

# Graham Allison and the Thucydides Trap Myth

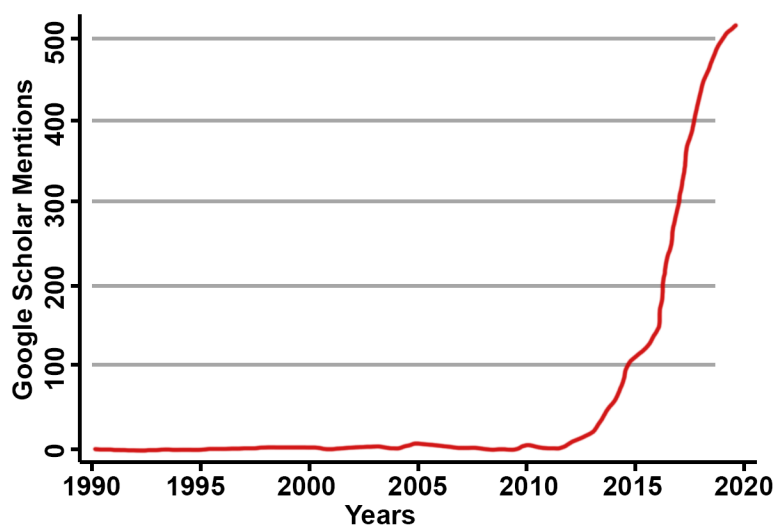
RICHARD HANANIA

China is rising, and tensions with the United States have increased in recent years. Yet the core theory informing much of US policy toward China today—the idea of a Thucydides Trap popularized in Graham Allison’s *Destined for War*—suffers from three major flaws: unclear definitions, omitted variable bias, and selection bias. Because any one of these problems is fatal to an attempt to use data in order to make predictions or any causal inferences, Allison’s findings on power transitions should not be used as a guide for understanding the US-China relationship.

## Introduction

The idea the United States and China are potentially headed for war has become commonplace among knowledgeable observers. This possibility is often articulated through the concept of the Thucydides Trap, which says that when one power seeks to displace the other, war is, if not likely, at least a serious possibility. Given China’s economic and military capabilities are rising relative to those of the United States, this concept has become the lens through which many see great power competition. Despite China’s three decades of remarkable economic growth, the more pessimistic view of its rise has been a recent development. According to Google Scholar, between 1989 and 2012, the number of works in which the phrases “China” and “Thucydides Trap” were both mentioned ranged between 0 and 7 each year. In 2013, there were 23 works with both phrases, and by 2019 that number had reached over 500 (fig. 1).

*Destined for War*, published in 2017 and named a notable book of the year by the *New York Times*, *Financial Times*, and *Times of London*, is the most influential work pushing the Thucydides Trap as a way to understand current international politics. The book has garnered praise from the likes of former CIA director David Petraeus, former Secretary of State Henry Kissinger, former Senator Sam Nunn, and former Secretaries of Defense Ash Carter and William Cohen. It also inspired the Harvard Thucydides’s Trap Project, an ongoing effort to expand on and facilitate discussion about Allison’s findings, created by the scholar himself. Cited nearly 800 times as of this writing, perhaps no international relations book of the last decade has had as much impact.



**Figure 1. Google Scholar "Thucydides Trap" mentions**

Despite China's rise and persistent tensions with the United States over human rights and other issues, the analysis in *Destined for War* suffers from major flaws, some of which have been pointed out in academic responses to the book.<sup>1</sup> Three in particular—unclear definitions, omitted variable bias, and selection bias—make moot any attempt to use data in support of predictions or causal inferences. The findings in *Destined for War* on power transitions should therefore not be used as a framework for interpreting the US-China relationship.

### A Structural Explanation

Those who see a threat coming from Beijing differ over the ultimate source of tensions. In his classic *Man, the State, and War*, Kenneth Waltz presents three images to explain the causes of war.<sup>2</sup> Conflict is caused by bad actors, that is, leaders with an unusual propensity toward aggression; by bad states, usually nondemocracies; or by the structure of the international system, the explanation favored by most academic realists. In the case of China, the first image puts the blame on President and Chinese Communist Party Leader Xi Jinping and his consolidation of power.<sup>3</sup> An even less compromising school of thought holds to the second image wherein dictatorships are necessarily aggressive even if power is not consolidated in the hands of one individual.<sup>4</sup>

The third image is the lens through which the Thucydides Trap understands great power relations. The first and second images tend to be less

credible to those with a thorough understanding of history. Democracies can be belligerent, and leaders are usually constrained by domestic politics, the international system, and their own sense of self-preservation. The idea that modern China is particularly aggressive is popular among commentators but not among academics and those who take a more historically informed perspective.<sup>5</sup>

Throughout history, democracies have demonstrated hegemonic behavior—the United States and the United Kingdom both established global empires. Dictatorships can also coexist without major conflict, as demonstrated by the Concert of Europe, the name given to the arrangement through which five mostly nondemocratic powers on the continent managed to settle disputes peacefully for most of the nineteenth century. Thus, for those who argue we must treat China as an adversary, the structural explanation, Waltz's third image, applies.

In 2006, John Mearsheimer predicted, "if China continues its impressive economic growth over the next few decades, the United States and China are likely to engage in an intense security competition with considerable potential for war."<sup>6</sup> He based this assessment not on the internal politics or culture of either of the two powers but on the idea that states cannot trust one another, and great powers will always compete for influence.

Recently, Stephen Walt has taken issue with those who think the United States and China are likely to coexist peacefully if America changes its posture. He writes, "because each is the other's greatest potential threat, they will inevitably eye each other warily, go to considerable lengths to reduce the other's ability to threaten their core interests, and constantly look for ways to gain an advantage, if only to ensure that the other side does not gain an advantage over them."<sup>7</sup>

Perhaps because Allison has provided quantitative evidence for similar claims, *Destined for War* has become the most influential work in this genre. A former assistant secretary of defense under President Bill Clinton, Allison published his book while director of the Belfer Center for Science and International Affairs at the Harvard Kennedy School.

Despite his affiliation with a Democratic administration, Allison's ideas were adopted by many Trump administration officials. For instance, the 2017 *National Security Strategy of the United States* informed the country that in recent years, "after being dismissed as a phenomenon of an earlier century, great power competition returned."<sup>8</sup> As demonstrated by the extensive media coverage of Allison's work, perhaps no academic has done more to shape American understandings of the future trajectory of the US-China relationship.

Allison gathered 16 cases over the last 500 years where a rising power challenged an established power, from the rivalry between Portugal and Spain in the late fifteenth century to the rivalry between the UK/France and Germany at the end of the twentieth century. Of these, 12 cases ended up in war. A naïve analysis therefore suggests that if history is any guide, there is around a 75 percent chance the United States and China will go to war in the coming decades.

Although Allison does not conduct any more sophisticated statistical tests, such a record indicates if we accept his methodology and reject any bias in the analysis, using conventional measures of statistical significance, we can be more than 95 percent certain that the chances of a great power war between the United States and China are over 50 percent, a truly horrifying possibility. *Destined for War* does not recommend any particular course of action. Rather, the author presents four possible grand strategies that the United States may adopt.<sup>9</sup> American leaders can accommodate China, seek to undermine it, negotiate a long peace, or redefine the relationship.

### Flawed Methodology

As mentioned above, Allison's work and his attempts to draw conclusions about the future course of US-China relations contain three inter-related problems, namely, unclear definitions, omitted variable bias, and selection bias. It is of note that Allison himself acknowledges his work might not withstand statistical scrutiny. His appendix 2 is titled "Seven Straw Men." The fifth of these states, "the Thucydides's Trap Case File offers too small a data set to support claims about laws or regularities, or for use by social scientists seeking to do so." Allison responds, "Agreed. The purpose of this inquiry is to explore a phenomenon—not to propose iron laws or create a data set for statisticians."

This admission is remarkable. In responding to this "straw man," Allison creates his own, saying that he is not arguing for "iron laws." Yet the sophisticated critique is not that 16 cases spread out over 5 centuries in a bivariate analysis does not lead to "iron laws." Rather, it is that such an analysis provides no guidance to understanding US-China relations, a point Allison seems to agree with. His statement that he is not seeking to "create a data set for statisticians" implies there is one standard that those who engage in quantitative analysis should apply to judging a work and another for everyone else. Presenting numbers on a phenomenon and then saying it cannot meet the standards of statisticians is like presenting an argument about genetics and saying that it cannot be judged by the standards of biology.

Moreover, this seeming humility contradicts not only how others have used Allison's work but how he himself has promoted it. For example, in the *Atlantic*, after summarizing his findings, Allison writes:

Based on the current trajectory, war between the United States and China in the decades ahead is not just possible, but much more likely than recognized at the moment. Indeed, judging by the historical record, war is more likely than not. Moreover, current underestimations and misapprehensions of the hazards inherent in the U.S.-China relationship contribute greatly to those hazards. A risk associated with Thucydides's Trap is that business as usual—not just an unexpected, extraordinary event—can trigger large-scale conflict.<sup>10</sup>

Allison made similar points in a 2017 *Foreign Policy* essay.<sup>11</sup> His book recommends the White House establish a Council of Historical Advisers, a group that would be analogous to the Council of Economic Advisers, and look at the past to draw lessons about the present.<sup>12</sup> In April 2017, he went to the White House and briefed a group of National Security Council staffers on the Thucydides Trap.<sup>13</sup>

China hawks at the highest levels of government have seized on the concept to support their preferred policies, including former National Security Advisor H. R. McMaster and former Secretary of Defense James Mattis.<sup>14</sup> This means Allison, despite some equivocations, wants to have it both ways. He makes sweeping conclusions about what his results say for the future of the US-China relationship, while also heading off any rigorous analysis of whether the results support statements like those in the passage quoted above.

In fact, Allison misstates the nature of the problem of drawing conclusions from his cases. The issue is not a small data set per se; a study with 16 observations can be valuable if it is well designed. Assuming there are no problems with data collection, whether one can make a predictive claim about the likelihood of a binary outcome depends on two factors: the ratio of hits to misses across observed cases and the total sample size.<sup>15</sup>

As discussed above, if the methodology were sound, 12 cases of armed conflict out of 16 observations would pass conventional tests of significance. This result would provide a high level of confidence that when a rising power challenges an established power, war is more likely than not to result. Unfortunately, the study is not well designed.

## **Unclear Definitions**

In the field of psychology, the replication crisis has shown how even well-intentioned analysts can introduce bias into their scholarship when

they have too much flexibility in research design.<sup>16</sup> Consciously or not, there is a human tendency to pick cases and measure variables in ways that support one's theory. Consequently, psychology has seen the rise of the preregistration revolution in which scholars explain every step of their research project before conducting an experiment or analyzing data.<sup>17</sup>

The lessons learned from other areas of social science urge caution when interpreting empirical data in the field of international relations. If studies in which the experimenter has complete control of the environment can be cherry-picked or p-hacked to produce certain results, historical analysis provides many more opportunities for subjectivity unless the researcher is careful.

It is thus worth exploring how Allison defines his cases. On his website explaining the methodology, he writes that he includes each case where “a rising power threatened to displace a major ruling power.” In addition, “these histories use ‘rise’ and ‘rule’ as conventionally defined, along with synonyms emphasizing rapid shifts in relative economic and military strength.”<sup>18</sup> Nearly every substantive word in these sentences is ill-defined. We are not told what the “conventional” definitions of “rise” and “rule” are. The term “rapid shift” in the context of geopolitics can mean anything from one or two years to several decades.

Moreover, how exactly are economic and military strength measured, and how large does the shift have to be? Is economic strength measured by GDP, or does the calculation also consider the production of militarily important sectors such as steel? In other words, is military strength actual or potential? Scholars have compiled empirical measures of these things, but Allison provides no details about which measures he used, if any. We have no way of determining whether a 20 percent reduction in the GDP gap between two powers over 10 years would count as one of his cases or whether the same reduction over 20 or even 50 years would. Additionally, what does “threaten to displace” mean? Does it account for the intentions of each side, and if so, how are those measured? The selection process seems to be completely anecdotal.

Throughout his data set, it is unclear why Allison includes certain cases but omits others. Thus we are told Germany displacing Great Britain and France in Europe since the 1990s is a power transition that did not lead to war. Why not also consider the end of colonialism when Great Britain and France gave up positions in Africa and Asia, and the United States took their place?

For example, after their defeat at the hands of the Viet Cong, the French left Indochina, and the United States assumed many of the responsibili-

ties of the former colonizer. One may respond that the voluntary relinquishment of power does not count. Yet it is hard to see why Germany taking control over European affairs should count, given that all the powers involved were treaty allies within NATO and the European Union.

### **Omitted Variable Bias**

Omitted variable bias has been called perhaps “the most serious and pervasive threat to the validity of social science research.”<sup>19</sup> If an analyst finds one variable predicts another, the question becomes whether this outcome is because  $x$  itself causes  $y$  or because one or more unobserved variables that correlate with  $x$  actually cause  $y$ . If those unobserved variables are no longer present, we may find the relationship between  $x$  and  $y$  disappears.

As an example, throughout most of history, economic downturns have been associated with an increase in the death rate. In twentieth-century America, however, this relationship did not hold. Health indicators improved during the Great Depression, while mortality increased during the economic boom years of the 1920s.<sup>20</sup> The reason for this incongruity (compared with longer-term historical data) is that because Americans live in an industrialized country, they are so wealthy that even a large decrease in economic output does not necessarily lead to more deaths. A relationship that held throughout human history disappeared or even reversed when circumstances changed.

Allison conducts a bivariate analysis in which one independent variable predicts a dependent variable. Yet if we control for other variables that could determine whether rival powers end up in war, the results look much less impressive. Perhaps the most important omitted variable Allison does not consider is time. It may seem too obvious to point out, but the world has changed quite a bit in the last 500 years. Do international relations in the sixteenth century have anything to say about the twenty-first century, given the social, political, and technological changes that have occurred?

For international relations theorists, nuclear weapons have fundamentally changed world politics and made war between great power unthinkable.<sup>21</sup> Still, this factor is only one possible explanation as to why the past is not a good guide for the present. Crediting nuclear weapons for the decline in great power war requires setting aside massive societal and technological changes including secularization, the explosion of wealth since the Industrial Revolution, the increasing political power of women, the emergence of mass media, and the improved ability of world leaders to communicate quickly with one another. Also, satellite imagery and other

breakthroughs in information and intelligence gathering lower uncertainty regarding power disparities.<sup>22</sup>

The Thucydides's Trap Project website indicates 14 more cases are being considered for inclusion in the data set. Of these cases, only seven ended up in war.<sup>23</sup> Had these cases been included in the original book, the results would have looked much less impressive, with only 19 of 30 power transitions resulting in armed conflict. Moreover, if one simply stuck to cases from the second half of the twentieth century and later, then only one out of seven cases led to war—indicating the past might not be such a valuable guide to understanding modern international relations.

One may also add the US-China relationship, which thus far has not resulted in war, giving us only one out of eight recent power transitions that led to armed conflict. None of this is to say that Allison should have included the additional cases. Without clearer definitions of what is being measured, the lesson is that one cannot determine which cases should be included.

### **Selection Bias**

There are two ways to understand the Thucydides Trap. In the first—the more ambitious version of the theory that Allison presents—China and the United States may fight a war because of changes in relative economic strength. In the second—the one Allison uses when he is more careful—the two countries may fight a war because of how they perceive their interests combined with shifts in objective measures of power. Yet one cannot conclude states are “destined for war” based on a material shift in power from a data set that selects for countries based on whether they are rivals, which is a state of affairs determined by the intentions of the actors in question.

In technical terms, selection bias occurs when one attempts to make conclusions based on a nonrandom sampling of the data.<sup>24</sup> If a researcher wants to understand public opinion on a specific issue, it would be a mistake to rely on a demographically unbalanced sample or a survey in which respondents seek out participation.

Similarly, Allison's claims about whether nations are destined to fight cannot rely on choosing cases where states have subjectively perceived overlapping interests. Drawing such a conclusion is like finding the most aggressive individuals in a bar and measuring how often they end up fighting to draw conclusions about the likelihood of a conflict between any two random individuals with high levels of upper body strength.



There are two ways to avoid conflict between the United States and China. In one scenario, China challenges the United States in East Asia, and we somehow avoid war—the optimistic outcome of Allison’s Thucydides Trap. In the other scenario, there is no challenge in the first place. Imagine if the economic rise of China mirrored that of Japan in the second half of the twentieth century, and Beijing did not become militarily more assertive. By Allison’s definition, there would be no Thucydides Trap because neither side is challenging the other. Moreover, the same would be true if the United States decided it was no longer interested in maintaining its military position in East Asia.

Allison collects cases based on one side threatening another; consequently, his analysis is biased by the fact he selects countries that are antagonists and then checks how often they find themselves at war. Advocates of restraint want to push the United States toward taking a less militarized approach to foreign policy. If they succeed, there is no longer a Thucydides Trap, just as there was none when the United States replaced France as the dominant power in Southeast Asia.

Great power antagonism is in that sense not only a choice; it is the crux of the discussion focused on how the United States should meet the rise of China. The concept of the Thucydides Trap skips the entire debate and assumes the United States wishes to remain an established power in East Asia and is being challenged by China. If these propositions are true, they are due to choices made by both sides, not the result of circumstances outside of human control.

### **Conclusion: Misusing History**

*Destined for War* has helped transform how foreign policy elites and much of the educated public think about the US-China relationship. While Allison studiously avoids making strong recommendations, many in the press have done so on his behalf, and some conclusions seem to follow naturally from the underlying analysis. After all, if one believes there is a 75 percent chance the United States and China will end up in war, does it not make sense to increase military spending just in case?

Thus, while Allison explicitly rejects the idea that accepting the Thucydides Trap means the United States should adopt an aggressive posture toward China and presents accommodation as one possible strategy, practically all prominent analysts who have accepted his framing have advocated for more confrontational policies.<sup>25</sup> The idea of the Thucydides Trap is appealing to hawks because it skips the question of whether the

United States *should* be a rival to China and assumes the laws of history have decided that it already is, or must be in the near future.

The only remaining question is whether American leaders can manage to make good decisions that would lead to the rare situation in which a power transition does not result in war. While it is possible to argue the Thucydides Trap calls for accommodation, presenting the US-China relationship as naturally antagonistic has provided rhetorical and political ammunition for advocates of more confrontational policies.

Luckily, things are not so dire. Allison's analysis does not follow the most basic rules of statistical modeling. There is practically no attempt to clearly define how he chooses his cases. Nor is there any attempt to account for omitted variables, even in the simple form of dividing the data by historical era. Finally, Allison selects cases where countries have conflicting interests as subjectively perceived by leaders. Thus, he short-circuits the continuing debate about how the United States should respond to a rising China by ignoring a potential path to peace wherein American leaders move away from a confrontational posture in East Asia.

Allison asks the reader not to judge his work from the perspective of statistics. Unfortunately, it is incoherent to present data to the world, argue that it should shape our predictions about how the US-China relationship will unfold, and then ask that we do not judge the theory by the most rigorous standards. Either the data set Allison presents should guide US thinking and behavior, or it should not.

Whether it is possible to use history to derive statistical predictions about the likelihood of war is an open question. What is certain is that doing so must, at the very least, avoid the problems highlighted here. A rigorous historical analysis intended to frame the US-China relationship and support the foreign policy process must clarify the standards of inclusion; consider other variables that might influence the likelihood of war; and avoid endogeneity problems that conflate the dependent variable and the independent variable of interest.

A narrower historical focus on international politics since the second half of the twentieth century provides a more optimistic lens for understanding the future of great power relations. As measured by GDP, a handful of power shifts have occurred over the last several decades. Among these are China relative to Japan and Russia, and Germany relative to other European nations. None of these cases has led to war. The disappearance of interstate conflict more generally offers hope that even if power transitions may have created a substantial risk of war in the past, they do not do so today.

In the end, however, history may be of limited utility in understanding the US-China relationship. Instead of employing historical analogies that may or may not apply or using data sets that cannot meet basic standards for establishing causal inference or reasonably predict behavior, American foreign policy should proceed by considering the interests, politics, and material capabilities of both sides. Questions such as what does China want, can the United States live with its claims, and what is worth going to war over should be at the forefront of the minds of American leaders.

The Thucydides Trap begins by assuming the two superpowers are engaged in a rivalry, all but foreclosing a more restrained American foreign policy by presenting such a view as hopelessly naïve. When it comes to power transitions, it is not enough simply to say that studying previous centuries reveals no iron laws. Rather, scholars have yet to show that conclusions about the likely course of future events derived from the distant past can withstand basic scrutiny. **SSQ**

#### **Richard Hanania**

Dr. Hanania is the president of the Center for the Study of Partisanship and Ideology and a research fellow at Defense Priorities.

#### **Notes**

1. See Steve Chan, *Thucydides's Trap?: Historical Interpretation, Logic of Inquiry, and the Future of Sino-American Relations* (Ann Arbor: University of Michigan Press, 2020); David C. Kang and Xinru Ma, "Power Transitions: Thucydides Didn't Live in East Asia," *Washington Quarterly* 41, no. 1 (2018); Richard Ned Lebow and Benjamin Valentino, "Lost in Transition: A Critical Analysis of Power Transition Theory," *International Relations* 23, no. 3 (2009); and Peter Harris, "Problems with Power-Transition Theory: Beyond the Vanishing Disparities Thesis," *Asian Security* 10, no. 3 (2014).

2. Kenneth Neal Waltz, *Man, the State, and War: A Theoretical Analysis* (New York: Columbia University Press, 2001).

3. Kevin Rudd, "Xi Jinping, China and the Global Order: The Significance of China's 2018 Central Foreign Policy Work Conference" (address, Lee Kuan Yew School of Public Policy, National University of Singapore, June 26, 2018), <https://asiasociety.org/>.

4. Hal Brands, "Democracy vs Authoritarianism: How Ideology Shapes Great-Power Conflict," *Survival* 60, no. 5 (2018), <https://doi.org/>.

5. Shirley V. Scott, "China's Nine-Dash Line, International Law, and the Monroe Doctrine Analogy," *China Information* 30, no. 3 (2016), <https://doi.org/>.

6. John J. Mearsheimer, "China's Unpeaceful Rise," *Current History* 105, no. 690 (2006): 160, <https://doi.org/>.

7. Stephen M. Walt, "Everyone Misunderstands the Reason for the US-China Cold War," *Foreign Policy*, June 30, 2020, <https://foreignpolicy.com/>.

8. Donald J. Trump, *National Security Strategy of the United States of America* (Washington, DC: The White House, December 2017), 27, <https://trumpwhitehouse.archives.gov/>.

9. Graham Allison, *Destined for War: Can America and China Escape Thucydides's Trap?* (New York: Houghton Mifflin Harcourt, 2017), chap. 10.
10. Graham Allison, "The Thucydides Trap: Are the US and China Headed for War?," *Atlantic*, September 24, 2015, <https://www.theatlantic.com/>.
11. Graham Allison, "The Thucydides Trap," *Foreign Policy*, June 9, 2017, <https://foreignpolicy.com/>.
12. Allison, *Destined for War*, chap. 10.
13. Michael Crowley, "Why the White House Is Reading Greek History," *Politico Magazine*, June 21, 2017, <https://www.politico.com/>.
14. Crowley, "Greek History."
15. Catherine Forbes et al., *Statistical Distributions* (Hoboken, NJ: John Wiley & Sons, 2011), chap. 7.
16. Andrew Gelman and Eric Loken, "The Statistical Crisis in Science," *American Scientist* 102, no. 6 (2014), <https://www.americanscientist.org/>.
17. Brian A. Nosek et al., "The Preregistration Revolution," *Proceedings of the National Academy of Sciences* 115, no. 11 (March 2018), <https://www.jstor.org/>.
18. "Thucydides's Trap: Methodology," Belfer Center for Science and International Affairs, Harvard Kennedy School, accessed October 2021, <https://www.belfercenter.org/>.
19. Paul A. Jargowsky, "Omitted Variable Bias," in *Encyclopedia of Social Measurement*, vol. 2, ed. Kimberly Kempf-Leonard (San Diego, CA: Academic Press, 2005), <https://doi.org/10.1016/>.
20. José A. Tapia Granados and Ana V. Diez Roux, "Life and Death During the Great Depression," *Proceedings of the National Academy of Sciences* 106, no. 41 (2009), <https://doi.org/>.
21. Kenneth N. Waltz, "Nuclear Myths and Political Realities," *American Political Science Review* 84, no. 3 (1990), <https://doi.org/>.
22. Steven Pinker, *The Better Angels of Our Nature: Why Violence Has Declined* (New York: Penguin Group USA, 2012); and James D. Fearon, "Bargaining, Enforcement, and International Cooperation," *International Organization* 52, no. 2 (1998), <https://doi.org/>.
23. "Thucydides's Trap: Potential Additional Cases," Belfer Center for Science and International Affairs, Harvard Kennedy School, accessed October 2021, <https://www.belfercenter.org/>.
24. James J. Heckman, "Sample Bias as a Specification Error," *Econometrica* 47, no. 1 (1979).
25. See Richard McGregor, *Asia's Reckoning: China, Japan, and the Fate of U.S. Power in the Pacific Century* (New York: Penguin Books, 2018), 354–55; Maaajd Nawaz, "Is China Preparing for War?," *Unherd*, April 20, 2020, <https://unherd.com/>; David P. Goldman, "Must We Fight?," *Claremont Review of Books* (Fall 2017), <https://claremontreviewofbooks.com/>; and H. R. McMaster, "How China Sees the World," *Atlantic*, May 2020, <https://www.theatlantic.com/>.

### Disclaimer and Copyright

The views and opinions in *SSQ* are those of the authors and are not officially sanctioned by any agency or department of the US government. This document and trademarks(s) contained herein are protected by law and provided for noncommercial use only. Any reproduction is subject to the Copyright Act of 1976 and applicable treaties of the United States. The authors retain all rights granted under 17 U.S.C. §106. Any reproduction requires author permission and a standard source credit line. Contact the *SSQ* editor for assistance: [strategicstudiesquarterly@au.af.edu](mailto:strategicstudiesquarterly@au.af.edu).