist. He previously worked for the State Department in Beijing and is currently CNN's chief national security correspondent. He is also the bestselling author of *The Shadow War* (Harper, 2019). His latest book provides gripping and firsthand insight into modern geopolitics and warfare.

Sciotto argues that great power competition has accelerated in the aftermath of Russia's illegal invasion of Ukraine. He contends that the new world order includes three great powers: the United States, Russia, and China. Hardening division between these great powers has "upended the post-Cold War global order and replaced it with a new, less stable one" (xi).

The book covers various interrelated topics of benefit to those interested in great power competition and twenty-first-century military affairs. Firstly, Sciotto enables his reader to understand in more depth Russia's war in Ukraine and the implications of the war for the great powers. Secondly, he describes the challenges of twenty-first-century warfare, the response of NATO and Europe, the potential for nuclear escalation, and China's connections to Russia. Finally, he addresses the potential for Taiwan to become the next flashpoint in great power warfare.

Sciotto describes the Russian invasion as "a 1939 moment" with global ramifications for the United States and its Allies (xiii). In an absorbing firsthand account, he gives insights from senior Central Intelligence Agency, Pentagon, and NATO contacts.



He shares with readers his conversations with Ukrainian civilians before and after the invasion—gathered while he was living in a hotel in Kyiv as Russian tanks rolled over the border—which provide superb insight and a perspective that may resonate with many in Taiwan today as they confront aggression from China.

Sciutto assesses that Russia's invasion of Ukraine signified the beginning of the post-Cold War "new world disorder," asserting that if Russia is allowed to succeed, it would likely incentivize aggression by other nefarious states (310). He illustrates this point with a quote from Estonian Prime Minister Kaja Kallas: "You can't walk away with more than you had before. Otherwise, it's incitement to aggression" (310). Sciutto describes Russia's war in Ukraine as a "real-world experiment in great power warfare" (28). The invasion has undoubtedly energized NATO and European countries. More importantly, this new energy will have made Beijing assess the implications of any plans to take Taiwan. As a result of Russia's war with Ukraine, the United States is certainly keen to ensure it "reasserts deterrents" (76).

Sciutto also tackles the challenges of twenty-first century warfare. The discussion with NATO Secretary General Jens Stoltenberg and former NATO Supreme Allied Commander Admiral James Stavridis brings this issue to life. Both officials highlight the combination of today's complex technology with trench warfare, tanks, and artillery. Their analysis illuminates Ukrainian successes as well as challenges, including the rapidly changing battlefield and Ukraine's ability to adapt to such changes through technological innovation. The book also highlights important lessons on defense industrial capacity, noting that Western support for Ukraine has revealed serious global supply chain issues.

With much ground to make up following the peace dividend after the Cold War, Sciutto analyzes the response of NATO and European nations. While one European NATO admiral is optimistic about increased European defense spending, an Estonian defense official is less enthused, stating "Russia put Europe to sleep in the 1990s . . . and it is struggling to wake up" (123). Sciutto questions whether Russian President Vladimir Putin would attack NATO and receives equally contrasting responses. Again, this concern is real for the Baltic countries but not a significant one for US senior officials.

The author explains that the 2022 NATO conference in Madrid changed the dynamic between NATO and China. The NATO Strategic Concept articulates that "the deepening strategic partnership between the People's Republic of China and the Russian Federation and their mutually reinforcing attempts to undercut the rules-based international order run counter to our values and interests" (61–2). Yet Sciutto's conversations with the NATO secretary general do not explicitly link China to the ongoing situation in Ukraine, and only Sciutto—not Stoltenberg—refers to Russia as a great power.

In 2022, US intelligence reported that Russia was preparing for the potential use of a nuclear weapon on the battlefield in Ukraine. Sciutto provides a firsthand account of US officials as they actively planned for a US response. Sciutto claims that "the degree of US concern and the seriousness of contingency planning—has not been reported in such detail before" (197). The use of nuclear weapons would inevitably make it a

great power conflict, and this potentially explains why he regards the war in Ukraine as “a 1939 moment.”

Sciutto then establishes the links between China, Russia, and the war in Ukraine. He argues that Western involvement has expanded the war into a proxy war among the great powers. The middle powers are also beginning to align, and there is concern about vertical and horizontal escalation—or the potential use of weapons of mass destruction and the introduction of NATO to the conflict, respectively.

Shortly before the Russian invasion on February 4, 2022, China and Russia “released a joint statement declaring that China and Russia’s bilateral partnership was greater than a traditional alliance and that their friendship would know ‘no limits.’”<sup>1</sup> Sciutto outlines the thinking of US officials concerned about the prospect of China assisting Russia in rearming militarily and boosting its capability on the Ukrainian battlefield. The United States believed that “China was considering the provision of ‘lethal support’ to Russian for its invasion, to complement the nonlethal aid it had already been sending” (76–7). This evolved into Chinese lethal support to Russia becoming a red line for the United States. It also led to US intelligence reports being made public to warn the global community that China was actively considering providing lethal support to Russia.

But if China has not provided Russia with lethal aid, why does Sciutto regard Ukraine as the first great power proxy war of the new unstable world order? He argues that “Chinese leaders hoped to prolong the war in Ukraine in order to distract and weaken the US and its allies so as to make it less capable to respond to a potential Chinese invasion of Taiwan” (80).

Sciutto thus shifts his focus to Taiwan, which has undoubtedly been observing this geopolitical exchange since the invasion of Ukraine. Sciutto visited the country to speak to senior serving and retired Taiwanese military officers and assess whether Taiwan would likely become the next flashpoint in great power warfare. US Chairman of the Joint Chiefs of Staff General Mark Milley said in an interview with Sciutto, “The historical record tells us that when the condition obtains, when a revisionist power and a status quo power meet and they have irreconcilable core vital national security interests, historically, most of the time it ended up in armed conflict” (50). This refers to the bipolar relationship between the United States and China rather than the ongoing situation in Ukraine. Still, Milley’s study of history has led him to conclude that ongoing geopolitics make “great power war more likely rather than less likely” (50). The author asserts that many lessons from Ukraine have benefited Taiwan, potentially more than China. His inference is that lessons must be acted upon to bolster deterrence and avoid Milley’s prediction coming to fruition.

Yet although Sciutto’s insight from senior officials, politicians, and generals on the front line of geopolitics provides a fascinating perspective, his assessment of Russia as a great power is open to challenge. Russia has significant nuclear capability, but it is an

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1. Patricia M. Kim, “The Limits of the No-Limits Partnership: China and Russia Can’t Be Split, but They Can Be Thwarted,” *Foreign Affairs*, March/April 2023, 28 February 2023, <https://www.foreignaffairs.com/>.

economic minnow in comparison with the United States and China. That said, there can be no doubt that Russia's war in Ukraine provides a compelling example of why it is necessary to deter future aggression.

*The Return of Great Powers* is nevertheless a book that readers interested in modern geopolitics or military affairs would find interesting. In providing lessons for future conflicts and exploring the implications of a Chinese military invasion of Taiwan, Sciotto covers the complex range of intertwined geopolitical challenges now facing the Western world.

**Group Captain Timothy Brookes, Royal Air Force**

***Cold War 2.0: Artificial Intelligence in the New Battle Between China, Russia, and America***

by George S. Takach. Pegasus Books, 2024, 432 pp.

In analyzing the challenges faced by democracies today, George S. Takach's *Cold War 2.0* argues that four key accelerator technologies—artificial intelligence (AI), semiconductor chips, quantum computing, and biotechnology—may very well determine whether democracies or autocracies win the next cold war, which he believes is currently underway. Takach, a Canadian attorney with over 40 years of experience in technology law, contends that innovation through technological advancements allows societies to move forward and establish their global dominance. Democracies led by the United States need to decouple the four modern accelerator technologies from their autocratic competition or they risk facing a new hegemonic order led by China with Russia on its coattails.

Takach begins his 14 chapters with his thoughts on how national powers utilize technology. He then ties this into a historical overview of the Cold War—identified as Cold War 1.0—and finally concludes with his analysis on how Russia failed to innovate and develop technology toward the end of the war, resulting in its dependence on foreign countries for tech components. He specifically points out in later chapters how Russia currently lacks semiconductor chip manufacturing capabilities. This has compelled Russia to find creative ways to bypass sanctions—which it currently accomplishes through the increased import of household appliances, such as washing machines. Russia then salvages the chips from the appliances, and the chips are then utilized in drones throughout Russia's war against Ukraine.

The book then takes a deep dive into China's learning from Russia's past mistakes over the years. China's technological innovation, though behind most western and neighboring countries like Japan, Taiwan, and South Korea, has accelerated its global power. Takach ultimately labels China as the main antagonist in Cold War 2.0.

When discussing China, Takach focuses on its current domestic and international actions as China's leader Xi Jinping sets his sights on leading the world under China's rule. Most recently, Xi changed the law to stay in power indefinitely. Takach also shows how Xi's measures within China seek to control its citizens, demonstrating its return to a closed society focused on the preservation of the Chinese Communist Party. For example, he presents cases on how China utilizes AI for population control

through the suppression of free speech. Internet censorship prevents Chinese citizens from searching online for topics that the country deems critical of the communist regime. China has also developed and implemented social credit scores that impact everything from loans to job applications. If a citizen crosses the street outside of the crosswalk or questions the local authorities, surveillance linked with AI automatically reduces a person's social hierarchy status, which further reduces any of their perceived freedoms. The book also points to the human rights abuses against the Muslim Uyghur minority in Xinjiang, drawing parallels with George Orwell's disturbing vision of a dystopian future.

Disobeying the law or speaking out against China leads to serious consequences for its citizens as well as for other countries. As Takach points out, the outlook for improving international relationships with China is grim. States critical of China can face repercussions through means of economic coercion, such as the trade war Beijing initiated against Australia when the latter questioned China's role in the COVID-19 pandemic. While censorship restricts China's population from questioning its government's actions internally, the great propaganda machine itself retaliates against other countries critical of its policies, wreaking havoc on these countries' economies. The book provides numerous examples of China's unfair practices, reinforcing Takach's argument that a new cold war has already begun as well as raising questions about why more has not been done to counter such efforts.

*Cold War 2.0* then examines the semiconductor chip industry and analyzes which countries have manufacturing capabilities, demonstrating how globally interconnected and fragile the industry is. Takach argues that democracies dependent on Taiwan's technology need to stand up against China. Details on trade deficits between China and Taiwan suggest why China would seek to control it beyond its geopolitical and strategic reasons. In 2022 Taiwan sold \$156.5 billion more to China than it purchased from China, thus representing China's largest trade deficit. The United States has attempted to slow China's semiconductor industrial growth and bring more manufacturing stateside.

Such restrictions faced by China are estimated to have put it 10 to 20 years behind the democratic world, thus compelling China to place significant investments in quantum computing. Now being developed, quantum computing offers technology described as being even faster than the world's most powerful super computers. Used in something such as encryption, it would take hundreds of years before the world's current machines could crack the code. If China can master this technology, it could essentially take semiconductor chips out of the equation altogether, resulting in its technological world dominance. For China to accomplish this, however, it still needs to advance its semiconductor chip and AI technologies.

Takach's book makes a strong case for the need to manage the future of AI, semiconductor chips, and quantum computing. A reader with little to no background knowledge on these topics would be informed enough to be concerned of the challenges ahead. Yet the book does not provide equal emphasis on the fourth accelerator technology, the biotech industry. Although Takach presents the challenges to the industry and

makes a strong case for why biotechnology is extremely important, details are not as substantive as with the other three technologies.

Another area lacking development is Takach's discussion of the outcomes of Cold War 2.0, specifically with China. Takach seems to offer only three possible and drastic conclusions: China will start playing by the rules and be on par with Japan, Korea, and Taiwan; democracies decouple their technology from China, and it gets left behind the democratic free world; or China goes to war with its democratic adversaries. While this approach drives home the urgent need for democratic leaders to act now, it also does not consider China's response. China is an independent nation that has just as much right to its own sovereignty as every other country, and any drastic measures might push China over the edge, possibly starting a war. Yet if such measures are ignored or misinterpreted, China may not see any off ramps, which could result in military conflict.

Nevertheless, *Cold War 2.0* is a great read, seeking to jumpstart the discussion on how leaders can begin to strategize innovative approaches for handling the challenges of addressing modern autocracies' influence over AI, semiconductor chips, quantum computing, and biotechnology. Even though Takach acknowledges that any decoupling actions would not be easy and would be met with resistance, all leaders of democracies who want to know how to stay ahead of a peer competitor like China should consider these recommendations. Change in itself is difficult to manage—even more so on a global scale. Yet as the leader of the free world, the United States would be wise to engage its Allies and partners to help in countering such threats from its peer competitors.

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