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A Note from the Editor-in-Chief

I have been extremely grateful to work on the *Journal of International Security and Strategic Studies* this semester. It was an honor to be asked to lead this publication. I have had opportunity to reach out to many renowned practitioners in the security field and it broadened my horizons; these authors write about so many different topics, but all are of extreme importance to our society. These thought-provoking pieces will bring great discussion and information to those reading.

I would like to thank the many people who have worked with me to help this journal be what it is today. To my executive editor, Sam Peterson, and managing editor, Mitchell Kleinsmith, along with my content editors, thank you for your time and effort in helping support this journal. Thank you to my other managing editors, Katie Lewis and Addison Gardner, who, with Deb Thornton and their team of editors, spent so much of their time and energy on helping source check, copy edit, typeset, and so much more. This truly would not have been possible without each and every one of you. Thank you to faculty member, Mike Smidt, who assisted me in finding wonderful authors to publish and guiding the journal to where it is today.

Publishing the *Journal of International Security and Strategic Studies* is an experience I will never forget, and I am forever appreciative of the time I had and the people I met during this process. I hope every reader is able to enjoy this edition as much as I have.

Rebekah Bushlaev Editor-in-Chief



Viability of the Bay of Pigs Strategy

Mark. Stamilio

The Bay of Pigs invasion was a flawed strategy for countering the spread of Communism in the Western Hemisphere, as there was little chance the plan would succeed in overthrowing the Castro regime, and significant risk the operation would discredit the United States and embolden the Soviet Union. The strategy, as implemented, was an unmitigated failure. It failed because the Kennedy administration failed to align the available ways and means to the desired end, which was the removal of Fidel Castro from power, and it failed to align that end with the administration's broader political aim, which was a free and democratic western hemisphere.

President John F. Kennedy reasonably assumed, in the midst of the Cold War, that a Soviet base in Cuba was a threat to US national security, and he understandably assumed that he must address this threat to avoid perceptions at home and abroad that he was weak, especially after criticizing Republicans for the same during the 1960 presidential election campaign. Somewhat paradoxically, however, Kennedy believed

^{1.} Donald Kagan, On the Origins of War and the Preservation of Peace (New York: Doubleday, 1995), 458–59.

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he must address the threat *without* directly involving the US military, lest he provoke Soviet retaliation in Berlin. This belief and a number of other faulty assumptions led Kennedy to adopt a risky strategy that hinged on the successful use of the military instrument of power but employed that instrument in a manner that was unlikely to succeed. Moreover, true success required the application of the information and diplomatic instruments in concert with the military instrument, but the Kennedy administration applied those instruments haphazardly.

President Kennedy's first faulty assumption was that removing Castro from power would prevent the Soviet Union from establishing a base in the western hemisphere and would thereby eliminate its ability to launch a nuclear strike on the United States. The CIA assessed at the time that other nations in the Caribbean and Central America were on the verge of succumbing to revolutionary movements akin to Castro's.² Thus, it was likely the Soviet Union could establish a base elsewhere in the Western Hemisphere should Kennedy succeed in eliminating Cuba as an option. Additionally, the Soviet Union, "having exploded a hydrogen bomb dropped from an airplane in 1955"3 and having launched Sputnik into orbit in 1957, 4 was likely to develop the capability to launch a nuclear strike from territory it already controlled. Thus, Cuba's proximity to the United States was more important symbolically than strategically; establishing a base on the island was an effort by the Soviet Union to demonstrate that it could project power into the Western Hemisphere and place "platforms for propaganda and surveillance"⁵ near the borders of the United States, as the United States had done near the borders of the Soviet Union.

President Kennedy's second faulty assumption was that the CIA had the competency to design and execute a strategy for overthrowing Castro that involved the use of the military instrument of power (the invasion), the information instrument of power (rallying the support of large numbers of anti-Castro Cubans), and the diplomatic instrument of power (installing a provisional government that the United States would recognize and support with arms and supplies).

The CIA modeled its plan for the invasion on the amphibious

^{2.} Kagan, 460.

^{3.} Kagan, 448.

^{4.} Kagan, 448.

^{5.} Kagan, 454.

landing in the Battle of Anzio, Italy, in 1944,6 which has been described as "the Allies' greatest blunder of World War II." Aside from being a strategic blunder, the Battle of Anzio involved landing 35,000 troops and 240 ships, including "two light cruisers, 12 destroyers, 24 mine-sweepers, and one [submarine]" in a conventional military campaign,7 whereas the Bay of Pigs invasion featured a force of 1,400 guerillas with minimal air support seeking to foment an insurgency. The two scenarios were hardly analogous. As soon as the Bay of Pigs invasion force landed, Castro's air force pinned them on the beach, killing 100 and capturing the rest. It was an even bigger blunder than Anzio.

Additionally, the CIA's plan was predicated on the notion that this group of 1,400 men who had been exiled from Cuba and trained in Guatemala, and were to be reinserted in a remote village where they had few, if any, ties to the local population, could somehow rally the support of large numbers of anti-Castro Cubans to overthrow the regime. The CIA's optimism in this regard stretched credulity. Even if there were large numbers of anti-Castro Cubans willing to join the cause, it is difficult to imagine how this group of exiles could have reached their prospective supporters from a remote base in the south, let alone engendered their trust and incited them to revolt against a regime that had firmly established its military bona fides.

The CIA's plan further stated that, within a few weeks of the invasion, the coup would culminate in the arrival by air of a provisional government that the United States would recognize diplomatically and support with arms and supplies.¹³ The CIA's optimism is this regard also stretched credulity. The Castro regime was unlikely to vacate power without a protracted fight, and a good number of countries throughout the communist "second world" and developing "third world" would have resisted the United States' presumptuous diplomatic maneuver as a threat to their own sovereignty and self-determination.

^{6.} Kagan, 461.

^{7.} Irwin J. Kappes, "Anzio—The Allies' Greatest Blunder of World War II," MilitaryHistoryOnline.com, accessed November 4, 2017, http://www.militaryhistoryonline.com/wwii/italy/articles/anzio.aspx (page no longer available).

^{8.} Kappes, "Anzio."

^{9.} Kagan, On the Origins of War, 461-63.

^{10.} Kagan, 463.

^{11.} Kagan, 465.

^{12.} Kagan, 460-61.

^{13.} Kagan, 461.

President Kennedy's third faulty assumption was that the United States not only *should* conceal its involvement in the operation but somehow *could* conceal its involvement. If Kennedy wanted to avoid perceptions at home and abroad that he was weak, he should have advertised the fact that he was standing up to the Soviet Union instead of concealing it. Better yet, he should have sent US forces to invade Cuba instead of sending a collection of exiles the CIA had trained in Guatemala. As CIA Director Allen Dulles warned Kennedy prior to the invasion, it would be difficult to keep the CIA training in Guatemala a secret, ¹⁴ and even if the administration managed to do so, the use of American B-26 bombers to support the invasion would make it nearly impossible to deny US involvement. Additionally, Cuba and the Soviet Union would very likely presume US involvement in the operation regardless of whether there was direct evidence of it.

President Kennedy's choice of strategy also reflected his failure to consider other ways he might have used the information and diplomatic instruments of power. First, Kennedy did not adequately consider ways to remove Castro without using the military instrument of power. Rather than inserting a guerilla force by means of military invasion, for example, he could have explored options for establishing insurgent cells in Cuba by more discreet means, such as the clandestine recruitment of potential agents on the ground. This approach would have taken more time, patience, and skill, but it was less likely to be detected and thwarted by the regime, and therefore may have had a better chance of success. Likewise, rather than unilaterally installing a provisional government and presenting it to the world as a fait accompli, Kennedy could have sought other nations' support in pressuring Cuba economically. Again, this approach would have taken more time, patience, and skill, but it would have had a better chance of producing a popular uprising and removing Castro from power than the plan to insert a group of exiles in a remote area where they had few, if any, ties to the local population.

Second, President Kennedy did not adequately consider the coercive use of diplomacy *vis-à-vis* the Soviet Union. The United States' new, high-altitude U-2 spy planes had revealed that Soviet Premier Nikita Khrushchev was bluffing about the number of operational intercontinental ballistic missiles the Soviets had at their disposal;¹⁵ "as late as

^{14.} Kagan, 460.

^{15.} Kagan, 451.

1960, it could deploy only a few."¹⁶ In fact, Khrushchev routinely employed "a policy of bluff, drawing back when the bluff was called."¹⁷ Plus, Khrushchev's generals had advised him that "an invasion of the island by American forces would take no more than three or four days to complete."¹⁸ Khrushchev's son Sergei later recounted that his father "honestly didn't think that Cuba could put up serious resistanae against the landing troops."¹⁹ These observations suggest that Khrushchev might have backed down had Kennedy openly threatened to invade Cuba if the Soviet Union had continued its buildup there.

Even if the Bay of Pigs strategy had succeeded, there was a significant risk that it would discredit the United States. President Kennedy rightfully assumed that open US involvement in the attack would provoke anti-American hostility elsewhere in Latin America. Kennedy also rightfully assumed that this hostility would undermine his efforts in Latin America and elsewhere around the world "to present the United States in a new, freedom-loving guise, as the first home of democratic revolutions, aligned with the emerging nations"—his "Alliance for Progress." As such, Kennedy's decision to pursue a strategy that involved the forceful removal of the Castro regime was inconsistent with his broader political aim, which was a free and democratic western hemisphere.

If the strategy failed, there was an even greater risk that it would discredit the United States and embolden the Soviet Union. President Kennedy adopted the strategy in part because he erroneously assumed that the invading forces could escape into the mountains if the operation went awry, and that no one would connect those forces to the United States. Kennedy therefore failed to appreciate the risk that a failed invasion would make him appear weak, thereby undermining the effectiveness of future threats of US military force, in addition to undermining his efforts to portray the United States as friend, not foe, to emerging nations. Again, the strategy he chose was inconsistent with his broader political aim of a free and democratic western hemisphere.

The Bay of Pigs strategy was an unmitigated failure. The invasion failed, and the world knew that the United States had orchestrated it.

^{16.} Kagan, 449.

^{17.} Kagan, 484.

^{18.} Kagan, 466.

^{19.} Kagan, 465.

^{20.} Kagan, 460.

Castro remained in power, and the Soviet Union was emboldened by Kennedy's perceived weakness and indecisiveness. Additionally, the invasion provoked anti-American hostility and contradicted the message that the Alliance for Progress was intended to convey to emerging nations in the western hemisphere and around the world. Thus, Kennedy undermined the credibility of US hard power and US soft power. Rather than countering the spread of communism in the western hemisphere, Kennedy arguably encouraged it.

The odds of the strategy succeeding were effectively nill. The invasion was modeled on a 1944 World War II landing that many military experts consider the Allies' worst strategic blunder and, in any case, was not appropriate for the insertion of guerilla forces in the context of Cuba circa 1961. The Kennedy administration should have known that the Castro regime would perceive the invasion as a serious threat and that it would mobilize its military to neutralize that threat. What is more troubling is that Kennedy adopted such a flawed strategy when the stakes were essentially as high as they could get. If Khrushchev had considered the survival of the Castro regime a vital national security interest to be protected at all costs, and if the Soviet Union had possessed the capability to launch a nuclear strike against the United States, the United States could have suffered consequences that were exponentially greater than the situation warranted.

The Bay of Pigs episode is a textbook case of how not to formulate national security strategy. First, strategists must base decisions on sound assumptions, and most of the assumptions that underpinned the Bay of Pigs strategy were faulty. Second, strategists must ensure that the available ways and means are aligned to the desired end (Castro's removal from power) and that the desired end aligns with the broader political aim (a free and democratic western hemisphere). The Bay of Pigs strategy failed on both accounts. Strategists must also identify and assess risks to and from the strategy. In the case of the Bay of Pigs, President Kennedy failed either to identify or to assess one very critical risk to the strategy—namely, the risk of relying on an intelligence agency to craft a plan that involved the use of the military, information, and diplomatic instruments of power. He also failed to identify or to assess an important risks from the strategy—namely, the risk that overthrowing Castro, or even attempting to overthrow him, would undermine the anti-communist efforts of the administration's Alliance for Progress throughout the western hemisphere, if not worldwide.

The Bay of Pigs episode is often cited as a classic example of "groupthink," a phenomenon in which "excessive efforts to reach agreement, and a strong need for group consensus . . . can override the group's ability to make the most appropriate decision."²¹ Groupthink often occurs when members of the group: "(i) believe the group to be more invulnerable than it is; (ii) rationalize the group's decisions and believe stereotypes about its enemies; and (iii) feel increasing pressure to agree with others in the group."22 In the case of the Bay of Pigs, "the drive for consensus among Kennedy's advisors was believed to have precluded crucial information from being discussed."23 This drive for consensus is attributed to the fact that Kennedy directly involved himself in the decision making, "[causing] his subordinates to come up with a plan that pleased him rather than one that made the most strategic sense."24 The views of the CIA and the military prevailed in large part because the views of other key advisors were suppressed. Presidential advisor Arthur Schlesinger, for example, expressed concerns about the strategy in a written memorandum to the president, but then was admonished by the president's brother, Attorney General Robert Kennedy, "to support the president's decision to invade," 25 and thereafter kept his views to himself during meetings. During one key meeting, Kennedy solicited the views of every member present except Schlesinger.26 As a result of this suppression of dissenting views, many members of the group went along with the strategy because they assumed the rest of the group agreed with it.²⁷ President Kennedy later lamented the decision as a "colossal mistake," and Schlesinger lamented his failure to express his views more forcefully.²⁸

^{21. &}quot;Victims of Groupthink," GlobalSecurity.org, accessed November 4, 2017, https://www.globalsecurity.org/intell/ops/bay-of-pigs-groupthink.htm.

^{22. &}quot;Victims of Groupthink."

^{23. &}quot;Victims of Groupthink."

^{24.} Ben Dattner, "Preventing 'Groupthink': Take Your Team off Autopilot" *Psychology Today*, April 20, 2011, https://www.psychologytoday.com/blog/credit and-blame-work/201104/preventing-groupthink.

^{25.} Rusty Wright, "JFK's Legacy and Group Think," JFK and Groupthink: Lessons in Decision Making, Probe.org, https://probe.org/jfk-and-groupthink-lessons-in-decision-making/.

^{26.} Wright.

^{27.} Wright.

^{28.} Wright.



An Overview of Global Hypersonic Weapon Technological Advancements with Potential Remediation and Policy Options

Ashton Earl

Global advances in hypersonic missile technology threaten existing international deterrents on the use of weapons of mass destruction (WMD) and quicken the pace of battle to incentivize first-strike use of nuclear weapons. This essay will explore current and prospective advances by Russia, China, and the US, and mitigation options for the US and global partners who seek to limit the use of WMD. The essay will be structured accordingly with an initial definition for current usage of the term "hypersonic," followed by a detailed overview of respective countries' recent developments in hypersonic weaponry. The following section will dissect the current debate on effective US strategy, along with this essay's concluding proposal for the pursuance of competitive US advancement in offensive hypersonic technologies and missile tracking capabilities.

A Definition of Current Hypersonic Weapons

The term "hypersonic" refers to the ability of a vehicle or projectile to travel five times the speed of sound or higher. However, when the term is applied to emerging hypersonic weapon technologies, it is not the speed, as many emerging hypersonics are at par or slower than

^{1.} Kelley M. Sayler, "Hypersonic Weapons: Background and Issues for Congress," Congressional Research Service, R45811, October 19, 2021, https://sgp.fas.org/crs/weapons/R45811.pdf.

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intercontinental ballistic missile (ICBM) counterparts² but the combination of that speed with advanced maneuverability, range, and low-altitude capabilities that separate these technologies from those of existing weapons systems.³

Currently, hypersonic weapons can be divided into two distinct categories: hypersonic cruise missiles and hypersonic glide vehicles (HGV) or hypersonic goost glide vehicles. Both can be nuclear or conventionally equipped and operate in similar capacities but with a few key differences.

Hypersonic cruise missiles are funcationally the same as traditional ICBMs, but they are equipped with air-breathing engines called scramjets (supersonic combustion ramjets), which with their lighter weight and smaller size,⁴ make hypersonic speeds and increased maneuverability possible.⁵ Unlike traditional missiles, they can maneuver around impediments between their origin point and destination, much as interceptor missiles do. They can also be fired vertically, allowing them to be equipped on submarines and maritime cruisers.⁶

Hypersonic glide vehicles are attached to rockets. HGVs have greater range and speed than cruise missiles, potentially reaching speeds of mach 20.7 The greater speed presents challenges in producing material suitable⁸ for the high temperatures reached during hypersonic

^{2.} Paige P. Cone, "Assessing the Influence of Hypersonic Weapons on Deterrence," Future Warfare Series 59, (June 2019): 5, https://media.defense.gov/2019/Sep/25/2002187108/-1/-1/0/59Hypersonicweapons.pdf.

^{3.} Cone, "Assessing the Influence," 5.

^{4.} Nishant Agarwal, "Hypersonic Air-breathing Propulsion," University of Colorado Boulder, December 2015, 1, https://www.colorado.edu/faculty/kantha/sites/default/files/attached-files/72875-116619_-_nishant_agarwal_-_dec_17_2015_908_am_-_agarwal_aircraft_propulsion_finalpaper.pdf.

^{5.} Sayler, "Hypersonic Weapons," 2.

^{6.} Sayler, 8.

^{7.} Thomas Newdick, "Air Force Says New Hypersonic Missile Will Hit Targets 1,000 Miles Away in under 12 Minutes," *The Drive*, October 13, 2020, https://www.thedrive.com/the-war-zone/37045/air-force-says-new-hypersonic-missile-will-hit-targets-1000-miles-away-in-under-12-minutes.

^{8.} Note: NASA and other entities have been developing materials better suited for the high temperatures affiliated with hypersonic travel, such as thermal protection systems (TPS) made from materials including silicone carbides, but cost may continue to play some difficulty in mass acquisition. David E. Glass, Ray Dirling, Harold Croop, Timothy J. Fry, and Geoffrey J. Frank, "Materials Development for Hypersonic Flight Vehicles," NASA, 2012, https://doi.org/10.2514/6.2006-8122.

flight,⁹ but their ability to glide at high speeds while consuming less fuel allows for greater strategic utility. Gliders can also make wide maneuvers along unpredictable flight patterns at low altitudes, which allows them to operate outside the general purview of adversarial detection.¹⁰

Hypersonic Technological Advances by Country: Russia, China, and the US

The extent to which hypersonics differ globally is minimal. However, as with all traits of global deterrence strategies, even the slightest inequities have major destabilizing effects. This section explores to what extent Russia, China, and the US have explored and capitalized on this emerging technology and what their potential objectives may be.

Russia

Russia started their hypersonic program during the Cold War and has revamped it successfully since the withdrawal of the US from the Anti-Ballistic Missile Treaty (ABM) in 2001. 11 Following the 2001 withdrawal, the US began constructing missile defense batteries and Terminal High Altitude Area Defense (THAAD) systems, 12 prompting Russian exploration of maneuverable nuclear options to counter US defense capabilities. 13

Russia's accomplishments in hypersonic weapons consist of two projects: the Avangard Hypersonic Glide Vehicle and the 3M22 Tsirkon Hypersonic Cruise Missile.¹⁴

The Avangard began development in the 1980s under the USSR,¹⁵ but development stopped when the Soviet Union fell in 1991. Production resumed a few years later when Russian defense manufacturer

^{9.} Tariq Malik, "Death of DARPA's Superfast Hypersonic Glider Explained," Space.com, April 23, 2012, https://www.space.com/15388-darpa-hypersonic-glider-demise-explained.html.

^{10.} Sayler, "Hypersonic Weapons," 3.

^{11.} Sayler, 12.

^{12.} Wade Boese, "U.S. Withdraws From ABM Treaty; Global Response Muted," Arms Control Association, August 2002, https://www.armscontrol.org/act/2002-07/news/us-withdraws-abm-treaty-global-response-muted.

^{13.} John Borrie, Amy Dowler, and Pavel Podvig, "Hypersonic Weapons: A Challenge and Opportunity for Strategic Arms Control," United Nations Office of Disarmament Affairs, February 2019, 16, https://doi.org/10.37559/WMD/19/hypson1.

^{14.} Sayler, "Hypersonic Weapons," 12.

^{15.} Missile Threat, "Missiles of the World: Avangard," CSIS, July 31, 2021, https://missilethreat.csis.org/missile/avangard/.

NPO Mashinostroeniya reinstated the program, calling it Project 4202. 16 Since then, the Russians have reportedly conducted fourteen tests, gradually achieving complete success. 17 In 2014, development was paused during the Russian invasion of Ukraine, as Russia worked to move critical parts manufacturing from Ukraine to Russian manufacturing facilities. 18 The most successful demonstration occurred in December 2018, when the Avangard was deployed at an altitude of 6,000 km from an SS-19 ICBM launched from Dombarovskiy missile base in Orenburg Oblast, then glided to a successful hit on its target in Kamchatka. 19,20 Russia is currently in the process of material development to withstand reported difficulties with vehicle surface temperatures of up to 2,000 degrees Celsius. 21

The Avangard reportedly can reach targets within a 6,000-km range and deliver a nuclear payload of "more than two megatons in TNT equivalent," or conventional loads of both traditional explosives and critical mass. According to a speech by Russian President Vladimir Putin in 2018, the Avangard is one of six "next generation" weapons the country is currently developing and can maintain maneuverable atmospheric speeds of up to Mach 20,23 or around 6.8 km/second.24 It is currently launched to its traditional suborbital deployment altitude of 100 km atop a SS-19 "Stiletto" (UR-100NUTTH) rocket, but it will be

^{16.} Missile Threat, "Missiles of the World: Avangard."

^{17.} Pavel Podvig, "Avangard System Is Tested, Said to be Fully Ready for Deployment," Russian Forces, December 26, 2018, http://russianforces.org/blog/2018/12/avangard_system_is_tested_said.shtml.

^{18.} Nikolay Surkov, "Hypersonic 'Avangard' Maneuvering Warheads Have Learned to Bypass Missile Defense Areas and Dodge Interceptor Missiles," Iz.Ru, March 2, 2018, https://iz.ru/715170/nikolai-surkov/giperzvukovoi-avangard.

^{19.} Missile Threat, "Missiles of the World: Avangard."

^{20.} Nikolay Surkov, "Hypersonic."

^{21.} Matthew Bodner, "Russia to World: Our New Nukes are 'No Bluff," Defense News, March 12, 2018, https://www.defensenews.com/industry/techwatch/2018/03/12/russia-to-world-our-new-nukes-are-no-bluff/.

^{22. &}quot;Source: The First Carriers of the Avangard Hypersonic Blocks Will Be the UR-100N UTTH Missiles," TASS, March 20, 2018, https://tass.ru/armiya-i-opk/5047200.

^{23.} Tony Wesolowsky, "Listen To Us Now": Putin Unveils Weapons, Vows to Raise Living Standards in Fiery Annual Address," *Radio Free Europe*, March 1, 2018, https://www.rferl.org/a/putin-set-give-annual-address-amid-presidential-election-campaign/29069948.html.

^{24.} Missile Threat, "Missiles of the World: Avangard."

replaced by the silo-based R-28 "Sarmat."²⁵ The Avangard reportedly entered serial production in 2019, following 2018 announcements by Russian Defense Minister Sergey Shoigu stating that "31 launchers with the Yars and Avangard ICBMs will assume combat duty in the Strategic Missile Force."²⁶ Currently reported fielding of the Avangard was confirmed to have begun December 2019.²⁷

Although there is less literature on the history of the 3M22 Tsirkon hypersonic cruise missile, many of its specifications and strategic implications are publicly accessible. The 3M22 Tsirkon is an anti-ship hypersonic cruise missile produced by NPO Mashinostroeniya. It has a reported low-level range of 500 km and 750 km at semi-ballistic trajectory; however, the Russian media claims the range is closer to 1,000 km. Initial 2017 tests of the weapon reportedly clocked its speed at over Mach 8. Upon deployment, the Zircon is also surrounded by a plasma cloud that absorbs radio frequencies, making it invisible to radar systems, thus adding a fast, maneuverable, and stealthy option to Russia's arsenal. The Zircon has reportedly been successfully launched from vertical launch systems equipped on a number of Russian naval vessels, including cruisers Admiral Nakhimov and Pyotr Veliky, Project 20380 corvettes, Project 22350 frigates, and Project 885 Yasen-

^{25.} Missile Threat.

^{26. &}quot;Over 30 Years, Avangard ICBMs to Assume Combat Duty in Russia Next Year," TASS, December 18, 2018, https://tass.com/defense/1036642.

^{27. &}quot;Russia Deploys Avangard Hypersonic Missile System" *BBC*, December 27, 2019, https://www.bbc.com/news/world-europe-50927648.

^{28.} Missile Defense Advocacy Alliance (MDAA), "3M22 Zircon," https://missiledefenseadvocacy.org/missile-threat-and-proliferation/todays-missile-threat/russia/3m22-zircon/.

^{29.} MDAA, "3M22 Zircon."

^{30. &}quot;A Fundamentally New Fuel Has Been Created for Hypersonic Cruise Missiles in Russia," Vesti.ru, trans. unknown, March 17, 2016, https://www.vesti.ru/article/1606617.

^{31. &}quot;Russia's Hypersonic Zircon Anti-Ship Missile Reaches Eight Times Speed of Sound," *TASS*, April 15, 2017, https://tass.com/defense/941559.

^{32.} MDAA, "3M22 Zircon."

^{33. &}quot;Russia Has Successfully Tested a New Hypersonic Missile 'Zircon,' Which Has No Analogues in the World," 1tv.ru, May 21, 2017, https://www.1tv.ru/news/2017-05-21/325643-v_rossii_uspeshno_proveli_ispytaniya_novoy_giperzvukovoy_rakety_tsirkon_ne_imeyuschey_analogov_v_mire.

^{34.} Steven Stashwick, "Russia Tests Anti-Ship Hypersonic Missile Against Sea Target," *The Diplomat*, October 8, 2020, https://thediplomat.com/2020/10/russia-tests-anti-ship-hypersonic-missile-against-sea-target/.

class submarines.³⁵ US intelligence believes the weapon will be ready for combat by 2022³⁶ and operationally fielded in 2023.³⁷

China

Many reports claim China began hypersonic testing in 2014.³⁸ Since then, China has made significant strides in both traditional rocketry and hypersonics, many of which sequentially overlap. Unhindered by the 1987 Intermediate-Range Nuclear Forces (INF) Treaty, the Chinese have made significant and strategic advances in rocketry and missiles over the past few decades. This progress, combined with Russian noncompliance, incentivized US abandonment of the agreement.³⁹ The Chinese believe continued pursuance of hypersonic capabilities is a necessary response to US missile defense system research and deployment possibilities.⁴⁰ Their most significant offensive weapon systems are the DF-ZF Hypersonic Glide Vehicle and Unnamed Fractional Orbital Bombardment System/HGV.

The DF-ZF Hypersonic Glide Vehicle is produced by the stateowned 10th Research Institute, or Near Space Flight Vehicle Research Institute, a part of the China Aerospace Science Industry Corporation (CASIC). The DF-ZF is a hypersonic glide vehicle capable of reaching speeds between Mach 5 and Mach 10.⁴¹ Its development has been part-

^{35.} Sayler, "Hypersonic Weapons," 13.

^{36.} Amanda Macias, "Russia Again Successfully Tests Ship-Based Hypersonic Missile—Which Will Likely Be Ready for Combat by 2022," *CNBC*, December 20, 2018, https://www.cnbc.com/2018/12/20/russia-tests-hypersonic-missile-that -could-be-ready-for-war-by-2022.html.

^{37. &}quot;Russian Navy to Accept Latest Tsirkon Hypersonic Missile for Service in 2023—Source," *TASS*, March 20, 2019, https://tass.com/defense/1049572.

^{38.} Zachary Keck, "China Confirms Hypersonic Missile Test," *The Diplomat*, January 17, 2014, https://thediplomat.com/2014/01/china-confirms-hypersonic-missile-test/.

^{39.} Daryl Kimball and Kingston Reif, "The Intermediate-Range Nuclear Forces (INF) Treaty at a Glance," Arms Control Association, August 2019, https://www.armscontrol.org/factsheets/INFtreaty.

^{40.} Tong Zhao, "Conventional Challenges to Strategic Stability: Chinese Perception of Hypersonic Technology and the Security Dilemma," Carnegie Endowment for International Peace, July 23, 2018, https://carnegieendowment.org/files/Conventional_Challenges_to_Strategic_Stability.pdf.

^{41.} Franz-Stefan Gady, "China Tests New Weapon Capable of Breaching US Missile Defense Systems," *The Diplomat*, April 28, 2016, https://thediplomat.com/2016/04/china-tests-new-weapon-capable-of-breaching-u-s-missile-defense-systems/.

nered with the creation of the Dong-Feng (DF)-17, formerly designated by the US as the Wu-14.42 The DF-17 was made to launch the HGV to its optimal deployable altitude. The People's Liberation Army (PLA) has been equipped with the weapons for the expressed purposes of "develop[ing] a fast, long-range, high-precision strike capability" and "[leaving] enemies with little time to react." The DF-17 was first successfully tested in 2014 at Taiyuan Satellite Launch Centre in Shanxi Province, 45 and its range is dependent on the rocket designed to carry it. That said, some tests have given hints at operational range with a November 2017 test launching the DF-17 at 400 km over 11 minutes, before launching the DF-ZF to a static glide at an altitude of 60 km. 46 US estimates pin the range of the DF-17 at between 1,800 and 2,500 km. It maintains the capacity to field conventional and nuclear weaponry when not equipped with the DF-ZF and can accurately impact within meters of its designated target.⁴⁷ The US Department of Defense indicates that the DF-17 became operational in 2020.48

The Unnamed Fractional Orbital Bombardment System/HGV is China's greatest public hypersonic feat. Successfully tested twice, once in July 2021 and again in August 2021, the latest test successfully launched the HGV into Low-Earth Orbit (LEO); it circumnavigated the earth before touching down 24 miles from its target. ⁴⁹ What is most significant about this trial run is the direction taken by the HGV. Current US missile defense strategy closely monitors ICBM trajectory over the North Pole, a product of the Cold War and continued deterrence

^{42.} Missile Threat, "DF-17," CSIS, August 2, 2021, https://missilethreat.csis.org/missile/df-17/.

^{43.} Missile Threat.

^{44.} Missile Threat.

^{45.} Missile Threat.

^{46.} Ankit Panda, "Introducing the DF-17: China's Newly Tested Ballistic Missile Armed with a Hypersonic Glide Vehicle," *The Diplomat*, December 28, 2017, https://thediplomat.com/2017/12/introducing-the-df-17-chinas-newly-tested-ballistic-missile-armed-with-a-hypersonic-glide-vehicle/.

^{47.} Panda, "Introducing the DF-17."

^{48.} Office of Secretary of Defense, "Military and Security Developments Involving the People's Republic of China: A Report to Congress Pursuant to the National Defense Authorization Act for Fiscal Year 2000," 2021, https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-Final.pdf.

^{49.} Demetri Sevastopulo and Kathrin Hille, "China Tests New Space Capability with Hypersonic Missile," *Financial Times*, October 16, 2021, https://www.ft.com/content/ba0a3cde-719b-4040-93cb-a486e1f843fb?signupConfirmation=success.

strategy against Russia. China, which sits at a comparable longitude to Russia, successfully sent the HGV gliding south, passing unmonitored air space around Antarctica. ⁵⁰ China denies this was a hypersonic missile test, ⁵¹ but regardless of what exactly the Chinese claim, this HGV could be weaponized into a potent nuclear threat to US national security. ⁵²

United States of America

The United States employs a wide array of hypersonic research and development programs. A study mandated by the FY2013 National Defense Authorization Act (NDAA) and conducted by the Institute for Defense Analyses (IDA) listed forty-eight "critical hypersonic test facilities and mobile assets"53 for maturation of hypersonic programs through the year 2030, but a more recent report⁵⁴ lists 26 governmental and private wind tunnel facilities with hypersonic testing capabilities.⁵⁵ Regardless, the US has, and is exhaustively using, a wide range of acquisitional capabilities to produce strategic hypersonic capabilities. In partnership with Army Futures Command, these capabilities are growing at a significant rate, with universities developing improved facilities to test and create advanced hypersonics, including the addition of a Mach 6 hypersonic wind tunnel at the University of Notre Dame, Mach 8 and Mach 10 hypersonic wind tunnels at Purdue University. An adjustment to a University of Arizona facility will give it Mach 5 capabilities, and construction of a kilometer-long Mach 10 wind tunnel at Texas A&M University is underway.⁵⁶ In March 2020, the Department of Defense announced the establishment of a "hypersonic war room" to assess the US industrial base for hypersonic weapons and identify "critical nodes"

^{50. &}quot;China's Test of a Hypersonic Missile Worries America," *The Economist*, October 23, 2021, https://www.economist.com/china/2021/10/23/chinas-test-of-a-hypersonic-missile-worries-america.

^{51.} Sevastopulo, "China Tests."

^{52.} Shaan Shaikh, "China's Hypersonic Future," CSIS, December 12, 2021, https://missilethreat.csis.org/chinas-hypersonic-future/.

^{53.} Sayler, "Hypersonic Weapons," 10.

^{54.} US Government Accountability Office, "Hypersonic Weapons: DOD Should Clarify Roles and Responsibilities to Ensure Coordination across Development Efforts," March 22, 2021, 105, https://www.gao.gov/products/gao-21-378.

^{55.} Note: According to the same report, 14 of these facilities were constructed before 1970 and require maintenance. All of these facilities are heavily booked, requiring reservation at least a year in advance.

^{56.} Sayler, "Hypersonic Weapons," 11.

in the supply chain.⁵⁷ The "DOD has also amended its '5000 series' acquisition policy in order to enhance supply chain resiliency and reduce sustainment costs."⁵⁸

US hypersonic developments are both offensive and defensive in nature due to a broad political and strategic opinions about what the future of US hypersonics should entail.⁵⁹ Because of the array of hypersonic capabilities currently under development by the US, this section will simply break down US hypersonic capabilities into prospective offensive and defensive capabilities, respectively.

US Offensive Hypersonic Developments

An October 2021 updated congressional research report lists a number of developmental hypersonic operational prototypes. At present, the Navy is developing a Conventional Prompt Strike (CPS) hypersonic missile. The Army is developing what they term a Long-Range Hypersonic Weapon (LRHW). The Air Force is developing both an AGM-183 Air-Launched Rapid Response Weapon (ARRW, pronounced "arrow") and a Hypersonic Attack Cruise Missile (HACM). DARPA is developing three hypersonic offensive capabilities: Tactical Boost Glide (TBG) HGVs, Operational Fires (OpFires) and Hypersonic Air-breathing Weapon Concept (HAWC, pronounced "hawk").60

The Navy's CPS is a unique development. The CPS is intended to feature a glide vehicle with air-breathing hypersonic booster systems. 61 Most HGVs rely solely on gravitational pull to achieve hypersonic speeds. Theoretically, the pairing of a booster should make the addition of a paired rocket system unnecessary, potentially cutting costs and lowering flight time of the HGV. The Navy's FY2022 budget proposals indicate that the CPS will initially be deployed on Zumwalt-class destroyers by FY2025 and Virginia-class submarines by FY2028. 62 The Army's LRHW is virtually the same as the CPS, but it is meant to be deployed from the ground. It is expected to have a range of around 1,725 miles and is estimated to enter the US arsenal as a program of

^{57.} Sayler, 11.

^{58.} Sayler, 12.

^{59.} Note: Disagreements that will be examined in the last section of this essay.

^{60.} Sayler, "Hypersonic Weapons," 5.

^{61.} Sayler, 5.

^{62.} Department of the Navy, "Department of Defense Fiscal Year (FY) 2022 Budget Estimates," 1466, https://www.secnav.navy.mil/fmc/fmb/Documents/22pres/RDTEN_BA4_Book.pdf.

record in FY2024.63

The Air Force's AGM-183 Air-Launched Rapid Response Weapon will feature DARPA's Tactical Boost Glide technology and will be launched from the air.64 This will offer the Air Force a globally unique capability, and the weapon will have an estimated range of 1,000 miles at speeds ranging between Mach 6.5 and Mach 8.65 The Air Force is expected to field 12 ARRW missiles beginning in FY2022.66 The Air Force's other project, the Hypersonic Conventional Strike Weapon, has experienced significant delays. The project was cancelled for more than a year in 2020 because of budgetary pressures⁶⁷ but is set to be resumed in FY2022 as the Hypersonic Attack Cruise Missile. The weapons seem to be similar in nature to the ARRW and are expected to be loaded on US bombers, a B-52 being able to equip 20 HACMs (a B-52 would only be capable of equipping four ARRW missiles).68 The Air Force is also looking into a project they term "Project Mayhem," which the Principal Director for Hypersonics, Mike White, describes as "a look at the next step in what the opportunity space allows relative to hypersonic cruise missile systems," and the project is set to be capable of exponentially longer ranges than those that are currently possible.⁶⁹ It is expected "to be larger than ARRW and capable of carrying multiple payloads for different mission sets."70

^{63.} Sydney J. Freedberg Jr., "Army Discloses Hypersonic LRHW Range of 1,725 Miles: Watch Out China," Breaking Defense, May 12, 2021, https://breakingdefense.com/2021/05/army-discloses-hypersonic-lrhw-range-of-1725-miles-watch-out-china/; and Department of the Army, "Department of Defense Fiscal Year (FY) 2022 Budget Estimates," 2 (Budget Activity 4): 639, https://www.asafm.army.mil/Portals/72/Documents/BudgetMaterial/2022/Base%20Budget/rdte/RDTE_BA_4_FY_2022_PB.pdf.

^{64.} Sayler, "Hypersonic Weapons," 6.

^{65.} Sayler, 6.

^{66.} Department of the Air Force, "Department of Defense Fiscal Year (FY) 2022 Budget Estimates," 21, 19, https://www.saffm.hq.af.mil/Portals/84/documents/FY22/PROCUREMENT_/FY22%20DAF%20J-Book%20-%203020%20-%20Missile%20Proc.pdf?ver=GIEj1YH2GS-elMys1wLm1A%3D%3D.

^{67.} Sayler, "Hypersonic Weapons."

^{68.} John A. Tirpak, "Air Force Will Try Again to Launch ARRW Hypersonic Missile in July," *Air Force Magazine*, June 3, 2021, 7, https://www.airforcemag.com/air-force-july-launch-arrw-hypersonic-missile.

^{69.} Mike White, "Hypersonic Strike and Defense: A Conversation with Mike White," CSIS, June 10, 2021, https://www.csis.org/analysis/hypersonic-strike-and-defenseconversation-mike-white.

^{70.} Sayler, "Hypersonic Weapons," 13.

DARPA has taken both a supporting role to the service branches as well as its typical cutting-edge pursuance in respect to hypersonics. In tandem with the Air Force, DARPA is currently testing their Tactical Boost Glide HGV, which currently reaches speeds over Mach 7. It is set to be initially deployed aerially by the Air Force and will then be fitted to vertical launch from naval vessels. There are not many available details on their Operational Fires system, but it is reportedly intended to be land based. DARPA's Hypersonic Airbreathing Weapon Concept seeks to be a smaller, aerially launched alternative to HGVs. The HAWC is expected to be better capable of fielding seeker attachments, and its smaller size will offer a more diverse array of launch platforms.

US Defensive Hypersonic Developments

Although operational hypersonic missile defense options are not expected to be available until around 2025, the DOD and Missile Defense Agency (MDA) are actively investing in defensive solutions, including interception and improved tracking capabilities. As noted earlier, most of the US radar stations are fielded in the northern hemisphere and are equipped to track high altitude targets. Hypersonics have been shown to take advantage of these gaps by flying unpredictable and maneuverable paths around radar stations and along the southern hemisphere at low altitudes. One of the major projects currently under development is the fielding of a network of LEO satellites to extend the range of US strategic tracking capabilities. The DOD recently awarded defense contractors Northrop Grumman and L3Harris contracts to pursue this endeavor.74 Raytheon, Northrop Grumman, and Lockheed Martin have also recently been selected to develop maneuverable interceptors capable of adapting to the trajectory adjustments of incoming hypersonic weapons.⁷⁵

^{71.} Sayler, 8.

^{72.} Department of Defense, "Fiscal Year (FY) 2022 Budget Estimates," vol. 3, 1, 159, https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2022/budget_justification/pdfs/03_RDT_and_E/RDTE_Vol3_OSD_RDTE_PB22_Justification_Book.pdf.

^{73.} Department of Defense, "Department of Defense Press Briefing on Hypersonics," March 2, 2020, https://www.defense.gov/News/Transcripts/Transcript/Article/2101062/department-of-defense-press-briefing-on-hypersonics/.

^{74.} Sandra Erwin, "Northrop Grumman and L3Harris to Build Sensor Satellites for Missile Defense Agency," Copernical, January 21, 2021, https://copernical.com/news-public/item/21704-2021-01-23-08-57-28.

^{75.} Theresa Hitchens, "Raytheon, Northrop, Lockheed to Compete for

The Current US Hypersonic Weapon Debate

While the US is currently moving forward with both offensive and defensive hypersonic capabilities, the consensus on the efficacy of such pursuits is far from unanimous. A January 2021 study conducted by the Center for Space Policy and Strategy⁷⁶ dissects perspectives on the issue into four categories with occasional overlap based on strategic, rather than technologic, opinion. This section stands by the findings of this study and will summarize and analyze the four approaches to hypersonics identified therein.

The study terms the four major US approaches to hypersonics as: 1), Get Ahead, 2), Shields Up, 3), Draw the Line, and 4), Avoid the Race. The descriptions and analysis of each are discussed below.

Those who promote the Get Ahead path see US military competition with Russia and China as inevitable. They typically see hypersonic weapons as "game-changers" that verge on being revolutionary. Considering both these perspectives, proponents of the Get Ahead approach are in favor of active and competitive acquisition of offensive hypersonic weaponry and the use of such to gain strategic advantages against Russia and China.

Those who promote the Shields Up path see US military competition with Russia and China as likely. They share many of the same technological perspectives as those in the Get Ahead camp. However, they typically see offensive capabilities as less of an advantage and desire broad missile defense capabilities for both conventional and nuclear warheads. Thus, they promote the pursuance of limited offensive capabilities and a greater investment in missile defenses.

Those who promote the Draw the Line path see the continued existence of strategic deterrence as likely, regardless of power competition with Russia and China. They see limited revolutionary traits in hypersonics and believe that traditional missile technology, so long as second-strike options are secured, is sufficient to maintain the status quo. Typical proposals of this group include relying on deterrence to

Hypersonic Interceptor" Breaking Defense, November 19, 2021, https://breaking-defense.com/2021/11/raytheon-northrop-lockheed-to-compete-for-hypersonic-interceptor/.

^{76.} Sam Wilson, "The Hypersonic Missile Debate," Center for Space Policy and Strategy, January 2021, https://csps.aerospace.org/sites/default/files/2021-08/Wilson_HypersonicMissileDebate_20210112_1.pdf.

maintain national security and constructing tighter defenses against traditional missiles, thus forcing the adversary to use nuclear arms or none at all.

Those who promote the Avoid the Race path do not see US military competition with Russia and China as inevitable. They generally share faith in strategic deterrence with those who promote the Draw the Line course. They see very limited revolutionary capabilities in hypersonics, quickly pointing out similar capabilities in some traditional projectiles. They believe that pursuance of hypersonic capabilities stokes unnecessary action-reaction cycles with Russia and China.

The CSPS study acknowledges that some may find themselves in multiple categories and that these category labels may fluctuate. For example, one could support competitive advancement of both offensive (Get Ahead) and defensive (Shields Up) hypersonic capabilities. The study states, "In this case, due to resource constraints, the expert could prioritize the offensive or defensive investments or pursue a more limited portfolio of both."⁷⁷ The study merely presents "simplified ways to represent areas on a continuous spectrum [of the hypersonic weapons debate in the US]."⁷⁸ The study also does not represent the extremes of either side, merely the mainstream positions.

Recommendation and Conclusion

This paper advocates for a general pursuance of the Get Ahead position with elements of the Shield Up position, thus pursuing competitive US advancement in offensive hypersonic technologies and missile tracking capabilities. This recommendation is based on the inevitable US power competition with China, the nature of deterrence and the benefits of its continued pursuit, and the destabilizing effects of missile defense systems. The following paragraphs will extrapolate these proposed positions.

Inevitable US Power Competition with China

This explanation will focus on Chinese hegemonic progression as a greater existential threat than Russian efforts at international disruption of order, even in the sphere of hypersonic weapons. In doing so, it is important to recognize China's perceived intentions, which justify US attention and support the urgency of the US in pursuing greater

^{77.} Wilson, "The Hypersonic Missile Debate."

^{78.} Wilson.

strategic capabilities than those of China.

China and the US have two distinctly different goals for world order. The Chinese make clear their intention to mold world affairs to benefit themselves, at the cost of human rights, by their internal oppression of minority populations and their support of nation states that violate human rights across the globe. Although imperfect, the US has routinely committed itself to the furtherance of peace and the protection of human rights through the global spread of democracy and individualism. The US and Chinese agendas are incompatible and mutually exclusive. Considering that WMD are retained as general insurance for the existence of a nuclear state, it is imperative that the US maintain competitive advantage in this sphere.

Contrary to proponents of the Avoid the Race path, there is no evidence that an action-reaction cycle of a strategic arms race would cease with the removal of the US. However, considering self-published goals of Chinese global hegemony,⁷⁹ it is likely that US hesitation or cessation of hypersonic pursuance would simply serve to expand the strategic gap between US and Chinese strategic capabilities favorably for China, thus jeopardizing US national security.

Benefits of Continued Deterrence Strategy

This paper posits that deterrence has proven effective historically and that it will continue its efficacy should the US pursue competitive advancement in offensive hypersonic technologies and missile tracking capabilities. Considering oppositional perspectives to the revolutionary capacity of hypersonic weapons, this paper proposes that this is not intrinsically important to effective deterrence. Unless the US can decisively categorize hypersonics as being strategically equal or inferior to alternative existing technologies, this may not be a risk that the US can take. Additionally, deterrence requires adversaries to believe that equal or greater harm will be mutually assured between both parties. Therefore, the actual efficacy of a weapon is less important than the adversarial belief in its effect. If the adversary believes that hypersonic weapons exhibit revolutionary and devastating potential harm to their state, then the fielding of such weapons serves the demands of deterrence.

^{79.} Arjun Gargeyas, "China's 'Standards 2035' Project Could Result in a Technological Cold War," *The Diplomat*, September 18, 2021, https://thediplomat.com/2021/09/chinas-standards-2035-project-could-result-in-a-technological-cold-war/.

Pursuing Global Strategic Stability

This paper recommends the acquisition of strictly offensive hypersonic capabilities, with the sole exception of increased missile tracking capabilities. This recommendation is based on the destabilizing nature of missile defense systems to global strategic stability. Deterrence initially demands equal offensive strategic capabilities by adversarial parties. The ability to negate these offensive capabilities with effective defensive capabilities shifts the balance of strategic power and leads to instability and potential war. This was the purpose of the former 1972 Anti-Ballistic Missile Treaty, and it proved effective until breaches in the treaty shifted the power balance.⁸⁰

The question for today is whether a return to effective deterrence through the strict fielding of operational offensive capabilities is possible. This paper posits that it is possible and that a slow progression towards this goal can begin with the US investing in superior quantities of hypersonic weapons in order to negate existing peer anti-missile defenses. This capability, partnered with the absence of revolutionary missile defenses, will serve to slow action-reaction cycles in strategic weaponry and enforce strategic deterrence and stability.

This paper takes exception to this principle in respect to missile tracking capabilities, such as LEO satellite networks. Effective deterrence requires global clarity and transparency. This goal can be met by the pursuit of greater global coverage for US missile tracking and warning systems.

Strategic weapons and WMD pose a unique dilemma in force development. For almost a century, the efficacy of these weapons remains somewhat speculative and is restricted to internal tests. Whether or not hypersonics pose the revolutionary capabilities many claim, their effective deterrence capacity is viable. It is in the United States' best interest for this to be the case, and the greatest insurance of such is to pursue active and competitive acquisition of offensive hypersonic capabilities and greater strategic clarity through the development and wider deployment of enhanced missile warning and tracking systems.

^{80.} Daryl Kimball and Kingston Reif, "The Intermediate-Range Nuclear Forces (INF) Treaty at a Glance," Arms Control Association, December 2020, https://www.armscontrol.org/factsheets/abmtreaty.



International Law of Statehood: What Has the Great Debate Between the Constitutive Theory and the Declaratory Theory Done for the China–Taiwan Issue? A New Approach Moving Forward

Yihao Yun

Abstract

The Chinese Civil War ended in 1949 when the Chinese Communist Party defeated the Kuomintang and forced it to retreat from the Mainland and move to Taiwan under the name of the Republic of China. However, the end of the Chinese Civil War did not erase the tension between the two political entities. After 1949, both entities claimed to be the sole, legitimate government of China until the Republic of China changed its narratives and gradually started claiming itself to be an independent sovereign State different from China in the 1990s. The tension was further intensified when the National People's Congress of the People's Republic of China passed the Anti-Secession Law in 2005. Today the media still bombards the international community with new developments on the China-Taiwan issue, which seems to worsen on a regular basis. The repeated question that has been on many people's minds, perhaps for decades, is whether the Republic of China is an independent sovereign state according to international law, an answer this paper attempts to answer.

This paper argues that neither of the two theories in the current literature is adequate to pronounce what the international law of statehood is, that the great debate between the two theories has shown the

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obvious and yet troublesome reality that there is currently no governing international law of statehood, and that the Republic of China's status at this moment is not a legal matter but a purely political matter. This paper also argues that the superficial irreconciliation between the two theories is philosophically untenable and that any theory that can potentially become the international law of statehood must take into consideration both the internal and external aspects of statehood for which the two theories separately advocate. This paper proposes an international law of statehood that integrates both the external and internal aspects of statehood as well as a process to effectively implement and enforce the proposed law through the actions of the United Nations member states, the International Court of Justice, the United Nations General Assembly, and the United Nations Security Council.

Introduction

Generally, "Taiwan" refers to the territories governed by the Republic of China (the ROC), including the Taiwan Island, Orchid Island, Green Island, Kinmen Islands, Matsu Islands, and the Pescadores. Taiwan has an area of approximately 36,197 square kilometers and is home to 23.6 million people, more than 95% of the population being Han Chinese.

The Chinese Civil War ended in 1949, when the Chinese Communist Party (CCP) defeated the Kuomintang (KMT) and forced it to retreat from the Mainland and move to Taiwan under the name of the ROC.³ In the same year, the CCP established the People's Republic of China(PRC).⁴ However, the end of the Chinese Civil War did not erase the tension between the two political entities. After 1949, both entities claimed to be the sole, legitimate government of China until the ROC changed its narrative and gradually started claiming itself to be an inde-

^{1.} Björn Ahl, "Taiwan," Max Planck Encyclopedia of Public International Law (Oxford: Oxford University Press, 2019), 2.

^{2. &}quot;About Taiwan," Government of Republic of China (Taiwan), accessed September 29, 2021, https://www.taiwan.gov.tw/about.php.

^{3.} Ahl, "Taiwan," 5. Before the Chinese Communist Party defeated the Kuomintang in the Chinese Civil War and established the People's Republic of China, the "Republic of China" was the official name of China, and Kuomintang was the political party governing it. The Republic of China today is not the same as the Republic of China before the establishment of the People's Republic of China.

^{4.} Tarcisio Gazzini, "Some International Legal Aspects of the Chinese Civil War (1927–1949)," *Journal of Conflict and Security Law* 1, no. 2 (December 1996): 141, 149.

pendent sovereign state different from China in the 1990s.⁵ The tension further intensified when the National People's Congress of the PRC passed the Anti-Secession Law, which manifested the PRC's willingness to forcefully unify Taiwan if Taiwan secedes from China or if significant incidents leading to Taiwan's secession from China were to occur.⁶

Today the media still bombards the international community with new developments on the China–Taiwan issue, which seems to worsen on a regular basis.⁷ The repeated question that has been on many people's minds, perhaps for decades now, is whether the ROC is an independent sovereign State according to international law, a question this paper attempts to answer.

Following the walkthrough of the historical events that led to the current issue in Section Two of this paper, Section Three then analyzes where Taiwan's title went after the surrender of Japan at the end of World War II. Section Four introduces the two most predominant theories of international law of statehood in the literature and applies the two theories in analyzing the ROC's international status, followed by criticisms for the two theories and a proposal for a new approach moving forward.

This paper argues that neither of the two theories in the current literature is adequate to pronounce what the international law of statehood is, that the great debate between the two theories has shown the

^{5.} Ahl, "Taiwan," 5, 19; James R. Crawford, *The Creation of States in International Law*, 2nd ed. (Oxford: Oxford University Press, 2007), 211–18. For purposes of this paper, "China" refers to the combination of the Mainland and Taiwan, not just the People's Republic of China.

^{6.} Fan Guojia Fenlie Fa [Anti=Secession Law] (promulgated by the third Session of the Tenth National People's Congress., March 14, 2005, effective March 14, 2005), art. 8; Embassy of the People's Republic of China in the United States of America, Anti-Secession Law, March 15, 2005, http://www.china-embassy.org/eng/zt/99999999/t187406.htm.

^{7. &}quot;China Warns Taiwan Independence 'Means War' as US Pledges Support," BBC, January 29, 2021, https://www.bbc.com/news/world-asia-55851052.; Lee His-min, "The Threat of China Invading Taiwan Is Growing Every Day. What the U.S Can Do to Stop it," NBC News, July 9, 2021, https://www.nbcnews.com/think/opinion/threat-china-invading-taiwan-growing-every-day-what-u-s-ncna1273386; Hana Carter, "RED FURY China Threatens Taiwan with 'Immediate War' Amid Reports US Has 30,000 Troops in Region as Beijing Starts Drills," The US Sun, August 17, 2021, https://www.the-sun.com/news/3490311/china-immediate-war-taiwan-us-troops/.

obvious and yet troublesome reality that there is currently no governing international law of statehood, and that the ROC's status at this moment is not a legal matter but a purely political matter. This paper also argues that the superficial irreconciliation between the two theories is philosophically untenable and that any theory that can potentially become the international law of statehood must take into consideration both the internal and external aspects of statehood for which the two theories separately advocate. This paper proposes an international law of statehood that integrates both the external and internal aspects of statehood as well as a process to effectively implement and enforce the proposed law through the actions of the United Nations (UN) member States, the International Court of Justice, the UN General Assembly, and the UN Security Council.

China-Taiwan Issue History

Pre-World War II

From the Southern Song Dynasty (1127–1279 AD) to the Ming Dynasty (1368–1644 AD), Taiwan was under the Chinese government's jurisdiction.⁸ In 1624, the Dutch Empire colonized Taiwan and remained in control until it was expelled from Taiwan by Koxinga's troops in 1662.⁹ Around 1683 to 1684, after the Ming forces surrendered to the Qing Dynasty, the Qing Dynasty established a Taiwan–Xiamen Patrol Command and a Taiwan Prefecture Administration under the jurisdiction of Fujian Province in Taiwan.10 Around 1885–1887, Emperor Guangxu formally adjusted Taiwan's status to a province.¹¹ In 1895, after being defeated by Japan, the Qing government signed with Japan the Treaty of Shimonoseki, which ceded Taiwan to Japan under Article 2(b) and (c).¹²

In 1911, the new Revolutionary Army initiated an armed uprising against the Qing government and occupied Wuchang, which was sub-

^{8.} Jianming Shen, "Sovereignty, Statehood, Self-Determination, and the Issue of Taiwan," *American University International Law Review* 15, no. 5 (2000): 1101, 1106.

^{9.} Shen, 1106-07.

^{10.} Shen, 1107; Ahl, "Taiwan," 4.

^{11.} Shen, 1108; Ahl, 4.

^{12.} Ahl, 11; Crawford, *Creation of States*, 198; Japan Center for Asian Historical Records National Archives of Japan, "Peace Treaty Concluded between Japan and China (Treaty of Shimonoseki)," accessed September 29, 2021, https://www.jacar.go.jp/english/jacarbl-fsjwar-e/smart/main/18950417/index.html.

sequently followed by other provinces, leading to the end of the Qing Dynasty.¹³ In 1912, the KMT established the ROC.¹⁴ In 1921, the CCP was formed and joined the KMT.¹⁵ In 1927, the CCP staged an armed revolt in Nanchang against the KMT, an event that marked the beginning of the Chinese Civil War, which lasted more than two decades.¹⁶ In 1937, the KMT and the CCP temporarily paused their internal conflict and allied to fight against the external threat from Japan.¹⁷

During World War II

In 1941, during World War II, the ROC declared war against Japan and issued a proclamation to abrogate all treaties, conventions, and agreements with Japan, including the Treaty of Shimonoseki. In 1943, the United States, United Kingdom, and ROC issued the Cairo Declaration, demanding Japan's unconditional surrender and its actions to give up all territories it had forcefully taken from other States. In The Cairo Declaration stated in part that

Japan shall be stripped of all the islands in the Pacific which she has seized or occupied since the beginning of the first World War in 1914, and that all the territories Japan has stolen from the Chinese, such as Manchuria, Formosa, and the Pescadores, shall be restored to the Republic of China.²⁰

In 1945, the United States, the United Kingdom, and the ROC further issued the Potsdam Proclamation to confirm the terms in the Cairo Declaration, which partly stated that "the terms of the Cairo Declaration shall be carried out and Japanese sovereignty shall be limited to the islands of Honshu, Hokkaido, Kyushu, Shikuku, and such minor

^{13.} Editorial Committee of Chinese Civilization, *China: Five Thousand years of History and Civilization* (Kowloon: City University of Hong Kong Press, 2007), 116.

^{14.} Odd Arne Westad, *Decisive Encounters: The Chinese Civil War,* 1946–1950 (Stanford: Stanford University Press, 2003), 23. Again, keep in mind that the Republic of China today is not the same as the Republic of China before the establishment of the People's Republic of China.

^{15.} Westad, Decisive Encounters, 23.

^{16.} Xiaobing Li, ed., *China at War: An Encyclopedia* (Santa Barbara: ABC-CLIO, 2012), 295.

^{17.} Gazzini, "International Legal," 146.

^{18.} Shen, "Sovereignty," 1108-09; Ahl, "Taiwan," 12.

^{19. &}quot;Cairo Communiqué," December 1, 1943," National Diet Library of Japan, accessed September 29, 2021, https://www.ndl.go.jp/constitution/e/shiryo/01/002/46shoshi.html.

^{20. &}quot;Cairo Communiqué."

islands as we determine."²¹ On September 2, 1945, Japan signed the Instrument of Surrender and accepted the terms in the Potsdam Proclamation after the Atomic Bombings of Hiroshima and Nagasaki.²²

Post-World War II

At the end of World War II, the Chinese Civil War between the CCP and the KMT fully resumed and eventually ended in 1949 when the CCP defeated the KMT, forcing the KMT to flee to Taiwan under the name of the ROC.²³ On October 1, 1949, the PRC was established by the CCP on the Mainland and received immediate recognition from the Soviet Union and other Communist States in Europe.²⁴ In the following months, the PRC was also recognized by Burma, India, Pakistan, Ceylon, Norway, Denmark, Israel, Finland, Afghanistan, Sweden, and the United Kingdom.²⁵ Nevertheless, some States continued to recognize KMT as the sole government of China.²⁶ Both the ROC and the PRC kept claiming to have sovereignty over China until the ROC changed its narrative in the 1990s.²⁷

On September 8, 1951, 49 nations signed the Treaty of Peace with Japan (also known as the "Treaty of San Francisco"), which stated in Article 2(b) that "Japan renounces all right, title and claim to Formosa and Pescadores." On April 28, 1952, the ROC and Japan signed the Treaty of Peace between the Republic of China and Japan, which stated in Article 2:

It is recognized that under Article 2 of the Treaty of Peace which Japan signed at the city of San Francisco on September 08 1951... Japan has renounced all right, title, and claim to Taiwan (Formosa) and Penghu (the Pescadores) as

^{21. &}quot;Potsdam Declaration," National Diet Library of Japan, accessed September 29, 2021, https://www.ndl.go.jp/constitution/e/etc/c06.html.

^{22. &}quot;Instrument of Surrender," National Diet Library of Japan, accessed September 29, 2021, https://www.ndl.go.jp/constitution/e/etc/c05.html; James C. Hsiung, "WWII Allies' Grand Plans for Postwar Asia & the Deviant Turnout: A Critical Review," *American Journal of Chinese Studies* 23, no. 2 (October 2016): 183, 184, https://www.jstor.org/stable/44289153.

^{23.} Ahl, "Taiwan," 5.

^{24.} Gazzini, "International Legal," 149.

^{25.} Gazzini, 149.

^{26.} Gazzini, 149.

^{27.} Ahl, "Taiwan," 5, 19; Crawford, Creation of States, 211-18.

^{28.} Treaty of Peace with Japan, art. 2(b), 3 U.S.T 3169; 136 U.N.T.S., September 8, 1951, b 45.

well as the Spradley Islands and the Paracel Islands.²⁹

As a founding member of the UN, the ROC had a seat in the UN and was recognized by the majority of the international community as the sole representation of China until 1971.³⁰ In 1971, the UN General Assembly adopted Resolution 2758 to replace the ROC with the PRC as the sole representation of China. The resolution stated:

The General Assembly, recalling the principles of the Charter of the United Nations, considering that the restoration of the lawful rights of the People's Republic of China is essential both for the protection of the Charter of the United Nations and for the cause that the United Nations must serve under the Charter, recognizing that the representatives of the Government of the People's Republic of China are the only lawful representatives of China to the United Nations and that the People's Republic of China is one of the five permanent members of the Security Council, decides to restore all its rights to the People's Republic of China and to recognize the representatives of its government as the only legitimate representatives of China to the United Nations, and to expel forthwith the representatives of Chiang Kai-shek from the place which they unlawfully occupy at the United Nations and in all the organizations related to it.31

By around 1975, the PRC had become recognized by the majority of nations.³² In 1979, the United States terminated its formal relations with the ROC and established diplomatic relations with PRC.³³ Nevertheless, the United States Congress passed the Taiwan Relations Act of 1979, which states in Section (b):

It is the policy of the United States to preserve and promote extensive, close, and friendly commercial, cultural, and other relations between the United States and the people on

^{29.} Treaty of Peace between the Republic of China and Japan, art. 2, 138 U.N.T.S., April 28, 1952, 3.

^{30.} Donald G. Palmer Jr., "Taiwan: De Jure or Not De Jure—That Is the Question—An Analysis of Taiwan's Legal Status within the International Community," *John F. Kennedy University Law Review* 7, (1996): 65, 73, https://www.jstor.org/stable/23773999.

^{31.} G. A. Res. 2758 (XXVI), October 25, 1971.

^{32.} Crawford, Creation of States, 200-01.

^{33.} Crawford, 201.

Taiwan . . . and to provide Taiwan with arms of a defensive character; and to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.³⁴

While the ROC's loss of recognition could be attributed to its loss of control over China, the significance of the PRC's One-China Principle in causing this result should not be ignored. The One-China Principle requires all States that want to establish or maintain diplomatic relations with the PRC must give no recognition to the ROC.³⁵ By 2005, the ROC was recognized by 26 States,³⁶ and as of 2021, ROC is only recognized by 14 States and the Holy See.³⁷ Nonetheless, many States still maintain informal relations with the ROC and have unofficial representative offices in the ROC.³⁸

In the 1990s, the ROC stopped claiming its authority to represent China and instead began claiming itself to be an independent sovereign State different from China.³⁹ In 2005, the National People's Congress of the PRC passed the Anti-Secession Law, which further intensified the conflicts between the PRC and ROC. Article 8 of the Anti-Secession Law states:

In the event that the "Taiwan independence" secessionist forces should act under any name or by any means to cause the fact of Taiwan's secession from China, or that major incidents entailing Taiwan's secession from China should occur, or that possibilities for a peaceful reunification should be completely exhausted, the state shall employ non-peaceful means and other necessary measures to protect China's sovereignty and territorial integrity.⁴⁰

In response to the Anti-Secession Law adopted by the PRC, the ROC government issued a statement, which, among other things, stated that "based on the Montevideo Convention of 1933, . . . it is undeni-

- 34. Taiwan Relations Act, 22 U.S.C., 1979: 3301(b).
- 35. Ahl, "Taiwan," 8.
- 36. Crawford, Creation of States, 201.
- 37. Ministry of Foreign Affairs of Republic of China (Taiwan), "Diplomatic Allies," accessed September 29, 2021, https://en.mofa.gov.tw/AlliesIndex.aspx?n=1294&sms=1007.
 - 38. Ahl, "Taiwan," 9; Crawford, Creation of States, 201-03.
 - 39. Ahl, 5, 19; Crawford, 216-18.
 - 40. Fan Guojia Fenlie Fa [Anti=Secession Law].

able that the Republic of China is a sovereign and independent State. The Republic of China is an independent and sovereign State. Taiwan's sovereignty belongs to the 23 million people of Taiwan."⁴¹

Taiwan's Title after World War II

First, an argument has been asserted that the Treaty of Shimonoseki did not effectively convey the title of Taiwan to Japan in 1895 since the Qing government signed the treaty under extreme duress, arguing that Article 51 and 52 of the Vienna Convention on the Law of Treaties⁴² made void all treaties procured by the threat or use of armed force.⁴³ However, Articles 4 and 28 of the Vienna Convention on the Law of Treatise explicitly stated that the Convention only applies to treaties concluded by states after it entered into force,⁴⁴ and the Treaty of Shimonoseki was signed almost seven decades before the Vienna Convention on the Law of Treaties entered into force. In addition, the same reasoning would virtually make all post-war peace treaties invalid, including the Treaty of Peace with Japan and the Treaty of Peace between the Republic of China and Japan.

Second, it has been argued that Taiwan was returned to China as a result of the Cairo and Potsdam Declarations⁴⁵ or that the two Declarations and the two Peace Treaties signed in 1951 and 1952 constituted "the chain of instruments" returning Taiwan to China.⁴⁶ However, it has been argued that the Declarations served only as statements of intent that had no legally binding authority because cession of territory at the end of the war must await the peace treaty and that Japan continued to have Taiwan at least formally as its territory until 1952.⁴⁷ Although there is no need to discuss the implications of the two Declarations for the purposes of this paper, the implications could be significant. On the one hand, if the declarations of similar nature during

^{41. &}quot;The Official Position of the Republic of China (Taiwan) on the People's Republic of China's Anti-Secession Law," *Mainland Affairs Council*, March 29, 2005, https://www.mac.gov.tw/en/News_Content.aspx?n=8A319E37A32E01EA&sms=2413CFE1BCE87E0E&s=D1B0D66D5788F2DE.

^{42.} Vienna Convention on the Law of Treaties, art. 51 & 52, 1155 U.N.T.S. 331, May 23, 1969.

^{43.} Shen, "Sovereignty," 1110-11.

^{44.} Vienna Convention on the Law of Treaties, art. 4 & 28.

^{45.} Crawford, Creation of States, 207.

^{46.} Shen, "Sovereignty," 1116-17.

^{47.} Crawford, Creation of States, 207-08.

wartime constitute no more than an intent, it might undermine other concerned parties' confidence in the effectiveness of those declarations, which could potentially prolong the conflicts. On the other hand, it seems inappropriate to say that the major powers during wartime can decide the legal status of a territory through such declarations.

Third, it has been argued that by signing the two Treaties, Japan merely relinquished its titles and rights to Taiwan and left sovereignty over Taiwan undetermined, a result caused by the lack of agreement among the signatories regarding which government represented China. 48 Assuming it was undetermined regarding which government represented China, it is undoubtedly clear that Taiwan was returned to China. Besides the PRC and the ROC, no other States or governments claimed sovereignty over Taiwan at or after the signing of the Peace Treaties. Furthermore, since Japan acquired the title of Taiwan from China, it is logical that Taiwan was returned to China after Japan relinquished its titles and rights in Taiwan, especially considering the statements of intent in the two Declarations. Most importantly, because the PRC and the ROC claimed sovereignty over Taiwan as one State, not as two separate and independent States, until the 1990s, 49 it is immaterial whether the States had an agreement on which government represented China. Therefore, a more plausible argument is that

Japanese relinquishment, which took place against a background of a commitment to return Taiwan to China, and the continued occupation of Taiwan by a recognized government of China, operated to re-vest sovereignty in China as a State without taking any position as to the government entitled to exercise that sovereignty.⁵⁰

Since China did receive Taiwan after World War II, the next question is which government received Taiwan: the PRC government or the ROC government. In Resolution 396 (V), the UN General Assembly recommended that when more than one authority claims to be the lawful government to represent a State in the UN, the Purposes and Principles of the Character and the circumstances of each case should be considered.⁵¹ It also declared that the decision of the General Assem-

^{48.} Ahl, "Taiwan," 14-15.

^{49.} Ahl, 5, 19; Crawford, Creation of States, 216-18.

^{50.} Crawford, 209.

^{51.} G.A. Res. 396 (V), December 14, 1950, 24-25.

bly and its Interim Committee had no effect on the direct relations of individual member States with the State concerned.⁵² Although Resolution 396 (V) made it clear that the General Assembly's decision to recognize one competing government over another was not mandatory for member States to follow, it illustrates how the UN recognizes a gov-ernment representing a State when there are other competing governments. By 1969, 20 years after the PRC was established, the PRC government was recognized by about fifty States as the legitimate government of China.⁵³

In 1972, about half a year after the General Assembly replaced the ROC government with the PRC government as the sole government of China, the majority of member States had shifted their recognition from the ROC government to the PRC government.⁵⁴ By the end of 1991, around the time the ROC started claiming itself to be an independent State instead of the sole government of China,⁵⁵ the PRC had been recognized by 141 nations.⁵⁶

Therefore, in light of the actions taken by the UN and States, it is reasonable to conclude that before the ROC changed its narratives and started claiming itself as an independent State, the PRC had become the sole and legitimate government to represent China, acquiring the sovereignty and the titles over the Mainland and Taiwan. The question would be much more difficult to answer if, before the ROC switched its claims in the 1990s, roughly the same number of States recognized the PRC and the ROC as the sole and legitimate government of China or if the PRC and the ROC approximately had effective control over the same amount of territory or the same amount of population, or both.

However, that is not the case here. Undoubtedly, it could be argued that it is inadequate to decide which competing government is the government of a State even if one government is recognized by the UN and the vast majority of States and has effective control and authority over the vast majority of territory and population within the concerned State. If that is true, one might as well argue that a government cannot

^{52.} G.A. Res. 396 (V), 25.

^{53.} Shen, "Sovereignty," 1121.

^{54. &}quot;U.S. Department of State Report on Diplomatic Relations of the Republic of China and the People's Republic of China," *International Legal Materials* 11, no. 3 (1972): 571–73. https://doi.org/10.1017/S0020782900035993.

^{55.} Ahl, "Taiwan," 5, 19; Crawford, Creation of States, 216-18.

^{56.} Shen, "Sovereignty," 1122.

become the sole, lawful government of State unless there is no other government competing with it, which is a likely way to create more severe conflicts. Such arguments should be firmly rejected for creating unnecessary confusion and providing no practical value. Hence, the PRC most likely now possesses the title of Taiwan.

International Law of Statehood

The Constitutive Theory and the Declaratory Theory

The constitutive theory and the declaratory theory are the most predominant theories of the international law of statehood.⁵⁷ The constitutive theory contends that a political entity needs recognition from other States to become a State.⁵⁸ In other words, the constitutive theorists argue that recognition from other States is both a sufficient and necessary condition for statehood.⁵⁹

Erik Ringmar, one of the leading proponents of the constitutive theory in the current debate on statehood formation, metaphorically compared States with individuals to assert that recognition from other States is essential for a political entity to form its identity as a State in the same way that individuals need recognition to form their identity. According to Ringmar, individuals devise their own stories to describe who they are, and the narratives are usually erroneous because individuals often exaggerate their importance and prospects or alternatively accept what the societal and traditional values tell them to be. As a result, who they really are is often mistaken. However, when individuals circulate their stories about who they think they are, others' responses to accept or deny those individuals' stories informs those individuals of the reasonableness of their descriptions of themselves.

^{57.} Malcolm N. Shaw, *International Law*, 4th ed. (Cambridge: Cambridge University Press, 1997), 296.

^{58.} Tsai Pei-lun, "The Application of International Human Rights Law to Unrecognized Entities: The Case of Taiwan" (PhD diss. University of Nottingham, 2015): 35, http://eprints.nottingham.ac.uk/28423/.

^{59.} Eva Erman, "The Recognitive Practice of Declaring and Constituting Statehood," *International Theory* 5, no. 1 (2013): 36, 39. https://doi.org/10.1017/S1752971913000031.

^{60.} Erik Ringmar and Thomas Lindemann, *The International Politics of Recognition* (New York: Routledge, 2014), 4–8.

^{61.} Ringmar and Lindeman, 6.

^{62.} Ringmar and Lindeman, 6.

^{63.} Ringmar and Lindeman, 6.

Through such interactions with others, their own stories are either recognized or not recognized.⁶⁴ Although others might disagree on the accuracy or reasonableness of the individuals' stories, some dominant accounts usually emerge.⁶⁵ According to Ringmar, the process is much the same for States.⁶⁶ He acknowledged the potential incomparability between the identity of States and the identity of individuals, such as States' lack of unified consciousness, memory, and subjective will.⁶⁷ Nevertheless, he asserted that the metaphor could help people understand how international politics function and demonstrate the importance of recognition in State identity formation.⁶⁸

In contrast, the declaratory theory maintains that a new State is created when the factual conditions are in conformity with the requirements of statehood and that recognition from other States is only an acknowledgment of the fact69 or a logical consequence of following the dictates of international law. Declaratory theorists have argued that when the rights and duties of political entities as States are based on facts rather than recognition from other States, international law can protect entities that are States factually but are denied their status as States by other States. Hence, declaratory theorists believe that the criteria of statehood should be factual and objective. The criteria of statehood should be factual and objective.

Traditionally, declaratory theorists base their criteria of statehood on four qualifications enumerated in Article 1 of the Montevideo Convention, which requires a State to possess (1) a permanent population; (2) a defined territory; (3) government; and (4) capacity to enter into relations with the other States.⁷³ However, as will be discussed in detail later in this paper, declaratory theorists have advocated for additional

^{64.} Ringmar and Lindeman, 6.

^{65.} Ringmar and Lindeman, 7.

^{66.} Ringmar and Lindeman, 5–6.

^{67.} Ringmar and Lindeman, 4-6.

^{68.} Ringmar and Lindeman, 4–6.

^{69.} Tsai, "International Human Rights," 35; Chen Ti-Chiang, *The International Law of Recognition: With Special Reference to Practice in Great Britain and the United States* (New York: Praeger, 1951), 14.

^{70.} Erman, Recognitive Practice, 41.

^{71.} Chen, International Law, 35.

^{72.} Erman, Recognitive Practice, 38.

^{73.} Convention on Rights and Duties of States, art. 1, 165 L.N.T.S., December 26, 1933: 19; Crawford, *Creation of States*, 45–46; Restatement (Third) of Foreign Relations Law of the United States, 1987.

necessary requirements as well as other factors to consider in deciding the statehood of political entities.

Generally speaking, the main difference between the constitutive theory and the declaratory theory is that the constitutive theory considers statehood as a status that can be created through external acknowledgment, while declaratory theory views it as a status that can be formed through internal acknowledgment.

Certain international instruments and cases have given support to the declaratory theory. For example, Article 3 of the Montevideo Convention stated that "the political existence of the state is independent of recognition by the other states." The same language was included in Article 13 of the Charter of the Organization of American States. In addition, scholars in the Institut de Droit International shared the same view, stating that "the existence of a new State with all the legal consequences attaching to this existence is not affected by the refusal of recognition by one or more States." Moreover, the Badinter Commission stated in its opinion concerning the former Yugoslavia that "the existence or disappearance of the State is a question of fact; that the effects of recognition by other States are purely declaratory."

Nonetheless, the constitutive theory is also supported by many recent cases and practices. For instance, when Azerbaijan, Moldova, Georgia, Croatia, and Bosnia received recognition from States and were admitted into the UN as States, none of them had effective control over the considerable parts of their territory. When Croatia was recognized by the European Community and other States and was admitted into the UN as a State in 1992, it had control over only two-thirds of its territory. Also, Bosnia received recognition from the European Community and other States and was admitted to the UN as a State in

^{74.} Convention on Rights and Duties of States, art. 3.

^{75.} Charter of the Organization of American States, art. 13, no. 1.

^{76.} Lori F. Damrosch and Sean D. Murphy, *International Law Cases and Materials*, 7th ed. (Saint Paul: West Academic Publishing, 2019), 282.

^{77.} Maurizio Ragazzi, "Conference on Yugoslavia Arbitration Commission: Opinions on Questions Arising from the Dissolution of Yugoslavia," *International Legal Materials* 31, no. 6 (1992): 1494, https://www.jstor.org/stable/20693759.

^{78.} Mikulas Fabry, Recognizing States: International Society and the Establishment of New States Since 1776 (Oxford: Oxford University Press, 2010), 180. All five States became United Nations member in 1992. See United Nations, "Member States," accessed September 29, 2021, https://www.un.org/en/about-us/member-states.

^{79.} Fabry, 197.

1992, and the vast majority of its territory was still controlled by parallel Bosnian Serb and Bosnian Croat authorities.⁸⁰ There were also two outside armies with undefined status operating in its territory over which the Bosnian government had no control.⁸¹ Furthermore, when Bosnia became a UN member, the consensus in the international community was that Bosnia could not be described as independent or a State.⁸²

On one occasion, the president of Bosnia was kidnapped at the Sarajevo airport by the Yugoslavia National Army as he returned from Portugal. Subsequent events suggested that the president lacked control over his own security forces. Moreover, when Georgia became recognized by the European Community and other States and received its member seat to the UN in 1992, it did not have an effective government. None of the States mentioned above met all the requirements listed in the Montevideo Convention in 1992, and it is undisputed that they became independent States in 1992. Furthermore, the UN's actions also lend support to the constitutive theory. As mentioned earlier, Georgia, Croatia, and Bosnia received admission to the UN while lacking the elements required by the Montevideo Convention, a phenomenon that can be easily explained by the constitutive theory but not by the declaratory theory. Article 4 of the UN Charter states:

- Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the Organization, are able and willing to carry out these obligations.
- 2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.⁸⁶

The International Court of Justice has confirmed the exhaustive nature of Article 4 on the required conditions.⁸⁷ When the ROC's

^{80.} Fabry, 199.

^{81.} Fabry, 199.

^{82.} Roland Rich, "Recognition of States: The Collapse of Yugoslavia and the Soviet Union," European Journal of International Law 4, no. 1 (February 1993): 36, 49.

^{83.} Rich, 51.

^{84.} Rich, 51.

^{85.} Rich, 47.

^{86.} U.N. Charter art. 4, no. 1-2.

^{87.} International Court of Justice, "Conditions of Admission of a State to Membership in the United Nations," *Advisory Opinion*, 1948 I.C.J. 1, 57, https://www.icj-cij.org/en/case/3.

application to the UN was rejected in 2007, it was highly doubtful that the rejection was based on the ROC's failure to meet the three requirements listed above. Therefore, it is reasonable to conclude that the UN rejected the ROC's application because the UN did not consider the ROC as a State even though it was widely accepted that the ROC was a de facto State and had met all the elements established by Montevideo Convention. In fact, in rejecting the ROC's application, the UN explained that Taiwan was an integral part of the PRC.⁸⁸ Although the UN's decision to reject the ROC's application offers no direct support to the constitutive theory, it certainly weakens the declaratory theory. However, because both Georgia and Bosnia were admitted to the UN in 1992 when neither of them was likely able to carry out the obligations set in the UN Charter,⁸⁹ it is not unreasonable to conclude that the UN does not follow the Article 4 requirements rigorously, which would offer more support to the constitutive theory.

Granted, the UN's means of admitting member States do not have a binding legal effect on the international law of statehood. In fact, none of the examples used in this paper to support either theory have real binding legal effects on the international law of statehood, at least not currently. Otherwise, the debate on what is "the" international law of statehood would not have been so controversial. The debate between the constitutive theory and the declaratory theory on the topic of international law of statehood seems to have reached a dead end: "Entire library shelves can be filled with a long-standing debate revolving around two seemingly irreconcilable theories of recognition." Nonetheless, the UN's practice sheds light on what the UN, the most influential intergovernmental organization that includes virtually all States as its members today, considers to be a State.

The China-Taiwan issue mainly involves two questions. The first is which State and government received the title, rights, and sovereignty of Taiwan after Japan was defeated in World War II, which is addressed

^{88.} United Nations, "General Assembly Adopts Work Programme for Sixty-Second Session, Rejects Bid to Include Agenda Item on Taiwan," September 21, 2007, https://www.un.org/press/en/2007/ga10617.doc.htm.

^{89.} As mentioned earlier, when the two States were admitted to the United Nations, the Bosnian government lacked effective control over two-thirds of its territory, and Georgia did not have an effective government.

^{90.} Mikulas Fabry, "Theorizing State Recognition," *International Theory* 5, no. 1 (2013): 165. https://doi.org/10.1017/S1752971913000080.

in Section Three. The second is whether the ROC has become an independent sovereign State separate from the PRC. Solving the first question of the issue is irrelevant to the constitutive theory since it only considers whether the ROC has been recognized by most States right now regardless of where the title of Taiwan went after World War II. However, the first question is crucial to declaratory theory. If the title of Taiwan went to the ROC and remained under the ROC before it started claiming itself to be an independent State, it is immaterial whether the ROC has successfully separated itself from the PRC since Taiwan would not have belonged to the PRC in the first place. In that case, what essentially happened when the ROC stopped claiming sovereignty over China was that it stopped fighting over the sovereignty of the Mainland with the PRC. However, as it is argued in Section Three, that was not the case.

Next, Subsections B and C will address the second question of the China–Taiwan issue, applying both theories to decide whether the ROC has become an independent sovereign State separate from the PRC.

The ROC's Status Based on the Constitutive Theory

As of September 2021, all 177 States that have formal diplomatic relations with the PRC recognize Taiwan as part of the PRC, not an independent State.⁹¹ Hence, the ROC is most likely not a State according to the constitutive theory.

The ROC's Status Based on the Declaratory Theory

Declaratory theorists generally agree that Article I of the Montevideo Convention illustrates the essential qualifications of a State, including a permanent population, a defined territory, government, and capacity to enter into relations with the other States. The Montevideo Convention enumerates four qualifications, but it is silent on how an entity can become a State once all four qualifications are satisfied. It has been argued that the four elements are only the basic but not the

^{91.} Ministry of Foreign Affairs of the People's Republic of China, "Countries and Regions," accessed September 29, 2021, https://www.fmprc.gov.cn/mfa_eng/gjhdq_665435/. The PRC's One China Principle requires all States that want to establish or maintain diplomatic relations with the PRC to recognize Taiwan as part of the PRC.

^{92.} Hungdah Chiu, "The International Legal Status of the Republic of China (Revised version)," Occasional Papers/Reprints Series Contemporary Asian Studies no. 5 (1992): 3; Crawford, Creation of States, 45–46.

sufficient conditions of statehood.⁹³ If the four elements are exhaustive, a political entity might unknowingly obtain statehood and become subjecti to international law as a State even if it had no intent to become a State. Accepting the four elements as sufficient for establishing statehood leads to a "bizarre assertion of statehood" when the qualifications are applied as if "a leap can be made from an attempt at their object application to establishing thereby that an entity is a State for every legal purpose." Perhaps for this very reason, additional qualifications and factors for determining statehood have been proposed since the four qualifications of statehood were established in 1933. The following analysis will apply all four qualifications from the Montevideo Convention as well as other popular and applicable requirements and factors that have been proposed since 1933.

1. Permanent Population

The Montevideo Convention does not define what permanent population is. However, it does not seem to pose a minimum size requirement for the population or a minimal amount of time the population must reside in one place. ⁹⁵ Instead, a permanent population seems only to imply the need for a stable community. ⁹⁶ As of 2020, Nauru had a population of about 11,000, and Palau had a population of about 19,000. ⁹⁷ In comparison, as of 2021, the population in Taiwan governed by the ROC is about 23,470,000, compared to approximately 20,620,000 in 1992. ⁹⁸ Therefore, the ROC most likely has met the qualification of having a permanent population.

2. Defined Territory

Without a clear definition from the Montevideo Convention, this qualification has generally been interpreted as not requiring a minimum

^{93.} Crawford, 45-46.

^{94.} Richard K. Gardiner, International Law (Harlow, Pearson, 2003), 169.

^{95.} Liu Yulin; Liu, "Statehood Theory and China's Taiwan Policy," *Tsinghua China Law Review* 2, (2009): 1, 6; Crawford, *Creation of States*, 52; Gardiner, *International Law*, 173.

^{96.} Liu, "Statehood Theory," 6; Palmer, "Taiwan's Legal Status," 85.

^{97.} World Bank, "Population, Total—Nauru," accessed September 29, 2021, https://data.worldbank.org/indicator/SP.POP.TOTL?locations=NR; World Bank, "Population, Total—Palau," accessed September 29, 2021, https://data.worldbank.org/indicator/SP.POP.TOTL?locations=PW.

^{98.} National Statistics of Republic of China, "Latest Indicators," accessed September 29, 2021, https://eng.stat.gov.tw/point.asp?index=9.

size of the territory or the territory to be free of disputes.⁹⁹ It instead only requires that some portion of land be identified without necessarily having a precise definition of frontiers.¹⁰⁰ Nauru has an area of 21 square kilometers, and Monaco only has an area of 1.5 square kilometers.¹⁰¹ In comparison, Taiwan has an area of 36,197 square kilometers.¹⁰² Moreover, the ROC has effectively controlled a stable political community without interruption within this defined area since 1945.¹⁰³ Even though the PRC has also been claiming the same territory, this element does not require the territory to be free from disputes. Hence, The ROC most likely has met the qualification of having a defined territory.

3. Government

Without a clear definition from the Montevideo Convention, this element has generally been interpreted as having a government that effectively controls "its organ of authority, its territory, and its people." The ROC has had an effective government with executive, legislative, and judicial branches since 1949. In addition, the ROC has exclusive control over its domestic and foreign affairs, and it has its own military forces and constitution. Also, the ROC's control over Taiwan likely became even easier after it dropped its claim to the Mainland. Hence, the ROC most likely has met this qualification as well.

4. Capacity to Enter into Relations with Other States

Without a clear definition from the Montevideo Convention, this qualification has generally been interpreted as requiring a political entity to have the capacity to conduct dealings generally undertaken among States with other States and to be able to do so freely without being

^{99.} Liu, "Statehood Theory," 6; Crawford, *Creation of States*, 46–48; Palmer, "Taiwan's Legal Status," 86; Restatement (Third) of Foreign Relations Law of the United States (1987): b.

^{100.} Gardiner, International Law, 175.

^{101.} Crawford, Creation of States, 47.

^{102.} Government of Republic of China (Taiwan), "About Taiwan."

^{103.} Palmer, "Taiwan's Legal Status," 86.

^{104.} Gardiner, *International Law*, 179; Liu, "Statehood Theory," 7; Palmer, "Taiwan's Legal Status," 87.

^{105.} Huang-Chih Chiang and Jau-Yuan Hwang, "On the Statehood of Taiwan: A Legal Reappraisal," in *The "One China" Dilemma*, eds Peter C. Y. Chow (New York: Palgrave Macmillan, 2008), 57, 70, https://doi.org/10.1057/9780230611931_4.

^{106.} Palmer, "Taiwan's Legal Status," 87-88.

subordinate to another governmental authority.¹⁰⁷ It has also been argued that this requirement is a fusion of the requirement of government and independence because "capacity" in this context depends on the adequate power of the internal government of a political entity to accept and carry out its obligations and its independence so others cannot accept and carry out its obligations for it.¹⁰⁸ As of 2021, the ROC has official diplomatic relationships with 14 States and Holy See¹⁰⁹ and is a member of 39 intergovernmental organizations.¹¹⁰ It does not lack the capability to enter into relationships with other States.¹¹¹ Therefore, the ROC most likely has met the qualification of being capable of entering into relations with other States.

5. Permanence

Declaratory theorists have proposed that permanence is not an indispensable qualification of statehood but rather a piece of evidence of qualifications of statehood. In cases where the qualifications of statehood are not entirely met for the time being or when the rights of another State are involved, showing continuance of an entity for a period of time is of evidential value. Some scholars have suggested the following factors in facilitating a determination of the permanence of a political entity: (1) peaceful and orderly transfer of power from the mother country, (2) absence of external threats, (3) freedom from external control, (4) internal stability, (5) popular support evidenced by a free vote, and (6) adoption of a constitution.

All factors will likely weigh in favor of finding permanence in the ROC because it has had complete authority over its external and internal affairs for more than 70 years, and the authority is vested in the

^{107.} Liu, "Statehood Theory," 7; Hersch Lauterpacht, Recognition in International Law (London: Cambridge University Press, 1947): 28.

^{108.} Crawford, Creation of States, 62.

^{109.} Ministry of Foreign Affairs of Republic of China (Taiwan), "Diplomatic Allies," 37.

^{110.} Ministry of Foreign Affairs of Republic of China (Taiwan), "IGOs in Which We Participate," https://subsite.mofa.gov.tw/enigo/Link3enigo.aspx?n=58BD38F4400A7167&sms=A72EC821FB103DD9.

^{111.} Brad R. Roth, "The Entity That Dare Not Speak Its Name: Unrecognized Taiwan as a Right-Bearer in the International Legal Order," *East Asia Law Review* 4 (Spring 2007): 98, https://doi.org/10.2139/ssrn.1015120.

^{112.} Crawford, Creation of States, 90-91; Tsai, "International Human Rights," 27.

^{113.} Crawford, 90-91; Tsai, 27.

^{114.} Tsai, 27.

municipal law of the ROC government under its constitution except factors (1) and (2).¹¹⁵ For the first factor, the ROC has not received the transfer of power from the PRC, and even when it does, it likely will not be peaceful and orderly since the PRC has threatened to use non-peaceful means necessary against Taiwan if the ROC secedes Taiwan from China or major incidents entailing secession from China or that possibility for a peaceful reunification is completely exhausted.¹¹⁶ This factor would be immaterial if the title of Taiwan went to and still remains under the ROC. However, as the analysis in Section Three suggests, that was not the case. For the second factor, it is unclear whether the threat from the PRC is an internal or external threat to the PRC. However, the factors have likely shown the stable and permanent nature of the ROC's existence over the past 70 years.

6. Recognition

According to the declaratory theory, although recognition is not a requirement for statehood, it could be significant evidence of legal status when a political entity consolidates a general legal status at that time precarious or in the process of being constituted. The Since a political entity does not need recognition from other States to become a State, it is irrelevant that the majority of the States do not recognize the ROC as a State. What is relevant is that the ROC is recognized by some States, including 14 States and the Holy See, and such recognition helps consolidate the ROC's international status as a State.

7. Unequivocal Declaration of Independence

James Crawford, a well-known public international law jurist and former Judge of the International Court of Justice, introduced "unequivocal declaration of independence" as yet another necessary requirement for statehood, contending that a putative State cannot become a State without unequivocally declaring its independence. However, he did not cite any direct authority for this requirement. On September 20, 2019, the Ministry of Foreign Affairs Republic of

^{115.} Palmer, "Taiwan's Legal Status," 87-88, 92.

^{116.} Fan Guojia Fenlie Fa [Anti=Secession Law].

^{117.} Crawford, Creation of States, 93.

^{118.} Ministry of Foreign Affairs of Republic of China (Taiwan), "Diplomatic Allies," 37.

^{119.} Crawford, Creation of States, 218-19.

^{120.} Roth, "Unrecognized Taiwan," 95; Crawford, Creation of States, 218–19.

China made an official statement to announce its decision to terminate diplomatic relations with the Republic of Kiribati, which, among other things, stated:

The government reiterates that the Republic of China (Taiwan) is a democratic, independent and sovereign nation. Through the free election of their head of state and parliamentarians, the people of Taiwan demonstrate their sovereignty. Taiwan is not a province of the PRC, and the PRC has never ruled over Taiwan for even a single day.¹²¹

Additionally, on May 26, 2018, the Ministry of Foreign Affairs Republic of China made an official statement on the resumption of diplomatic ties between Burkina Faso and the PRC, which stated partially, "The Republic of China (Taiwan) is an independent, sovereign state, a fact which the "one China principle" referred to in the communique between China and Burkina Faso cannot negate unilaterally."122 Moreover, on December 26, 2016, the Ministry of Foreign Affairs Republic of China made an official statement as a response to São Tomé and Príncipe's re-establishment of diplomatic ties with the PRC, which stated partially, "The fact that the Republic of China (Taiwan) is an independent, sovereign nation cannot be denied by the so-called "one China principle" mentioned in the said communique." These statements have clearly demonstrated the ROC's self-stated claim of being an independent sovereign State. Hence, the ROC most likely has made an unequivocal declaration of its independence. Nonetheless, Crawford concluded that "Taiwan is not a State because it still has not unequivocally asserted its separation from China and is not recognized as a State distinct from China."124 Crawford's conclusion raises the question of

^{121.} Ministry of Foreign Affairs of Republic of China (Taiwan) and The R.O.C. (Taiwan), "Government Terminates Diplomatic Relations with Republic of Kiribati with Immediate Effect to Uphold National Dignity," September 20, 2019, https://en.mofa.gov.tw/News Content.aspx?n=1330&s=34156.

^{122.} Ministry of Foreign Affairs of Republic of China (Taiwan), "Statement by the Republic of China (Taiwan) on the Resumption of Diplomatic Ties between Burkina Faso and China," May 26, 2018, https://en.mofa.gov.tw/News_Content .aspx?n=1330&s=34153.

^{123.} Ministry of Foreign Affairs of Republic of China (Taiwan), "Response to São Tomé and Príncipe's Re-establishment of Diplomatic Ties with Mainland China," December 26, 2016, https://en.mofa.gov.tw/News_Content.aspx?n=1330 &s=34148.

^{124.} Crawford, Creation of States, 219.

how unequivocal a declaration of independence has to be to satisfy this requirement. He acknowledges the existence of statements of similar nature mentioned above because he actually cites one himself in his own analysis. He seems to suggest that the ROC is not a State because although it has claimed itself to be an independent sovereign State, it has not claimed its independence from China. 126

As already mentioned in this paper, a practical problem of considering the qualifications of statehood from the Montevideo Convention as exhaustive is that the convention makes it extremely hard, if not impossible, to tell when precisely a political entity becomes a State. Another practical problem is that it does not consider whether an entity that meets all the qualifications actually wants to become a State at a given moment. The two problems could lead to extraordinarily complex legal and political issues. However, a requirement of an unequivocal declaration of independence from a political entity could address the problems. Nevertheless, the level of unequivocalness of the declaration of independence embraced by Crawford seems unnecessary.

8. Self-Determination and Independence

After World War II, a norm of legitimizing secessions of colonies from colonizers through self-determination emerged.¹²⁷ Various international documents confirmed the significance of the right to self-determination.¹²⁸ Not only has self-determination been considered to be a binding customary international law, it has also been perceived as jus cogens by many jurists and judges as well.¹²⁹ However, the applicability

^{125.} Crawford, 218.

^{126.} Crawford, 216-19.

^{127.} Thomas M. Franck, "The Emerging Right to Democratic Governance," *American Journal of International Law* 86, no. 1 (January 1992): 46–91.

^{128.} U.N. Charter art. 1, no. 2, Article 1 of the Charter of the United Nations pronounced self-determination of people a fundamental right for achieving friendly relations among nations; International Covenant on Civil and Political Rights, art. 1, T.I.A.S. (December 16, 1966): 92–908, Article 1 of the International Covenant on Civil and Political Rights stated that the right of self-determination allows people to "freely determine their political status and freely pursue their economic, social and cultural development." International Court of Justice, in "Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory" (I.C.J. 1, (July 2004): 136) stated in its Advisory Opinion that "every State has the duty to refrain from any forcible action which deprives peoples . . . of their right to self-determination."

^{129.} Damrosch and Murphy, International Law Cases, 304-05.

of using self-determination to achieve independence outside the decolonization context remains unclear.¹³⁰ The problem with reading the right to self-determination too broadly is that it inevitably clashes with the territorial integrity and sovereignty of existing States.¹³¹

The current trend is that the principle of self-determination does not give unilateral rights of secession by parts of independent States outside of the colonial context¹³² and that it instead grants people of States the right to internally determine their future through the constitutional process without external interference, "a right to participate freely, fairly, and openly in a democratic process of governance chosen by each State."¹³³ Since 1945, except for South Sudan, no State formed outside of colonial context through unilateral secession has been admitted to the UN, and there has been a strong reluctance of States to

130. Damrosch & Murphy, *International Law Cases*, 306; In the Declaration on Principles of International Law Concerning Friendly Relations and Co-Operation Among States in Accordance with the Charter of the United Nations, the General Assembly stated that:

Nothing in the foregoing paragraphs shall be construed as authorizing or encouraging any action which would dismember or impair, totally or in part, the territorial integrity or political unity of sovereign and independent States conducting themselves in compliance with the principle of equal rights and self-determination of peoples as described above and thus possessed of a government representing the whole people belonging to the territory without distinction as to race, creed or colour.

G.A. Res. 2625 (XXV), Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations, October 24. 1970.

In its Kosovo Advisory Opinion, the International Court of Justice had an opportunity to decide whether people could exercise external self-determination to achieve secession outside the colonial context, as well as the complex relationship between recognition and statehood. However, the Court narrowed its scope and avoided addressing those questions that are desperately begging for prompt answers. See also Anne Peters, "Has the Advisory Opinion's Finding that Kosovo's Declaration of Independence was not Contrary to International Law Set an Unfortunate Precedent?" *The Law and Politics of the Kosovo Advisory Opinion*, eds. Marko Milanovic and Michael Wood, (Oxford: Oxford University Press, 2015), 298–99.

- 131. Daniel Thürer and Thomas Burri, "Secession," in *Max Planck Encyclopedia of Public International Law*, eds. Rüdiger Wolfrum and Anne Peters (Oxford: Oxford University Press, 2009), 15.
 - 132. Crawford, Creation of States, 415.

^{133.} Franck, "Emerging Right," 59; Gardiner, *International Law*, 185; Crawford, *Creation of States*, 415; Reference re: Secession of Quebec, 2 S.C.R. (Canada, 1998): 217, 282.

recognize or accept unilateral secession outside of the colonial context.¹³⁴ Nevertheless, certain extreme circumstances have been suggested to grant secession through self-determination outside the colonial context, such as when the right to exercise internal self-determination has been denied.¹³⁵

A good example is the independence of South Sudan, whose external self-determination was justified because of Sudan's denial of its Southern citizens' equal citizenship rights and equal rights in exercising political powers. Additionally, South Sudan's independence was also unique in the sense that both the central Sudanese government and the Sudan People's Liberation Army accepted the possibility of the South achieving independence through self-determination during their peace negotiations, and when South Sudan declared its independence, the president of Sudan accepted the result.

It could reasonably be argued that if the ROC exercises self-determination to achieve independence, its self-determination would be out of the colonial context. This argument is supported by the fact that Taiwan was freed from its Japanese colonizers in the early 1950s and that the ROC continued to claim itself to be the sole representation of China for almost four decades after Japan returned Taiwan to China. Therefore, for the ROC to achieve independence through self-determination, it most likely needs to show that the PRC has denied Taiwanese people's right to internal self-determination, which does not seem plausible since the Taiwanese people have been subject to the effective jurisdiction of the ROC, not the PRC, since the 1950s. In other words, the PRC has not had the chance to deny Taiwanese people's right to internal self-determination.

In conclusion, under the declaratory theory, assuming secession

^{134.} Crawford, Creation of States, 415.

^{135.} Reference re: Secession of Quebec, 2 S.C.R., 282; Thürer and Burri, "Secession," 16.

^{136.} Douglas H. Johnson, "New Sudan or South Sudan? The Multiple Meanings of Self-Determination in Sudan's Comprehensive Peace Agreement," *Civil Wars* 15 (August 2013): 153; Solomon A. Dresso, "International Law and the Self-Determination of South Sudan," *Institute for Security Studies Papers*, no. 231, (February 2012): 7, https://www.files.ethz.ch/isn/141398/Paper231.pdf.

^{137.} Johnson, "New Sudan," 148.

^{138.} Scott P. Sheeran, "International Law, Peace Agreements and Self-Determination: The Case of the Sudan," *International & Comparative Law Quarterly* 60, no. 2 (April 2011): 423, https://doi.org/10.1017/S0020589311000091.

through self-determination outside the decolonization context is allowed under international law, the ROC most likely would have become an independent State. However, supposing secession through self-determination outside the decolonization context is not allowed under international law, the ROC most likely would not have become a State under the declaratory theory.

As this paper has demonstrated, the constitutive theory and the declaratory theory take entirely different approaches and could reach very different coheenclusions in statehood analysis. Two points should have become clear: first, although both theories have received considerable support, neither governs the international law of statehood; second, international law currently cannot answer whether the ROC is a State. Nevertheless, is one of the two theories better than the other? Moreover, if both theories have received considerable support, why cannot a new approach be formed to integrate certain aspects of both theories? Answers to the questions are critical because if neither of the two theories is clearly better than the other and if there is no convincing reason why an approach that integrates certain aspects of both theories cannot or should not be formed, then the current debate should change its direction immediately. The earlier the direction in the current debate is changed, the earlier a governing international law of statehood could come into existence, and the earlier statehood claims like the China-Taiwan issue could be resolved legally. The next section will attempt to address the two questions.

D. Criticisms for the Constitutive Theory, Declaratory Theory, and the Current Debate

Declaratory theorists have criticized the constitutive theory as an expression of an obsolete and positivist view of the international law that legal relations can only raise with the consent of States concerned, ¹³⁹ arguing that by considering the acts of recognition from other States as an essential and sufficient condition for statehood, recognition would become only an expression of arbitrary political power among the States. ¹⁴⁰ A political entity lacking qualifications of statehood could be made a State through recognition of other States and be

^{139.} Stefan Talmon, "The Constitutive Versus the Declaratory Theory of Recognition: Tertium Non Datur?" *The British Year Book of International Law* 75, no. 1 (2005): 102, https://doi.org/10.1093/BYBIL/75.1.101.

^{140.} Erman, Recognitive Practice, 41.

taken advantage of by the States.¹⁴¹ In addition, when a political entity is struggling to receive recognition from other States in a stratified international system, it might take actions that are not in its material interests, even violent ones, hoping to receive recognition from other States. 142 Moreover, the constitutive theory could lead to a relativity of the "State" as subject of international law because what one State considers to be a State may be a non-entity for another under international law. 143 In addition, it has been contended that the idea of the constitutive theory that States can decide the legal personality of another State under international law is contrary to the principle of sovereign equality of States in Article 2 of the UN Charter. 144 However, the Article never explicitly asserts that the same principle would apply to nonmembers. Instead, it stated that "the Organization is based on the principle of the sovereign equality of all its Members." Furthermore, the constitutive theory is directly contradicting Article 3 of the Montevideo Convention, which states, "The political existence of the state is independent of recognition by the other states."145 Finally, the constitutive theory has been criticized for not being able to explain the rights, responsibility, and legal obligations of non-recognized entities under international law. 146

On the other hand, practically speaking, the declaratory theorists' sole focus on factual conditions does not provide clear guidance to diplomats and international attorneys in determining whether a political entity is a State. However, the constitutive theory also faces the same problem when two political entities are recognized by roughly the same number of States. Furthermore, the constitutive theorists have contended that even if an entity could become a State without recognition from other States, such recognition is needed to maintain its creditability. Although recognition by other states is not, at least as a

^{141.} Jens Bartelson, "Three Concepts of Recognition," *International Theory* 5, no. 1 (March 2013): 122, https://doi.org/10.1017/S1752971913000002X.

^{142.} Bartelson, "Three Concepts," 111–12; Sweden went to Thirty Year War in 1630 in order to received recognition from other powers in Europe at that time, even when it had no other good reasons to do so.

^{143.} Talmon, "Declaratory Theory," 102.

^{144.} Talmon, 102.

^{145.} Convention on Rights and Duties of States, art. 3.

^{146.} Talmon, "Declaratory Theory," 102-03.

^{147.} Erman, Recognitive Practice, 42.

^{148.} Erman, 41.

matter of theory, necessary to achieve statehood, the viability of a would-be state in the international community depends as a practical matter, upon recognition by other states."¹⁴⁹ Moreover, declaratory theory's presumption that the element of having the capacity to enter into relations with other States is entirely independent of recognition is questionable. To enter into relations with other States, an entity must be at least recognized by other States as something, either formally or informally. ¹⁵⁰ Finally, if claims for sovereignty are constitutive of political and legal reality, "then a state would become a state by virtue of its successful claims to sovereignty, the benchmark of that success being nothing less than these sovereignty claims being recognized as such by other similar entities."¹⁵¹

Both theories focus on some critical aspects of statehood. The constitutive theory has focused on the external relationships between a political entity with other States, while the declaratory theory has focused on the conditions within the political entity, but neither can explain statehood adequately. Both theories "suppose that there is but one means of evaluation of an entity for all contexts and all purposes and represent the ultimate divorce of theory from practice." ¹⁵³

Eva Erman has pointed out that the seemingly irreconcilable division between the two theories is caused by their reliance on a philosophically untenable distinction for the question at hand between empirical facts on the one hand and social facts and norms on the other. ¹⁵⁴ In other words, there is no sharp difference between the declaratory theory and the constitutive theory as the former easily falls into the latter. ¹⁵⁵ Erman contends that even though the recognition of States has been perceived as a normative phenomenon, it can easily be identified as being based on empirical evidence as well, just as the qualifications of statehood advocated by the declaratory theorists such as permanent population and defined territory. ¹⁵⁶

If declaratory theorists believe that their advocated qualifications

^{149.} Reference re Secession of Quebec, 2 S.C.R., 289.

^{150.} Talmon, "Declaratory Theory," 116.

^{151.} Bartelson, "Three Concepts," 116.

^{152.} Erman, Recognitive Practice, 49.

^{153.} Gardiner, International Law, 190.

^{154.} Erman, Recognitive Practice, 42.

^{155.} Bartelson, "Three Concepts," 116.

^{156.} Erman, Recognitive Practice, 43.

of statehood are based on factual observation of what all States objectively possess, they must then explain why they claim that "all States have recognin from other States" is not a factual and objective observation. Declaratory theorists might retort, "Because not all States have recognition from other States," essentially arguing that some entities without recognition from other States are still States. However, what this argument is really saying is that "we do not think recognition is a necessary condition of statehood." How is this objective and factual? Why must an entity have a government that fits within the definition provided by declaratory theorists to become a State? Why would an entity's statehood depend on its capacity to interact with other States? How do these requirements differ from the recognition requirement? The Montevideo Convention qualifications have been extensively modified or supplemented in their interpretation or application, ¹⁵⁷ but why? This paper will later attempt to answer the last question. To summarize, declaratory theorists provide their version of essential qualifications of statehood based on what they think States should have, define those qualifications based on their own interpretations, and consider only those qualifications as factual and objective measurements. How is this not arbitrary?

Since it is not clear that one of the two theories is better than the other, and because the main reason for the two theories to reject each other has been shown to be unconvincing, it is time for the debate to take a different approach, an approach that takes into consideration both the external and internal aspects that the two theories focus on discretely. Additionally, another important thing to keep in mind is that the qualifications of statehood and the definitions of the qualifications should not be unchangeable.

What people consider to be States today are very different from States in the past. For instance, during the Chun Qiu Period (722–481 BCE), feudal states in ancient China were all under the jurisdiction of the King of the Chou Dynasty. The lord of each of the feudal states received an official rank vested by the Dynasty. In theory, when there was a conflict between the King and the feudal lords, the King's will

^{157.} Gardiner, International Law, 171-72.

^{158.} Shih-Tsai Chen, "The Equality of States in Ancient China," *American Journal of International Law* 35, no. 4 (October 1941): 641–50.

^{159.} Chen, "Equality of States," 643.

would prevail as a matter of law. However, in reality, the feudal states were virtually independent of the Imperial Government. The Chou Dynasty certainly did not have a government that possessed effective control over its organ of authority, territory, and people. Nevertheless, it is highly doubtful that people living in the Chou Dynasty or other neighboring States would consider the Chou Dynasty to be a non-State.

The point is that "State" is not a static social structure of human civilization; it evolves. What are considered to be the necessary qualifications of statehood and the proper definitions for the qualifications today might be unnecessary or improper in the past and vice versa. This is perhaps the very reason why the four qualifications enumerated in the Montevideo Convention have been extensively modified or supplemented in their interpretation or application since 1933. Receiving recognition from other States might not mean much to political entities in the past when the intercourse among members of the international community was limited. However, globalization, accompanied by the closer than ever interrelation and interdependence among States, has drastically reshaped the dynamic. Today, political entities' capacity to participate in the international arena is significantly restricted when they have no or minimal recognition from other States.

The next section will make a proposal for the international law of statehood.

E. A Different Approach

Although the great debate between the constitutive theory and the declaratory theory regarding the international law of statehood seems to have reached a dead end, it has made utterly clear the urgency of changing the direction of the current debate and forming a new approach. There is currently no authoritative international law of statehood; binding treaties or customary international law governing this matter do not exist. However, what do exist are inconsistent international practice and two competing theories in the literature taking two polar opposite sides in making proposals regarding what the international law of statehood should be while ignoring the truism that many things in life are not just black and white. This paper makes the following proposal for the international law of statehood.

^{160.} Chen, "Equality of States," 647.

^{161.} Chen, 642.

First, to become a State, a political entity must have a defined territory that includes some portion of land identified but without necessarily having a precise definition of frontiers or being free from dispute.

Second, to become a State, a political entity must have a permanent population, meaning that the entity overall has a stable community and that people living in the community consider or intend the entity to be an independent sovereign State.

Third, to become a State, a political entity must have a government that effectively controls its organ of authority, territory, and people.

Fourth, to become a State, a political entity must have the capacity to enter into relations with other States, meaning that it has the capacity to conduct dealings generally undertaken among States with other States and is able to do so freely without being subordinate to any other governmental authority.

Fifth, to become a State, a political entity must have been recognized by more than half of the UN member States as a State, although the entity does not have to establish or maintain formal diplomatic relationships with the recognizing member States to be considered to have been recognized by them. Furthermore, if member States recognize or establish formal diplomatic relationships with a political entity that has not become a State pursuant to this proposal, the entity shall be considered a State only in its relations with the recognizing member States, and international law shall govern their relations only to the extent that is not contrary or detrimental to other non-recognizing member States' rights and obligations under international law.

Sixth, to become a State, a political entity must have submitted its request to the UN to become a State, which is different from a request to become a UN member State, and the UN General Assembly must have reasonably concluded that the entity has met requirements one through five. For requirement five, the number of the recognizing member States shall be based on the time when the entity submits its request to the UN to become a State, unless the member States that cease or intend to cease their recognition of the entity after the entity has submitted its request to the UN can clearly demonstrate that their actions are not mainly driven by the fact that the entity has submitted its request to the UN or by any known or reasonably foreseeable consequences that could or would come with it.

Moreover, the General Assembly shall conclude that a political entity has satisfied requirements one to five only if over half of the member States have voted in favor of the political entity meeting the requirements. Before the voting, the General Assembly shall obtain an Advisory Opinion from the International Court of Justice regarding whether the political entity has met requirements one to five, and member States shall rely on the Advisory Opinion to make an informed decision. If the reasonableness of the General Assembly's conclusion is challenged by the concerned political entity or any member States within 60 days after the conclusion is made, the General Assembly shall promptly request the Court for a second Advisory Opinion regarding whether the member States have clearly voted in disregard of the requirements one to five. In writing the second Advisory Opinion, the Court shall respect and give deference to the member States' decision if the particular facts create genuine ambiguity regarding whether the political entity has met all the requirements. However, if the Court finds that the member States clearly have voted in disregard of requirements one to five, the Court shall give no deference to their decision.

Seventh, for a political entity to become a State, the UN Security Council must have issued a resolution to bind all member States to recognize and treat the entity as a State. If the General Assembly's conclusion in favor of the entity is not challenged within 60 days or, if it is challenged, the Court's second Advisory Opinion is in favor of the entity, the Security Council must then promptly issue the resolution; the Security Council shall have no discretion in this regard. Moreover, becoming a State by meeting requirements one to seven shall not automatically make the political entity a UN member State, and member States shall not be obligated to establish or maintain formal diplomatic relations with the political entity once it becomes a State. Finally, all current UN member States shall be considered States under international law regardless of whether they have met requirements one to seven.

Under this proposal, although the ROC will most likely meet requirements one to four, it will undoubtedly fail short on requirement five. As of 2021, the UN has 193 member States. Hence, to be recognized by over half of the member States, the ROC will need recognition from at least 97 member States, a number that the ROC clearly does not currently meet. However, once this requirement is met, the

ROC will most likely meet requirements six and seven subsequently. Even if it could not receive enough votes from the member States due to political reasons, upon a challenge to the reasonableness of the General Assembly's conclusion, the Court will most likely still find in favor of the ROC in the second Advisory Opinion, which the Security Council will then enforce by issuing a resolution.

The effectiveness of this or any other proposals will inevitably and largely rely on the Security Council's involvement in enforcing the law. While acting in accordance with the Purposes and Principles of the UN, 162 Articles 24, 163 25, 164 48, 165 and 103166 of the UN Charter grant the Security Council the authority to make binding decisions on all UN member States. In the past, the Security Council has used such authority to amend and override international law and deny statehood claims. After Southern Rhodesia declared its independence from the United Kingdom in 1965, the Security Council passed Resolution 216, demanding all States to give no recognition to Southern Rhodesia, 167 which could claim to have met all the requirements established in the Montevideo Convention. 168 Moreover, after the former Iraqi government was overthrown, the Security Council passed Resolutions 1483, 1511, and 1546 to accept the transfer of authority from the former Iraqi government to the new regime, 169 which arguably violated the Iraqi people's right to self-determination, 170 a customary international law that many jurists and judges have considered to be a a jus cogens. 171 Furthermore, three years after North Korea had withdrawn from the Treaty on the Non-Proliferation of Nuclear Weapons and declared itself to be free from any restriction of the safeguard agreement with the

^{162.} U.N. Charter art. 24, no. 2.

^{163.} U.N. Charter art. 24, no. 1.

^{164.} U.N. Charter art. 25, no. 1.

^{165.} U.N. Charter art. 48, nos. 1–2.

^{166.} U.N. Charter art. 103, no. 1.

^{167.} S. Res. 216, (Nov. 12, 1965): 2.

^{168.} David J. Harris, *Cases and Materials on International Law*, 6th ed. (Oxford: Oxford University Press, 2004), 110.

^{169.} Steven Wheatley, "The Security Council, Democratic Legitimacy and Regime Change in Iraq," *European Journal of International Law* 17, no. 3 (2006): 531–51, https://doi.org/10.1019/EJIIL/CHL018.

^{170.} Wheatley, "The Security Council," 540-41.

^{171.} Damrosch and Murphy, International Law Cases, 304-05.

International Atomic Energy Agency,¹⁷² the Security Council passed Resolution 1718, which, among other things, demanded that North Korea withhold further nuclear missile tests, terminate its nuclear program, and return to the Treat on the Non-Proliferation of Nuclear Weapons and the International Atomic Energy Agency; it further requested that member States put sanctions on North Korea.¹⁷³ The Security Council essentially nullified the legal effect of North Korea's withdrawal three years later. All the examples demonstrate the Security Council's capacity to enforce the international law of statehood.

Conclusion

The current debate on the international law of statehood has illustrated the merits and exposed the shortcomings of both the constitutive theory and the declaratory theory and has made the urgent need to form a new approach clearer than ever. The constitutive theory has focused on the external aspects of statehood, while the declaratory has focused on the internal aspects of statehood; both are critical for a political entity's survival and prosperity in the modern world. There is no clear philosophical distinction between the two theories that fundamentally differentiates them or makes one of them better or less arbitrary than the other. Moving forward, any coherent and plausible theories must take into consideration both the internal and external aspects of statehood that the two theories separately focus on. Unfortunately, due to the lack of a governing international law of statehood, whether the ROC is a State is currently not a legal question but purely a political question.

This paper proposes an international law of statehood that integrates both the external and internal aspects of statehood as well as a process to effectively implement and enforce the proposed law through the actions of the UN member States, the International Court of Justice, the UN General Assembly, and the UN Security Council.

Ideally, the international law of statehood should be fair and practical for all concerned parties under all circumstances. However, the inherently political nature of statehood claims makes forming such a law improbable, if not impossible. What is fair and practical for one

^{172.} Yordan Gunawan and Rima A, Andriana, "The Proliferation of Nuclear Weapons in North Korea: International Law Perspective," *Jurnal Cendekia Hukum* 5, no. 1 (September 2019): 43, https://doi.org/10.33760/jch.v5i1.162.

^{173.} S. Res. 1718 (October 14, 2006):13-46.

might be the polar opposite for another. The past has shown the critical significance of having a principled approach rather than an ad hoc approach to statehood claims.¹⁷⁴ Act of foreign policy inherently prone to conflicts must be defendable by referring to unequivocal, generally applicable norms.¹⁷⁵ The danger of lacking an established procedure of norm change and interpretation is that major players in the international arena may invoke a contested exception to a norm as a precedent when their interests are at stake.¹⁷⁶ States, even the major player, are better off when well-established norms restrict their power than if they all act with fewer limitations¹⁷⁷ because they know the same norms also bind other players.

^{174.} Mikulas Fabry, "The Evolution of State Recognition," in *Routledge Handbook of State Recognition*, eds. Edward Newman, Gëzim Visoka, and John Doyle (Abingdon: Routledge, 2019), 45.

^{175.} Fabry, 45.

^{176.} Fabry, 45.

^{177.} Fabry, 45.



Strategic Medicine: Treating Competitive Interdependence and Convergent Threats, Not a Cold War

Colonel James A. Chambers

You may not be interested in strategy, but strategy is interested in you.

—Leo Trotsky

Tactics without strategy is the noise before defeat.

—Sun Tzu

Abstract

Prior to 2019, great power and near-peer competition had already returned to prominence in international strategic circles. The COVID-19 pandemic, global warming, and other issues have demonstrated how health expands the dimensions of competition in international security and shared existential threats. This paper briefly reviews the evolution of modern strategic thinking and uses eight lessons from the

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Greco-Persian and Peloponnesian Wars to illustrate how health issues impact international security. It prescribes measures for the United States, and, where appropriate, other democratic nations, to mitigate risk. Optimizing health resources and policy for near-peer competition and globally shared risks requires knowing domestic and international needs, understanding relevant winning strategies, addressing domestic and international logistics challenges, engaging leadership, and proactively seeking means to mitigate risk from pandemics, climate change, antibiotic resistance, migration, changing patterns of disease and injury, and cyber vulnerabilities. Additional investments in emerging technologies, as well as intelligence and data management, must be made. The United States needs to continue leading in health-technology innovation, advancing global health policy, and strengthening its own healthcare system while working with partner nations to increase capability, capacity, and interoperability abroad to bolster regional security against natural disasters aand prevent coercive actions from peer competitors.

Introduction

The US National Defense Strategy and the earliest military history both emphasize peer competition. ^{1,2} Despite a renewed need to focus on great-power competition after a quarter-century, the current geopolitical situation is best described as complicated, complex, near-peer competition in an environment of increased shared global threats, not a return to the Cold War. ^{3,4} This new multi-polar environment has prompted a recalibration in US strategy and a geopolitical shift toward Asia and Europe, with new investments in strategic weapons, modernization, and force posture. As the COVID-19 pandemic illustrates, however, health is also a factor that broadly and significantly impacts US interests. This paper will address the role of health in developing

^{1.} Katie Lange. "What Is the National Defense Strategy?" US Department of Defense, October 8, 2018, https://www.defense.gov/Explore/Features/Story/Article/1656414/what-is-the-national-defense-strategy/.

^{2.} Thucydides, P. J. Rhodes, *The History of the Peloponnesian War*, trans. Martin Hammond (Oxford: Oxford University Press, 2009).

^{3.} Charles A. Richard, "Forging 21st-Century Strategic Deterrence," *Proceedings* 147/2, no. 1,416 (February 2021), US Naval Institute, https://www.usni.org/magazines/proceedings/2021/february/forging-21st-century-strategic-deterrence.

^{4.} Ryan Hass, "The New Normal in US—China Relations," August 12, 2021, https://www.brookings.edu/blog/order-from-chaos/2021/08/12/the-new-normal-in-us-china-relations-hardening-competition-and-deep-interdependence/.

strategies that mitigate risk to US and allied nations' security.

The Evolution of Modern Strategic Thinking

National strategy is popularly compared with chess. However, modern game theory began with nuclear physicist and mathematician John von Neumann, who in 1928 defined it in zero-sum terms limited to two opponents, inspired by playing poker. When asked about the source of his insights, he replied,

Chess is not a game. Chess is a well-defined form of computation. You may not be able to work out all the answers, but in theory there must be a solution, a right procedure in any position. Now real games . . . are not like that at all. Real life is not like that. Real life consists of bluffing, of little tactics of deception, of asking yourself what is the other man going to think I mean to do.⁵

In security communities, the term "strategic weapons" typically refer to nuclear arms. In 1944, von Neumann, who served on the Manhattan Project, expanded his model of strategy to include multiple contestants in a more ambiguous environment. A year later however, after Hiroshima, many asserted war strategies were obsolete and meaningless; new strategies doubled down on navigating the new environment. In 1946, strategist Bernard Brodie identified that nuclear deterrence would become central in US defense policy: "Thus far the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them." The same year the United States proposed at the United Nations a plan to eliminate nuclear weapons and institute a system of international control; it was vetoed by the Soviet Union.

In the 1950s, Brodie joined the RAND corporation, which was established to help guide Air Force policies and strategy. RAND articulated the classic "Prisoner's Dilemma," which moved beyond a zero sum model. It featured two players who faced a better outcome if they could communicate, coordinate responses, and trust each other to keep to the agreed strategy. During that decade, NATO pursued nuclear deterrence to dissuade much larger Warsaw Pact conventional forces from *a fait accompli* in western Europe, essentially a "two player" con-

^{5.} William Poundstone, Prisoner's Dilemma (New York: Anchor, 1993), 6.

^{6.} Bernard Brodie, The Absolute Weapon (New York: Harcourt Brace, 1946), 76.

frontation.

In the 1960s, Herman Kahn published multiple books on nuclear war while at RAND, but he did not rely on abstract game theory because he and Brodie believed it to be of little use. Another RAND theorist, Nobel laureate Thomas Schelling, proposed different deterrence means than Kahn⁷ but also did not endorse a scientific solution for nuclear Cold War challenges. Schelling claimed to have learned more "from reading ancient Greek history and looking at salesmanship than studying game theory."8 Both men relied on relatively simple quantitative estimates of damage and insights into human nature rather than rigidly embracing complex algorithms and mechanistically predetermined outcomes. Schelling, the economist who helped implement the Marshall Plan, focused on negotiation and interdependent relationships featuring a mixture of conflict and cooperation. He believed competitors can mutually learn if trust and "some common language . . . and shared focal points" are present, to "concert their intentions" away from destructive ends.9

Post-Cold War Landscape

Post–WWII liberal, inclusive, transparent, rule-based institutions provided the stability required for unprecedented global economic growth. Nuclear weapons also enhanced stability because they limited the ability of aspirational powers to overturn the existing order. Nuclear weapon deterrence was especially effective during the Cold War, when the great powers agreed to a framework that provided a relatively predictable context for actions and a pathway for decreases in nuclear arms.^{10,11}

This world order has become strained. New states have acquired nuclear weapons, and technology has created new challenges for positive control of nuclear materials, making nuclear terrorism more credi-

^{7.} Schelling believed US deterrence should rely on uncertainty, Kahn on robust offensive and especially defensive capabilities. See Keith Payne, *The Great American Gamble* (Washington DC: National Institute Press, 2008), 20–55, 394–98.

^{8.} Lawrence Freedman, Strategy (Oxford:Oxford University Press, 2013), 161.

^{9.} Freedman, 162, 166.

^{10.} Steven E. Miller, "A Nuclear World Transformed: The Rise of Multilateral Disorder," *Daedalus* 149, no. 2 (Spring 2020): 17–36.

^{11.} Richard Haass, "How a World Order Ends," *Foreign Affairs*, January/ February 2019, https://www.foreignaffairs.com/articles/2018-12-11/how-world-order-ends.

ble. Nuclear weapons have returned to prominence in multipolar international relations, adding to other existential vulnerabilities such as climate change and pandemics. Unlike chess, in which both the resources and the goal are known, and its inverse, poker, in which the resources are hidden but the aim is known to all, modern international competition challenges leaders with opacity on key capabilities and obfuscated intent, contributing to the possibility of harm from miscalculation even while we face unprecedented common challenges. Global leaders must collaboratively address common threats and advance universally acknowledged goods, such as health. Several modern strategic precepts are relevant to all these concerns: first, in restrained circumstances, the rational strategy is not to attempt maximal gain but instead accept an optimal outcome; second, because there is rarely an orderly movement towards goals set in advance, strategy should be fluid and flexible.¹²

An Historic Perspective on Peer Multipolar Competition

While the Concert of Europe has been offered as a comparison with modern times, ¹³ ancient Greece also provides a useful analogy. Classical Athens faced peer challenges from Persia, Sparta, Macedonia, and Rome. Trade and interdependence in the Mediterranean did not prevent war 2,500 years ago, nor did it prevent war in Europe before WWI, ¹⁴ nor can we solely rely on it to prevent wars today. The world has enjoyed several decades of peace among great powers, and it seems improbable that war will soon arise. However, Athens also enjoyed three decades of peace before the Second Peloponnesian War.

Hippocrates, a contemporary of Thucydides, wrote, "The physician must be able to tell the antecedents, know the present, and foretell the future... and have two special objects in view with regard to disease, namely to do good or to do no harm." This article applies eight lessons from ancient Greece to recent history and prescribes the role

^{12.} Freedman, Strategy, xi, 152.

^{13.} Richard Haass, A World in Disarray (New York: Penguin Publishing Group, 2017), 258.

^{14.} Norman Angell's book *The Great Illusion* (1910) famously asserted the economic cost of war would prevent future armed conflict for rational actors.

^{15.} Hippocrates, Of the Epidemics, 1.2.5, from, The Genuine Works of Hippocrates, Charles Darwin Adams (New York, Dover, 1868), http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0248%3Atext%3DEpid.%3Abook%3D1%3Achapter%3D2%3Asection%3D5.

of health to do good and minimize harm; this article is not about nuclear strategy but about medicine's role in the United States' grand strategy in an increasingly complex nuclear world.

Eight Lessons from Ancient Greece

1. Know Yourself

Prescription:

- Embrace historic virtues of aspirational democratic Western ideals
- Demonstrate beneficence and justice of US domestic policy in quality, equitable healthcare for its citizens.
- Commit to continued international leadership in common goods, including advancing partner nation capability, capacity, and resilience.
- Coordinate USG global health efforts through a single office supported by a database tracking all related activities, goals, and outcomes.

Pilgrims to Delphi were adjured to above all "Know Thyself." Pericles initially succeeded by defining his city's and allies' strengths and virtues in contrast to their adversaries, galvanizing them toward a greater good. However, when he began controlling members of the League and using their funds to fund private Athenian interests, his support faltered. Like early RAND strategists, Simon Sinek links game theory, salesmanship, and war. He and others stress that American policy should filter decisions primarily through the values that are ensconced in America's founding documents and fortified through tradition—rather than its short-term interests. To compete for global respect and strengthen its sense of national identity, the US must articulate what it uniquely stands for to a wired world that is aware of and dissatisfied with poor governance.

Sinek notes that enduring organizations support a "Just Cause," an optimistic affirmation for something that is open, inclusive, service-oriented, and for the primary benefit of others. A "Just Cause" is a fitting description of the ideals in the founding documents of the United

^{16.} Sophocles, The Three Theban Plays: Antigone; Oedipus the King; Oedipus at Colonus, trans. Robert Fagles (New York: Penguin Publishing Group, 1984), 266.

^{17.} Simon Sinek, "Build Your Life with Your Values," TED, 2015, https://www.youtube.com/watch?v=fzCb1qPUbko.

States.¹⁸ He stresses that worthy rivals help competitors clarify their cause and remain agile.¹⁹ The US must lead through appropriate means to remain a dominant force for good and ensure that its efforts achieve the desired effects. Just as the ancient Greek word *pharmakeia* could mean either medicine or poison, overly aggressive efforts to create wide gaps with adversaries can push others to escalate rather than deter. The United States must seek to, on balance, advance favorable conditions for open societies and include health in its intersectoral security efforts.²⁰

President Dwight D. Eisenhower skillfully shaped US–Soviet relations and nuclear posturing at the beginning of the Cold War. His domestic and international communication espoused aspirational attributes of American ideals. It was Eisenhower, not de Tocqueville, who first said, "America is great because she is good. If she were to no longer be good, she would no longer be great." Commitment to its values reassures US allies and resonates with citizens of its peers who are aware of the world outside their authoritarian regimes. The legitimacy of US leadership since WWII was established not just on wealth and hard power but also from its effective domestic governance, provision of global public goods, and will and ability to competently coordinate responses to crises.

China, India, and others have been able to bring more than a billion citizens out of poverty and into better health in the last 25 years by participating in the rule-based institutions established after WWII. Transparent, inclusive governments that invest in their citizens provide the most predictable path for flourishing and security. Democratic nations must continue to support such progress with a commitment to domestic and international health while leading with data-driven, transparent, and sustainable solutions for the globe.

Democracy earns admiration by supporting freedom, human rights, the rule of law, and human dignity—including health—as well as generating sustained economic growth and influence. In contrast, autocracies typically cannot sustain high economic growth or willing coalitions.²²

^{18.} Simon Sinek, The Infinite Game (New York: Portfolio Penguin, 2020), 37.

^{19.} Sinek, 177-80.

^{20.} Richard, "Forging."

^{21.} John Pitney, "The Tocqueville Fraud," Washington Examiner, November 12, 1995, https://www.washingtonexaminer.com/weekly-standard/the-tocqueville-fraud.

^{22.} Matthew Kroenig, The Return of Great Power Rivalry (Oxford:Oxford

Sparta's invasion of Messenia and oppression of Helots led Spartans to fear influence from without and revolt from within. This fear crippled Sparta's economy, innovation, and ability to commit to enduring campaigns abroad; the US likewise operates best from a base of domestic strength.

George Kennan stressed that the US's domestic contributions to Soviet advantage in 1946 were "exhibitions of indecision, disunity, and internal disintegration." Kennan advocated funding for common goods and believed American power depended on our ability to communicate values, fulfill domestic and international responsibilities, and offer a spiritual vitality competitive with current ideologies.

The United States must act consistent with its values and support healthy and safe populations at home and abroad. Niall Ferguson attributes part of the West's ascendance to modern medicine, which showcases American humanitarian ideals and innovative technology.²⁴ America must continue to lead in global health in order to maintain influence, goodwill, and open communication—and to help other nations contribute to regional and global stability. It must lead through private sector innovation, rule of law, transparency, and commitment to quality and reliability.²⁵

US government global health engagement has shifted from providing care abroad, potentially creating unsustainable expectations and displacing indigenous health professionals, to building capability, capacity, and interoperability. This change from paternalistic provider to partner signals a broader intent for US strategy and must be captured in appropriate metrics. The US is the world's largest global health donor,²⁶ and it must better synchronize USG health efforts with other nations, within various departments of the US government, and in collaboration with academia and NGOs.

University Press, 2020), 315-16.

^{23.} George Kennan, "Sources of Soviet Conduct," Foreign Affairs, July 1947 https://www.foreignaffairs.com/articles/russian-federation/1947-07-01/sources-soviet-conduct.

^{24.} Niall Ferguson, "Civilization: The West and the Rest," May 22, 2012, *PBS*, https://www.pbs.org/wnet/civilization-west-and-rest/killer-apps/.

^{25.} Jacob J. Lew, Gary Roughead, Jennifer Hillman, David Sacks, "China's Belt and Road: Implications for the United States," 2021, US Council on Foreign Relations, Independent Task Force Report No. 79, 91–100.

^{26.} Lew et al., 79.

2. Know Your Competition

Prescription:

- Leverage health as a universally-valued good to maintain communications and indicate goodwill abroad and at home.
- Stress common global health challenges to reinforce solidarity.
- Support partner nation governance through health initiatives to reinforce legitimacy and popular support.
- Prepare for the unthinkable, from future pandemics to statesponsored WMD attacks.

Sun Tzu adjured warriors to know their competitors as well as themselves in order to define vulnerabilities and anticipate rivals' actions. Russia and China have become increasingly autocratic, and their tactics share similarities with Pericles' adversaries. For example, the opening salvo of the Peloponnesian War was a *fait accompli*.²⁷ US planners have to anticipate and counter grey-zone maneuvers, while preparing to help other nations blunt and then fully eng age in large-scale conflict.

Russia

Russia has contributed several key benefits to modern medicine. It also has a tradition of effective international collaboration in health—the first US Air Force Surgeon General first gained useful combat medical experience as a volunteer officer in the Russian Army during WWI. However, the health fallout from Chernobyl in 1986 contributed to the collapse of the Soviet Union, and Putin's government has perpetuated mistrust regarding the health of its citizens, including opacity on nuclear issues.^{28,29}

More recently, Putin undermined Western ethics and science by releasing a COVID vaccine before it met international standards for efficacy and safety. In so doing, he sought prestige and revenue through Sputnik V while recklessly putting his own citizens at risk. Russia's lack of transparency and its marketing before satisfying international standards fueled distrust and resulted in the second-lowest vaccination rate

^{27.} Donald Kagan, The Peloponnesian War (New York: Penguin Books, 2003), 1.

^{28. &}quot;A Nuclear Disaster That Brought down an Empire," *The Economist*, April 26, 2016, https://www.economist.com/europe/2016/04/26/a-nuclear -disaster-that-brought-down-an-empire.

^{29.} Andrew E. Kramer, "Russia Orders Evacuationof Village Near Site of Nuclear Explosion," *New York Times*, August 13, 2019, https://www.nytimes.com/2019/08/13/world/europe/russia-nuclear-explosion-accident.html.

in all Europe; only 30% of Russians indicated willingness to get the vaccine even after The Lancet eventually published excellent efficacy data. The Abroad, his revanchist incursions into Georgia and Ukraine, as well as support of an abusive Syrian regime, have unnecessarily contributed to human suffering. His government's testing of nuclear-armed, nuclear-fueled cruise missiles and other destabilizing weapons further threaten global security and health.

China

The Republic of China was first led by Sun Yat Sen, a physician inspired by the democratic ideals of Abraham Lincoln. In current Communist China however, allegiance to the Party is the central political value. Despite American's providing medical support to the CCP during and after WWII,³¹ authoritarian rule has at times been disastrous for China's health. Mao's "great leap forward" led to the largest famine in history and the death of 55 million Chinese.³²

In contrast, Deng Xiaoping embraced Western engagement and warned against excessive concentration of power.³³ His policies increased per capita income twenty-five-fold, lifted more than 800 million out of poverty, and reduced global poverty by seventy percent.³⁴ China's current leadership, however, considers Western values to be an existential threat, which was articulated a decade ago as the "Seven No's."³⁵ Xi has deepened the reach of an unelected Communist party, curtailed expression, reversed freedoms, and seeks to export this model

- 30. Ed Holt, "Russia's Faltering Vaccination Programme," *The Lancet*, June 2020, https://doi.org/10.1016/S1473-3099(21)00277-2; "Vaccination Failure and Delta Variant Push Russia Toward Catastrophic Coronavirus Third Wave," *The Bell*, June 21, 2021, https://thebell.io/en/vaccination-failure-and-delta-variant-push-russia-toward-catastrophic-coronavirus-third-wave/.
- 31. James Chambers, "The Rise of Chinese Military Medicine: Opportunity for Mercy Ship, not Gunboat Diplomacy," *Military Medicine*, 176, no. 9 (2011): 1043–50.
- 32. Vaclav Smil, "China's Great Famine: 40 Years Later," *British Medical Journal* 319, no. 7225 (December 1999): 1619–21.
- 33. Hung Li, *China's Political Situation and the Power Struggle in Peking*" (Beijing: Lung Men Press, 1977), 107.
- 34. Abraham Denmark, "40 Years Ago, Deng Xiaoping Changed China—and the World," *Washington Post*, December 19, 2018, https://www.washingtonpost.com/news/monkey-cage/wp/2018/12/19/40-years-ago-deng-xiaoping-changed-china-and-the-world/.
- 35. Odd Arne Westad, "The sources of Chinese Conduct: Are Washington and Beijing Fighting a New Cold War?" Foreign Affairs, Sept./Oct. 2019, https://www.foreignaffairs.com/articles/china/2019-08-12/sources-chinese-conduct.

to others. The CCP gains intelligence and power through control of industry—often stealing or forcing technology transfer—and academia. It also uses social credit scores to link individual compliance with party priorities with access to financial assistance, employment, and transportation. It has committed genocide against its Uygurs.³⁶

Although China has prospered through participating in the post—WWII international order, it now engages in economic espionage, unfair trade practices, coercive regional behavior, and restrictive domestic policies. Many in Asia are less enthusiastic about China's rise more than a decade ago and seek the means to respond to coercion without capitulation or conflict.³⁷

Despite Xi's claim that no nation should seek to impose its system on others, he demands compliance from surrounding weaker nations and challenges international law and norms. China's Brick and Road Initiative (BRI) generates debt burdens, deepens carbon-intensive futures and trade inequities, and coerces partners' political alignment.³⁸ Chinese representatives celebrate BRI's opacity, stating it "gives China a unique definitional flexibility and advantage."³⁹

Chinese-backed banks promote alternative mechanisms and norms to Bretton Woods institutions for financing related projects, while China fails to report almost half of its international lending and urges BRI nations to obfuscate data. 40 Although BRI has placed nations in China's debt and gained control of foreign infrastructure, BRI has still largely failed to realize its goals. Many nations have withdrawn, resenting the loss of control of their own resources. 41,42 Due to these reasons and the pandemic, China is refocusing BRI as the "Digital Silk Road" and "Health Silk Road," 43 but similar concerns over exploitation endure.

^{36.} John Hudson, "In Report, Biden Administration Formalizes Declaration of Genocide in China," *Washington Post*, March 31, 2021, A16.

^{37.} Westad, "The Sources of Chinese Conduct."

^{38.} Lew et al., "China's Belt and Road," 110.

^{39.} Ngeow Chow-Bing, "COVID-19, Belt and Road Initiative and the Health Silk Road: Implications for Southeast Asia," October 2020, Friedrich Ebert Stiftung, http://library.fes.de/pdf-files/bueros/indonesien/16537.pdf.

^{40.} Lew et al., "China's Belt and Road," 90.

^{41.} Wade Shepard, "Is China's Belt and Road Already in Retreat?" Forbes.com, January 30, 2020, http://www.forbes.com/sites/wadeshepard/2020/01/30/is-chinas-belt-and-road-already-in-retreat/?sh=59abe0095ebe.

^{42.} Lew et al., "China's Belt and Road," 92.

^{43.} Alberto Tagliapietra, "European Union Won't Be Fooled by China's Health

Other States and Threats

While attending to existential risks, the United States must continue to protect the interests of her citizens and allied nations against threats from Iran, North Korea, and terrorist organizations. Outside the US, this means supporting the legitimacy and security of partner nation governments. In the United States, this includes continuing vigilance against and preparedness for WMD events.

Implications for Competition

Russia and China must be allowed to pursue resources to meet the needs of their citizens in a transparent, equitable, sustainable fashion. However, they must not be allowed to threaten the system that provided unprecedented advances in reducing poverty and extending lifespans. Washington and allies must continue to work to strengthen the global institutions such as the World Bank and World Health Organization (WHO) and give China and Russia greater incentives to participate and accomplish domestic and international responsibilities.

Like ancient Athens, the West faces competition that uses *fait accompli* to accomplish operational objectives while pursuing the ability to achieve strategic, existential advantage. As then, cultural rifts among modern global powers aggravate misunderstandings and divergent agendas. To counter challenges, the West needs to offer development options and build capacity in non-exploitative relationships. They must also deter aggression through clear communication and demonstrated resolve and pursue conditional engagements.

The United States and allies must continue to demonstrate capability and resolve to rebuff military attempts that extend Russian and Chinese influence at the expense of regional sovereign rights. Effective defenses must be in place to blunt *fait accompli* attempts and engage follow-on forces that are buttressed by agile expeditionary resources, including medical support.⁴⁴

Competing powers must pursue collaboration in areas of common interest, in part to keep multiple lines of communication open. Even

Silk Road," German Marshall Fund of the US, September 2, 2020, https://www.gmfus/org/news/european-union-wont-be-fooled-by-chinas-health-silk-road.

^{44.} Andrew Scobell, Edmund J. Burke, Cortez A. Cooper III, Sale Lilly, Chad J.R. Ohlandt C, Eric Warner, J.D. Williams, "China's Grand Strategy: Trends, Trajectories, and Long-Term Competition," 24 Jun 2020, https://www.rand.org/pubs/research_reports/RR2798.html.

when interests converge, internal and external communication styles differ significantly between the United States and China. From pandemic planning to trauma and surgical care in disasters, health provides a non-threatening common platform to maintain communications and advance common goals. The United States has sought to include China's military in security-cooperation activities, and supported it hosting high-profile international military medical conferences. A decade ago, the author benefited from operating at a PLA Air Force hospital on multiple occasions and participated in medical symposia in Beijing, Shanghai, and Washington DC with PLA counterparts. Unfortunately, such exchanges have not continued under current PRC leadership.

George Marshall, former Army Chief of Staff, Secretary of State, and envoy to China stated in accepting the Nobel Peace Prize, "I am certain that a solution of the general problem of peace must rest on broad and basic understanding on the part of its peoples." Health-based collaboration related to climate change and other existential threats should encourage collaboration from "our sense of being involved in a common fate of tragic proportions."

3. Know Your Allies and Those on the Fence

Prescription:

- upport and help lead key global health institutions like WHO.
- Support intersectoral coordination to advance international health security.
- Seek mutually beneficial international health goals and coordination in both civil and military arenas, seeking whole-ofgovernment integration.
- Help advance sustainable health development, especially related to pandemic preparedness and medical/surgical enterprise maturation.
- Leverage emerging technologies to advance shared care and interoperability for both domestic and international use.

^{45.} Phillip Ventura, "Multinational Asia Pacific Military Health Exchange 2018 Comes to a Close," US Indo-Pacific Command, September 27, 2018, https://www.pacom.mil/Media/News-Article-View/Article/1647067/multinational-asia-pacific-military-health-exchange-2018-comes-to-a-close/

^{46.} George C. Marshall, "Nobel Lecture," December 11, 1953, https://www.nobelprize.org/prizes/peace/1953/marshall/lecture.

^{47.} Reinhold Niebuhr, "The Illusion of World Government," Foreign Affairs 27, No. 3 (April 1949): 388.

Ancient Athens' example supports General James Mattis' observation: "History is compelling; nations with allies thrive; those without them die." World War II taught the United States it must engage with others to balance potential regional hegemons and promote security and economic cooperation—the post-war order has proven uniquely durable and accessible to all powers willing to adhere to international standards. In the future, partners will be more critical. If the competition in the coming decades is between China and an isolated United States, the odds are in China's favor. However, China is not likely to prevail in either economic or military competition against a committed network of allies who have shared values aligned with the current order.

The United States is right to renew its commitment to collaborative leadership, evidenced in health by pledges to become the "arsenal of vaccines" in the global fight against COVID-19.⁴⁹ In addition to the threats of nuclear catastrophe and global warming, COVID-19 should teach us that the world must strengthen "every moral and political force which might give a rudimentary world community a higher degree of integration." Cold War containment policy needs to be modernized to emphasize "sovereign obligation" in which legitimacy is defined not only by the rights of nations but also by their obligations to other states and their citizens.⁵¹ The United States should pursue a strategy of openness and accountability to "prevent closed spheres of influence, maintain free access to the global commons, defend the political independence of all states, modernize existing institutions, and build new forms of governance." ⁵²

The US has the globe's dominant expeditionary military force but must continue to develop operational and medical capabilities integrated with allies, especially South Korea, Japan, Australia, and India, while supporting Taiwan, the Philippines, Vietnam, and Singapore's blunt offensive incursions. Coordinated contributions to development and di-

^{48.} James Mattis, Call Sign Chaos (New York: Random House, 2019), 170.

^{49.} COVID: Biden Pledges Donation of 500 Million Vaccine Doses," DW, October 6, 2021. https://www.dw.com/en/covid-biden-pledges-donation-of-500-million-vaccine-doses/a-57849161.

^{50.} Niebuhr, "The Illusion of World Government," 382-88.

^{51.} Richard Haass, A World in Disarray: American Foreign Policy and the Crisis of the Old Order (New York:Penguin Books, 2018), 288–89.

^{52.} Rebecca Lissner and Mira Rapp-Hooper, An Open World: How America Can Win the Context for Twenty-First Century Order (New Haven: Yale University Press, 2020), 121.

plomacy in health can be achieved through deployments, subject matter expert visits, personnel exchanges, mobile training teams, exercises, and health campaigns integrated with partner nations' ministries of defense and health.

Parallel with efforts abroad, the US must retain credibility through consistency with its own articulated values. This includes continued efforts toward an equitable health system that optimizes outcomes by investments in infrastructure, research, and education. Such actions reinforce international convictions of the United States as a reliable partner for common goals.

Seventy-five percent of the world's population are neither Chinese nor American and also have a say. Many will be disproportionately affected by global threats such as climate change and pandemics. Many will seek assistance with security and infrastructure development and must understand that partnerships with Russia and China are not isolated transactional investments but choices in alignment with autocracy and control versus democracy and open-market, rule-based environments. Desperate people make poor decisions in favor of short-term benefits that may become long-term snares, such as BRI and derivative healthcare initiatives. While Washington should not force others into either/or decisions, it should work with allies to provide credible, sustainable, respectful options and to highlight exploitative actions of competitors. President Joe Biden's "Build Back Better World" (B3W) plan with G-7 leaders represents such an initiative that appropriately integrates healthcare policy into infrastructure plans along with climate, digital technology, and increased equity.⁵³

In accordance with ancient Greek wisdom, to protect the liberties and benefits of the post–WWII system, the United States must work with others to build an increasingly Rawlsian order that will safeguard the interests of all, not just where it happens to be in the current global order.⁵⁴ In coming decades, the important thing is not so much whether the United States or another nation is at the top in certain

^{53.} The White House, "Fact Sheet: President Biden and G7 Leaders Launch Build Back Better World (B3W) Partnership," June 12, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/12/fact-sheet-president-biden-and-g7-leaders-launch-build-back-better-world-b3w-partnership/.

^{54. &}quot;Those who intend on becoming great should love neither themselves nor their own things, but only what is just, whether it happens to be done by themselves or others," commonly attributed to Plato.

metrics of the global order at a particular time as what sort of world order the US is in. Health security for the US and its allies is not only a worthwhile end in itself but also a means to multiple other salutary ones. Good health broadly affects societies and their economies.⁵⁵ Preventing diseases such as malaria boosts economic growth for nations and benefits their trading partners.56 Similarly, malnutrition decreases annual GDP and per capita growth worldwide.57

Global morbidity and mortality solutions are shifting from infectious diseases toward surgical conditions that the US—especially its military—has pioneered. Today, trauma accounts for more deaths worldwide than malaria, tuberculosis, and HIV/AIDS combined.⁵⁸ Chronic non-infectious diseases such as cancer and cardiovascular diseases, which often require surgical interventions, are increasingly responsible for lost life and productivity.⁵⁹ The Department of Defense (DoD) and other US agencies, other governments, and academia can expand efforts to advance surgical care in underserved areas and, in the process, build goodwill, provide medical networks for civilian and defense use, and yield increased proficiency operating in differently resourced environments, such as those similar to deployed care.⁶⁰

In Asia, medical student surgical exchanges with the US Uniformed Services University could mature into broader interactions and even joint exercises.⁶¹ DoD trauma care partnerships similar to the one it

^{55.} Ngwen Ngange and Kouty Manfred, "The Impact of Life Expectancy on Economic Growth in Developing Countries," *Asian Economic and Financial Review* 5, no. 4 (2015): 653–60.

^{56.} John Gallup, and Jeffrey Sachs, "The Economic Burden of Malaria," in "The Intolerable Burden of Malaria: A New Look at the Numbers: Supplement to Volume 64(1) of the *American Journal of Tropical Medicine and Hygiene*, January 2001, https://www.ncbi.nlm.nih.gov/books/NBK2624/.

^{57.} Jean-Louis Arcand, "Undernourishment and Economic Growth: The Efficiency Cost of Hunger, Food and Agriculture Organization of the United Nations, October 15, 2001, https://www.fao.org/News/2001/stockholm/arcandfull.pdf.

^{58.} World Health Organization, "Injuries and Violence," March 19, 2021, https://www.who.int/news-room/fact-sheets/detail/injuries-and-violence.

^{59. &}quot;The US Government and Global Non-Communicable Disease Efforts," KFF, January 29, 2019, https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-global-non-communicable-diseases/.

^{60.} James Chambers, Susan M. Briggs, and John Tarpley, "Damage Control Partnerships: Trauma Care Capacity-Building Abroad," *Journal of the American College of Surgeons* 228, no. 1 (January 2019): 130–31.

^{61.} David Welling, "Medical Students and International Exchanges: An Under-

presently has with the United Arab Emirates could be replicated elsewhere to build interoperability and surge capacity for both nations; partnerships can also decrease the time to transport injured citizens to definitive care. ⁶² In areas constrained by anti-access and area-denial (A2/AD) technology, allied nations will need to increasingly depend on partner nation care interoperability, or at least increasing parity, more in-depth training for prolonged field care, and telemedical and telesurgical capabilities. Investment in artificial intelligence and machine learning can help a larger number of less-trained medics from any nation take care of a larger number of casualties in peaceful disasters and in combat. As COVID-19 reminds us, planners must develop resiliency and redundancy for vulnerable logistical channels.

4. Know Faraway Places

Prescription:

- Through coordinated civil and military global health engagement, train medical professionals to develop deep understanding (cultural, linguistic, health) of other nations and work with them to advance shared goals and maintain meaningful communication channels and influence.
- Apply coordinated intelligence and diplomatic resources to better understand and deliberately advance health security objectives in all regions.

The Peloponnesian War was sparked by affronts to important Spartan allies, such as Corinth, and by issues (as was myopically pronounced in the prelude to WWII) "in a faraway country between people of whom we know nothing," the relatively remote settlements of Corcyra and Lesbos.63 Similarly, WWI began over peripheral competition in Sarajevo; later, arguably the closest the Cold War powers came to nuclear war was not because of developments in Europe but because of an island in Latin America.

appreciated Aspect of Global Surgery," *Military Medicine* 182, no. 5/6 (2017): 1566. 62. Daniel Sanderson, "New UAE—US Military Hospital for Abu Dhabi to Offer 'Better Outcomes for Wounded Soldiers," National News, February 24, 2019, https://www.thenationalnews.com/uae/health/new-uae-us-military-hospital-for-abu-dhabi-to-offer-better-outcomes-for-wounded-soldiers-1.829614; Richard Bumgardner, "Medical Ties Bind Forces in Partnership," US Army, July 27, 2020, https://www.army.mil/article/237595/medical_ties_bind_forces_in_partnership.

^{63.} From British Prime Minister Neville Chamberlain's radio speech 27 September 1938, referring to Germany's annexation of the Sudetenland.

The existence of multiple nuclear powers and the spectre of nuclear terrorism complicate decision making. Instant news coverage and social media allow little time to prepare official statements or communicate with relevant actors when responding to issues that can flame into conflict. More than ever, diplomacy and coordinated intelligence—including healthcare—are needed to understand local conditions, identify trends early, maintain presence and influence, and facilitate strategic communication to achieve security objectives.

One organization that supports such needs is the US Air Force International Health Program (IHS), which trains and fields military medics to build relationships and communication; support partner nation resiliency, capability, and capacity; and advance interoperability. Their work supports stability and resiliency through enhanced governance and disaster response, not just preparedness for combat operations. For example, after several years of focused partnership with the US Air Force, the Philippines government was able to fulfill all its aviation evacuation needs for Super Typhoon Yolanda in 2013, buttressing Manila's legitimacy. Studies of that response demonstrated value in foreign language proficiency and deep cultural understanding on the part of US personnel, even while working with the Filipino population that was largely fluent in English.⁶⁴

5. Know What Works: Enduring Winning Strategies and Novel Developments

Objective

Prescription:

- Continue to define US objectives in terms that include core Western values.
- Healthcare reform: Invest in meeting basic health needs of all citizens and partner nations.
- Healthcare reform: Incentivize medical careers, assist with educational costs and tort reform.
- Train DoD medics for prolonged field care.
- Train toward interoperability with partner nation medics.
- Invest in robust telemedicine and telesurgical capabilities as well as AI for diagnostic and therapeutic applications.

^{64.} Reliefweb. "An Inside Look into USPACOM response to Super Typhoon Haiyan," February 2015," February 17, 2015, https://reliefweb.int/report/philippines/inside-look-uspacom-response-super-typhoon-haiyan-february-2015.

- Support partner nations legitimacy through health engagement which boosts citizens confidence in and satisfaction with their governments.
- Deepen civ-mil interoperability to enhance currency, proficiency, and ability to move both medical resources (personnel, materiel) and patients between systems.
- Better coordinate global health efforts between USG departments as well as private sector and academia. Create a federal office to global health activities of Department of State, USAID, HHS/CDC, and DoD, supported by a shared database of initiatives and outcomes.

US Joint Publication 3-0 lists objective as the first principle of war.⁶⁵ Pericles lost his allies' favor when he repurposed the Delian League to serve exclusively Athenian interests. For health, the US must identify and support the most critical domestic and international needs, including equitable access to care for its citizens and supporting health security needs of partner nations.⁶⁶

Mass/Concentration of Effect

Many consider massing of effect as the most effective principle to impose cost, but the complexity of today's multipolar nuclear world—with emerging threats in cyber, hypersonic delivery systems, and drones—complicates efforts to achieve confidence in this capability. To prevent *fait accompli* and subsequent escalation, partner nations must maintain a dispersed network of bases that have adequate military medical support provided by deployment of allied medical forces working with host nation professionals. Support also includes telemedical assets and resilient logistics networks.⁶⁷

Maneuver

Innovations in *maneuver* proved a decisive advantage for the Greeks (Battle of Salamis, 480 BCE), the Spartans (Battle of Mantinea, 481 BCE), the Macedonians (Battle of Gaugamela, 331 BCE), and the Romans (Battle of Cynocephalae, 197 BCE). Maneuvering is critical to-

^{65.} Office of the Chairman of the Joint Chiefs of Staff, Joint Publication 3-0, "Joint Operations," October 22, 2018, 191–94.

^{66.} Richard Haass, Foreign Policy Begins at Home (New York: Basic Books, 2014), 57–58, 126–27.

^{67.} Michael Johnson and Terrence Kelly, "Tailored Deterrence: Strategic Context to Guide Joint Force 2020," *Joint Force Quarterly* 73, no. 3 (3rd Quarter, 2014): 22–29.

day, when small factors can amplify at unprecedented rates and the United States faces homeland threats in expanding domains. It will be so in the future as the United States may not enjoy air superiority or overmatch capability in overseas conflict. Expeditionary forces will need to deploy rapidly as partner forces blunt adversary offensive action; the US will need to approach power projection—and its medical support—differently.

Potentially lacking freedom of movement for patient care and medical resources, American and partner nation medics must prepare to provide prolonged care at lower echelons of resources than in previous conflicts. They must pursue joint and international interoperability and become more mobile and agile in facing all hazards and threats. They need to cross-train in key skills to provide resiliency and redundancy in austere environments. In fact, they would benefit from serving in austere environments during peace to support capacity-building efforts of other nations while gaining experience in differently-resourced environments. Integrated investments in health, transportation, and infrastructure abroad can support partner-nation health care networks and improve resilience against natural disasters and foreign aggression. Continued regional medical exercises demonstrate commitment to forward presence and advancing shared interests in regional stability.

Competitive medicine must evolve with technology. Virtual reality platforms could improve pre-deployment team training, help maintain psychomotor skills, and provide exposure to low-frequency but high-impact, highly stressful medical scenarios.⁷¹ Teelemedicine and telesurgery can enable extended field care by junior medics.

Depth and Unity of Effort

^{68.} James A. Chambers, Ricardo Oliver, and Jennifer McKeen, "Cross-Training: A Force Enabler for Resiliency in Expeditionary Medicine," accepted for publication in *Military Medicine*, March 5, 2021.

^{69.} Chambers et al., "Damage Control Partnerships," 130c31.

^{70.} James A. Chambers, Peter Garretson, Mort M. Rolleston, Jeffrey Alder, Peter Podbielski, "Aviation and Health: A Key Nexus for the US Air Force's Regional Security-Building Efforts," *Air & Space Power Journal* 29, no. 3 (May–June 2015): 57–72.

^{71.} James A. Chambers, Colin Davidson, Nicole S. Fanning, and Joseph M. Genualdi, "Leveraging Virtual Reality to Enhance Expeditionary Medical Team Performance in Three Key Areas," *Military Medicine* 185, no. 9–10 (September 2020): e1357–e1359.

Rome's depth of resources and unity of command helped it conquer a loose federation of Greek city-states. Rome's success and longevity have been attributed to both its form of government, a republic that avoided impulsive excesses of autocrats, and uninformed pure democracy. Rome also granted citizenship to those it conquered rather than simply exploiting them.^{72,73} These provided Rome balanced governance, depth, and unified alignment in human resources.

The US must commit to extended deterrence through establishing forward presence, assisting partner nations develop defensive measures, and modernizing its strategic forces while adjusting diplomatic and military protocols. A policy of "sovereign obligation" rather than containment, or "engage but hedge," provides needed flexibility in a less-aligned world facing shared global threats. This strategic policy provides global powers a consistent platform to address nuclear threats, terrorism, climate change, and pandemics.

Increased depth of US preparedness for all-hazards threats, from natural disasters to state attack, is warranted. Congress has mandated increased civilian-military collaboration to provide DoD trauma providers clinical currency and proficiency training.⁷⁷ It has established federal grants to offset civilian trauma center costs, but funds have not yet been appropriated for trauma center incentivization.⁷⁸

Multiple US academic medical centers already support DoD training needs for trauma care, high-consequence pathogen management, critical-care air transport, and other areas. The DoD is evaluating op-

- 72. Polybius, *The Histories*, Book 6, Butter-Wobst ed., 1882, https://penelope.uchicago.edu/Thayer/e/roman/texts/polybius/6*.html.
- 73. Mary Beard, "Ancient Rome and Today's Migrant Crisis," *Wall Street Journal*, October 16, 2015, https://www.wsj.com/articles/ancient-rome-and-todays-migrant-crisis-1445005978; Emily Wilson, "The Secret of Rome's Success," *The Atlantic*, December 2015, https://www.theatlantic.com/magazine/archive/2015/12/the-secret-of-romes-success/413143/.
 - 74. Haass, A World in Disarray, 288-89.
- 75. Graham Allison, Destined for War: Can America and China Escape Thucydides's Trap? (Boston:HMH Books, 2017), 219.
 - 76. Johnson and Kelly, "Tailored Deterrence."
- 77. 114th Congress, *National Defense Authorization Act for Fiscal Year 2017*, Public Law 114–328, December 23, 2016, https://www.congress.gov/114/plaws/publ328/PLAW-114publ328.pdf
- 78. 116th Congress, "Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2019, Public Law 116–22, June 24, 2019, https://www.congress.gov/bill/116th-congress/senate-bill/1379.

tions for new models of integrated patient care, both for Homeland Defense and for injured troops returning from large-scale conflict or abroad. These partnerships could also provide DoD medical professionals not only opportunities for trauma skill maintenance but also proficiency in addressing all-hazards threats, including mass casualty events from biological, chemical, nuclear, and/or radiological weapons. Such investments would enhance the National Disaster Medical System.

Other nations provide a variety of civilian-military care constructs for consideration. In Chinese military hospitals, any citizen with the capability to pay can receive care, which provides a large volume of complex clinical care to providers. A significant number of the staff are civilians, offering a nation preparing to deploy forces abroad the flexibility to field uniformed medics abroad while minimizing adverse impact to healthcare access at home. In Israel, civilian hospitals can seamlessly transition to accommodate military patients and providers. The UK places certain military specialists (i.e., burn surgeons) at designated civilian centers. While evaluating options, the US must also seek to approximate an equitable national health system that optimizes outcomes by investments in infrastructure, research, and education.

Domestic health depth requires a commitment to education. Cold War military leaders called for increased STEM education and research, which today must include biomedical sciences. The DoD has historically contributed to this effort and must continue to inspire, recruit, and provide opportunities for medical scientists and clinicians to excel both in uniform and through academic collaboration with civilian universities.

Depth and unity of effort with partner nations will be necessary to face shared threats. In recent years, the US government has shifted emphasis from directly providing care to maintaining communication and to building resiliency, capability, capacity, and interoperability. The DoD, Department of State, US Agency for International Development (USAID), and CDC all serve in this domain, and establishing a central authority to coordinate all federal global health efforts could help share best practices and encourage trans-regional and trans-departmental activities to achieve sustainable strategic goals.

Legitimacy

Legitimacy—maintaining legal and moral authority⁷⁹—is derived in

^{79.} Office of the Chairman of the Joint Chiefs of Staff, "Joint Operations,"

part from how well governments meet medical needs. Legitimacy is also the cornerstone of sovereign obligation, compelling states to pursue objectives that broadly benefit the global population.

The recent race to produce a COVID-19 vaccine became a nationalistic endeavor with a more immediate impact to most nations than any Cold War race. As the United States rigorously reviewed its candidates, Russia's and China's vaccines were rapidly marketed before meeting international testing standards. Indonesia linked refusal to a US defense request to lack of vaccine support and then purchased the Sinovac vaccine from China, which failed to meet expectations and deepened vaccine hesitancy.^{80,81} The Philippines' president threatened the status of forces agreement with the United States if the latter did not provide his nation vaccines.⁸² He obtained vaccines from China after agreeing not to challenge Chinese claims in the South China Sea. When Chinese ships later entered Manila's maritime zone unwelcomed, he sought Russian vaccines. He also publicly apologized to his citizens for receiving the then-unapproved Sinopharm shot and advised his nation not to follow his example.83 The US has since donated millions of doses for the Philippines along with \$37M in assistance.

6. Know the Importance of Logistics

Prescription:

- Invest more in adaptable domestic medical materiel production.
- Maintain the Strategic National stockpile with clear communication, and authority.
- Mission statement should be ensconced in law.
- Exercise ability to complete the "final mile."

191–94.

80. Tom Allard, "Vaccines, Not Spy Planes: U.S. Misfires in Southeast Asia," Reuters, October 27, 2020, https://www.reuters.com/article/us-indonesia-diplomacy-usa-china-insight/vaccines-not-spy-planes-u-s-misfires-in-southeast-asia-id USKBN27C19Z

- 81. Hannah Beech and Muktita Suhartono, "Indonesia's Doctors Got Vaccinates with Sinovac, and Got Sick," *New York Times*, July 18, 2021, https://www.nytimes.com/2021/06/25/world/asia/indonesia-covid-sinovac.html.
- 82. Cliff Venzon, "Duterte Threatens to End US Military Pact if No Vaccines," Nikkei Asia, December 17, 2020, https://asia.nikkei.com/Politics/International -relations/Duterte-threatens-to-end-US-military-pact-if-no-vaccines.
- 83. BBC, "Philippines' Duterte Apologises for Taking Unapproved China Jab," May 6, 2021, https://www.bbc.com/news/world-asia-57004924.

- Develop a National Supply Chain approach rather than just stockpile.
- Ensure Defense Industrial Base supports medical needs.
- Explore potential of 3-D printing for medical materiel in austere environments.
- Mitigate cyber risks to electrical grid, water supply, and health data systems.
- Improve international phosphorus transparency and cycle management.
- Mitigate risk in global water security.

Pericles protected and provided for Athenians by establishing fortified access to the sea. Similarly acknowledging the importance of logistics to health and security, the Department of Homeland Security identifies the Defense Industrial Base (DIB) as a Critical Infrastructure Sector and includes medical supplies and pharmaceuticals to meet national security commitments.

During the pandemic, the Defense Logistics Agency (DLA), the Defense Threat Reduction Agency (DTRA), and the Defense Contracting Agency (DCMA) purchased \$84M of ventilators and medical supplies for the USNC Comfort and USNS Mercy for civil-support missions and delivered millions of test kits by US Air Force C-17s. The DoD partnered with businesses to retool product lines for masks, gowns, and ventilators. Despite these achievements, a Joint Acquisition Task Force identified vulnerabilities in the DIB to improve capacity.84 Foremost, the United States needs to decrease foreign dependence on key materiel and pharmaceuticals. The United States is the world's largest importer of pharmaceuticals and medical supplies from China, which manufactures 50% of global totals.85 This vulnerability is compounded by adversarial capital—foreign investments in US businesses for critical supplies. China aggressively sought to buy critical national assets during the pandemic. The DoD participates in the Council of Foreign Investment in the US (CFIUS) to mitigate this risk.

^{84.} Mike Andrews, "Partnering with the U.S. Defense Industrial Base to Combat COVID-19," US Department of Defense, March 22, 2020, https://www.defense.gov/Newsroom/Releases/Release/Article/2121122/partnering-with-the-us-defense-industrial-base-to-combat-covid-19/.

^{85.} Nsikan Akpan, "U.S. Has Only a Fraction of the Medical Supplies It Needs to Combat Coronavirus," *National Geographic*, March 3, 2020, https://www.nationalgeographic.com/science/article/us-america-has-fraction-medical-supplies-it-needs-to-combat-coronavirus.

The Federal government sub-optimally prepared and utilized the Strategic National Stockpile (SNS) for the pandemic. ⁸⁶ Despite serving a valuable role in the 2009 H1N1 influenza outbreak, face masks were not replenished, and many of the remaining supplies had expired by 2020. ^{87,88} Stockpiling itself is only part of the challenge; distribution, especially the "last mile" to target populations, has proven to be difficult and under-exercised. ⁸⁹

Several factors hampered a coordinated national response and misallocation of resources. 90 For example, the mission of the SNS was changed without formal staffing, 91,92 and federal emergency assistance was contested, leaving states to compete for supplies from domestic and international sources. 93 The US government dithered over using the Defense Production Act (DPA), initially relying upon private volunteerism to provide testing supplies and PPE, despite the DHS having

^{86.} Thomas Henkey, "Perspective: It Is Not Too Late to Get the Coronavirus Response Right," Homeland Security Today, April 1, 2020, https://www.hstoday.us/subject-matter-areas/emergency-preparedness/perspective-it-is-not-too-late-to-get-the-coronavirus-response-right/.

^{87.} Beth Reinhard and Emma Brown, "Face Masks in National Stockpile Have Not Been Substantially Replenished Since 2009," *Washington Post*, March 10, 2020, https://www.washingtonpost.com/investigations/face-masks-in-national-stockpile-have-not-been-substantially-replenished-since-2009/2020/03/10/57e57316-60c9-11ea-8baf-519cedb6ccd9_story.html.

^{88.} Lamar Alexander, "Preparing for the Next Pandemic: A White Paper," June 9, 2020, https://www.help.senate.gov/imo/media/doc/Preparing for the Next Pandemic.pdf.

^{89.} Public Health Emergency, "Strategic National Stockpile," August 9, 2021, https://www.phe.gov/about/sns/Pages/default.aspx.

^{90.} Glenn Kessler, "Did Trump Ship 17 Tons of 'American' Masks and Medical Supplies to China?" *Washington Post*, April 22, 2020, https://www.washingtonpost.com/politics/2020/04/22/did-trump-ship-17-tons-american-masks-china/.

^{91.} Andrew Feinberg, "Strategic National Stockpile Website Changes after Jared Kushner's Controversial Claim It Was Not for States' Use," *Newsweek*, April 3, 2020, https://www.newsweek.com/strategic-national-stockpile-website-changes-after-jaered-kushners-controversial-claim-it-was-not-1496051.

^{92.} Nathaniel Weixel, "Trump Administration Changes Definition of National Stockpile after Kushner Remarks," The Hill, April 3, 2020, https://thehill.com/homenews/administration/491037-trump-administration-changes-definition-of-national-stockpile-after.

^{93.} Brakkton Booker, "Maryland Secures Half a Million Coronavirus Test Kits from South Korea, Drawing Criticism from Trump," NPR, April 21, 2020, https://www.npr.org/sections/coronavirus-live-updates/2020/04/21/839919655/maryland-gets-500-000-test-kits-from-south-korea-drawing-criticism-from-trump.

used the DPA over a thousand times in 2018 alone. 94,95 Public health should be considered a national security issue and have funding for defense and intelligence.

The United States needs to develop a strategic national *supply chain* approach and improve the vaccine development and distribution system. Near-expiration supplies should be donated to hospitals and front-line workers, helping maintain national industrial capacity for critical items. Subnational stockpiles should be reinforced through federal grants, and an independent organization should be established to assess stockpile adequacy and adequacy of service to users. The SNS should be better funded and considered to act only as a bridge for the private sector to ramp up production. Clear lines of communication and authority need to be exercised for crisis access and distribution.

Abroad, logistical support of future military operations may be significantly constrained without air dominance. The United States needs to equip deployed medics with ruggedized equipment that can function in cyber-degraded environments and leverage both partner nation relationships and emerging technologies such as 3-D printing for resupply and adaptation to real-time field demands.⁹⁸

Cybersecurity presents immediate threats to healthcare logistics. Russia has conducted cyberattacks in multiple nations since 2015, affecting hundreds of thousands' access to power, transportation, and other resources critical for health.⁹⁹ Chinese malware was attributed to

^{94.} Dan Diamond and Nahal Toosi, "Trump Team Failed to Follow NSC's Pandemic Playbook," *Politico*, March 25, 2020, https://www.politico.com/news/2020/03/25/trump-coronavirus-national-security-council-149285.

^{95.} Zolan Kanno-Youngs and Ana Swanson, "Wartine Production Law Has Been Used Routinely, but Not with Coronavirus," *New York Times*, March 31, 2020, https://www.nytimes.com/2020/03/31/us/politics/coronavirus-defense-production-act.html.

^{96.} George J. Busenberg, "Policy Lessons from the History of Pandemic Preparedness," COVID-19 Rapid Response Impact Initiative, White Paper 23, Harvard University Edmond J. Safra Center for Ethics, September 3, 2020, https://ethics.harvard.edu/files/center-for-ethics/files/23pandemicpreparedness.pdf

^{97.} Busenberg.

^{98.} James A. Chambers, Kenneth P. Seastedt, and Joceyln Raymundo-Grinstead, "An example of 3-D Printing for Expeditionary Medicine: The Air Force Retractor," *Military Medicine* 185, no. 6 (June 8, 2020): 8;185(5-6):e3565–3567.

^{99.} Kim Zetter, "Inside the Cunning, Unprecedented Hack of Ukraine's Power Grid," Wired, March 3, 2016, https://www.wired.com/2016/03/inside-cunning-unprecedented-hack-ukraines-power-grid/; Lizzie Dearden, "Ukraine Cyber

a blackout in India that caused power loss to hospital ventilators; the attack was thought to be in response to border conflicts. Of Strategic partners must identify red lines and plan responses of appropriate severity. Of the conflict of the caused power loss to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators; the attack was thought to be in response to hospital ventilators.

Phosphorus management poses a long-term logistical threat to food security. In the last century, a six-fold increase in phosphate processing enabled the global population to double in less than 50 years; in the next three decades, an estimated 9 billion people will increase food demand by 60%. During a global food crisis in 2008, phosphate rock prices jumped almost 800%, highlighting this vulnerability. In recent decades, US phosphate production has fallen dramatically; China is currently the largest producer, but the largest reserves are in northwest Africa. Phosphate processing is inefficient, and its usage and logistics are non-transparent. Paradoxically, excess phosphorus runoff

Attack: Chaos as National Bank, State Power, and Airport Hit by Hackers," *Independent*, June 27, 2017, https://www.independent.co.uk/news/world/europe/ukraine-cyber-attack-hackers-national-bank-state-power-company-airport-rozenko-pavlo-cabinet-computers-wannacry-ransomware-a7810471.html; U.S. Says Russian Hackers Now Targeting Power Grid, Water Systems," *Radio Free Europe*, Radio Liberty, March 16, 2018, https://www.rferl.org/a/us-says-russian-hackers-now-targeting-power-grid-water-systems-critical-infrastructure/29103250.html.

- 100. David E. Sanger and Emily Schmall, "China Appears to Warn India: Push Too Hard and the Lights Could Go Out," *New York Times*, September 27, 2021, https://nytimes.com/2021/02/28/us/politics/china-india-hacking-electricity.html.
- 101. Daniel Malloy, "Secretary General Stoltenberg Explains Why NATO Is Getting Serious About Cyber and China 'Is not an Enemy," Atlantic Council, June 7, 2021, https://www.atlanticcouncil.org/blogs/new-atlanticist/secretary-general-stoltenberg-explains-why-nato-is-getting-serious-about-cyber-and-china-is-not-an-adversary-/.
- 102. "Feeding Nine Billion People in 2050," Food and Agricultural Organization of the United Nations, April 12, 2013, http://www.fao.org/news/story/en/item/174172/icode.
- 103. Julia Rosen, "Humanity Is Flushing Away One of Life's Essential Elements," *The Atlantic*, February 8, 2021, https://www.theatlantic.com/science/archive/2021/02/phosphorus-pollution-fertilizer/617937/.
- 104. "Phosphate Rock Statistics and Information," US Geological Survey, 2019, https://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2019 -phosp.pdf.
- 105. Claudiu-Eduard Nedelciu, Kristín Ragnarsdóttir, Ingrid Stjernquist, and Marie Schellens, "Opening Access to the Black Box: The Need for Reporting on the Global Phosphorus Supply Chain," *Ambio* 49, (2020): 881–91, https://doi.org/10.1007/se13280-019-01240-8.
 - 106. Nedelciu et al.

pollutes global waterways, triggering algal blooms and killing fish in hundreds of coastal dead zones.¹⁰⁷ Oversight of a transparent phosphorus reporting process must be instituted to address inefficiencies and incentivize improved stewardship.

Water demand has increased six-fold over the last century; the supply is now threatened by pollution and climate change. Some 2.2 billion people lack access to safe drinking water. Water crises have been identified as more likely and consequential in the future than infectious disease outbreaks, interstate conflict, or terrorist attacks. Water security is a UN sustainable development goal and merits prompt action. Soviet irrigation practices irreversibly devastated Central Asia's Lake Aral ecosystem, once the fourth largest lake in the world; Chinese BRI projects in the same region threaten to further destabilize the region. Biogas from water treatment can be used for renewable energy and should be collaboratively developed.

7. Know the Importance of Leaders

Prescription:

- Coordinate interdepartmental USG global health efforts through the National Security Council.
- Lead health care reform to benefit both patients and providers.
- Train civilian and military leaders in strategic effects of medicine, including metric analysis.
- Consider creating a federally-incentivized International Health Corps to supplement work done in academia, Department of State, USAID, Department of Defense, and partner governments.
- Foster a common national identity which unifies citizens behind common purpose.

Effective leaders build collective identity and commitment to a directed set of actions. Thucydides credits Pericles for consolidating Athenian identity around related virtues worth fighting for as well as

108. "The Global Risks Report 2020," World Economic Forum, January 15, 2020, https://www.weforum.org/reports/the-global-risks-report-2020.

109. Elena F. Tracy, Evgeny Shvarts, Eugene Simonov, and Mikhail Babenko, "China's New Eurasian Ambitions: The Environmental Risk of the Silk Road Economic Belt," *Eurasian Geography and Economics* 58, no. 1 (2017): 56–88.

110. "Renewable Natural Gas Production," US Department of Energy, accessed September 9, 2021, "https://afdc.energy.gov/fuels/natural_gas_renewable.html.

^{107.} Nedelciu et al.

restraint, which contributed to several victories.¹¹¹ In contrast, the disastrous Sicilian expedition was conceived by relatively inexperienced, uneducated persons overly swayed by greed, emotions, and Alcibiades' polemics to pursue ill-conceived and poorly planned operations.¹¹² Tactical failure in Sicily represented the beginning of the end for Athens and resulted in part from delays in decision making due to a lack of established lines of authority for experienced, proven leaders.¹¹³

Athens remained secure only when leaders judiciously managed funds and human capital for social cohesion (τα θεωρικά) versus funds for military needs (τα στρατιωτικά) against existential threats. ¹¹⁴ US leadership must foster national identity and unity—a common national purpose—by focusing on common values and threats, and deepening public-private partnerships. ¹¹⁵ National identity and unity should include equitable and sustainable healthcare policy coupled with broad opportunities for service.

US leadership must prioritize improved integration of its nation's health system. Several modern advanced nations (Israel, Norway, etc.) mandate community or military service for segments of their population to provide service to their citizens, build skills and experience to those involved, and strengthen communal bonds. Similarly, some have advocated for an International Health Corps in the United States to advance infrastructure development, transfer knowledge, and build capacity. Such an entity could complement USG global health engagement efforts while boosting national identity and purpose.

8. Know Health Can Determine Strategic Outcomes and Be a Supported Priority in Security Activities

^{111.} Thucydides, *The History of the Peloponnesian War*, 2.34–36, trans. Richard Crawley, https://www.gutenberg.org/files/7142/7142-h/7142-h.htm.

^{112.} Donald Kagan, *The Peace of Nicias and the Sicilian Expedition* (Ithaca: Cornell University Press, 1991), 191.

^{113.} Kagan, The Peace of Nicias, 170-71.

^{114.} Demosthenes, *Dem. Phil.*, i 35–36, 19–20; Plutarch, *Morals, Praecepta Gerendae Reipublicae* 818 E–F, from James Buchanan, *Theorika* (Locust Valley, NY: J. Augustin, 1962), 80.

^{115.} Lissner, Rapp-Hooper, An Open World, 123.

^{116.} Vanessa Bradford Kerry, Sara Auld, and Paul Farmer, "An International Service Corps for Health—An Unconventional Prescription for Diplomacy," *New England Journal of Medicine* 363, no. 13 (2010): 1199–1201, https://doi.org/10.1056/NEJMp1006501.

Prescription:

- US Departments of State, Defense, and Health and Human Services must, in concert, prioritize and plan for the diplomatic and security concerns of global health.
- Public Affairs staffs need to fully leverage Social Media to provide accurate, frequently updated narratives of health efforts, especially in times of crisi, to include actively discrediting "fake news."
- Emphasize honest narratives of public/global health support, leadership, and successes.
- Improve accessibility and transparency in reporting health concerns at all levels globally.
- USG must be willing to lead health initiatives while demonstrating humility in adopting best practices identified by other nations and/or international organizations like WHO.
- USG must provide leadership and other support to WHO and other prominent health organizations.
- The US must continue to innovate in infectious disease and surgery and share related technologies.
- Caution partner nations about counterfeit or poor quality medical supplies or products without adequate testing.
- Advocate against risks of sharing health data with Chinese IT networks.
- Support affordable, secure telecommunications networks for global healthcare needs.
- Governments and the WHO must improve health surveillance efforts from far-forward data gathering to real-time, transparent sharing of analyzed risk.

Pandemics

The opening book of the *Iliad* describes a plague that confounds the plans of both sides in the Trojan War. After the first year of the Peloponnesian War, life imitated art when an epidemic in fortress Athens killed a quarter of the population, including Pericles. The outbreak and two subsequent plagues dissipated morale, discipline, and social coherence. Despite implementing a strategic plan that had initially proven to be successful, Athens never recovered and was ultimately defeated. COVID-19 has similarly exacerbated fault lines in American society that require mending.

^{117.} Thucydides, History of the Peloponnesian War, trans. Richard Cawley (New York:Digireads, 2017), Kindle locations 1779–2024.

The 2003 SARS epidemic originated in China, which punished those who reported the outbreak. The nation reportedly overhauled its public health system, integrating military and civilian resources, 118 but pervasively obfuscated facts to maintain a favorable narrative. 119 Despite the PRC's reported improvements, since 2013, there have been five epidemics of H7N9 in China associated with a 40% case fatality rate. 120

The 2014–2015 Ebola outbreak demonstrated the global risk of failing health systems and a lack of international data sharing or prioritized response. It questioned the roles, authorizations, and responsibilities of the WHO. The United States deployed military teams to provide field-treatment areas, clinicians, laboratory support, and training capability. China claimed to have mobilized the largest overseas assistance and developed effective medication and a vaccine for Ebola, but the US deployed more than 2,500 personnel to Africa (1,000 more than China did), dispatched trainers to other continents to support UN taskings, developed effective vaccine and therapeutic technologies, and invested \$5.4 billion for emergency aid. ¹²¹

In November 2019, COVID-19 emerged in China, where the government punished Li Winliang, the doctor who first reported it. A year later, China jailed journalist Zhang Zhan for criticizing Chinese management of the pandemic. China deflected attention by claiming the

^{118.} Hui Ma, Ji-Ping Dong, Na Zhou, and Wei Pu, "Military–Civilian Cooperative Emergency Response to Infectious Disease Prevention and Control in China," *Military Medical Research* 3, no. 39, (2016), https://doi.org/10.1186/s40779-016-0109-y; William Zheng and Laurie Chen, "China Sends in Military Doctors to Help Wuhan Hospitals Fight Coronavirus Outbreak," *South China Morning Post*, January 24, 2020, https://www.scmp.com/print/news/china/politics/article/3047595/china-sends-military-medics-help-wuhan-hospitals-fight.

^{119.} Susan M. Puska, "SARS 2002–2003: A Case Study in Crisis Management," ed. Andrew Scobell and Larry M. Wortzel, *Chinese National Security Decision Making Under Stress*, US Army War College Strategic Studies Institute, September 1, 2005, 85–134; Ma et al., "Military–Civilian Cooperative."

^{120.} Lisa Monaco and Vin Gupta, "The Next Pandemic Will Be Arriving Shortly," Foreign Policy, September 28, 2018, https://foreignpolicy.com/2018/09/28/the-next-pandemic-will-be-arriving-shortly-global-health-infectious-avian-flu-ebola-zoonotic-diseases-trump/.

^{121.} Ma et al., "Military-Civilian Cooperative"; Chow-Bing, "COVID-19"; Jennifer Kates, Josh Michaud, Adam Wexler, and Allison Valentine, "The U.S. Response to Ebola: Status of the FY2015 Emergency Ebola Appropriation," KFF, December 11, 2015, https://www.kff.org/global-health-policy/issue-brief/the-u-s-response-to-ebola-status-of-the-fy2015-emergency-ebola-appropriation/.

virus was spread by the US military in Wuhan, but the government eventually moved to more productive responses abroad, offering lessons learned and medical materiel with other nations. As President Xi called for a G20 health ministers' meeting to support information sharing with the WHO and other collective actions, some argued it could be "China's unlikely Sputnik moment." China later welcomed the UN's efforts to coordinate international response to the pandemic, and cited the WHO's support of their actions. However, the WHO and multiple nations subsequently criticized China for lack of access to relevant information regarding the source of the pandemic, a behavior previously overlooked during the SARS epidemic. Descriptions of the pandemic.

China has demanded public gratitude and even security concessions for their vaccines, which have been demonstrated to be less efficacious than Moderna's, Pfizer's, and Johnson & Johnson's. ¹²⁶ China and Russia both proved willing to jeopardize their citizens'—and others'—health with inadequately tested COVID-19 vaccines. ^{127,128} Chinese

^{122.} Branko Milanovic, "Is the Pandemic China's Sputnik Moment?" Foreign Affairs, May 12, 2020, https://www.foreignaffairs.com/articles/united-states/2020-05-12/pandemic-chinas-sputnik-moment; Hua Chunying, "CCP Foreign Ministry Press Conference on CCTV," April 2, 2020, https://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/2511_665403/t1765251.shtml.

^{123.} Chunying, "CCP Foreign Ministry Press Conference."

^{124.} Chunying.

^{125.} Emily Rauhaula, "WHO Chief, U.S. and Other World Leaders Criticize China for Limiting Access of Team Researching Coronavirus Origins," *Washington Post*, March 31, 2021, https://www.washingtonpost.com/world/who-wuhan-tedros-lab/2021/03/30/896fe3f6-90d1-11eb-aadc-af78701a30ca_story.html; Puska, "SARS."

^{126.} Eduardo Simões, "New Brazil Data Shows Disappointing 50.4% Efficacy for China's Corona Vaccine," *Reuters*, January 12, 2021, https://www.reuters.com/article/us-health-coronavirus-brazil-coronavirus/new-brazil-data-shows-disappoining-50-4-efficacy-for-chinas-coronavac-vaccine-idUSKBN29H2CE; Raissa Robles, Alan Robles, and Bloomberg, "Duterte Seeks Chinese Coronavirus Vaccine, Rules Out US Bases in Philippines," *South China Morning Post*, July 27, 2020, https://www.scmp.com/week-asia/politics/article/3094918/duterte-seeks-chinese-coronavirus-vaccine-rules-out-us-bases.

^{127. &}quot;Sinovac: Brazil Results Show Chinese Vaccine 50.4% Effective," *BBC News*, January 13, 2021, https://www.bbc.com/news/world-latin-america-55642648, August 11, 2020, https://www.nature/articles/d41586-020-02386; Holly Ellyatt, "Russia's Voronavirus Vaccine Is Alluring for Eastern Europe, Creating a Headache for the EU," *CNBC*, March 2, 2021, https://www.cnbc.com/2021/03/02/russias-sputnik-vaccine-is-luring-eastern-europe-worrying-the-eu.html.

^{128.} Nectar Gan and Tatiana Arias, "Chinese Covid-19 Vaccine Far Less Effective than Initially Claimed in Brazil, Sparking Concerns," CNN, January 14,

media highlighted PRC's efforts to provide global medical supplies and expertise, 129 but some "donations" were actually commercial transactions for products, some of which were of poor quality, accompanied by Chinese inroads in foreign stock exchanges and the expansion of Huawei 5G networks embedded with Chinese surveillance apps. 130

China has used the pandemic to recast its flagging BRI away from large infrastructure projects to a Health Silk Road (HSR) and Digital Silk Road (DSR). HSR is marketed as a network option to surpass the effectiveness and efficiency of the WHO and other international standards that would allow the country "to reap the benefits," but it has failed to do little more than expand Chinese telecommunications and potential surveillance investments, such as Huawei, abroad in a conglomeration of bilateral agreements. 133

HSR has proposed independent, parallel processes for handling international medical emergencies¹³⁴ and threatens to create closed spheres of influence linked by databases and infrastructure systems vulnerable to exploitation. Rather than create an open, transparent network for Southeast Asia, China has stated its intent to pursue HSR on a "bilateral basis. . . . For those countries willing to cooperate with China, China will likely pour in more resources, to reward these countries' friendly attitudes."¹³⁵ During the launch of BRI and its HSR, Chinese foreign investment in the health industry exceeded \$4B, several-fold higher than US investments. Many of these were strategic acquisitions of

^{2021,} https://www.cnn.com/2021/01/13/asia/sinovac-covid-vaccine-efficacy-intl-hnk/index.html; Chunying, "CCP Foreign Ministry Press Conference."

^{129.} Chunying, "CCP Foreign Ministry Press Conference"; Ma et al., "Military–Civilian Cooperative."

^{130.} Tagliapietra, "The European Union"; Kirk Lancaster, Michael Rubin, and Mira Rapp-Hooper, "Mapping China's Health Silk Road," Council on Foreign Relations, April 10, 2020, https://www.cfr.org/blog/mapping-chinas-health-silk-roadwww.cfr.org; Lew et al., "China's Belt and Road," 98.

^{131.} Chow-Bing, "COVID-19."

^{132.} Kristine Lee and Martijn Rasser, "China's Health Silk Road Is a Dead-End Street," Foreign Policy, June 16, 2020, https://foreignpolicy.com/2020/06/16/china-health-propaganda-covid; Lew et al., "China's Belt and Road," 89.

^{133.} Andreea Brînză, "Some Say China's Belt and Road Helped Create This Pandemic. Can It Prevent the Next One?" *The Diplomat*, April 2, 2020m https://thediplomat.com/2020/04/some-say-chinas-belt-and-road-helped-create-this-pandemic-can-it-prevent-the-next-one.

^{134.} Chow-Bing, "COVID-19."

^{135.} Chow-Bing.

pharmaceutical and medical device manufacturers in the US, Israel, India, and Australia. 136

Other nations have demonstrated the importance of having experienced, proactive leadership. Taiwan's vice president, an epidemiologist, applied lessons learned from SARS to rapidly institute screenings and closures coordinated by a central authority. Vietnam rapidly built its post-SARS public health system to include mobile apps for contact tracing.

Unfortunately, the United States initially failed to lead at home and abroad. It distanced itself from the WHO, an organization it helped found after WWII, allowing China to gain influence. The WHO provided information on test design that was quickly implemented by other nations but ignored by American federal authorities for weeks. ¹³⁷ For several months, the United States suffered more deaths per day, every day, than occurred on 9/11, the event that prompted America's longest war. The rifts in civil society and policy over defending national interests against the COVID virus have been exploited by Russian and Chinese hackers on social media. Economic, political, security, and humanitarian effects will likely be felt globally for years.

US leadership has, fortunately, resurged. In his first message to the Force, Secretary of Defense Lloyd Austin identified COVID-19 as the "greatest proximate threat to our nation's security" and China as the pacing challenge. ¹³⁸ President Biden has called upon G7 partners to prioritize heath security financing and provided \$2 billion to GAVI's COVID vaccine commitment to 92 low- and middle-income countries. ¹³⁹ Biden

^{136.} Chow-Bing.

^{137.} Jennifer B. Nuzzo, Jessica A. Bell, and Elizabeth E. Cameron, "Suboptimal US Response to COVID-19 Despite Robust Capabilities and Resources," *Journal of the American Medical Association* 324, no. 14, (2020): 1391–92, https://doi.org/10.1001/jama.2020.17395.

^{138.} Lloyd J. Austin, Office of the US Secretary of Defense, "Memorandum for All Department of Defense Employees," March 4, 2021, https://media.defense.gov/2021/Mar/04/2002593656/-1/-1/0/Secretary-Lloyd-J-Austin-III

⁻Message-to-the-Force.pdf.

^{139. &}quot;Fact Sheet: President Biden to Take Action on Global Health through Support of COVAX and Calling for Health Security Financing," The White House, February 18, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/02/18/fact-sheet-president-biden-to-take-action-on-global-health-through-support-of-covax-and-calling-for-health-security-financing/.

has also pledged to help India produce one billion doses, countering hastily-made Russian and Chinese deals with other nations that sometimes produced disappointing results. He has committed 500 million doses of BioNTech-Pfizer vaccines to developing nations and \$11.5 billion for global COVID-19 response.

The mRNA vaccine technology initially developed at the US National Institutes of Health holds promise for many other diseases, including non-infectious diseases such as malaria and cancer. The United States needs to continue funding revolutionary government work while incentivizing private industry partners and sharing global goods with others. The transformative innovations and transparent contributions of the US and partner nations should be more effectively communicated against vaccine diplomacy narratives that fail to address safety, sustainability, and efficacy.

Zoonotic pandemics are expected to increase and demand interventions in habitat conservation, sustainable agriculture, food safety standards, and illegal wildlife trade. Far-forward epidemiology and control will be critical. The UN must ensure that nations manage risk transparently, facilitated by better biosurveillance and data-sharing networks. To improve compliance with international health regulations, the US and other nations formed the Global Health Security Alliance in 2014. In parallel, the WHO has attempted to improve preparedness through Joint External Evaluation of each country's readiness. Analysis of 55 participating countries indicates that 90% fail to demonstrate goal capacity; the weakest indicator is for antimicrobial resistance. In the safety of the safety o

Antibiotic Resistance

In the US alone, almost three million antibiotic-resistant infections

^{140.} Scott Neuman, "U.N. Predicts Rise in Diseases That Jump from Animals to Humans Due to Habitat Loss," *NPR*, July 6, 2020, https://www.npr.org/sections/coronavirus-live-updates/2020/07/06/888077232/u-n-predicts-rise-in-diseases-that-jump-from-animals-to-humans; Michaeleen Doucleff, "WHO Points to Wildlife Farms in Southern China As Likely Source of Pandemic," *NPR*, March 15, 2021, https://www.npr.org/sections/goatsandsoda/2021/03/15/977527808/who-points-to-wildlife-farms-in-southwest-china-as-likely-source-of-pandemic.

^{141.} Vin Gupta, John D. Kraemer, Rebecca Katz, Vanessa B. Kerry, Jussi Sane, Jukka Ollgren, and Milka O. Salminen, "Analysis of Results from the Joint External Evaluation: Examining Its Strength and Assessing for Trends among Participating Countries," *Journal of Global Health* 8, no. 2, (December 2018): 020416, https://www.jogh.org/documents/issue201802/jogh-08-020416.pdf.

occur annually, costing nearly \$5B. By 2050, they could cause 10 million deaths per year globally. A Contributing factors include agricultural use of antibiotics; overprescription; global travel of people, animals, and goods; and lack of new treatments for bacterial infection. Compared with drugs for hypertension and other lifelong diseases, antibiotics are not as profitable to pharmaceutical companies.

The US Biomedical Advanced Research and Development Authority is expanding its research portfolio in private, public, and international partnerships to accelerate development of antibacterial options. The US CDC continues domestic and international work to track resistance, improve antibiotic prescription practices, and develop national plans, including limiting antibiotic overuse in agriculture. The CDC needs to incentivize development of antibiotics with resistance inhibitors as well as application of viral (bacteriophage) and fungal properties to combat bacteria, consonant with Sir Alexander Fleming's initial work, and there should be incentives to engineer bacterial vaccines.

Large-Scale Migration

Since the 1951 Refugee Convention, nations have conducted at least 75 real or threatened cross-border population movements—coercive engineered migrations (CEMs)—to achieve asymmetric influence. Like nuclear deterrence, CEM can be direct, extended/indirect, or mixed; goals can include generating turmoil in receiving states, which may respond with inconsistent policies and actions. Whether due to climate change, political action, or armed conflict, national and international authorities must continue to be prepared for refugees' medical needs.

Climate Change

The WHO assesses climate change as the greatest threat to health, ¹⁴⁵ affecting vector-borne diseases, air pollution, food- and water-borne

^{142. &}quot;Antibiotic Resistance Threats in the United States, 2019," Centers for Disease Control and Prevention, https://www.cdc.gov/drugresistance/pdf/threats-report/2019-ar-threats-report-508.pdf; Jim O'Neill, "Antimicrobial Resistance: Tackling a Crisis for the Health and Wealth of Nations," "Review on Antimicrobial Resistance. Antimicrobial Resistance: Tackling a Crisis for the Health and Wealth of a Nation" (London: Wellcome Trust and UK Government, December 2014).

^{143.} Erik Gartske and Jon Lindsay, Cross-Domain Deterrence: Strategy in an Era of Complexity (Oxford:Oxford University Press, 2019), 260–61.

^{144.} Gartske and Lindsay, 262-63, 279.

^{145.} World Economic Forum, *The Global Risks Report 2020: 15th Edition*, https://www3.weforum.org/docs/WEF_Global_Risk_Report_2020.pdf.

diseases, food security, mental health, flooding, migrations, temperature extremes, and wildfires. Associated issues, such as air pollution, are a leading cause of premature death globally. These problems create significant economic costs for all nations as well as increased political volatility and migration. The USAID has committed to multilateral partnerships and the G7 to help vulnerable nations manage risk in their development plans; health must be a consideration in these efforts.

Non-Communicable Diseases and Trauma

Over the last two decades, trauma and non-communicable diseases have dramatically risen in prominence as causes of premature mortality and loss of productivity, including many that require surgery. Surgery, like infectious disease, is an area in which the US, including its military, has long led and innovated. The DoD has sponsored subject matter expert exchanges and fielded mobile training teams, and it has deployed a broad spectrum of medical personnel to build relationships, partner nation resilience, and increase interoperability when responding to humanitarian disasters and other security challenges. The United States and other well-resourced nations must continue to partner to build resiliency and capability while emphasizing public health and lifestyle measures necessary to limit the burden of such diseases.

Summary: Knowledge to Action

Strategic thought in the Cold War relied less on abstruse models than on understanding human relationships. Like the Cold War, modern competition among the United States, Russia, and China involves ideologies (as did tensions between Athens and Sparta), but with a significant difference: Cold War ideologies between democracy and communism transcended individual nations, creating two opposing blocs involving large numbers of nations on each side, bonded by profession of common ideals. Current ideological differences are between democracy and autocracy—the latter does not tend to foster long-term trust

^{146.} Office of the Director of National Intelligence, "Annual Threat Report of the US Intelligence Community," April 9, 2021, https://www.dni.gov/files/ODNI/documents/assessments/ATA-2021-Unclassified-Report.pdf.

^{147.} Francesco Bosello, Roberto Roson, and Richard S. J. Tol, "Economy-Wide Estimates of the Implications of Climate Change: Human Health," SSRN 97.2005, August 9, 2005, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=773926.

^{148.} Chambers et al., "Damage Control Partnerships," 130-31.

and enduring productive coalitions. 149

After the fall of the USSR, Russia established the Commonwealth of Independent States but then invaded a founding member—Georgia, in 2008—then a founding state—Ukraine, in 2014—both of whom subsequently withdrew support. China can only count North Korea a time-tested ally, but it often serves more as a liability than an asset. As for Vietnam, the only other thriving Communist state in Asia, China built in waters adjacent to it and severely restricted its (and two other BRI partners') access to Mekong River flow, behaviors which do not engender loyalty. Twenty-first-century Chinese and Russian ideology sow suspicion instead of trust, splintering former blocs of influence.

The advantages democracies enjoy in innovation, alliance-building, military execution, and other areas relevant to national power should incentivize the US and like-minded nations to redouble their commitment to their unique institutions that confer trust and confidence at home and abroad—and to the soft power and moral arguments for doing so. In developing strategies for tailoring deterrence and successful competition, the physician's insight is relevant: "It is more important to know what sort of person has a disease than to know what sort of disease a person has." ¹⁵¹

If Cold War competition was ever legitimately considered to be a chess game, today's multipolar cyber-connected world is more like Byzantine circular chess, with new fronts of vulnerability and opportunity but fewer familiar moves to guide strategy. A reporter once asked the chess grand master Richard Réti how many moves ahead he calculated; he responded, "I only see one move ahead; the right one." Réti deeply understood patterns and principles. Despite novel challenges today, leaders can choose the principles best suited to achieve enduring secu-

^{149.} Despite the "Joint Statement by the Russian Federation and the People's Republic of China on International Relations Entering a New Era and Global Sustainable Development," February 4, 2021, (http://kremlin.ru.supplement /5770), claiming unity, "deep traditions of democracy," and commitment to sustainable development, there have not been any corresponding long-term joint behaviors by these nations indicative of the enduring strength of functional solidarity evinced in the Eastern Bloc during the Cold War.

^{150.} Jennifer Hillman and David Sacks, "China's Belt and Road: Implications for the United States," US Council on Foreign Relations, March 2021, https://www.cfr.org/report/chinas-belt-and-road-implications-for-the-united-states/findings.

^{151.} Variously attributed to physicians Hippocrates and Sir William Osler.

^{152.} www.chesshistory.com, accessed 11 Sep 2021.

rity, such as transparency, alliance-building, and rules-based conduct.

Although the ancient Greeks believed in fate, they also acknowledged the human agency of choice. The United States and the world more broadly face a unique and challenging juncture, but there are no inevitable outcomes. Despite the relative vacuum America created in global leadership in recent years, neither Russia nor China will likely soon supplant it, but both threaten the security, values, and interests of the United States and its allies. 154

Athens' loss in the Peloponnesian War led to a decline in democracy for the Mediterranean, and Sparta did not bring lasting peace. ¹⁵⁵ Similarly, US failure to effectively lead could "mean not just a multipolar world, but an unruly world—one in which fear, hatred, and ambition hold everyone hostage to the basest instincts of the human imagination." ¹⁵⁶ It could be a world in which global health gains erode. Like Sparta, China and Russia can effectively challenge, but neither is likely to advance enduring peace in their regions. The United States has the opportunity to avoid Athens' mistakes.

Thucydides recommended democracy over empire.¹⁵⁷ The United States must prioritize homeland defense while helping other nations build capacity to defend theirs. Its strategy must seek optimal outcomes rather than maximize gain, and will require flexibility, imagination, and regular re-evaluation.

Presidents Dwight D. Eisenhower and John F. Kennedy faced down early American challenges in nuclear deterrence by communicating strong ideals at home and abroad and by committing to international partnerships. The United States must vigorously define and pursue its own vital interests, including a more equitable, resilient, and integrated healthcare system. Abroad, it must partner with allies to achieve shared goals with proportional contribution, and skillfully challenge Russian and Chinese ambitions that seek to dominate their regions' sovereign nations and challenge international norms. It must also continue to lead efforts to address long-standing global health gaps while leading the

^{153.} Anthony Everitt, The Rise of Athens (New York: Random House, 2016), xxviii–xxxiii.

^{154.} Kroenig, The Return of Great Power Rivalry, 217.

^{155.} Kagan, The Peloponnesian War, 488.

^{156.} Westad, "The Sources of Chinese Conduct."

^{157.} Sungwoo Park, "Thucydides on the Fate of the Democratic Empire," *Journal of International and Area Studies* 15, no. 1 (June 2008): 93–109.

fight against new threats.

COVID-19 revealed multiple vulnerabilities to national security—a story echoed in some of the oldest fiction (The *Iliad*) and non-fiction (*The History of the Peloponnesian War*) in the world. Before the pandemic, however, non-communicable diseases had surpassed infectious diseases globally in reducing lifespans and productivity; leaders and healthcare systems need to adjust to that reality while addressing shared threats of climate change and future pandemics. The United States' rejoining the Paris Accords and the WHO demonstrate commitment to lead in an increasingly non-zero sum, competitive, interdependent world.

Global health policy must first do no harm. The US government is moving away from providing direct care abroad, which can create unintended negative consequences, and now it focuses on building relationships, capability, capacity, resilience, and interoperability with partner nations. President Biden's plan to help strengthen other nations' health systems and advance health security demonstrates solidarity in tackling global challenges. US foreign aid and global health partnerships squarely support its own health, security, and economic interests. 159

Thucydides wrote, "In practice we always base our preparations against an enemy on the assumption that his plans are good; indeed, it is right to rest our hopes not on a belief in his blunders, but on the soundness of our provisions." Democratic nations must proactively address threats from aggressive authoritarian states, pandemics, finite environmental resources, and climate change rather than simply hope for the best. Those provisions begin at home; essential are leading by example and seeking focus and unity on long-term compelling interests, such as sustainable economic growth and access to quality healthcare underpinned by data-driven, adequately funded public health policies.

The US Constitution and its republican democracy provide endur-

^{158. &}quot;Good actions give strength to ourselves and inspire good actions in others," and "The strength lies in the union," popularly attributed to Plato and Aesop, respectively. "U.S. COVID-19 Global Response and Recovery Framework," The White House, July 1, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/01/u-s-covid-19-global-response-and-recovery-framework/.

^{159.} Vin Gupta and Vanessa Kerry, "Foreign Aid Makes America Safer," Foreign Policy, April 11, 2018, https://foreignpolicy.com/2018/04/11/foreign-aid-makes-america-safer/.

^{160.} Thucydides, The Peloponnesian War, Kindle location 791.

ing advantages over autocracy. They have guided a nation that has helped lead the world toward less poverty and longer lives. Rivals should inspire America and its allies to double down on what makes them most compelling. Democratic nations would do well to adopt China's historical posture to seek, by majesty of performance—including leadership in health—to persuade others to join in common causes. Aeschylus would likely agree that by demonstrating democracy's strengths with inspiring idealism and clear-eyed realism, the United States and others have the greatest chance to achieve collective aspirations for a healthier and more secure world. 162

DISCLAIMER: This views expressed in this article are those of the author and do not reflect the official policy of the U.S. Government, including the U.S. Department of Defense, the U.S. Strategic Command, or the U.S. Air Force.

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^{161.} Jeffrey Goldberg, "World Chaos and World Order: Conversations with Henry Kissinger," *The Atlantic*, November 10, 2016, https://www.theatlantic.com/international/archive/2016/11/kissinger-order-and-chaos/506876/.

^{162. &}quot;When Strength Is Yoked with Justice, Where Is a Mightier Pair Than They?" Fragments, Fragment 1, 298, Aeschylus, in Steven Stavropoulous, The Beginning of All Wisdom: Timeless Wisdom from the Ancient Greeks (New York: Marlow, 2003), 33.



Policy Progress in Terrorist Rehabilitation: The Case of Kazakhstan

Samuel Elzinga

Introduction

Despite having a population of 74 million, the Central Asian region is the third most common origin for foreign terrorist fighters (FTFs) in Iraq and Syria. Since the conflict began, anywhere between 5,758 and 7,099 Central Asians joined to fight in the Levant, and with the destruction of the caliphate, these FTFs are now returning to their home countries. The return of these FTFs poses a unique challenge for Central Asian states who have promised both repatriation for some and criminal charges for others. In the Joint Plan of Action For the Implementation of the United Nations Global Counter Terrorism Strategy in Central Asia, the Central Asian states reaffirmed the importance of "develop[ing] systems of assistance at the national and regional level to address the needs of victims of terrorism," which has resulted in

^{1.} Central Asian Member States of the United Nations, "Joint Plan of Action for the Implementation of the United Nations Global Counter Terrorism Strategy in Central Asia," *UN Missions*, November, 30, 2013, https://unrcca.unmissions.org/sites/default/files/final_joint_action_plan_eng.pdf.

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Central Asian states resuming discussions regarding proper terrorist rehabilitation methods in the region.²

Of the five Central Asian Republics, only Kazakhstan has stepped forward to implement a complete repatriation strategy for all its citizens abroad in the Levant. This presentation aims to show how Kazakhstan's implementation of its FTF repatriation program can act as a model for other Central Asian states to emulate with similar success.

Kazakhstan's model provides rehabilitation for noncombatants and terrorists alike, it and provides cultural and religious support to help former terrorists successfully reintegrate into religious and professional life. If implemented at a broader scale across the region, Central Asia could become a standard for terrorist repatriation that not only is successful but also respects both the law and religious traditions.

Current Literature on Terrorist Rehabilitation and Repatriation

With the global war on terror waning, governments around the world are grappling with evolving policy challenges regarding terrorism. Three primary questions exist: the first is how to best try terrorists to ensure justice is served; the second is how to best treat victims of terrorist camps and ensure they are cared for; and the third is how to ensure terrorists do not re-radicalize. The central question that needs to be studied, therefore, is "whether these programs are effective and what makes them so." Since the horrific terrorist attacks of 9/11, numerous countries have sought to develop these programs, with varying success.

Unfortunately, research is only beginning to address the effectiveness of deradicalization and rehabilitation programs around the world, with very few academic sources addressing the topic of Kazakhstan's role in developing terrorist rehabilitation programs. Further research, particularly beyond the scope of this paper, is absolutely warranted.

In Webber et al.'s approach to understanding deradicalization and subsequent rehabilitation, treatment for individuals is broken down into

^{2.} UN Regional Center for Preventive Diplomacy for Central Asia, "Addressing Conditions Conducive to the Spread of Violent Extremism and Terrorism," UN *Missions*, January 16, 2019, 5, https://unrcca.unmissions.org/sites/default/files/final_astana_report_eng_2.pdf.

^{3.} Daniel Webber, Marina Chernikova, Arie W. Kruglanski, Michele J. Gelfand, Malkanthi Hettiarachchi, Rohan Gunaratna, Marc-Andre Lafreniere, and Jocelyn J. Belanger, "Deradicalizing Detained Terrorists," *Political Psychology* 39, no. 3 (June 2018): 539–56, https://doi.org/10.1111/pops.12428 (my italics).

four thematic phases.⁴ The goal of the programs within each phase, as with all deradicalization efforts, is for the terrorists "to disengage from violence and re-engage in harmonious living." These programs, developed in Sri Lanka to reintegrate and rehabilitate former terrorists from the Liberation Tigers of Tamil Eelam (LTTE), address spiritual rehabilitation, recreational rehabilitation, social and cultural rehabilitation, and community rehabilitation. Each of these specific programs helped foster certain aspects of complete reintegration into society, with the community rehabilitation program allowing participants to integrate into their home community for the period of one month. The program developed by the Sri Lankan government was dubbed a success, with "postrehabilitation LTTE members [measuring] significantly less extreme than matched community members."

While the success of the Sri Lankan rehabilitation program is heartening, it is important to remember that no two terrorist organizations are the same, even in Central Asia. According to Mariya Omelicheva, writing in 2013, many terrorist organizations in Central Asia

have conflicting visions of Islam and differing interpretations of jihad and Islam's relationship with modernity, among other questions. Some radical Islamic groups view jihad in a purely military sense and consider violence as a legitimate means for influencing politics in Muslim nations. Other groups abstain from coercion in their activities.⁸

Therefore, it is important to understand the context from which terrorist activities arise and the potential regional and religious shifts in ideology that could impact the rehabilitation prospects of terrorist returnees. The LTTE members were engaged in a primarily political struggle on territory that was considered "native" to them. 9 In contrast, the

- 4. Webber et al., "Deradicalizing Detained Terrorists."
- 5. Malkanthi Hettiarachchi, "Sri Lanka's Rehabilitation Program: A New Frontier in Counter Terrorism and Counter Insurgency," *Prism: A Journal of the Center for Complex Operations* 4, no. 2 (March 2013): 105–22.
 - 6. Webber et al., "Deradicalizing Detained Terrorists."
 - 7. Webber et al.
- 8. Mariya Omelicheva, "Terrorism in Central Asia: Dynamics, Dimensions, and Sources," *Education about Asia* 18, no. 3 (2013), https://www.asianstudies.org/publications/eaa/archives/terrorism-in-central-asia-dynamics-dimensions-and-sources/.
- 9. Suthaharan Nadarajah and Dhananjayan Sriskandarajah, "Liberation Struggle or Terrorism?: The Politics of Naming the LTTE," *Third World Quarterly* 26, no. 1 (January 2005): 87–100, https://www-jstor-org.ezproxy.uvu.edu/stable/3993765.

terrorists currently being rehabilitated in Kazakhstan originate from the Levant and are from the remnants of the Islamic State's so-called "caliphate." Therefore, success in Sri Lanka's program of deradicalization—and, by extension, any other country's programs—does not necessarily guarantee policy effectiveness of Kazakhstan's program.

With that being said, reference group theory, applied to Central Asian counterterrorism policies by Mariya Omelicheva, has helped explain, at least in part, the process by which Central Asian states emulate certain policies and programs deemed effective in neighboring states. ¹¹ Applying this theory to terror rehabilitation programs, analyzing Uzbekistan's rehabilitation is a more appropriate approach to potentially explain how Kazakhstan could successfully implement their terrorist rehabilitation. Uzbekistan's rehabilitation policy is "carried out through three stages, including: actual rehabilitation in prison, amnesty, and 'supervised reintegration' programs." According to Ashghor's report, the counterterrorism policy is "sustainable," but provides no indication regarding the effectiveness of the program itself. ¹³

Jamilya Nurkanova provides the closest analysis of Kazakhstan's current terrorist rehabilitation policies, as she specifically writes concerning their impact on women from the country. ¹⁴ Nurkanova's research dives into the mismanagement of Kazakhstan's countering violent extremism and preventing violent extremism policies, showing how the mismanagement has affected the effectiveness of their policies. Nurkanova notes that the "lowest levels of trust are courts and the maslikhats (local government councils) with 1.8 and 1.4 percent," yet these councils subsequently received "tens of millions tenge . . . to carry out deradicalization." ¹⁵ Nurkanova subsequently addresses the crimes these women commit, which, according to the state, are "spreading

^{10.} U.S. Department of State, "Country Reports on Terrorism 2019: Kazakhstan," https://www.state.gov/reports/country-reports-on-terrorism-2019/kazakhstan/.

^{11.} Mariya Y. Omelicheva, *Counterterrorism Policies in Central Asia* (London: Routledge, 2011).

^{12.} Aly Ashghor, "International Case Studies of Terrorist Rehabilitation," *Jurnal Keamanan Nasional* 5, no. 1 (2019): 83–88. https://doi.org/10.31599/jkn.v5i1.429.

^{13.} Aly Ashghor, "International Case Studies."

^{14.} Jamilya Nurkanova, "Repertoires of Official Deradicalization of Non-Violent Radical Muslim Women in Kazakhstan," (dissertation, Nazarbayev University, 2018), http://nur.nu.edu.kz/handle/123456789/3925.

^{15.} Nurkanova, "Repertoires," 40, 53.

radical propaganda and recruiting."¹⁶ Unfortunately, as Nurkanova remarks, "little is known about deradicalization and rehabilitation of these convicts in prisons, and what is known is often contradictory."¹⁷ Since the publication of Nurkanova's dissertation in 2018, however, significant strides have been made by the Kazakhstani government, especially since 2018, to develop an effective rehabilitation program.

Kazakhstani Practices of Rehabilitation, 2001–2017

Prior to 2018, Kazakhstan's policies regarding terrorist rehabilitation and deradicalization appear to be both preventative and punitive. According to the US Department of State's 2016 Country Reports on Terrorism, Kazakhstan "takes a two-pronged approach to the few returning foreign terrorist fighters, pursuing rehabilitation for some, while arresting and prosecuting others."18 As Nurkanova notes, however, the effectiveness of these policies must be drawn into question. The effectiveness, or lack thereof, was highlighted on national television in Kazakhstan when a member of parliament stated that "some extremist organizations, unlike state structures, have formed their own type of post-prison rehabilitation, providing their members or new recruits from among former convicts—housing and work, and even help them in the creation of a family." Furthermore, Almaty-based lawyer Ayman Umarova stated that women who were radicalized and later returned to Kazakhstan were "left alone with their problems, do not know how to behave, where to go and do not know their rights."20

Exacerbating the problem further, these women "often encounter economic and social hardship and have to overcome it on their own," with little support from the government itself, potentially leading to re-radicalization and a return to the Levant. Fieldwork done by Nur-

^{16.} Nurkanova, 53.

^{17.} Nurkanova, 56.

^{18.} U.S. Department of State, "Country Reports on Terrorism 2016—Kazakhstan," refworld, July 19, 2017, https://www.refworld.org/docid/5981e43413.html.

^{19. &}quot;Deputies Offer to Put Terrorists in Separate Prisons," trans. Google, *KTK* October 19, 2016, https://www.ktk.kz/ru/news/video/2016/10/19/73086.

^{20.} Ayman Umarova, quoted in Ksenia Bondal, "Kazakhstan Battles Female Radicalization," *Caravanserai*, January 11, 2017, https://central.asia-news.com/en_GB/articles/cnmi_ca/features/2017/01/11/feature-01.

^{21.} Ksenia Bondal, "Kazakhstan Battles Female Radicalization," *Caravanserai*, January 11, 2017, https://central.asia-news.com/en_GB/articles/cnmi_ca/features/2017/01/11/feature-01.

kanova highlighted the lack of consistent resources available to women who need access to terrorist rehabilitation centers, stating that "out of 18 centers, I was able to access only six centers which provided me with further steps where to go or whom to call to receive further help."²² The official government line, also known as the "114" line, provided no answers either. Upon a brief overview of state practices relating to rehabilitation, it becomes apparent that Kazakhstan's two-pronged approach of pursuing rehabilitation and prison sentences did not focus on the former. Instead, Kazakhstan imprisoned 671 people on terrorism charges, which was the first step towards rehabilitation, according to Kazakhstan's methodology for successful rehabilitation. A variety of factors, such as deputizing local, underfunded municipalities and provinces to be responsible for rehabilitation efforts, as well as an unclear national initiative to counter violent extremism can be to blame.

Current Kazakhstani Terrorist Rehabilitation Policy, 2017–Present

By January 2017, however, we begin to see a shift in emphasis on rehabilitation, with Deputy Prosecutor General Andrey Kravchenko noting that the international standard of confining terrorists from other prisoners "will not help rehabilitate them."²³ These remarks come at the same time as Kazakhstan's ascension to the Security Council at the United Nations, a role that provides both a greater chance to enact change and to secure greater scrutiny. As Kazakhstan was elevated to this lofty position, a first for any country from Central Asia, it subsequently began to take rehabilitation more seriously.

While Kazakhstan was a member of the Security Council, roughly 25 percent of all treaties relating to the return and rehabilitation of foreign terrorist fighters were introduced and ratified.²⁴ Resolution 2396, one such resolution, states that

prisons can serve as potential incubators for radicalization to terrorism and terrorist recruitment, and that proper assessment and monitoring of imprisoned foreign terrorist fighters is critical to mitigate opportunities for terrorists to

^{22.} Nurkanova, "Repertoires," 59.

^{23.} Andrey Karvchenko, quoted in Alexander Bogatik, "Kazakhstan Calls for 'Zero Tolerance' of Radicalism," *Caravanserai*, February 13, 2017, https://central.asia-news.com/en_GB/articles/cnmi_ca/features/2017/02/13/feature-02.

^{24.} UN Resolution database, https://research.un.org/en/docs/find/resolutions.

attract new recruits, recognizing that prisons can also serve to rehabilitate and reintegrate prisoners, where appropriate, and also recognizing that Member States may need to continue to engage with offenders after release from prison to avoid recidivism, in accordance with relevant international law and taking into consideration, where appropriate, the United Nations Standard Minimum Rules for the Treatment of Prisoners, or "Nelson Mandela Rules"²⁵

In the context of the new benchmarks ratified at the United Nations, Kazakhstan's rehabilitation policies appear more understandable. These new standards require a more comprehensive approach to both countering violent extremism as well as rehabilitating terrorists who have returned home. As Kazakhstan's government is largely secular, providing rehabilitation and religious re-education would require work with non-governmental organizations to achieve a comprehensive re-habilitation model. From 2017–2018, rehabilitation policy began largely with partnerships between Kazakhstan and civil society to bring about effective rehabilitation, among other policies. Among the 20 agencies and ministries assigned to provide comprehensive rehabilitation efforts, one agency specifically focused on liaising with civil society in order to "leverage the potential of civil society institutions to solve pressing social issues." These partnerships are still ongoing today.

NGOs and civil society play "an important role to play in the fight against extremism" in Kazakhstan today.²⁷ Civil society and NGOs focus on different aspects of the rehabilitation process than the state, whose primary focus is the administration of justice. These non-governmental organizations can step in and provide much needed theological and outreach support to convicts and those in prison. In May of 2020, theologians participated in webinars for prisoners to understand proper readings of the Quran and see the causes and effects of extremism more fully. These services provided by theologians and other counterparts in civil society are particularly useful, as Kazakhstan's govern-

^{25.} United Nations, "Security Council Urges Strengthening of Measures to Counter Threats Posed by Returning Foreign Terrorist Fighters, Adopting Resolution 2396 (2017)," Meetings Coverage and Press Releases, United Nations, https://www.un.org/press/en/2017/sc13138.doc.htm.

^{26.} Quoted in Aydar Ashimov, "Kazakhstan Taps NGOs for Rehabilitation in New Anti-Extremism Tactic," *Caravanserai*, May 26, 2020, https://central.asia-news.com/en_GB/articles/cnmi_ca/features/2020/05/26/feature-02.

^{27.} Leila Baimanova, quoted in Aydar Ashimov, "Kazakhstan."

ment is largely secular and not overly involved in religious education.²⁸

Kazakhstan's government has also been completing an equally vital component of rehabilitating its citizens who have resorted to extremism: transporting them home. Beginning in 2019, the Kazakhstani government, with assistance from the United States, began repatriation flights back from Syria, which were widely reported on state-operated media.²⁹ Though the operations came as a shock to many citizens in Kazakhstan, "operations were carefully planned and executed by security services well before the public was informed."³⁰ Anna Gussarova, Director at the Central Asia Institute for Strategic Studies, explained the calculus for not informing Kazakhstani citizens was because "little is known on exactly how the Kazakh people felt about the issue," and "there is a wide spectrum of opinions, many of which are driven and fueled by fear and conspiracy theories."³¹

Furthermore, it occasionally has taken a prolonged amount of time to collect evidence and prosecute foreign fighters, with the Kazakhstani government using legal loopholes to detain individuals suspected of committing "serious crimes" including terrorism, for up to 18 months prior to trial.³² In this time, "authorities occasionally used pretrial detention to torture, beat, and abuse inmates to extract confessions."³³ The decision to not inform the public, therefore, was to delay public discourse until the operation had been completed successfully. Once individuals had returned, the Kazakhstani government would be able to work with its network of civil society organizations, NGOs, and government agencies to best assist the repatriated individuals. The op-

^{28.} Svante E. Cornell, S. Frederick Starr, and Julian Tucker, "Religion and the Secular State in Kazakhstan," *Silk Road Paper*, April 2018, http://silkroadstudies.org/publications/silkroad-papers-and-monographs/item/13288-religion-and-the-secular-state-in-kazakhstan.html.

^{29.} KNB RK, "Humanitarian Operation 'Zhusan," February 5, 2020, https://www.youtube.com/watch?v=WSOLFTyq2l0.

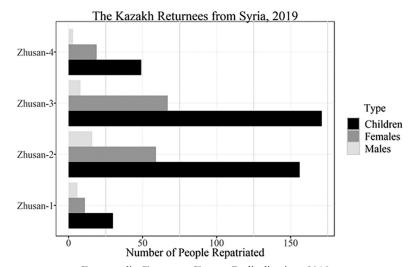
^{30.} Anna Gussarova, "Repatriating Foreign Fighters: The Case of Kazakhstan," *European Eye on Radicalization*, April 17, 2020, https://eeradicalization.com/repatriating-foreign-fighters-the-case-of-kazakhstan/.

^{31.} Gussarova, "Repatriating Foreign Fighters."

^{32.} Bureau of Democracy, Human Rights, and Labor, "Kazakhstan 2020 Human Rights Report," United States Department of State, March 30, 2021, 9, https://www.state.gov/wp-content/uploads/2021/03/Kazakhstan-2020-Human-Rights-Report.pdf.

^{33.} Bureau of Democracy, Human Rights, and Labor, "Kazakhstan 2020 Human Rights Report," 9.

eration, dubbed Zhusan-1, was an apparent success, with the government completing three more operations just like it. According to the figure below, nearly 600 Kazakhstani citizens returned to their homeland in 2019, the majority being women and children.



Data credit: European Eye on Radicalization, 2019.

Once returned to Kazakhstan, men and women who have been charged with crimes are sent into the criminal justice system, and those who need immediate rehabilitation services are given aid. Following the Zhusan operations, the Ministry of Education worked with their non-governmental partners to open 17 rehabilitation centers.³⁴ The centers provide "psychologists, social workers, psychiatrists, theologians, lawyers, nurses, and teachers, working together to help the children, mothers, and their extended families and host communities" integrate back into normal life.³⁵

Though many of Kazakhstan's rehabilitation programs are conducted through trial and error, the government is eager to share best practices with the world. UN Special Rapporteur Fionnuala Ní Aoláin remarked that Kazakhstan "has demonstrated how to optimize part-

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^{34.} Stevan Weine, "Rehabilitating the Islamic State's Women and Children Returnees in Kazakhstan," Just Security, December 12, 2019, https://www.justsecurity.org/67694/rehabilitating-the-islamic-states-women-and-children-returnees-in-kazakhstan/.

^{35.} Weine.

nerships with other countries and international entities in tracing, identifying and delivering the practical means to extract individuals from territories under the control of non-state actors and ensure their safe return to home countries."³⁶ This glowing commendation from the United Nations has given Kazakhstan an international reputation for its rehabilitation programs. In September 2020, Kazakhstan shared its best practices with other UN Member States in a side event titled "Central Asian Experience with Individuals Returned from Syria and Iraq: Successes, Challenges, and Lessons Learned."³⁷ This event, hosted with the UN, other member states, as well as other bodies within the United Nations, highlights the amount of expertise other countries and international organizations have placed in Kazakhstan to share its policies for implementation.

In addition to recognition from the United Nations and its participating bodies in developing a successful terrorist rehabilitation program, great powers, such as the United States, recognize Kazakhstan as a pioneer in this field. During an OSCE roundtable on the issue of returning foreign terrorist fighters, Deputy Coordinator for Counterterrorism at the US Mission to the OSCE Chris Harnisch remarked how Kazakhstan "is the world leader on this issue [terrorist rehabilitation] and has set the example for all countries to follow."³⁸ The United States' recognizing Kazakhstan's efforts to better understand and develop a holistic approach to terrorist repatriation and rehabilitation speak to the policy's current effectiveness and adaptability. In turn, this provides hope that analogous policies can be developed and implemented in other Central Asian nations.

Broader Implementation in Central Asia

Kazakhstan's policy regarding terrorist rehabilitation is a unique approach that has grown and developed over the years. What began as

^{36.} Fionnuala Aolain, "Time to Bring Women and Children Home from Iraq and Syria," Just Security, June 4, 2019, https://www.justsecurity.org/64402/time-to-bring-women-and-children-home-from-iraq-and-syria/.

^{37.} Vladimir Voronkov, "Central Asian Experience with Individuals Returned from Syria and Iraq: Successes, Challenges, and Lessons Learned," United Nations, https://www.un.org/counterterrorism/sites/www.un.org.counterterrorism/files/200925_unoct_unrcca_press_release_sprr_event.pdf.

^{38.} Chris Harnisch, "Foreign Terrorist Fighters: Addressing Current Challenges," U.S. Mission to the OSCE, February 11, 2020, https://osce.usmission.gov/foreign-terrorist-fighters-addressing-current-challenges/.

an underfunded, uncoordinated governmental effort has transformed into a robust partnership between government and non-government sources, providing both the justice required under Kazakhstani law and rehabilitation for all those returning. Returning to Mariya Omelicheva's reference group theory, we can assume other Central Asian states may look to Kazakhstan to develop their own terrorist rehabilitation programs. As Kazakhstan is the largest economy and political power in Central Asia, this assumption is not baseless, and neighbors such as Uzbekistan are shifting approaches to model Kazakhstan's approach.

In 2017, the government of Uzbekistan began redeveloping its terrorist rehabilitation programs.³⁹ New programs implemented include a new subdivision of the police force focused on anti-terrorism efforts, working with the ministry of education to promote anti-extremism measures, and working with imams to provide religious education to returning terrorists. They additionally provided some form of amnesty for some terrorists who have been cooperative. For a more complete analysis of Uzbekistan's policies, please read *International Case Studies of Terrorist Rehabilitation* by Rohan Gunaratna and Sabariah Hussin. While Uzbekistan's rehabilitation policies differ somewhat from those of Kazakhstan, they take a similar, multi-faceted approach to preventing extremism and rehabilitating terrorists. Their efforts, much like Kazakhstan's, have also been successful.⁴⁰

Conclusion

This paper aimed to highlight the shift of Kazakhstan's terrorist rehabilitation policies over the years from a poorly operating system to one that is the current world standard. Additionally, this paper highlighted how the efforts to enact policy changes and create a holistic rehabilitation process for the returning fighters has potentially impacted other countries around them, with Uzbekistan used as a case study. While this paper is by no means an exhaustive analysis of Kazakhstan's policies and practices, it does show a shift in their efforts following international scrutiny while serving on the UN Security Council, while also seeking to address the humanitarian challenge of returning terrorist fighters to their homeland. In doing so, the government became more proactive in developing partnerships with nongovernmental or-

^{39.} Gunaratna and Hussin, International Case Studies.

^{40.} Gunaratna and Hussin.

ganizations and even utilized military resources to return fighters and their dependents. While the work of terrorist rehabilitation is ongoing and further research is absolutely warranted, I believe it is safe to say Kazakhstan has not only presented a rehabilitation policy that is quickly becoming the world standard, but one that can work inexpensively and locally within every Central Asian country.



How We Lose the Next War

Michael Lacey

19 October 2032: President Rubio and Chinese Premier Xiu Jinping announced a ceasefire today, effectively ending the five-month conflict between the United States and China. The United States announced that it would recognize China's "legitimate interests and sphere of control over the East China Sea, Taiwan, Korea and southeast Asia." China announced that it would remove its dampening impacts on internet controls and functions that resulted in rolling shutdowns of US financial markets, internet banking and commerce, transportation hubs, energy distribution, and power generation stations. President Rubio will appear on a livestreamed video feed from the Oval Office (the first since government servers were taken offline in mid-September) to speak to the American people tonight at 7 p.m. EST. He is expected to promise the restoration of electrical power on the east coast before any additional deaths are caused from lack of electrical power. Unfortunately, the proposed reopening of gas stations and power plants in the midwest is still on hold awaiting repair of pipeline delivery systems damaged in the mid-September cyberattack. President Rubio will also announce a plan for the recovery of banking electronic data that was allegedly "erased" in the mid-July Chinese cyberattack. Data recovery is the expected topic of additional talks with Chinese officials in Sydney early next year.

1–16 May 2032: Using satellite imagery, US intelligence sources noticed the buildup of Chinese amphibious and naval forces in the port city of Fuzhou. Intelligence analysts at the Central Intelligence Agency (CIA) and Defense Intelligence Agency (DIA) predict that this is the

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beginning of the annual Chinese military exercise dubbed "Liberation." According to intel, for the previous nine years, every May through July, the Chinese armed forces have conducted mock war games and exercises rehearsing a potential landing on Taiwan. Chinese officials claim the buildup and movement of forces is a mere training and readiness exercise to coordinate tactics and techniques between their navy and amphibious forces. Tensions decreased significantly two years ago, when Taiwanese military officers were invited by China to participate in the exercise as observers. US national security decision makers ordered the traditional response to the exercise by increasing surveillance over the East China Sea, coordinating with Taiwanese defense officials for increased levels of readiness, and placing various 7th Fleet contingency forces, including the aircraft carrier *Abraham Lincoln*, at Yokosuka Naval Station on alert status.

2330 27 May 2032: A US Naval P3 aircraft from Okinawa shadowing the Chinese naval task force notices a change in the direction of Chinese maritime forces participating in the "Liberation" exercise. Typically, over the last nine years, such forces had departed Fuzhou under heavy Chinese naval escort and headed north to land forces on the Chinese coast near Taizhou—simulating a landing on Taiwan and enacting a follow-up exercise on what a post-landing invasion scenario would look like.

Instead, midway to the usual rehearsal "invasion" site near the Chinese City of Taizhou, the armada changes course and heads for the disputed Senkaku Islands. The P3 pilot attempts to radio his headquar-

^{1.} The Senkakus are five extremely small uninhabited islands lying between China, Taiwan, and Japan, and they are claimed by all three countries (Seokwoo Lee, Territorial Disputes among Japan, China and TaiwanConcerning the Senkaku Islands, Boundary & Territory Briefing 3 no. 7 (Durham, UK: International Boundaries and Research Unit, 2002), 10–11). The largest island, Uotsuri Jima (or Diaoyu Dao as the Chinese call it), is less than a mile long and a half mile across. The other four islands are less than five acres each in total surface area. "Geology of the Senkaku Islands," Sasakawa Peace Foundation, February 15, 2015, https://www.spf.org/islandstudies/info_library/senkaku-islands-02-geography--02_geo007.html. China and Taiwan have repeatedly pointed to the Treaty of San Francisco in 1945, which required Japan to cede Taiwan and all associated islands to China. The islands had been seized by Japan in the first Sino-Japanese War in 1895. Traditional Chinese naval historical records also mention the islands (Lee, Territorial Disputes, 10–11) Japan claims the islands are part of the Ryukyu Island chain and have been under Japanese economic, sovereign, and legal control for more than four centuries,

ters but finds that his communications are electronically jammed. He continues to monitor the Chinese course and direction for an additional 30 minutes to confirm the speed and course, and when he cannot make contact with higher authorities, he sets his course back to Okinawa to make his report in person, per the unit's standard operating procedure.

0200 28 May 2032 – Admiral Peak, the Indian and Pacific Command Combatant Commander (INDO/PACOM), is awakened at home with a report that the Chinese naval task force was last recorded headed towards the Senkaku Islands, and that the shadowing P3 was electronically jammed when it attempted to report the course change. Peak orders the information to be passed to the Chairman of the Joint Chiefs and Secretary of Defense Wagner. Peak orders his aide to ask his intelligence officer (J2) when the next "flyover" of an overhead imagery platform is scheduled. He is informed that it will be at least another six hours until imagery of the ocean around the Senkaku Islands is available. Peak notes in his secure communication to the Chairman that the Chinese task force had changed course immediately after the last flyover of a US satellite at 2300 on 27 May.

0230 28 May 2032 – When he receives the report from the INDO/PACOM Commander, the Secretary of Defense orders Peak to use "active screening" tactics to stop Chinese ship movement if they breach the 12 miles of territorial waters around the Senkaku Islands. This tactic consists of deliberately maneuvering a US man of war directly in the path of an opponent in an attempt to get them to change course. Peak responds, saying that the nearest US ship is four hours away at flank speed. Peak orders the *USS Mustin*, a guided missile destroyer of the *Arleigh Burke* class, to execute the "active screening" mission.² A call from the US Secretary of State to the Taiwan Minister of Defense for information or assistance goes unanswered.

officially claiming ownership in 1895. Japan claims their control started well before the first Sino–Chinese conflict during which Japan seized Taiwan—the nearest land mass of any size ("Japan Displays Documents to Defend Claims to Disputed Isles," AP, January 25, 2018, https://apnews.com/article/681ae336f8fc4c158d6 ee03914ad6123). Though China and Taiwan accepted Japan's claims of ownership for 75 years, they disputed ownership until 1972 and point to even older historical claims on the islands going back to the beginnings of their recorded histories.

^{2. &}quot;Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress," Congressional Research Service, February 26, 2010 (updated February 3, 2022), https://sgp.fas.org/crs/weapons/RL32109.pdf.

0400 28 May 2032 – The Japanese radar stationed on the islands of Yonaguni and Miyakojima is jammed by intense electronic magnetic radiation (EMR).³ Radar operators notify their superiors, who attempt to relay the information to the Japanese high command and government. On Miyakojima, while the Japanese radar is jammed by the EMR, a Chinese guided missile strikes the arms rooms for the 600-man security force, destroying the unit's small arms supply.

0430 28 May 2032 – 600 Chinese PLAMC (People's Liberation Army Navy Marine Corps) landing forces, consisting of the 1st Battalion of the 164th Marine Brigade, land on the western coast of the island of Yonaguni. Simultaneously, Chinese airmobile forces land on uninhabited Diaovu Dao in the Senkaku chain after departing from the small Chinese aircraft carrier *Liaoning*. Although the 150 Japanese self-defense forces manning the radar installation are on alert and in defensive positions after the jamming of the radar is noticed, they are quickly surrounded and unable to communicate with their higher headquarters in Okinawa. The Chinese Commander promises the Japanese commander that his soldiers will be returned to the mainland of Japan if he surrenders his command. Even so, 43 Chinese Marines and 15 Japanese soldiers are casualties in this first battle of the next war. The Japanese commander, outnumbered four to one and with little ammunition, surrenders his company but not without first dispatching a helicopter to Okinawa with a detailed description of the situation and his decision to surrender the island.

0435 28 May 2032 – The remaining 5,400 Chinese Marines of the 164th Battalion land on the Japanese island of Miyakojima in the far West of the Ryukyu chain. Although Japan has two anti-ship-type 88 missile

^{3.} Yonaguni is only 90 miles from the disputed Senkaku Islands and has more than 1,600 Japanese civilians, an all-weather airfield, and 150 Japanese self-defense forces, mainly devoted to the monitoring and maintenance of the radar system. (Tiezzi, Shannon, "Japan to Station Troops on Yonaguni, Near Disputed Islands," The Diplomat, April 19, 2014, https://thediplomat.com/2014/04/japan-to-station-troops-on-yonaguni-near-disputed-islands/. Japan activated the radar station in March of 2016 for the explicit purpose of gathering intelligence on both Taiwan and the Senkaku Islands (Franz-Stefan Gady, "New Radar Facility: Japan Expands Military Presence in East China Sea," The Diplomat, March 29, 2016, https://thediplomat.com/2016/03/new-radar-facility-japan-expands-military-presence-in-east-china-sea/). Miyakojima has a population of more than 54,000, is a vacation destination for many Japanese, and boasts a 2,000-meter all weather airstrip and an amusement park.

batteries with a range surpassing 100 miles on the island, they are unable to target the invasion fleet because of effective Chinese radar jamming. Lacking the weapons that had been destroyed in the arms room attack, the 600 Japanese security forces surrender.

0600 28 May 2032 – General Kawano, the Japanese Chief of Staff of the Joint Staff and the highest-ranking officer in the Japanese Self-Defense Forces, informs the Japanese Minister of Defense, SECDEF Wagner, Admiral Peak, and the US INDO/PACOM Commander that Chinese forces have landed on and now control Japanese sovereign territory on the island of Yonaguni. The US Secretary of Defense schedules a meeting at 0830 with the President, the Joint Chiefs, and the Director of National Intelligence. He adds a secure video teleconference with their Japanese counterparts at 0900 to give the imagery interpretation analyst working at the National Geospatial-Intelligence Agency (NGA) time to interpret and analyze the latest satellite flyover of the region at 0800. The government of Taiwan has been extended an offer to attend the meeting but states through their ambassador that they "will take no part in the ongoing dispute over sovereign Chinese territory."

0700 28 May 2032 – The government of China makes its first public statement concerning their actions: "Today the people of China have asserted their historical and cultural ties over the Senkaku Islands in the South China Sea and have effectively neutralized a Japanese base from which any attempt to reclaim said islands would be launched. Any attempt by any nation to enter within the internationally recognized 12-mile territorial waters limit of either the Senkaku Islands or to threaten the recently seized islands of Yonaguni or Miyakojima will be considered an act of war, and the People's Liberation Defense Forces will respond accordingly. The Chinese government stands ready to negotiate on the status of Yonaguni and Miyakojima if the government of Japan recognizes China's sovereignty over the Senkaku Islands. We desire peace, but will defend what is ours."

0750 28 May 2032 – Minutes before the *USS Mustin* is scheduled to enter China's announced 12-mile perimeter, Admiral Peak orders them to turn around, unwilling to risk further escalating the crisis without orders from Washington, accurate satellite imagery, or the arrival of reinforcements.

^{4. &}quot;Type 88," Military Today, accessed September 2, 2020, http://www.military-today.com/missiles/type_88.htm.

0830 28 May 2032 - At the "tank" in the Pentagon, imagery recently received and analyzed from the NGA clearly depicts more than 60 Chinese ships unloading Chinese military-style shipping containers (MIL-VANS) in the small harbor on Yonaguni. The DIA speculates that the MILVANs contain anti-ship missile batteries of the Dong Feng (DF)-28 type – an improved version of the older DF-26 type intermediate ballistic missiles.⁵ Satellite imagery also depicts an unidentified Chinese warship in the midst of the invasion armada that has hundreds of telephone-pole sized antennas protruding from all over the ship. It is known that the DF-28 has a range of over 3,000 miles and has hit targets as small as a destroyer in well-publicized Chinese tests from the mid-2020s. The Chairman tells the Joint Chiefs that he needs to present options to the president at an emergency 1100 National Security meeting. The Director of the DIA speculates that it will take the Chinese at least a week to get the DFs up and functional, and that the "Porcupine," as the DIA analyst have christened the heretofore unknown Chinese naval vessel, is some type of command and control vessel.

1100 28 May 2032 – At an unknown secure location, President Rubio, Vice President Smidt, the Secretaries of Defense, State, Homeland Security, Treasury, the Director of DNI, and the National Security Council receive an overview of the recent events. Secretary of State Linder pointedly reminds everyone of the Treaty of Mutual Cooperation and Security Between Japan and the United States of America and that Article 5 requires: "Each Party recognizes that an armed attack against either Party in the territories under the administration of Japan would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional provisions and processes." Linder states that our international obligations are clear and that the Japanese Prime Minister has repeated requests for a phone conversation with President Rubio since 0700 that morning.

Defense Secretary Wagner states that Taiwan's Defense Minister has refused to take his call for the forward deployment of US land and

^{5.} Eric Gomez, "Meet the DF-31AG and the DF-26: The Big Ballistic Missiles at China's Military Anniversary Parade," Cato Institute, August 8, 2017, https://www.cato.org/commentary/meet-df-31ag-df-26-big-ballistic-missiles-chinas-military-anniversary-parade#.

^{6. &}quot;Treaty of Mutual Cooperation and Security between the United States of America and Japan," Asia for Educators, January 19, 1960, http://afe.easia.columbia.edu/ps/japan/mutual_cooperation_treaty.pdf.

air assets in Taiwan to aid in the recovery of the seized islands. This is particularly troubling since US/Taiwan planning for the defense of both Taiwan and the surrounding islands has centered on this operational concept.

President Rubio says he needs options when he talks to the Japanese prime minister that afternoon. The Chairman states that while the *Abraham Lincoln* could be underway within 48 hours, and within striking distance of Chinese forces on Yonaguni and their fleet in the vicinity, the significant Marine Ground forces that would be needed to assault the islands are on the west coast of the United States and will take at one to two months to train, load, and logistically prepare to launch an amphibious operation—the most challenging and complex of any military operation.

President Rubio gives the order to prepare to honor the US treaty obligations to Japan with military force if necessary and demands an immediate phone call with Xi Jinping. Xi is not only the President of China but also the Chairman of the Communist Party and the Chairman of the Central Military Commission. President Rubio also orders his United Nations Ambassador to call an emergency session of the Security Council's 15 members.

1200 28 May 2032 – Xi Jinping addresses the Chinese nation and allows Western news services access to the transmission. Xi starts the speech with a historical description of the Chinese claim to the Senkaku Islands. He discusses at length the 150-year Western imperial manipulation and humiliation of China and the Chinese people, from the Opium Wars where the West fought China for the ability to "ensure the drug addiction of the Chinese people would fuel their capitalistic profits," to the recent attempts by the United States to "control our economy, our culture, and our people by denying us our rightful place in the sun." He also announces that the islands of Yonaguni and Miyakojima were seized as part of "reparations" for Japan's seizing and holding the Senkakus for over 200 years and for the Nanking massacres of Chinese civilians by the Japanese in 1937. But, Xi also states, "we are willing to negotiate the status of those islands depending on the response to this

^{7.} W. Travis Hanes III and Frank Sanello, *Opium Wars: The Addiction of One Empire and the Corruption of Another* (Naperville: Sourcebooks, 2002).

^{8.} David Nelson Sutton, "International Military Tribunal for the Far East," July 29, 1946, 2631, 2635, 2636, 2642–2645, https://www.legal-tools.org/doc/a5a0b0/pdf.

act of reclaiming our islands as our legitimate birthright."

1500 28 May 2031 – President Rubio discusses the situation with Japanese Premier Yonosuki. Rubio promises US support per the Treaty and asks Japan to make an official request of the United Nations (UN) Security Council to find the Chinese action in violation of article 2(4) of the UN Charter and that Japan and the United States are authorized to take collective action under Article 51 of the same Charter.⁹

1600 28 May 2032 – President Rubio's call to Taiwan's President Zhu-Knee is not returned. Taiwan has not commented or made any official condemnation of the Chinese invasion of the Islands which are less than 100 miles from their nation. Rubio's National Security Advisor Franklin speculates that Taiwan has become "the willing accomplice" in the Chinese military operation and blames the increased economic and cultural interdependence that Taiwan and mainland China have experienced in the last 15 years. In 2028, Xi Jinping and President Zhu-Knee announced the formation of the joint China/Taiwan Reunification Committee to discuss a plan for Taiwan to "return with honor and independence," if only for economic reasons, to China.

1200 29 May 2032 – The US Ambassador to the United Nations makes a stirring speech to the 15 members of the Security Council, claiming that the Chinese aggression "cannot stand" and that "this blatant violation of the international order could well lead to a conflict that will spill out beyond the borders of the Pacific and could be the spark to ignite a conflagration which could consume mankind." The Chinese delegate counters with a prepared statement, asserting that the day's actions were long overdue and involved internal Chinese security but that China remains open to a discussion of the status of Yonaguni and Miyakojima once the international community recognized China's claims over the Senakukus. Recognition would include giving China the oil and fishing rights that would extend 12 miles into the territorial sea, per the 1982 United Nations Convention on the Law of the Sea. ¹⁰ Japan requests a vote on a violation of Article 2(4) by China, which fails to pass because of the Chinese permanent member veto. Russia abstains.

^{9. &}quot;United Nations Charter," United Nations, accessed September 2, 2020, https://www.un.org/en/about-us/un-charter.

^{10. &}quot;United Nations Convention on the Law of the Sea of 10 December 1982, United Nations, updated November 2, 2020, "https://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm.

1000 1 June 2032 – In the first phone call between President Rubio and Xi Jingping, President Rubio reiterates the treaty obligations of the United States to Japan. He does, however, state that he can foresee no circumstance where the United States will employ nuclear weapons in any conflict that remains confined to the western Pacific. President Xi agrees and says he is willing to negotiate the status of the Japanese islands of Miyakojima and Yonaguni but will not discuss the status of the Senkakus. President Rubio says there can be no discussions until the Chinese forces withdraw from all islands. Xi ends the conversation by quoting the Chinese philosopher Sun Tsu, "He will win who knows when to fight and when not to fight," and then adds, "This is not the time for the United States to fight."

1000 4 July 2032 – President Rubio announces to Congress and the American people that the United States and Japan have established a 200-mile "exclusion zone" around the Senkakus as well as the islands of Yonaguni and Miyakojima that both countries will start enforcing on 8 July. All Chinese naval ships, aircraft, and land-based forces within the zone will be subject to attack. Any neutral merchant ships or warships of other nations are advised to stay out of the zone or risk being stopped for inspection and search.

1000 5 July 2032 – President Xi Jingping announces a 500-nautical-mile maritime exclusion zone for any American or Japanese warships as measured from their major naval base in the Chinese city of Fuzhou. This expansive zone does not reach the major islands of Japan, but it does encompass the extreme southern part of the Japanese Ryukyu Island chain – including some parts of Okinawa. President Xi stresses that international trade may continue to traverse the East and South China seas but that any United States or Japanese warships "will be subject to attack" until the status of the Senkakus and the westernmost Ryukyus islands of Yonaguni and Miyakojima are determined. President Xi Jingping also states that China reserves the right to stop and search any commercial vessel that enters the 500-mile zone. He again calls for negotiations with Japan and the United States to discuss the ultimate status of the Ryukyus Islands but reiterates that the Senkakus are Chinese sovereign territory.

15 July 2032 - The Chairman of the Joint Chiefs, the Service Chiefs of

^{11.} Sun Tzu, Art of War, accessed September 2, 2020, https://suntzusaid.com/book/3/17.

the Navy, Army, Air Force, Marine Corps and the Secretary of Defense attend a meeting in the tank of the Pentagon with President Rubio. The Secretary of Defense has requested an updated status of the US military response to the Chinese aggression for the President. The Chairman puts the Commander of INDO/PACOM, Admiral Peak, on the secured top-secret video teleconference and turns the brief over to the four-star Admiral. Admiral Peak states that the 1st Marine Expeditionary Force (MEF) consisting of over 52,000 Marines, the 1st Marine Infantry Division, a complete Marine Air Wing, a Marine logistical group, and various other supporting units can depart the port of San Diego in four days if the President approves the execution order (EXORD). Admiral Peak also briefs that the 1st MEF Commander, Lieutenant General Baker, and his staff have developed an amphibious assault plan on the island of Miyakojima.

Peak states that current satellite imagery shows that the Chinese have already installed several batteries of the anti-ship DF-28 type ballistic missile on Miyakojima and Yonagumi. Peak tells President Rubio that these anti-ship missiles and Chinese aircraft based on the islands must be neutralized before any effective amphibious landing can be attempted. He recommends a combination of US guided missiles followed by carrier-based aircraft. The latest generation of the United States' new hypersonic Tomahawk II and Harpoon II missiles that had been placed into service in 2028 and 2030, respectively, after development in the early and mid-2020s. These hypersonic missiles travel more than five times the speed of sound and are either able to avoid radars by flying low or giving no time for the target to employ countermeasures even if they are tracked.¹² These missiles had never been used in armed conflict and US intelligence had predicted the Chinese currently have the advantage in such hypersonic missiles with their Shang-hi model. Admiral Peak says there is no intelligence that depicts the missiles having been deployed either to the Senkakus or on the seized Japanese islands of Yonaguni and Miyakojima. The Tomahawk II missile can be launched from either a surface ship or submarine. The *Harpoon II* can be launched from a surface ship, sub, or aircraft. While the range of such missiles can be up to 1,400 nautical miles for the Tomahawk II, the range could

^{12.} See Kelley M. Sayler, "Hypersonic Weapons: Background and Issues for Congress," Congressional Research service, updated October 19, 2021, https://sgp.fas.org/crs/weapons/R45811.pdf.

be significantly reduced with electronic interference or other electromagnetic jamming methods.

Admiral Peak briefed that the aircraft carriers *Abraham Lincoln* and *Ronald Reagan* (Nimtz class) and *Enterprise* and *Gerald R. Ford* (Ford class) are all on standby in the Pacific and will precede the Marine Air-Ground Task Force (MAGTF) to "sweep clean" any possible Chinese threat to the Marine forces.¹³ Admiral Peak completes the 90-minute briefing by updating the President on available Japanese ships and follow-on land forces that will accompany the fleet, and notes that the expected amphibious invasion and capture of Miyakojima may well result in 4,000 US casualties.

The Secretary of Defense asks for the President to sign the EX-ORD. President Rubio looks at the assembled group of military professionals and asks, "Can we pull this off?" After a prolonged silence, LTG Baker, the Commander of the MAGTF states emphatically,"Leave it to the United States Marines, Mr. President. We have some experience with taking back islands from aggressors in this part of the world."

19 July 2032 – Seven US Navy amphibious assault ships, the *Iwo Jima*, *Makin Island*, and *Bataan*, ffrom the older Wasp class, and the *America*, *Tripoli*, *Okinawa*, and *Saipan*, from the newer America class, depart from San Diego harbor. ¹⁴ These ships resemble mini aircraft carriers and transport the 3rd Marine Air Wing of fixed-wing aircraft and helicopters that will be used to support the assault. All have large open bays in their sterns to support the launch of smaller beach assault craft that they are transporting. Aboard these vessels are the 52,000 Marines of the 1st MEF. The assembled task force represents over three quarters of the total United States amphibious assault capability. President Rubio uses the occasion to ask China to withdraw from the disputed islands and submit the status of the Senkakus to an independent United Nations Commission. He states emphatically that this naked use of aggression against Japan cannot stand and that the United States will honor its treaty obligations to all Pacific partners.

23 July 2032 - The USS Iowa, a Virginia-class attack submarine, torpe-

^{13.} See "Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress" Congressional Research Service, June 12, 2015, updated January 31, 2022, https://sgp.fas.org/crs/weapons/RS20643.pdf.

^{14.} See Norman Polmar, *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet*, 18th ed. (Annapolis: Naval Institute Press, 2004).

does the Chinese warship *Nanchang*, a type 055 destroyer.¹⁵ The *Nanchang* is 50 nautical miles southwest of Miyakojima, well within President Rubio's 300 mile exclusionary zone. The ship sinks within ten minutes, quickly taking down 156 of the 300-man crew.

24 July 2032 – President Xi Jinping appears on Chinese government network and on a streaming internet link available for viewing in the West. Xi Jinging shows footage of oil-coated, exhausted, disheveled Chinese sailors who were rescued from the *Nanchang*. He includes footage of distraught parents of the Chinese sailor fatalities being informed of the death of their sons and daughters. He states that this was an unprovoked attack and that China will defend her people and land with every resource available. He warns the United States and Japan that to continue the escalation will result in great misery—not for the governmental and defense industry elites who are waging this war, but for the common people of the United States and Japan. He ends the broadcast by once again asking for President Rubio and Prime Minister Yonosuki of Japan to negotiate the status of Miyakojima and Yonagumi, but stating that any discussion about Chinese sovereignty over the Senakukus is not on the table for negotiation.

12 August 2032 – The MAGTF naval armada arrives at the port of Yokosuka at Tokyo, where they rendezvous with the four fleet carriers who have been conducting extensive air exercises in the Pacific waters east of Japan. Admiral Peak, INDO/PACOM Commander, orders the carrier task force to prepare to move south and engage the anti-ship missile batteries on all disputed islands on 18 August. The Marine force will depart two days later.

14 August 2032 – The *Lincoln*, *Reagan*, *Enterprise*, and *Ford*, carrying more than 400 advanced aircraft, depart Yokosuka, along with 55 cruisers, destroyers, frigates, and other support vessels. The fleet includes eight Japanese naval vessels. Since mid-July, a screen of US nuclear submarines has sat in a picket line 100 miles south of Iwo Jima and less than 75 miles from the island of Miyakojima. The US submarines have seen only commercial traffic since the sinking of the *Nanchang*. The Chinese fleet refuses to leave the security of their base at Fuzhou.

^{15.} Andrew Tate, "Chinese Navy's First Type 055-Class Destroyer Enters Service," Jane's, January 13, 2020, https://www.janes.com/defence-news/.

0800 18 August 2032 – The United States and Japan launch a total of 1,400 ground-based conventional missiles from their bases in Okinawa, from various submarines in the area, and from surface ships in the carrier task force. The missiles carry warheads ranging from 500 to 2,000 lbs. The carrier task force is careful to remain outside the Xi's 500-mile zone and continues to patrol just north of the island of Okinawa. The targets are various Chinese military emplacements on Ryukus of Miyakojima and Yonaguni and the Senkakus—particularly the anti-ship batteries of the DF-28 batteries, airfields, and hardened aircraft shelters, where it is believed the Chinese are protecting their strike aircraft. The missiles receive some minor jamming from electromagnetic stations on Miyakojima and mainland China, but given that the missiles are traveling less than 200 miles from the US base in Okinawa and the US fleet north of the Island to their targets on Miyakojima, their GPS signals are strong and there is little time for the Chinese jamming to alter their course. As a result, 60% of the traditional missiles and 95% of the hypersonic Tomahawk IIs and Harpoon IIs hit their targets. Neither the Chinese nor the United States have made any attempt to neutralize the satellites that such missiles are dependent upon for their guidance systems. Experts have theorized that there is an unofficial/unannounced "gentlemen's agreement" because each country is so dependent upon satellites for communications, global positioning, systems, internet conductivity, and weapons delivery—both the United States and China have declared space a neutral zone.

1400 18 August 2032 – President Xi addresses the Chinese people describing the US missile attack of their forces on the disputed islands. He also shows footage and claims that 300 US missiles have hit urban areas in Miyakojima and caused Japanese civilian casualties. ¹⁶ Xi promotes the extensive coverage of the collateral damage caused by these missile attacks, and he states that at least 300 Chinese soldiers and 200 Japanese civilians were killed in the attack.

1000 19 August 2032 – President Rubio and Japan's prime minister conduct a joint news conference and announce the beginning of Operation *Recovery*, the joint US/Japan effort to liberate Miyakojima, Yonaguni, and the Senkakus Islands from Chinese occupation. President

^{16.} An investigation after the conflict by the Japanese government determined that 14 US missiles had missed their targets and hit civilian areas, causing 26 civilian casualties.

Rubio announces the initial success of the American strike, stating that an estimated 80% of the Chinese defensive capabilities on the islands have been neutralized. He again calls for President Xi to withdraw his forces before the next phase of the operation begins. Rubio denies knowledge that any US missiles caused civilian casualties, but admits that some collateral damage is unavoidable in war.

0900 20 August 2032 - The Marine Air Ground Task Force (MAGTF) leaves Yokosuka enroute to Miyakojima, and almost simultaneously, the carrier fleet launches a variety of attack aircraft, including the Stingray unmanned drone and Stingray drone refuelers, and F18 Super Hornets III and F-35 (saber models) to finish the eradication of the D-28 anti-ship batteries. ¹⁷ The US plan calls for all Chinese anti-ship missiles to be destroyed before the MAGTF enters the Xi declared 500-mile exclusionary zone. The range of the US carrier strike aircraft carrying a full weapons load is approximately 600 miles, which means the four US carriers will be able to stay out of the 500-mile exclusion zone.

1030 20 August 2032 – More than 200 US carrier aircraft supported by a complex strike package of ECW (Electronic Combat Wing) aircraft, remotely piloted drones, and aircraft carrying high-speed-anti-radiation missiles (HARM) hit the remaining Chinese defenses on Miyakojima and Younaguni. Primary targets are the remaining anti-ship missiles batteries plus airfield and aircraft shelters. Shockingly, the US forces are not challenged by any Chinese aircraft, but they do meet serious anti-aircraft fire, resulting in the downing of 16 aircraft and the first loss of American life in the conflict. Still, the strike appears to be a success, with the remaining DF-28 sites destroyed and the all-weather airfield on Miyakojima put out of action. Surprisingly, the 43 aircraft armed with anti-ship *Harpoon II* missiles that were prepared to strike any Chinese naval vessels have no targets since it appears that the Chinese fleet has retreated to their bases in Fuzhou. The aircraft head back to their carriers, unaware that 55 bird-sized drones are following them.

1230 20 August 2032 – The last of 172 aircraft and drones are recovered on board the four carriers. Nineteen US aircraft have sustained enough damage from the Chinese anti-aircraft fire that they are divert-

^{17.} Stephen Trimble,"USN Awards MQ-25 Risk Reduction Contract to Northrop Grumman," FlightGlobal, October 19, 2016, https://www.flightglobal.com/civil-uavs/usn-awards-mq-25-risk-reduction-contract-to-northrop-grumman/122036.article.

ed to the US airfield on Okinawa. The task force maintains a constant combat air patrol (CAP) of 45 F-35s to address any incoming air threat.

1235 20 August 2032 – After receiving the data downlink from the Chinese "bird" drones on the location of the carrier task force, more than 400 hypersonic DF-28s are launched from 200 miles inside China. The missiles have been cleverly concealed in a base that has not been previously identified by US satellite imagery. Traveling at over 6,000 miles an hour, the missiles will reach the US carrier task force in less than eight minutes.

1238 20 August – US satellite systems pick up the approach of the missiles as they leave China and head out over water for the first time.

1240 2032 August – The information is immediately relayed to the Combat Information Centers on board each of the ships. Admiral Lynn, the Commander of the carrier task force, asks the navigational officer to confirm that their present location is outside the Xi-imposed 500-mile exclusionary zone. The lieutenant commander confirms to the Admiral that they are precisely 582.6 miles from Fuzhou. Admiral Baker orders the task force to general quarters and to prepare for incoming missiles.

1242:03 seconds 20 August 2032 – The radars on the USS George Neal and Daniel Inonye (Arleigh Burk class) guided missile destroyers, which serve as early warning pickets on the outer limits of the carrier task force, pick up the incoming missile barrage. With only 27 seconds of reaction time before impact, the second generation Phalanx II system is unable to acquire the target to engage. Two DF-28s strike the Neal and three hit the Inonye. The 500-kilogram warheads on each missile explode with terrible lethality, bringing both ships to a dead stop within three minutes and cause devastating internal fires. Before impact, the Inonye manages to get a message to the Enterprise, the flagship for Admiral Lynn, warning of incoming missiles. The Inonye sinks in 20 minutes, losing 89 sailors.

1242:16–19 seconds 20 August 2032 – On what is later christened "the day the Navy died," 299 of 412 D-28 hypersonic missiles launched from mainland China impact US Navy and Japanese warships in the carrier task force. The carriers absorb the majority of the punishment—the *Lincoln* absorbs 15 missiles, the *Reagan* 22, the *Enterprise* 25, and the *Ford* 27. Secondary explosions on board all four carriers indicate the

Chinese attack took advantage of the vulnerabilities of the carriers when they received returning aircraft from the strikes on the islands. Every ship in the task force is hit, and even minor support vessels being hit by as many as three missiles.

Of 55 total vessels in the task force, only four are undamaged at the conclusion of the attack. The *Lincoln, Enterprise*, and *Ford* subsequently sink—along with 24 other ships. Although the total casualty numbers are unknown until weeks after the attack, 4,621 American and 244 Japanese sailors were killed in the attack. It is the single worst day of casualties ever suffered by the United States Navy, dwarfing the 2,403 killed at Pearl Harbor in 1941. Much of the attack is filmed by Chinese drones with high resolution cameras that arrived minutes prior to the attack.

1405 20 August 2032 - President Xi announces the success of the Chinese attack. He displays vivid video of Chinese missiles striking US and Japanese warships and the resulting explosions. He announces that in the spirit of mercy and reconciliation, he has determined not to launch the planned missile strike on the US amphibious task force that is currently at latitude and longitude 31°34'11.8"N 134°36'02.4"E. By giving the exact location of the MAGTF, Xi makes it clear that the Chinese have precise intelligence on the location of US ships. He states that the initial attack has undoubtedly caused thousands of deaths to the aggressors, and the missile attack initially planned on the amphibious invasion force would cause thousands more. But, "in an act of mercy and reconciliation, it has been canceled." Xi announces that, to demonstrate the military might and ability of the Chinese people and nation, Xi will allow one missile to strike one of the ships in the amphibious task force so that the United States does not claim this act of mercy is an unsupported boast that China is incapable of executing. He claims he does this to demonstrate the military might and ability of the Chinese people. He again calls for negotiations with the United States and Japan over the disputed islands. The broadcast is carried in the west and is the first information the American or Japanese public receives about the Chinese missile attack.

^{18.} See Naval History and Heritage Command, "Overview of the Pearl Harbor Attack, 7 December 1941," accessed December 2, 2020, https://www.history.navy.mil/content/history/nhhc/research/library/online-reading-room/title-list-alphabetically/p/the-pearl-harbor-attack-7-december-1941.html.

1415 20 August 2032 – One hypersonic missile strikes the USS *Simpson*, a logistical support ship carrying medical supplies, ammunition, aircraft fuel, and other cargo for the amphibious task force. The missile had been launched from near the Chinese city of Xuzhou, and although it carries a smaller warhead than the D-28, it flew at nearly eight times the speed of sound and executed complex evasive maneuvers that allowed it to completely evade the radar or defenses of the alerted US amphibious task force. The missile severely damages the *Simpson* and causes an additional 22 casualties. The missile hits its target after a flight of 980 miles and is of a type not previously identified by western intelligence. It is christened the D-30 series.

1430 20 August 2032 – The Marine Amphibious task force is ordered to return to Japan by Admiral Peak of INDO/PACOM. The shattered carrier task force is ordered back to Yokosuka naval base after rescuing as many survivors as possible.

1800 20 August 2032 – President Rubio goes on all major networks and streaming internet platforms and tells the American people about the possibility of a major American naval defeat. While he stresses that it is too early to clearly identify what exactly happened, it did appear that several US ships were sunk in a major naval battle near Okinawa with hundreds of US casualties. He stresses that this is a treacherous and underhanded Chinese attack, launched outside of the 500-mile maritime exclusion zone. As a result, US ships did not expect the invasion of the seized Japanese islands. Responses will be delayed while the "full resources of the United States and Japan" prepare for a long struggle against a "predatory power." Rubio reminds the American people that all of the United States' great struggles against evil have taken time and this will be no different. He reasserts that the United States will not negotiate with the Chinese until the islands are freed.

21 August 2032 – As a result of the US naval defeat, the US stock exchange indices all drop by more than 30% at the opening bell. At 1008 in the morning, all computer data bases and digital recording media that record the trades, account balances, and account history of 23 major banks, brokerage, and investment firms, such as Black Rock, Vanguard Group, UBS, Fidelity, JP Morgan, Goldman Sachs, and 18 others, become non-responsive and show a zero balance on current accounts. While a Chinese cyberattack is suspected, it is impossible to

determine why these companies cannot access their data. Together, the 23 firms control over 89% of all US pensions and stock market liquidity. Each company assures their investors that the data can be recovered and claim that it will "just take time."

- 22 August 2032 The best computer cybercrime analysts from Wall Street continue to struggle to understand whether the loss of data is a transfer or an erasure. The effort is thwarted by 23 separate approaches to the investigation because each firm is reluctant to share its information/approach and data bases with rivals in the investment community.
- 23 August 2032 President Rubio again addresses the nation. He announces that the United States has "incontrovertible truth" that China launched the cyberattack that shut down Wall Street. He states that the United States will soon respond in kind and that any losses to the individual investors caused by this attack will be compensated by the United States government if the big 23 cannot regain their data. Rubio announces that a special FBI cyber task force will take over the investigation and find the missing data.
- 24 August 2032 President Xi states that China is indeed responsible for the 180 trillion dollar loss on Wall Street. He announces that China now possesses the data. Xi promises to use the data to show the American people that it is the wealthy US military and government elite who are prosecuting this war. He also announces that additional cyberattacks are coming, designed to convince the American people to end their manipulation by the financial elite.
- 25 August 2032 All electronic data regarding financial payments is suspended in Texas, Oklahoma, Louisiana, Mississippi, and Alabama. US consumers are unable to make any purchase using their credit or debit cards or using any electronic data processing submission. Once again, cash is king. Many merchants cannot even process cash payments because of a lack of small bills and change. Even consumers with cash are forced to pay for a \$4 sandwich with a \$20 bill because the merchant has no change. Consumers without cash find they cannot purchase gas, groceries, perishables, and other crucial consumables.
- 26 August 2032 Panic ensues in the affected states. Consumers making purchases close enough to the border of states that are not impacted, resulting in mass shortages near the borders as people flood there to make purchases. Even states that are not impacted become ensuared

in the panic, and hoarding ensues since each state fears it will be next. People flood to banks trying to get cash, and banks are forced to close their doors while the federal government determines the response. The National Guards of impacted and neighboring states are ordered to duty by the state governors, but fewer than 60% of the guardsmen have reported to their armories by the end of the 72-hour required reporting-in period. Many guardsmen later claim that they cannot purchase gas because ATM cards no longer function, while other guardsmen state they cannot leave their families until they can ensure that the financial situation is remedied.

27 August 2032 – President Rubio announces the Treasury Department is rushing "trucks full of money" to various key bank locations throughout the five-state region. He also orders all commercial establishments to accept written checks from established financial institutions with valid federal routing numbers. While he states he is optimistic that electronic banking will soon be back up and running, he explains that the Chinese have introduced "blocking bugs" to each of the major credit/debit card bank terminals through which all financial transactions must pass. Used successfully by hackers for years, this technology infests the key switches where charges are submitted to central financial institutions and banks and encodes the transaction that is sent forward. The receiver of the information cannot decipher what the charge is and simply rejects it. The return to a cash economy comes as a shock to millions of Americans under the age of 35, who have never carried cash or written a check.

28 August 2032 – Anxious consumers mob 228 grocery/Walmart/ Warehouse foodstuff stores in Houston, Dallas, Austin, San Antonio, and scores of other Texas cities. Many are unable to pay for basic food staples because of the lack of cash, an existing banking account that does not allow the utilization of checks, or the rumor on a popular radio program that all grocery/food stores will close on the 29th until the federal government can begin an allotment system of foodstuffs for all citizens. The National Guard is sent to establish order and secure the remaining banking and food distribution locations in the five impacted states. Throughout the United States, widespread apprehension and panic unfolds fears that they could be next, resulting in widespread panic buying and shortages on store shelves throughout the country.

29 August 2032 – 35 people in the five impacted states are killed during looting.

0001 30 August 2032 – Simultaneously, with the electrical power going off in the five "misery states," President Xi announces that China will now sever the electric grid and that the power will stay off until President Rubio announces by midnight that he will enter into negotiations regarding the status of the islands in question, or until the Governors of the impacted states personally ask for Chinese assistance to lift the electrical power attack. Xi also states that China will "pull" their blocking bugs from these states so that American consumers will have an opportunity to purchase foodstuffs and other necessities, but then threatens that China will soon introduce the bugs to the American northeast.

30-31 August 2032 – Panic buying hits the entire Eastern seaboard since President Xi did not elaborate on what he meant by the use of the term "American northeast." Resulting riots and lawlessness occur in Baltimore, Philadelphia, and Boston. Eighty-two people die; the majority of the dead are elderly citizens of the five "misery states" who perish due to the lack of electricity, which stopped air conditioning units, causing temperatures to reach the high 90s inside nursing homes and managed care facilities that did not have generators.

1 September 2032 - President Rubio addresses the nation and attempts to calm fears by stating that all digital transactions are now functioning in Texas, Oklahoma, Mississippi, Alabama, and Louisiana. Where power is available from back-up generators, consumers will be able to make purchases. He states that the electrical grid outages are due to the United States over-reliance on decades of power plants that purchased Chinese micro-processing computer chips that had an externally activated "kill switch" that will give China the ability to shut down the plants until the chips are replaced.¹⁹ He assures the American public this can be done, but it will take time.

He also points to effective US cyberattacks that crippled China's banking system and caused widespread shortages in their supply chain, including petroleum, throughout the country. He asks his fellow citi-

^{19.} Jordan Robertson and Michael Riley, "The Big Hack: How China Used a Tiny Chip to Infiltrate U.S. Companies," Bloomberg, October 4, 2018, https://www.bloomberg.com/news/features/2018-10-04/the-big-hack-how-china-used -a-tiny-chip-to-infiltrate-america-s-top-companies.

zens in the northeast to stop panic buying for a contingency that has not yet occurred and will likely not occur since the United States Cyber Command has developed an effective counter cyberstrategy to thwart the Chinese "blocker bugs." President Rubio asks for patience and for all Americans to come together in this time of war, and prepare to assist Japan in the recovery of the occupied Islands.

3 September 2032 – Widespread protests against the war occur in major cities throughout Texas, Alabama, and Louisiana. The protest turns violent in New Orleans, and 32 people are killed in widespread looting and rioting, leading to the destruction of most of the French Quarter by fire. Without electricity, the fire alarm systems are inoperative and lack of communication results in a tepid response by first responders.

5 September 2032 – The British Broadcasting Corporation does a story on the widespread discontent and anger appearing on American social media sites and the mass protests that are beginning to take place in many urban areas. Although such communication is not occurring in most of the "misery states" because of the lack of electricity, there is widespread media reporting from within the "misery zone," the name given by the American media to the five affected states. The reports focus on the terrible suffering and shortages resulting from going without electricity for more than a week. Hospitals have started to shut down because even those with generators have started to experience fuel shortages. Any commercial establishment that sells foodstuffs is designated a food distribution point (FDP) by the federal government and is under the supervision of either the National Guard or active duty soldiers. President Rubio federalized the National Guard in the "misery states" on 1 September.

6 September 2032 – Speaker of the House Schonert, in a televised interview with National Public Radio, asks why Japan is not suffering the same fate as the United States vis-a-vis the cyberattacks. The Japanese have been unaffected since the attack on their ships on 20 August. Schonert points out these are Japanese islands for which the American people are suffering. He becomes the first politician from either party to question the decision to lose 2/5 of the American fleet and more than 4,000 American lives to reclaim islands that "Japan failed to adequately defend because of their lack of will and military expenditures." Schonert demands to know the plan to get the Chinese chips replaced

in the power system throughout the misery states, and asks, "What is to stop the Chinese from implementing these attacks across the entire country? Are we not at their mercy?"

8 September 2032 – Although the communication is not publicly disclosed, the Governor of Oklahoma makes a phone call to President Xi, asking for the restoration of power to the state of Oklahoma. The National Security Agency (NSA), which monitors all communication in and out of China, intercepts the phone call and informs the President.

11 September 2032 – Fuel supplies to the midwest, which primarily come from ports in Texas, Mississippi, and Louisiana, are shut down. Although major refineries and fuel distribution pipelines have not been impacted by the loss of electricity because of back-up generators, the shutdown pipeline system is blamed on the same Chinese microchip technology.²⁰ Fuel stockpiles in the midwest will be exhausted in approximately one week without replenishment.

12 September 2032 – The governor of Oklahoma is taken into custody by the FBI for "acts of espionage and sedition against the United States." Secretary of Energy Ryan announces an alternative fuel delivery plan for the seven states in the midwest that no longer have access to fuel supplies from the pipeline shut down by the blocker bugs. Federal tanker trucks will deliver fuel from locations that still have access to pipeline supplies and transport them to certain fuel delivery points (FDPs) that will be controlled by National Guard or federal soldiers.

15 September 2032—Twenty-three percent of the relevant microchips have been replaced in the misery state power grid. Unfortunately, the supply of available chips for substitution is exhausted as electrical power systems, fuel distribution nodes, financial institutions, supply chain, and transportation networks across the United States battle for non-Chinese produced microchips. The lack of supply results in rolling blackouts throughout the impacted area, with most people receiving electricity four to five hours a day.

20 September 2032 – In Texas, a 500-man militia unit called the "Texan Freedom Corps" (TFC) overruns and disarms 23 National Guard posts

^{20.} Emma Newburger, "Largest U.S. Fuel Pipeline Remains Mostly Closed Days after Cyberattack with No Timeline for Reopening," *CNBC*, May 9, 2021, https://www.cnbc.com/2021/05/09/pipeline-hack-all-hands-on-deck-to-avert -disruptions-commerce-secretary-says.html

in and around the greater Houston area. The National Guard posts were minimally manned (10-15 soldiers) [need an en dash] at FDPs, gas stations, and key infrastructure sites, such as water treatment and electrical plants. The federal Quick Reaction Force (QRF) for the Houston region, consisting of a 180-person regular army infantry company, is ambushed by the TFC while responding to the initial request for assistance from a NG guard post outside of a grocery store under attack. Twelve soldiers from the 1st Brigade of the 3rd Infantry Division are killed and 22 are wounded. The infantry company withdraws to their cantonment area outside of the city. The leader of the TFC announces on local radio stations (the few that have power) that the federal government, which has caused the suffering and chaos with this nonsensical conflict, is no longer welcome in the sovereign state of Texas. He states that there are TFCs in every Texan major city, and they are all prepared to assume control of key infrastructure and sites.

21 September 2032 – President Rubio denounces the violence in Houston and announces that the 82nd Airborne Division will travel to Houston and the cities of Dallas, Fort Worth, Austin, and Corpus Christi – all of which have had incidents of militia violence against either National Guard or active duty soldiers.

25 September 2032 – With gas stations in the midwest without fuel and the FDP plan of Secretary of Energy Ryan being inadequate to meet even ten percent of the prior demand, riots and protests breakout in more than 300 cities throughout the region. Without fuel, individuals in rural areas are unable to either travel to work, school, or purchase vital necessities. Across the midwest, 108 people are killed and thousands are wounded when the soldiers protecting the FDPs, operating under approved Rules for the Use of Force, are authorized to use deadly force if they are under assault.

30 September 2032 – The States of New York, Pennsylvania, Connecticut, Delaware, Rhode Island, Maryland, Virginia, and the District of Columbia have their digital commerce shut down by the introduction of the Chinese blocker bugs into their data communication systems

1 October 2032 – Despite the best efforts of Wall Street's cyberrecovery experts, they have been unable to recover the data from the 21 August data attacks that resulted in the "loss" of 180 trillion dollars of

market value. President Rubio announces that the US government will seek to reimburse all pension funds, investment firms, and banks that suffered the catastrophic losses. Speaker Schonert, however, responds publicly that "only Congress has the power of the purse," and for the President to offer such a "windfall to the wealthy" needs further study and reflection.

3 October 2032 – Despite the absence of electricity in the District, Speaker Schonert launches a comprehensive radio/internet/media attack on the Rubio administration's handling of the war to date. He points out that the United States has suffered a catastrophic naval defeat and is now suffering severe economic and societal impacts at home—all for the sake of "five bird-shit covered Japanese islands that most Americans have never heard of. He points to the civil unrest in Texas, the fuel crisis in his home state of Illinois, and the loss of trillions of dollars of equities on Wall Street as proof that President Rubio is unfit to be the Commander-in-Chief for a conflict that we should have never entered into. When questioned about our treaty obligations to Japan to defend against foreign attack, Schonert replies, "My obligation to the people of Illinois and of the United States trumps any treaty with a foreign power that apparently didn't care enough to spend the money on defense they should have."

7 October 2032 – The Joint Chiefs of Staff (JCS) meet with the President to give him an overview of the planning for the next stage of the conflict. Given the incredible success of the Chinese anti-ship D-29 and D-30 missiles, the JCS recommends that the President impose a naval blockade on China, allowing no foreign ships to leave or enter Chinese ports. The JCS believe this will force China to the bargaining table, but it could well take years because of the belt and road initiative China built through central Asia throughout the 2020s. The generals and admirals, as well as the Secretary of Defense, recommend that we use the two-to-four-year period to catch up with the Chinese technological advantages in missile technology. President Rubio asks them if they have been tracking the domestic chaos in the United States and what is being done to stop the complete Chinese dominance in cyberspace. There is silence around the conference table.

^{21.} Stephen N. Smith, "China's 'Major Country Diplomacy': Legitimation and Foreign Policy Change," *Foreign Policy Analysis* 17 no. 2 (2021), https://doi.org/10.1093/fpa/orab002.

8 October 2032 – President Rubio calls President Xi and asks him if he is willing to surrender Miyakojima and Yonaguni to the Japanese if the United States and Japan recognize Chinese sovereignty over the Senkakus. Xi states that, while he can make no absolute promises, he is willing to consider the offer.

End of the Narrative

Obviously, the narrative depicts a worst-case scenario should the United States choose to intervene in any Chinese decision to exercise what China sees as their legitimate and historical hegemony over the East China Sea. While much of the previous description and narrative focuses on the lack of preparedness of the US military to take on an emerging China in their backyard, another more important theme is the potential disaster awaiting any United States military intervention into an area of conflict for which there is no existential or vital US national security interest. Historically, for the United States to wage a successful war against a major peer competitor, it needs the support of the American people, a vital national security interest, and a military prepared for the inevitable surprises and unexpected events of the next conflict. In the possible coming conflict with China, we fail on all three.

The very nature of democracy requires the active participation of the people to support the war effort. The American people must believe in the importance and the necessity of the national interest in order for this country to wage a prolonged, effective war against a major peer competitor. The United States has historically reacted strongest and most effectively when the American people feel betrayed, surprised, or stunned by a potential opponent's attack upon them. Undoubtedly, our future opponents realize this and will not make the same mistakes to awaken the full potential of the United States' war-making capabilities.

The historical record is replete with examples of the United States emerging with full war-fighting potential only when the attack is seen as sudden, unprovoked, and against a vital national interest. During the American Civil War, the level of support in the North was lukewarm for going to war before the South's firing on Fort Sumter. After this act of aggression against a federal installation, the northern public saw it as sufficient reason for a *cause belli* and supported Abraham Lincoln's decision to issue a call for 75,000 volunteers, and soldiers flocked to the colors from every Northern State. Throughout the war, the North

could always point to the war rationale that the South began the conflict and they were responding to an attack on their sovereign soil.

The Spanish-American [will need an en dash] War serves as an example that the requirement for the United States to be the victim of an unprovoked attack need not be factual, but merely be believed by the American people to garner their support. The belief by the American public that the destruction of the battleship Maine was some deliberate, calculated, and underhanded attack by Spain was a well-recognized klaxon for war in 1898.22 The yellow journalism of such media giants as William Randolph Hearst and his New York Journal created the public belief that the attack was a Spanish act of sabotage or a surprise attack by Spain.²³ Thanks to Hearst's rabble rousing and desire to sell papers, the popular slogan for the war—"Remember the Maine, to Hell with Spain!" was born.24 The media and politicians also played a role in convincing the American people that the independence of Cuba and the acquiring of colonies such as the Philippines and Puerto Rico was the conclusion of the American manifest destiny and crucial to American national security.²⁵

The United States' entry into World War I serves as yet another example of both contentions that the American public must believe their nation is the victim of aggression and that any such conflict must serve a greater national interest. Three stark examples of Imperial Germany's provocations hastened our entry into the war. First, the sinking of the *Lusitania* in 1915 by a German submarine was viewed by many Americans as proof of vicious German aggression and malice against the innocent civilian passengers. Out of the nearly 1,200 passengers killed in the attack, 128 (out of 139) were US citizens.²⁶ The act was proclaimed as a war crime in the United States with the popular maga-

^{22. &}quot;The Disaster to the Battleship 'Maine," *Harper's Weekly*, February 26, 1898, Gilder Lehrman Institute of American History, https://www.gilderlehrman.org/sites/default/files/inline-pdfs/08833.pdf.

^{23.} Chris Woolf, "Back in the 1890s, Fake News Helped Start a War," *The World*, December 8, 2016, https://theworld.org/stories/2016-12-08/long-and-tawdry-history-yellow-journalism-america.

^{24.} See Robert B. Edgerton, Remember the Maine, to Hell with Spain: America's 1898 Adventure in Imperialism (Lewiston: Edwin Mellen Press, 2005).

^{25.} See Albert J. Beveridge, *The Meaning of the Times and Other Speeches* (Indianapolis: The Bobbs–Merrill Company, 1908).

^{26.} Howard Jones, Crucible of Power: A History of U.S. Foreign Relations Since 1897 (Lanham: Rowman & Littlefield, 2001).

zine *Nation* calling it "a deed for which a Hun would blush, a Turk be ashamed, and a Barbary pirate apologize."²⁷

Second, the Zimmerman telegram of 1917 convinced the American people that Germany was planning an aggressive war with the United States that would begin with a stab in the back through Mexico. In the infamous "telegram from German Foreign Minister Arthur Zimmermann to the German Minister to Mexico, Heinrich von Eckhardt, offering United States territory to Mexico in return for joining the German cause." He offered an alliance with the Mexican government and promised all of the territories lost by Mexico to the US in the War of 1848—if they joined Germany in war against the United States.

Finally, the unrestricted submarine warfare, which was pulled back after the outrage over the sinking of the *Lusitania*, was also seen by the American public as evidence that the German empire planned to wage an aggressive war. When Woodrow Wilson called for his Declaration of War against Germany by Congress on April 2, 1917; in the second sentence, he specifically mentioned Germany's decision to wage unrestricted submarine warfare as proof that they had "put aside all restraints of law or of humanity." With a clear national interest to make the world safe for democracy—and with the belief of the American people that Germany was an unlawful aggressor—popular support for the war was assured.

The attack on Pearl Harbor during World War II stands as yet another example of how a sudden and unexpected act of aggression enrages and motivates the American public to endure the sacrifices of a major conflict. The attack by the Japanese on the American fleet based at Pearl Harbor on December 7, 1941, was certainly viewed as a catastrophic surprise and enraged the average United States citizen.³⁰ The national security interest was clear and unequivocal: Japan was using

^{27.} Jones, Crucible of Power, 73.

^{28. &}quot;The Zimmerman Telegram," National Archives, accessed September 3, 2020, https://www.archives.gov/education/lessons/zimmermann.

^{29.} Woodrow Wilson, "Declaration of War Message to Congress," National Archives, April 2, 1917, 1, https://www.archives.gov/global-pages/larger-image.html?i=/historical-docs/doc-content/images/wilson-decl-war-germany-l.jpg&c=/historical-docs/doc-content/images/wilson-declared-war-germany.caption.html.

^{30.} John D. Gresham, "It Could Have Been Worse," Defense Media Network, December 7, 2011, https://www.defensemedianetwork.com/stories/it-could-have-been-worse/.

force to create a Greater East-Asia Co-Prosperity Sphere and to control the vital minerals of the Dutch East Indies and Southwest Asia.³¹ Not since the Civil War had the country been so united and focused on the accomplishment of the ultimate goal—the defeat of Japan.

The Global War on Terror as instigated by the Al Qaeda attacks on September 11, 2001, serves as another example of the nation responding dramatically and decisively to a perceived national security threat instigated by a surprise attack. The national will and popular clamor for decisive military action was palpable in the weeks and months following the attacks.³² The public support and clamor soon subsided when the scope of the original mission to defeat Al Qaeda in Afghanistan morphed into the realm of nation building.

The counterexamples of the United States failures in conflicts that did not start with the nation as the victim of aggression, and therefore lacking public support, are equally telling. From the stalemate and never-ending war in Korea, to the resounding defeat in Vietnam, to the disastrous occupation of Iraq in the Second Gulf War, the long-term sustainability of the American war-making effort in each of these conflicts was hampered—not only by a lack of public support but also a realization that the security of the nation was not under any existential or direct risk. While it is possible for an administration to execute certain small-scale, limited conflicts—such as Grenada, Panama, and the First Gulf War—anything over a prolonged period will not be sustainable without the American people's support.

No direct US national security interest in the East China Sea can justify the tremendous risk of any US attempt to limit the expansion and eastward manifest destiny of a resurgent China. While the current Treaty with Japan is important and the most persuasive argument, it would be folly to blindly adhere to a document which offers so little to the United States national interest.³³

The economic importance to the United States of the relationship

^{31.} John Toland, The Rising Sun: The Decline and Fall of the Japanese Empire 1936–1945 (New York: Modern Library, 2003), 447.

^{32.} Kevin Pobst "The Aftereffects of September 11th and What the Polls Tell Us," *Social Education* 66 no. 2, 103–09, http://www.socialstudies.org/sites/default/files/publications/se/6602/660204.html.

^{33. &}quot;Treaty of Mutual Cooperation between the United States of America and Japan, January 19, 1960," Columbia University Asia for Editors, http://afe.easia.columbia.edu/ps/japan/mutual_cooperation_treaty.pdf.

with China cannot be underestimated. Currently, China is the largest net exporter of all goods to the United States.34 The Chinese government is a major purchaser of US debt, holding over \$1.065 trillion in US treasuries as of October 2021.35 China is also the third-largest export market for the US.36 The economic ramifications, for both sides, of a conflict between the first- and second-largest economies in the world are frightening.³⁷ During the recent pandemic, the US discovered just how dependent it had become on Chinese imports. American consumers found themselves unable to purchase various pharmaceuticals, antibiotics, personal protective equipment, and other common items that were almost universally manufactured in China.³⁸ In the event of conflict, not only would the United States lose its largest trading partner, but the disruption to the world economy that would occur because of the disruption of shipping traffic in the East China Sea would almost certainly lead to world-wide economic dislocation, recession, and likely depression.

Yet the United States continues to give assurances to both Taiwan, the Philippines, and Japan over various territorial island claims that, in some cases, are only 100 miles off the Chinese mainland. These are islands of no real military significance to the United States, but they are of great political and cultural value to China. While China invests billions of dollars in the Caribbean, US foreign policy remains fixated on tiny, uninhabited, and in some cases, man-made islands on the other side of the world.³⁹ The national security threat to the United States is not in the Senkakus or Ryukos, but rather the Bahamas and Bermuda.

^{34. &}quot;Top Trading Partners–December 2021," United States Census Bureau, https://www.census.gov/foreign-trade/statistics/highlights/toppartners.html#total.

^{35.} Shobhit Seth, "Why China Buys U.S. Debt with Treasury Bonds," Investopedia, December 30, 2021, https://www.investopedia.com/articles/investing/040115/reasons-why-china-buys-us-treasury-bonds.asp.

^{36. &}quot;Top Trading Partners," United States Census Bureau.

^{37. &}quot;World Economy to Top \$100 Trillion in 2022 for First Time: Report," Reuters, December 26, 2021, https://www.reuters.com/business/world-economy-top-100-trillion-2022-first-time-report-2021-12-26/.

^{38.} Chuin-Wei Yap, "Pandemic Lays Bare U.S. Reliance on China for Drugs," *Wall Street Journal*, August 5, 2020, https://www.wsj.com/articles/how-the-u-s-ceded-control-of-drug-supplies-to-china-11596634936.

^{39.} Kirk Semple, "China Extends Reach in the Caribbean, Unsetting the U.S.," New York Times, November 8, 2020, https://www.nytimes.com/2020/11/08/world/americas/china-caribbean.html.

Most of the current Interim National Security strategy illustrates the points above, and that "China, in particular, has become more assertive. It is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system." It also states, "It is our most solemn obligation **to protect the security of the American people**." But to argue that the security of the American people is protected by risking the United States Navy in an attempt to reverse a Chinese occupation of five uninhabited Senkaku islands, which the vast majority have never heard of, stretches the imagination.

The strategy goes on to say, "We have an enduring **interest in expanding economic prosperity and opportunity**." As previously discussed, the economic dislocation and chaos that would result from such a conflict would yield widespread market panic. The conflict could also cause many to question the status of the American Treasury bond market, which has been underwritten by large scale Chinese purchases for years. 43

Also, page 14 of the strategy states, "We will make smart and disciplined choices regarding our national defense and the responsible use of our military, while elevating diplomacy as our tool of first resort." The resources of the United States military are not infinite. When we make the crucial decision to use force and risk American lives, it must be for a purpose that the American people will support. Absent a direct threat to our territorial integrity, a direct economic threat to international trade/sea lanes, or the threat of the imminent demise of one of our key allies, the United States should not risk the majority of its most crucial asset – the United States Navy. It would be an ill-conceived effort to draw some "line in the water" to stop the expansion of another major power in an area that is clearly within their sphere of influence.⁴⁵

^{40.} Joseph R. Biden, Jr., *Interim National Security Strategic Guidance*, March 2021. The White House, accessed 24 February, 2022, 8, https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf

^{41.} Biden, 9.

^{42.} Biden, 9.

^{43.} Thomas Kenny, "How Much U.S. Debt Does China Own?" The Balance, January 4, 2022, https://www.thebalance.com/how-much-u-s-debt-does-china-own-417016.

^{44.} Biden, Interim National Security Strategic Guidance, 14.

^{45. &}quot;Line in the water" is a parody of line in the sand statement that President

Finally, the document states, "Our strength abroad requires the United States to build back better at home." The economic interests of the United States are not served by engaging in a conflict with our largest import trading partner, our third-largest export trading partner, and the second-largest holder of US debt. The cessation of all trade between the world's first- and second-largest economies can only have severe economic consequences for not only the United States economy but also the global economy.

Not since the War of 1812 has the United States fought a peer competitor that we could not economically out-produce. Our manufacturing base, our technological superiority, and the United States' almost endless supply of natural resources has always ensured that we never had to fight an adversary that we could not flood with tanks, ships, planes, and munitions. Isolated in North America, our powerful economic engine was free to churn out the quantitative numbers that were needed to make up for any qualitative inferiority—such as the Sherman tank versus the German Tiger Tank.

The next conflict with China will not resemble any from our past. China's economy will likely surpass the United States' sometime in the next ten years. ⁴⁷ The United States could well find itself outnumbered and out-produced in anti-ship missiles, attack drones, and unmanned aerial vehicles. All this equipment will likely be crucial in the next conflict with China over islands in the South or East China Sea. These extremely effective, devastating, and relatively cheap weapons—as compared to a naval ship—have called into question the continuing obsession by the United States Navy on the primacy of the aircraft carrier. With 11 major aircraft carriers currently in the US fleet, and two more being built, clearly the ships are seen as a major component of any future naval conflict with a peer competitor. ⁴⁸

George H. Bush made regarding Saddam Hussain's invasion of Kuwait in 1991. See John Harwood, "'A Line Has Been Drawn in the Sand," *Tampa Bay Times*, October 17, 2005, https://www.tampabay.com/archive/1990/08/09/a-line-has-been-drawn-in-the-sand/.

- 46. Biden, Interim National Security Strategic Guidance, 16.
- 47. Numerous sources concur. See, e.g., Ralph Jennings, "China's Economy Could Overtake US Economy by 2030," VOA, January 4, 2022, https://www.voanews.com/a/chinas-economy-could-overtake-us-economy-by-2030/6380892.html.
- 48. "Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress," Congressional Research Service, January 31, 2022, https://sgp.fas.org/crs/weapons/RS20643.pdf.

Even if the United States military recognizes the vulnerability of any surface ship responding to a threat in the East or South China Seas, very little has been done to prepare the nation for the havoc and chaos of a concentrated Chinese cyber campaign once war starts. A campaign that will inflict no kinetic casualties, but, as described in the previous scenario, would be one that eats away at the resolve and morale of a populace that is not accustomed to sacrifice or hardship. The United States has never faced the type of economic, social, military, and cultural impacts that will arise in a cyber-type conflict.

The banking, investment, and consumer purchase impacts on what is now based almost exclusively on digital transfers of funds are impossible to predict. US consumers during the darkest times of the Civil and Second World War were always able to make purchases that enabled them to continue a day-to-day existence for themselves and their families. The US electrical grid, transportation and energy delivery networks, and supply chain dynamics, are all tied to the transfer of data over the ubiquitous internet. How a generation that has never known a world without internet will react to its absence is unknown.

This is not to suggest that the people of the United States are incapable of tremendous sacrifice or enduring hardship. During the American Civil War, the number of deaths reached 655,000, including 214,938 combat deaths; more recent sources cite a figure of 750,000.⁴⁹ Vast swaths of homes and farms were pillaged and destroyed. Throughout the conflict, the populations of both the North and the South remained committed to the goals and ultimate outcomes of their respective governments. The rationale for their support was that the very existence of the nation, both North and South, was at risk; therefore, the sacrifice was worth the cost.

During the Second World War, the American people suffered more than 400,000 combat deaths.⁵⁰ They also endured extensive rationing of basic foodstuff, gasoline, and rubber products. They contributed time and physical effort to the war effort by planting Victory Gardens,

^{49.} See Bob Zeller, "How Many Died in the American Civil War? History, January 6, 2022, https://www.history.com/news/american-civil-war-deaths, and Guy Gugliotta, "New Estimate Raises Civil War Death Toll," *New York Times*, April 2, 2012, https://www.nytimes.com/2012/04/03/science/civil-war-toll-up-by-20-percent-in-new-estimate.html.

^{50. &}quot;America's Wars," Department of Veterans Affairs, May 2021, https://www.va.gov/opa/publications/factsheets/fs_americas_wars.pdf.

conducting metal and rubber scrap drives, and forfeiting the opportunity to purchase various commercial products such as automobiles or tires.⁵¹ Again, this was accepted with almost universal popular US support and unity because of the recognition of the threat to the nation.

The American people may well be willing to accept such casualties and sacrifices—if they perceive the national threat is so severe that the sacrifice is worth the ultimate goal. The recapture or defense of various islands and atolls in the western Pacific, most of which the average American cannot locate or even pronounce, is unlikely to make the short list of those goals worthy of sacrifice.

DISCLAIMER: This article represents the views/opinions of the author alone and is in no way a representation of United States Army, the Department of Defense, or the United States Government.

^{51.} Aaron Kassraie, "Just How Tough Was World War II Rationing? Very: A Look Back on Sacrifices Americans Made in Support of a Common Effort," American Association of Retired People, May 1, 2020, https://www.aarp.org/politics-society/history/info-2020/world-war-ii-rationing.html.



Motivations for Developing Nuclear Weapons Programs: Argentinean and Brazilian Case Study

Elmas Hasanovikj

Abstract

To date, eight countries have declared possession of nuclear weapons, while Israel, although generally believed to possess nuclear weapons, has not yet declared. In the past, many countries have decided to go nuclear, while some have decided to abandon nuclear programs. In North and South America, only the US is a known nuclear power. By using Brazil and Argentina as case studies, this paper examines the main motivations of both countries in developing a nuclear weapons program as well as the manner of their implementation of proliferation. This paper finds that the change of regime in both countries played a crucial role in how they developed nuclear weapons programs: democracy brought the needed transparency and civilian control that led to publicly abandoning the nuclear weapon programs. However, public abandonment of nuclear weapons led the military to secretly pursue nuclear programs. Furthermore, this paper argues that both Brazil and Argentina decided to go nuclear without any real fear of external aggression.

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Introduction

William Epstein argues that "the essence of the nuclear arms race is power—military, political and economic." In most cases, countries that have developed nuclear weapons capabilities were driven by security motives. For example, the US wanted to secure victory and develop nuclear weapons before Hitler's Nazi Germany did the same. The USSR wanted to strengthen its security and position vis-à-vis the United States. Great Britain developed nuclear weapons out of fear of aggression by the USSR (which already had a nuclear bomb at that time). India developed nuclear weapons because of the fear of aggression by China. Israel developed them because of the fear of being invaded by Arab states. Additionally, there are certain states that decided to develop nuclear weapons capabilities based on the sense of national pride. For example, French leader De Gaulle wanted to be as self-reliant as possible and to have an equal position on the international scene in the post-war period, equal to that of the other permanent five (P5) countries of the UN Security Council.

The purpose of this paper is to examine what drove Brazil and Argentina—both of which claimed to have produced fissile materials requisite for fashioning nuclear weapons—to go nuclear and the means of proliferation they decided to implement. Thus, this paper is divided into three parts: the first and second parts discuss Brazil and Argentina's nuclear weapons programs, respectively; the final part will draw conclusions based on the full discussion provided in this paper.

What Drove Brazil to Go Nuclear?

The origins of Brazil's nuclear interests can be traced to the 1930s, when initial studies on nuclear fission took place. The first nuclear deal occurred in 1940, when Brazil agreed to export monazite sand to the United States.² Later, from 1964, when João Goulart was overthrown by a coup, to the late 1980s, Brazil was under military dictatorship.³

^{1.} William Epstein, "Why States Go—And Don't Go—Nuclear," *Annals of the American Academy of Political and Social Science* 430, no. 1 (1977): 17, https://doi-org/10.1177/000271627743000104.

^{2.} Jean Krasno, "Brazil's Secret Nuclear Program," *Orbis* 38, no. 3 (1994): 425–437, https://doi.org/10.1016/0030-4387(94)90006-X.

^{3.} Tracy Ann Breneman, Brazil's Authoritarian Experience, 1964–1985: A Study of Conflict, Conflict Research Consortium Working Paper No. 95-1. University of Colorado, September 1995.

During the military regime, Brazil intensified its efforts to develop nuclear weapons capabilities. The Brazilian government has justified its nuclear program with claims that its nuclear energy program was a response to the 1973 oil crises. However, the Brazilian government was criticized for lacking justification for massive investments in nuclear energy because most of Brazil's electricity at that time was produced from hydropower plants and not petroleum, and so there were no shortages of electricity at that time.

Another reason why Brazil's nuclear rhetoric was not justifiable at that time is the economic side of nuclear energy. At that time, the cost of installing one kilowatt of nuclear capacity was estimated to be between US\$2,500 and US\$3,000, compared with US\$1,500 for one kilowatt of hydropower, making it almost two times more expensive than hydropower energy. Due to its economic policy, the public debt of Brazil from 1977 to 1986 increased to 60 percentage of its GDP, and the inflation rate spiked to a record high of 6,100% in 1993–1994.

Third, "Brazil has the second largest recoverable coal reserves in the Western Hemisphere and enormous unexploited hydropower po-

^{4.} Etel Solingen, "Managing Energy Vulnerability: Brazil's Adjustments to Oil Dependency," *Comparative Strategy* 10, no. 2 (1991): 177–199, https://doi.org/10.1080/01495939108402841.

^{5.} At that time, Chairman of the Physics Department at University of Sao Paolo Jose Goldemberg was a fierce critic of the nuclear program of the Brazilian government. For more information, see James Cameron, "Technology, Politics, and Development: Domestic Criticism of the 1975 Brazilian–West German Nuclear Agreement," *Revista Brasileira de Política Internacional* 61, no. 2 (2018): e0001, http://dx.doi.org/10.1590/0034-7329201800201.

^{6.} Brazil was in the process of building the largest hydroelectric plant on the Parana River with a capacity of 12,000-megawatts/hour that was capable of satisfying the increases in electricity consumption in the following years. See José Goldemberg, "Looking Back: Lessons from the Denuclearization of Brazil and Argentina," *Arms Control Today* 36, no. 3 (2006): 41–43.

^{7.} Clivia M. Sotomayor Torres and Wolfgang Rudig, "Nuclear Power in Argentina and Brazil," *Review of Radical Political Economics* 15 no. 3 (1983): 72, https://doi.org/10.1177/048661348301500307.

^{8.} Pedro Cavalcanti Ferreira and Marco Bonomo, "The Political Economy of Public Debt in Brazil," Guncação Getulio Vargas (n.d.), 9, https://www.fgv.br/professor/epge/ferreira/PolEconDebt.pdf.

^{9.} G. Tullio and M. Ronci, "Brazilian Inflation from 1980 to 1993: Causes, Consequences and Dynamics," *Journal of Latin American Studies 28*, no. 3 (1996): 636, https://www.jstor.org/stable/157697.

tential.¹⁰ Additionally, Brazil has the "world's eighth largest uranium reserves."¹¹ Brazil clearly had many other natural resources that would be more cost-efficient¹² for generating electricity rather than nuclear energy.

In reality, Brazil developed a nuclear weapons program primarily because the military regime wanted to develop nuclear weapons in response to Argentina's nuclear program. Brazilian authorities believed that, if successful, they would gain additional legitimacy among their people and boost Brazil's power nationally and internationally. In short, their motivations were based solely on a sense of national pride, prestige, and seeking status as a regional hegemon. With the change of regime from military to civilian, the nuclear policy of Brazil has drastically changed. 15

Way of Proliferation and Technological Capabilities of Brazil

As a means of proliferation, Brazil wanted to purchase nuclear technology for ostensibly civilian purposes and then use it to develop nuclear weapons capabilities. At the same time, they refused to sign the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and did not accept safeguards until the mid-1990s. In this regard, Brazilian nu-

^{10.} Jason C. Willett, Robert B. Finkelman, Wolfgang Kalkreuth, and Alex. W. Karlsen, "World Coal Inventory: Brazil," US Geological Survey, 2006, https://pubs.usgs.gov/of/2006/1241/Chapter%203-Brazil.pdf.

^{11. &}quot;Supply of Uranium," World-Nuclear.org, September 2021, https://www.world-nuclear.org/information-library/nuclear-fuel-cycle/uranium-resources/supply-of-uranium.aspx

^{12.} Considering the capital costs, investment costs, costs related with operation of the power plants, etc; costs are cheaper for hydropower plants that use fossil fuels (thermal coal) than for nuclear power. See "Nuclear Power Is the Most Reliable Energy Source and It's not Even Close," Office of Nuclear Energy, March 24, 2021, https://www.energy.gov/ne/articles/nuclear-power-most-reliable-energy-source-and-its-not-even-close. The cost of maintaining coal plants is higher, and you need two coal factories for every nuclear factory in order to produce the same amount of energy).

^{13. &}quot;Nuclear Weapons Programs," GlobalSecurity.org, https://www.globalsecurity.org/wmd/world/brazil/nuke.htm.

^{14.} Barry M. Blechman and Alexander K. Bollfrass, Eds., *National Perspectives on Nuclear Disarmament*, Henry L. Stimson Center, March 2021, 3, https://www.stimson.org/wp-content/files/file-attachments/National Perspectives on Nuclear Disarmament.pdf

^{15.} Adriano Nervo Codato and Miriam Adelman, "A Political History of the Brazilian Transition from Military Dictatorship to Democracy," *Curitiba* 2 (2006), 33.

clear weapons ambitions can be divided into two categories: *experimental program* and *clandestine weapons program*.

The experimental program dates from the mid-1950s to the late 1960s. Brazilian nuclear plans during this period did not go as well as they expected. Brazil secretly tried to buy nuclear technology from a German nuclear physicist. The American Central Intelligence Agency (CIA) intercepted the deal and confiscated the centrifuges 20 hours before they were due to be shipped to Brazil. Nonetheless, records reveal that Brazil succeeded in purchasing three Soviet-style Zippe centrifuges of an early design in the mid-1950s. However, Brazil had difficulties manufacturing these centrifuges due to corrosion and strength issues related to the materials chosen for production.

In 1965, Brazil concluded a nuclear cooperation agreement with the United States in which Brazil purchased a Westinghouse light-water reactor for its Angra-I power plant that was delivered in 1971. Brazilian scientists objected to the government's "decision to purchase a light-water power reactor fueled by slightly enriched uranium, preferring instead heavy-water technology, as adopted by Argentina and India." In 1967, Juan Flegenheimer developed an experimental program for enriching uranium with a gaseous diffusion method and discover[ed] how to reprocess the plutonium based on the work of Scottish scientist Thomas Graham. However, during this period Brazil did not succeed in making any progress in enriching uranium.

^{16.} Krasno, "Brazil's Secret Nuclear Program," 425.

^{17.} Joel Ullom, "Enriched Uranium Versus Plutonium: Proliferant Preferences in the Choice of Fissile Material," *The Nonproliferation Review* 2 no. 1 (1994): 8, https://doi.org/10.1080/10736709408436562.

^{18.} R. Scott Kemp, "The Nonproliferation Emperor Has No Clothes: The Gas Centrifuge, Supply-Side Controls, and the Future of Nuclear Proliferation," *International Security* 38, no. 4 (2014): 39–78. https://doi.org/10.1162/ISEC_a_00159.

^{19.} Daphne Morrison, "Brazil's Nuclear Ambitions, Past and Present," NTI, August 31, 2006, https://www.nti.org/analysis/articles/brazils-nuclear-ambitions/.

^{20.} John R. Redick, "Nuclear Illusions: Argentina and Brazil," Henry L. Stimson Center, December 1995, 7, https://www.stimson.org/wp-content/files/file-attachments/Occasional Paper No. 25 December 1995.pdf.

^{21.} Tatiana Coutto, "An International History of the Brazilian—Argentine Rapprochement," *The International History Review* 36, no. 2 (2014): 302–23, https://doi.org/10.1080/07075332.2013.864987.

^{22. &}quot;Gaseous Diffusion Technology Developed." Ports Virtual Museum, https://www.portsvirtualmuseum.org/history/process-principles.html.

The clandestine weapons period lasted from 1975 to 1990.²³ This period started when Brazil signed an agreement for cooperation with West Germany that "envisaged the construction of two new plants at the Angra site (Angra II and III) with increasing participation of Brazilian local industries," as well as the "establishment of uranium fuel enrichment and plutonium reprocessing facilities."²⁴ This agreement included uranium exploration and mining, fuel fabrication, uranium enrichment, reactors, reactor components, and reprocessing technology.²⁵

In other words, Brazil intended to get the necessary technology from other countries and *to develop a complete fuel cycle* in order to decrease its dependence on foreign suppliers. This deal was strongly opposed by the United States in the wake of India's so-called "peaceful" nuclear test, and Brazil reluctantly accepted bilateral safeguards of its civilian nuclear program.²⁶ Therefore, Brazil was denied the gas centrifuge technology from West Germany and agreed to develop the experimental jet-nozzle technology that proved to be very costly and ineffective.²⁷ The failure of the jet nozzle uranium enrichment program frustrated the military officials who later authorized the secret nuclear weapons program, known as the "parallel program."²⁸

In 1978 Brazil started its secret nuclear weapons program²⁹ under the initiative of Captain Othon Pinheiro Da Silva,³⁰ who started to build the enrichment-centrifugation³¹ system that was triggered by US

^{23.} In 1978, President Figueiredo approved the Autonomous Program of Nuclear Technology (PATN).

^{24.} Dani K. Nedal and Tatiana Coutto, "Brazil's 1975 Nuclear Agreement with West Germany," Wilson Center, September 2013, https://www.wilsoncenter.org/publication/brazils-1975-nuclear-agreement-west-germany.

^{25.} Torres and Rudig, "Nuclear Power."

^{26.} Sharon Squassoni and David Fite, "Brazil's Nuclear History," Arms Control Association, https://www.armscontrol.org/act/2005-10/brazils-nuclear-history.

^{27.} Redick, "Nuclear Illusions," 10.

^{28.} The program was initiated by General Ernesto Geisel (1974–78) and reached full flower under the leadership of General Joao Baptista Figueiredo (1978–85), while it was "coordinated" by CNEN President Rex Nazareth Alves. See Redick, "Nuclear Illusions."

^{29.} Brazilian President Figueiredo approved a clandestine parallel nuclear program: the Autonomous Program of Nuclear Technology. (PATN). http://www.nti.org/analysis/articles/brazils-nuclear-ambitions/

^{30.} He studied three years at MIT University in the United States, where he gained insights on how to build the enrichment-centrifugation system.

^{31.} Da Silva attended the Nuclear Chemical Engineering class of Professor

President Jimmy Carter's policies, which prohibited "third-party exports of sensitive technology." The so-called "parallel program" implemented three different methods intended to produce weapons-grade fissile materials within the military: (1) the Navy, in cooperation with the Institute for Energy and Nuclear Research (IPEN), developed the ultracentrifuges for uranium enrichment; (2) the Army worked on building graphite reactors suitable for plutonium production, and (3) the Air Force worked on laser enrichment of uranium and construction of a nuclear test site. The intention was to run different methods at the same time with the hope that at least one would be successful.

Indeed, the Navy's submarine project, under the leadership of Da Silva, succeeded in making a small module of a gaseous-centrifugation system of about 500 centrifuges, which produced small quantities of 20-percent-enriched uranium.³⁴ The Navy's official rationale was "to enrich fuel for a compact power plant used in submarine propulsion."³⁵ The Army and Air Force projects proved to be unsuccessful and were abandoned.

In 1980, Da Silva reluctantly agreed to visit the Argentinean Constituyentes Atomic Center, during which he realized that Argentina was importing highly-enriched uranium (HEU) from China. In 1984, Brazil made a similar deal with China. Regardless of the intentions of the Brazilian regime to build a complete nuclear fuel cycle and to decrease their dependency on foreign suppliers, Brazil heavily depended on foreign suppliers and their equipment. For example, it was dependent on the import of fuels from the United States, HEU from China, and

Manson Benedicts at MIT, who was in charge of the diffusion enrichment program at Oak Ridge, Tennessee, during the Manhattan Project. From Benedicts' class, as well as from other guest-lecturers from Oak Ridge, Da Silva learned how to compose the gaseous-centrifugation system that he later implemented in Brazil. See also Erico Guizzo, "How Brazil Spun the Atom, IEEE Spectrum, https://spectrum.ieee.org/tech-history/space-age/how-brazil-spun-the-atom.

- 32. Matias Spektor, "The Long View: How Argentina and Brazil Stepped Back from a Nuclear Race," Americas Quarterly, October 28, 2015, http://www.americasquarterly.org/content/long-view-how-argentina-and-brazil-stepped-back-nuclear-race.
- 33. Joseph Cirincione, "A Brief History of the Brazilian Nuclear Program," Carnegie Endowment for International Peace, August 18, 2004, https://carnegieendowment.org/2004/08/18/brief-history-of-brazilian-nuclear-program-pub-15688.
 - 34. Guizzo, "How Brazil."
 - 35. Goldemberg, "Looking Back," 42.
 - 36. Coutto, "An International History."

technology and skilled personnel from both the United States and West Germany.

In general, the motivations for going nuclear were based on the military leadership's desire to develop nuclear weapons capabilities faster than Argentina, but the means of proliferation were mainly determined by many factors that undermined the endeavor, including institutional factors and technological constraints in choosing which technology should be used, lack of cooperation between policymakers and the scientific community, and lack of skilled personnel. The main reason Brazil has abandoned its nuclear weapons program is because of the regime change—the shift from a military to a civilian regime. However, financial and technological constraints as well as public pressure have also played certain roles.

What Drove Argentina to Go Nuclear?

Since 1950, Argentina has defended its right to develop a civilian nuclear energy program for peaceful purposes, and it has taken a stand against the NPT that international Argentinian statesman José María Ruda called a treaty for "disarmament of the unarmed." There is no clear indication that Argentina intended to develop a nuclear weapons capability; however, under the military regime, these intentions were unclear because they developed technology and materials that could be used for fashioning nuclear devices or weapons. The Argentinean military regime (1973-1983) was motivated to develop a nuclear weapons program in order to "balance Brazil's dominance in conventional weapons."38 They were also driven by the sense of prestige and material benefits³⁹ related to the program that would secure Argentina a seat among the great powers. The Argentinean nuclear program was under strict military control, and, like its Brazilian counterpart, the Argentinean government at that time refused both to join the NPT and to accept the full scope of safeguards on its nuclear facilities.⁴⁰

^{37.} Frederico Merke, "Argentina in a Changing Nuclear Order: An Appraisal," in *Perspectives on the Evolving Nuclear Order*, edited by Toby Dalton, Togzhan Kassenova, and Lauryn Williams, 15–19, Carnegie Endowment for International Peace, 2016.

^{38.} Paul Davis, "Giving Up the Bomb: Motivations and Incentives," Carleton University, May 2009, 8, https://studylib.net/doc/8448604/giving-up-the-bomb--motivations-and-incentives.

^{39.} Ullom, "Enriched Uranium," 9.

^{40.} John Walsh, "Argentina Formulates Nuclear New Deal," Science 223 no.

Regardless of its nuclear ambitions, Argentina was among the first countries to sign the Treaty of Moscow for the Partial Prohibition of Nuclear Testing, and was a strong advocate for prohibiting explosions of any type in Antarctica. Argentina cooperated with the West German company Siemens and its subsidiary body Kraftwerk Union. They also purchased nuclear technology from the US, which supplied them with heavy-water. Nevertheless, the nuclear weapons program started by the Argentinean military regime was stalled by "the cut-off of enriched uranium supplies," as well as Jimmy Carter's decision to ban the "third-party exports of sensitive technology."

A Way of Proliferation and Technological Capabilities

The first signal of Argentina's interest in nuclear weapons can be traced to 1945, when the Argentinean War Ministry issued decree No. 22855-45, which prohibited the export of uranium. ⁴⁵ As with Brazil, Argentinean nuclear weapons ambitions can be divided into two categories: *experimental program* and *clandestine weapons program*.

The first period dates from 1945–1972, when Argentinean President Juan Perón authorized the development of an experimental nuclear program under the leadership of Ronald Richter, who promised President Perón that he could "control thermonuclear reactions through nuclear fission;" until then, "the only reactions achieved had been by nuclear fission." In 1950, Richter's program led Argentina to establish its Atomic Energy Commission, and, since then, Argentina has made major efforts to adopt a strategy of "independence in nuclear development," such as building their own reactors instead of importing them from the US.⁴⁷

However, Richter's nuclear program failed in 1952. The commission that investigated his program concluded that it had failed due to his incompetence. The commission found that he was a theoretical 4637 (1984): 669–70.

- 42. Sheinin and Figallo.
- 43. Ullom, "Enriched Uranium," 9.
- 44. Spektor, "The Long View."
- 45. Sheinin and Figallo, "Nuclear Politics," 101.
- 46. Sheinin and Figallo, 102.
- 47. Torres and Rudig, "Nuclear Power," 68.

^{41.} David Sheinin and Beatricz Josephina Figallo, "Nuclear Politics in Cold War Argentina," MACLAS Latin American Essays (2001), 106, https://www.questia.com/library/journal/1G1-92615137/nuclear-politics-in-cold-war-argentina.

physicist with lack of engineering experience in the field. Additionally, he operated in total secrecy and away "from both the scrutiny and collaboration of other scientists and technicians." Additionally, in the period from 1969 to 1972, Argentina operated a number of West German hot cells. 49

On the other hand, the clandestine nuclear weapons program dates from 1973–1983. Argentina started its nuclear program earlier than Brazil did, and it consisted of several nuclear reactors and a small gas diffusion enrichment plant. In order to get the technology needed to produce heavy-water and to recycle plutonium, Argentina wanted to join the Nuclear Suppliers Group, but its request was denied. In 1973, after long and intense negotiations with the United States, Canada, and West Germany, Argentina decided to purchase the pressurized heavy-water "CANDU" reactor from Canada. Argentina had chosen the CANDU option because the uranium-based reactors decreased "Argentina's dependency on external suppliers of nuclear fuel. Additionally, Argentina chose the heavy-water option because it wanted to take "advantage of indigenous uranium deposits and avoid dependence on foreign enrichment services. Their indigenous uranium deposits were considered to be ideal for bomb production purposes.

Not being part of the NPT and refusing to accept the full scope of safeguards, Argentina seized the opportunity to build numerous facilities for uranium mining, milling, conversion, and fuel fabrication, as well as gaseous diffusion enrichment plants that were supplied by Canada and West Germany (power reactors), Switzerland (heavy-water plants) and the Soviet Union.⁵⁶

^{48.} David Sheinin, "Dictatorship and Disarmament in Argentina 1965–1973," 2001, 102, http://lasa.international.pitt.edu/Lasa2001/SheininDavid.pdf.

^{49.} Ullom, "Enriched Uranium."

^{50.} Goldemberg, "Looking Back."

^{51.} Coutto, "An International History."

^{52.} David Martin, "Exporting Disaster ~ Chapter 3 the Cost of Selling CANDU Reactors, Case of Argentina, India, Pakistan and Taiwan," Nuclear Awareness Project, 1996, http://www.ccnr.org/exports_3.html.

^{53.} Coutto, "An International History."

^{54.} Ullom, "Enriched Uranium," 9.

^{55.} Torres and Rudig, "Nuclear Power," 72.

^{56.} Soviet Union as a supplier of nuclear equipment. See Jonathan Garbose, "Nuclear Weapons Program," FAS.org, May 30, 2012, https://nuke.fas.org/guide/argentina/nuke/index.html.

However, in the late 1970s and early 1980s, Carter's decision to ban the third-party exports of sensitive technology triggered Argentina, in 1978, to start the Reduced Enrichment Research and Test Reactors program⁵⁷ (RERTR), which ran the reprocessing facility at Ezeiza and the gaseous diffusion facility at Pilcanyeu. Moreover, the main reason why Argentina decided to develop a gaseous diffusion plant is because it felt that the technology could be developed indigenously, as it feared that "ordering parts for an enrichment system would attract foreign attention." This project was run by Da Silva's former MIT colleague, Domingo Giorsetti, who, for the purposes of the RERTR program, succeeded in importing heavily enriched uranium from China. Pargentina also reversed its earlier objection to signing the NPT and became eager to sign the treaty because that would "reinforce the perception of Brazil as a potential proliferator."

Furthermore, Argentina strongly supported any "arms control initiative beyond the Americas." Argentina has justified its reprocessing and gaseous diffusion plants with the need to produce low-enriched uranium fuels (LEU) for the research reactors that it wanted to sell to its foreign customers. This implies that Argentina tended to develop a dual-proliferation strategy similar to India's—to work on enriching weapons-grade uranium under the cover of its nuclear nonproliferation advocacy.

However, regardless of its efforts to bring all elements of the nuclear fuel cycle under its control, Argentina heavily depended on the transfer of technology and materials from foreign suppliers. Argentina had abandoned its program primarily because of the regime change, or in other words, the regime of democracy had increased the transparency and scrutiny over the nuclear programs, which had led to the abolition of their nuclear weapons program.

^{57.} Domingo R. Giorsetti, "Status of the RERTR Program in Argentina," International Atomic Energy Agency, 8, https://inis.iaea.org/collection/NCLCollectionStore/_Public/22/069/22069714.pdf. https://inis.iaea.org/collection/NCLCollectionStore/_Public/22/069/22069714.pdf.

^{58.} Ullom, "Enriched Uranium," 10.

^{59.} Coutto, "An International History."

^{60.} Coutto.

^{61.} Sheinin, "Dictatorship," 4-5.

^{62.} Leonard Weiss, "India and the NTP," Strategic Analysis 34, no. 2 (2010): 255–71. https://doi.org/10.1080/0970016090353785.

Last but not least, in 1967 Argentina and Brazil and 30 other states (Cuba was the only detractor, not signing until 23 October 2002) signed The Tlatelolco Treaty,⁶³ intended to establish a Free Nuclear Weapons Zone in Latin America and the Caribbean.⁶⁴ However, they did not adhere to the agreement and refused to accept full-scope safeguards until the mid-1990s.⁶⁵ Later, Argentina and Brazil signed a Bilateral Agreement for the exclusive peaceful use of nuclear energy in July 1991, which was enforced by the Common System of Accounting and Control of Nuclear materials (SCCC).⁶⁶ Further, that same day, the two countries established the Brazilian–Argentinean Agency for Accounting and Control of Nuclear Materials (ABACC), which included with the Quadripartite Agreement, which included application of IAEA safeguards.⁶⁷

Conclusion

The main motive that drove Argentina and Brazil to develop nuclear weapons was the desire to achieve military and scientific prestige visà-vis each other, rather than any real fear of aggression. The Brazilian and Argentinean nuclear weapon programs are perfect examples that indicate that the personal motivation of leadership is the strongest determinant of whether certain countries will go nuclear or not. The shift of regime in both Brazil and Argentina to adopt democracy brought new insights, such as transparency and civilian control, which led to open abandonment of their nuclear weapons programs, whereas the

^{63.} This Treaty was initiated by Costa Rica in 1958; it proposed a nuclear arms control agreement of the Latin American states at an Organization for the American States (OAS) Council meeting.

^{64.} Morrison, "Brazil's Nuclear Ambitions."

^{65.} Department of State, "Argentina and Chile Bring into Force The Treaty for the Prohibition of Nuclear in Latin America and the Caribbean (The Treaty of Tlatelolco)," January 20, 2001, https://2001-2009.state.gov/t/isn/rls/fs/2001/4595.htm.

^{66.} Argentina and Brazil were committed to the following: All nuclear materials and facilities under their jurisdiction or control shall be used for peaceful purposes only; and Either or direct or indirect way to prohibit and prevent in their respective territories as well as to abstain from carrying out testing, use, manufacture, production or acquisition by any means of any nuclear weapon; and the receipt, storage, installation, deployment or any other form of possession of any nuclear weapon. For more information, please refer to the following link: https://search-proquest-com.prox.lib.ncsu.edu/docview/211260940?pq-origsite=summon.

^{67.} Morrison, "Brazil's Nuclear Ambitions."

military regimes pursued secret nuclear weapons programs.

The Argentinean and Brazilian examples prove that if certain countries decide to go nuclear, the domino effect is more likely to occur in the neighboring region. In order to prevent that from happening, eliminating the reasons that drove the leadership to go nuclear is the most important step towards nuclear disarmament and nonproliferation. The "neighbor-controlling-neighbor" approach proved to be successful regarding countries that are neither NPT signatories' parties nor under full-scope safeguards. Thus, this approach could be successful in other regions too. Certainly, Argentina and Brazil are among the best examples of the world's nuclear nonproliferation history.



From a Weak State to a Failed State: Push and Pull Factors in Burkina Faso

Mallika Parlikar

Burkina Faso, a west African country long praised for its seeming stability in a region ravaged by violence, has found itself, too, a victim of the same forces destabilizing the rest of the Sahel. The prevailing narrative argues that the small land-locked country's conflict is simply the Malian civil war permeating Burkina's borders. This argument undermines pervasive issues at the local level that have led rural Burkinabè populations to sympathize with Malian militants. The following factors led to the conflict we see in Burkina today: weak state structures and corrupt local practices in Burkina's rural neighborhoods resulted in negative sentiments towards the state, and involuntary migration from Mali crippled the weak state structures in areas where refugees settled, nurturing grievances by local Burkinabè. Exacerbated by Malian refugees, non-state actors exploited these sentiments to gain territory in the region. which nurtured grievances by local Burkinabè.

Introduction

International relations (IR) theory has long viewed migration as a consequence of conflict, rather than a potential cause. When migration as a cause of conflict came into the scope of IR research, academics began to consider the effects migrants have on their receiving country, specifically in their relationships with non-state actors and their state of origin. In this context, receiving states have become implicated in the

1. Stephen Castles, "Towards a Sociology of Forced Migration and Social Transformation," *Sociology* 37, no. 1 (February 2003): 18; Maggie Ibrahim, "The Securitization of Migration: A Racial Discourse," *International Migration* 43, no. 5

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conflict-migration nexus, as many of them ignore belligerents embedded among involuntary migrants, who then use receiving states as a launching ground for attacks on their country of origin.²

In recent decades, Burkina Faso's neighboring states—Liberia, Sierra Leone, Mali, and Niger—have been consumed with conflict. Until recently, Burkina Faso had remained a strong beacon of stability. Many Burkinabè believe that the conflict in Mali has "spilled over" to northern Burkina and is to blame for much of the conflict in the Sahel today. The reality is that the refugee crisis in Burkina Faso has laid bare internal divisions and rural discontent with the state and its representatives. As state authority weakened in rural regions, tensions became increasingly frequent and violent. The emergence of self-defense groups, such as the Koglweogo, has further eroded government sovereignty in the region. 4

Hypotheses and Research Design

This paper seeks to answer the following question: What conditions in Burkina Faso inspired local Burkinabè to join Islamist extremist organizations? Contrary to the pervasive narrative, local Burkinabè form the nucleus of jihadist groups operating in-country.⁵ Undoubtedly,

- (2005), 173, https://doi.org/10.1111/j.1468-2435.2005.00345.x.
- 2. Karen Jacobsen, "Livelihoods in Conflict: The Pursuit of Livelihoods by Refugees and the Impact on the Human Security of Host Communities," *International Migration* 40 no. 5 (2002): 95–128, https://doi.org/10.1111/1468-2435.00213.
- 3. International Crisis Group, "The Social Roots of Jihadist Violence in Burkina Faso's North," October 12, 2017, https://www.crisisgroup.org/africa/west-africa/burkina-faso/254-social-roots-jihadist-violence-burkina-fasos-north, i.; Manni Crone, Mona Kanwal Sheikh, Lars Erslev Andersen, Maria-Louise Clausen, and Isak Svensson, "Expanding Jihad: How Al-Qaeda and Islamic State Find New Battlefields," Danish Institute for International Studies, September 27, 2017, https://www.diis.dk/en/event/expanding-jihad-how-al-qaeda-and-islamic-state-find-new-battlefields; Corinne Dufka, "By Day We Fear the Army, by Night the Jihadists': Abuses by Armed Islamists and Security Forces in Burkina Faso," Human Rights Watch, 2018, 8, https://reliefweb.int/report/burkina-faso/day-we-fear-army-night-jihadists-abuses-armed-islamists-and-security-forces; Robin Geiss, "Armed Violence in Fragile States: Low-Intensity Conflicts, Spillover Conflicts, and Sporadic Law Enforcement Operations by Third Parties," *International Review of the Red Cross* 91 no. 873 (March 2009): 128, https://corteidh.or.cr/tablas/R32030.pdf.
 - 4. Geiss, "Armed Violence," 128.
- 5. International Crisis Group, "Burkina Faso: Stopping the Spiral of Violence," February 24, 2020, 2, https://d2071andvip0wj.cloudfront.net/287-burkina-faso-spiral-of-violence.pdf.

the Malian conflict has influenced violence in Burkina, specifically in regards to involuntary migration. Hence the question arises: how have Malian refugees influenced the conflict in Burkina Faso? I posit that weak state structures served as a push factor in Burkina Faso. On its own, weak state structures were insufficient to incite conflict, but the Malian refugee crisis in Soum province, Burkina Faso, was the compounding pull factor that stressed the system enough to incite violence in the region.

This paper will examine the hypothesis by considering conceptual literature on the migration-conflict relationship and the weak state structure-conflict relationship. It will examine research conducted on the conflict in Burkina Faso, drawing on interpretations from interviews conducted with local Burkinabè from multiple provinces, including Soum, which is at the heart of the conflict. For the purpose of this research, our dependent variable is intrastate conflict intensity in Burkina Faso, and our independent variables are weak state structures in the region and levels of migration.

Pull Factor: Involuntary Migration

As literature surrounding migration as a cause rather than a consequence has expanded, many academics have come to recognize that refugee flows from civil wars are a destabilizing force to host countries.⁶ The regional conflict system that emerges from this is a geographically clustered group of states engaging in a migration-conflict-migration pattern that perpetuates instability.⁷ Conflicts that bloom from these interactions are, therefore, by their very nature, inextricably intertwined with the different diasporas of sub-state and transnational actors. Regional security issues can then be viewed as subsystems of the international system, having their own structures of interactions.⁸

Most notably, Myron Weiner coined these types of dynamics "Bad

^{6.} Paul Collier, V. L. Elliott, Håvard Hegre, Anke Hoeffler, Marta Reynal-Querol, and Nicholas Sambanis, "Breaking the Conflict Trap: Civil War and Development Policy," World Bank Group 41, https://doi.org/10.1596/978-0-8213-5481-0.

^{7.} C. Kevin Taber, "A Migratory Mess or a Demographic Peace? Voluntary and Involuntary Population Flows and Conflict Intensity in Sub-Saharan Africa," *African Conflict and Peacebuilding Review* 8, no. 2 (2018): 6, https://doi.org/10.2979/africonfpeacrevi.8.2.01.

^{8.} Barry Buzan and Richard Little, *International Systems in World History:* Remaking the Study of International Relations (New York: Oxford University Press, 2000), 4.

Neighborhoods" that are simply "regions with a number of countries in which violence and brutality impel large numbers of people to cross international borders in search of security." Refugees, victims of these bad neighborhoods, unknowingly extend the reach of rebel groups and enable ideologies, weapons, and combatants to permeate borders. This migration stresses state capacity and its ability to use state authority and force to control violence within its borders.

Unsurprisingly, IR research has tied countries with neighboring areas experiencing civil war to an increased likelihood they will contract civil war themselves. 12 The research also finds that refugees from neighboring countries have "a substantial impact on political violence." 13 The "contagiousness" of civil war is anticipated by neighboring states as well. States tend to repress potential rebels more severely when a regional neighbor experiences civil conflict than when they are peaceful. 14

Migration research has been relatively silent in regards to the African continent. But recent research has shown that increased levels of migration in Sub-Saharan African countries is associated with a higher likelihood that "disputing receiving and sending states will reach a violent level of hostility in their interactions with one another." As violence increased in the border region between Cote d'Ivoire and Burkina Faso, tensions between the two countries have risen exponentially. Very little has been studied on conflict and migration, specifically in the

^{9.} Myron Weiner, "Bad Neighbors, Bad Neighborhoods: An Inquiry into the Causes of Refugee Flows," *International Security* 21, no. 1 (1996): 26, https://doi.org/10.1162/isec.21.1.5.

^{10.} Graeme P. Auton and Jacob R. Slobodien, "The Contagiousness of Regional Conflict: A Middle East Case Study," *Journal of International Affairs* 69, no. 2 (2016): 7.

^{11.} Auton and Slobodien, 5.

^{12.} Idean Salehyan and Kristian Skrede Gleditsch, "Refugees and the Spread of Civil War," *International Organization* 60, no. 2 (2006): 355–56, https://doi.org/10.1017/S0020818306060103.

^{13.} Salehyan and Gleditsch, 360.

^{14.} Nathan Danneman and Emily Hencken Ritter, "Contagious Rebellion and Preemptive Repression," *Journal of Conflict Resolution* 58, no. 2 (2014): 272, https://doi.org/10.1177.0022002712468720.

^{15.} Taber, "A Migratory Mess," 19.

^{16.} Armed Conflict Location & Event Data Project, "In Light of the Kafolo Attack: The Jihadi Militant Threat in the Burkina Faso and Ivory Coast Borderlands," 2020, 4, https://acleddata.com/2020/08/24/in-light-of-the-kafolo-attack-the-jihadi-militant-threat-in-the-burkina-faso-and-ivory-coast-borderlands/.

Sahel region, where migration has played a critical role not only in the conflict but also in important economic activity. In Burkina Faso, pastoralists represent forty percent of the workforce.¹⁷

Burkina Faso did not host large refugee populations prior to the Malian conflict's onset in 2012.¹⁸ Since then, the country has hosted approximately 20,000 Malian refugees in Mentao and Goudoubo camps, both of which lie in the northern Sahel region.¹⁹ With more than 780,000 internally displaced people (IDP) of their own, Burkina is struggling to survive, and many Malian refugees have opted to move back to Mali, accepting the risk in their home country over the increasing turmoil in Burkina Faso.²⁰

The effects of Malian migration to Burkina Faso are multifold. Borders in the tri-state area between Burkina Faso, Mali, and Niger have become incredibly porous, allowing belligerents to not only move freely back and forth but also to carry out transnational smuggling activities. The porousness of borders led to the Malian government's frequent criticism of Burkina Faso's then-President Compaoré for supporting the National Movement for the Liberation of Azawad (MNLA), which had fallback bases across the border in Burkina. The country also suffers from resource competition. With an economy largely relying on pastoralism, refugee populations only increase resource competition

^{17.} Loïc Bisson, Ine Cottyn, Kars De Bruijne, and Fransje Molenaar, "Between Hope and Despair: Pastoralist Adaptation in Burkina Faso," Clingendael Institute, 2021, 5, https://www.clingendael.org/sites/default/files/2021-02/between-hope-and-despair.pdf.

^{18.} United Nations High Commissioner for Human Rights (UNHCR), "Refugee Data Finder," https://www.unhcr.org/refugee-statistics/download/?url=h6tK9X.

^{19.} Moussa Bougma, "Fresh Start for Malian Refugees in Burkina Faso as Camp Reopens," UNHCR, April 1, 2021, https://www.unhcr.org/en-us/news/stories/2021/4/605b65304/fresh-start-malian-refugees-burkina-faso-camp-reopens.html.

^{20. &}quot;Violence in Burkina Faso Forces Malian Refugees to Return Home," UNHCR, March 13, 2020, https://www.unhcr.org/news/briefing/2020/3/5e6b56774/violence-burkina-faso-forces-malian-refugees-return-home.html.

^{21.} Crone et al., "Expanding Jihad," 29.

^{22.} Virginie Baudais, Amal Bourhrous, and Dylan O'Driscoll, "Conflict Mediation and Peacebuilding in the Sahel: The Role of Maghreb Countries in an African Framework," Stockholm International Peace Research Institute, 9, 2021, https://www.sipri.org/publications/2021/sipri-policy-papers/conflict-mediation-and-peacebuilding-sahel-role-maghreb-countries-african-framework.

between already aggrieved farmers in the region.²³

A definitive solution does hinge, in part, on a resolution in Mali.²⁴ Soum province, where a majority of Malian refugees are located, is also the hardest hit region of Burkina Faso. Bordering the Mali and Niger borders, Soum capitulated to the stressors of the Malian conflict, exposing profound social unrest in the province. As a result of poor governance and corruption, unhappy Burkinabè began to share the resentments that many Malians felt.²⁵

Push Factor: Weak State Structures

While migration is an important factor to consider when analyzing Burkina Faso's conflict, it is insufficient on its own as a cause for conflict. Refugees served as a lynchpin to a myriad of push factors that were destabilizing Burkina Faso well before the Sahel became a "bad neighborhood." Absence of the state outside of Ouagadougou resulted in unequal access to state institutions, including overstretched or non-existent social services, such as health care, security, and water. Attempts to access resources were met with corruption and impunity from the state. Indeed, in interviews conducted with local Burkinabè, "corruption and impunity" were among the first concerns listed. 27

With the exception of occasional armed outbursts, violence in weak states tends to linger at a low intensity over extended periods of time.²⁸ In the hierarchy of political goods provided by the state, human security is critical. Individuals and groups can rarely substitute security provided by the state. These activities include preventing cross-border invasion, eliminating domestic threat, preventing crime, and enabling citizens to resolve disputes without physical coercion.²⁹ Weak states do

^{23.} Bisson et al., "Between Hope and Despair," 6-7.

^{24.} International Crisis Group, "The Social Roots," i.

^{25.} International Crisis Group, 9.

^{26.} Moussa Soumahoro, "Burkina Faso Conflict Insight," *Peace and Security Report*, 1 (March 2020): 4.

^{27.} Augustin Loada and Peter Romaniuk, "Preventing Violent Extremism in Burkina Faso: Toward National Resilience Amid Regional Insecurity," Global Center on Cooperative Security (2014): 13, https://www.globalcenter.org/wp-content/uploads/2014/07/BF-Assessment-Eng-with-logos-low-res.pdf.

^{28.} Geiss, "Armed Violence," 127.

^{29.} Robert I. Rotberg, "Failed States, Collapsed States, Weak States: Causes and Indicators," in *State Failure and State Weakness in a Time of Terror*, ed. Robert I. Rotberg (Washington, DC: Brookings Institution Press, 2004), 3.

not always descend into failed states, but a lack of human security weighs heavily in determining levels of internal violence.³⁰ These types of states are unable to control and suppress violence within their borders. As a result, local structures develop between members of communities, forming independent, ad hoc security organizations.³¹ The outcome is a state descending into failure, operating with impunity in "its oppression of its citizens."³²

Weak state institutions, conflict, and corruption are interdependent phenomena; as Pyman et al. note,

However, while we can observe a strong correlation between corruption and conflict (as well as armed violence and corruption) we cannot clearly say which one is caused by the other, or whether they are both phenomena with a common cause, such as weak state institutions. Arguably, all four phenomena—corruption, conflict and insecurity, and weak state institutions—are interdependent and feedback loops exist between them."³³

Research supports the theory that civil conflict is more likely in weak states whose citizens have lower levels of income.³⁴ Furthermore, causal relationships have been identified between Rule of Law and the likelihood of terrorism.³⁵ Choi argues that effective judicial systems reinforce state and legal legitimacy. He continues, if "ordinary citizens can peacefully resolve grievances, . . . they lack feelings of hopelessness that motivate terrorist action."³⁶ Similar arguments have been made regarding levels of corruption on state legitimacy.³⁷ In addition to hurting

^{30.} Rotberg, "Failed States," 4.

^{31.} Geiss, "Armed Violence," 130.

^{32.} Rotberg, "Failed States," 4.

^{33.} Mark Pyman, Tobias Bock, Eléonore Vidal de la Blache, Saad Mustafa, and Dominik Zaum, "Corruption as a Threat to Stability and Peace," Transparency International Deutschland, 2014, 16.

^{34.} Timothy Besley and Torsten Persson, "State Capacity, Conflict, and Development," *Econometrica* 78, no. 1 (2010): 21.

^{35.} Seung-Whan Choi, "Fighting Terrorism through the Rule of Law?" *The Journal of Conflict Resolution* 54, no. 6 (2010): 941, https://whanchoi.people.uic.edu/Fighting-Terrorism-through-the-Rule-of-Law.pdf; Agnès Hurwitz and Kaysie Stuffard, "Rule of Law Programs in Peace Operations," International Peace Institute, 2005, 2.

^{36.} Choi, "Fighting Terrorism."

^{37.} Pyman et al., "Corruption," 15.

the perceived legitimacy of the state, corruption fuels sentiments of inequality and injustice, especially in resource-rich states.³⁸

Festering discontent in the rural areas of Burkina was not a well-kept secret. Disputes over land access are handled by municipal authorities, who frequently commit abuses when handling land subdivisions. Additionally, the government's lackluster response was perceived as weak, and the absence of Rule of Law left a security vacuum filled by banditry, local self-defense groups, and jihadists. Generally, interviewees frequently cited a sense of abandonment by the state—particularly the state's failure to provide basic goods and security—as underpinning violence in the region.

Disputes over Land Access

Another major grievance by local Burkinabè is a historically sensitive issue: government inadequacy in managing and protecting farmland in the rural north. Lack of development in a region that has so much agricultural and mining potential frustrates locals. ⁴² In an attempt to drive development in the remote province, Burkina passed multiple laws in 1993 on territorial organization and administration. ⁴³ In fact, resentments towards the state's absence in the region led to formation of a movement to raise its administrative status from province to region. ⁴⁴ With no action taken to support these rural areas, abandonment appears stark compared to levels of development in Ouagadougou and other southern cities. The result is a deep distrust between the state and local populations in the north. ⁴⁵

Lacking oversight from the central government, decentralized authorities in Soum mismanage land in the region, opting to grant land to non-locals, to the detriment of herders and farmers in the area. ⁴⁶ Heads

^{38.} Pyman et al., 17.

^{39.} International Crisis Group, "Burkina Faso," 7.

^{40.} International Crisis Group, 14.

^{41.} Loada and Romaniuk, "Preventing Violent Extremism," 17.

^{42.} International Crisis Group, "The Social Roots," 7.

^{43.} Eric Champagne and Ben Mamadou Ouedraogo, "Decentralization in Burkina Faso: A Policy Reform Process in Slow Motion," (2008), 5.

^{44.} International Crisis Group, "The Social Roots," 7.

^{45.} Soumahoro, "Burkina Faso," 5.

^{46.} Serigne-Bamba Gaye, "Conflicts between Farmers and Herders Against a Backdrop of Asymmetric Threats in Mali and Burkina Faso," Dakar-Fann: Friedrich-Ebert-Stiftung, 2018, 10, https://library.fes.de/pdf-files/bueros/fes-pscc/14174.pdf.

of land departments and other city employees involved in the distribution of property are frequently incriminated in speculation and corruption.⁴⁷ These officials participate in land grabbing, taking over pastoral lands for illicit, personal enrichment.⁴⁸ Jihadists then play on government mismanagement of land resources as propaganda for recruiting members.⁴⁹ Many groups leverage these sentiments to gain support for themselves by promising to restore local access to these lands.⁵⁰

Weak state structures are also incapable of resolving disputes between farmers and herders, two groups with a long history of conflict divided on ethnic and socio-economic lines.⁵¹ Before the 2014 protests, forty-nine percent of conflicts in Burkina Faso were between farmers and herders.⁵² Lacking any state authority to adjudicate their disputes, farmers and herders turn to self-defense groups, such as the Koglweogo, to keep the peace.⁵³ Resorting to self-defense groups to resolve land disputes has negatively impacted the perceived legitimacy of the state, increasing distrust between their institutions and the people.

Rise of Self-Defense Groups

As rural neighborhoods have become increasingly dangerous, self-defense groups have developed to combat banditry and theft.⁵⁴ Absence of the state has left a security vacuum in the northern and eastern regions, where it is so dangerous that some main roads have been completely abandoned.⁵⁵ Most communities who feel the State offers no protection have been drawn to non-state security organizations.⁵⁶

The oldest and most active self-defense group is the Koglweogo, meaning "guardians of the bush."⁵⁷ The Koglweogo recruit members of the Mossi, the largest ethnic group in Burkina Faso, accounting for just over fifty percent of the population.⁵⁸ Participants are predomi-

^{47.} Gaye, 17.

^{48.} Gaye, 11

^{49.} International Crisis Group, "Burkina Faso," 6-14.

^{50.} International Crisis Group, 6-14.

^{51.} Gaye, "Conflicts," 11.

^{52.} International Crisis Group, "Burkina Faso," 7.

^{53.} Gaye, "Conflicts," 22.

^{54.} Soumahoro, "Burkina Faso," 8.

^{55.} International Crisis Group, "Burkina Faso," 8.

^{56.} Gaye, "Conflicts," 21.

^{57.} Soumahoro, "Burkina Faso," 8.

^{58.} International Crisis Group, "Burkina Faso," 10.

nantly livestock farmers and workers, and the organization's mission was originally dedicated to protecting the forests against wood trafficking.⁵⁹ In the wake of increasing instability in the region, the Koglweogo has extended the scope of their mandate to include combating livestock robberies and other armed attacks.⁶⁰ Proximity to local communities, according to these groups, allows them to deliver more efficient justice than the State is able to provide.⁶¹ Estimates from 2018 show that Burkina Faso is home to around 4,500 Koglweogo groups, which account for 45,000 members nationwide.⁶²

Widespread community support has emboldened the Koglweogo to expand their scope even further. In recent years, the Koglweogo has taken over multiple state activities, including taxation, justice, and local policing. ⁶³ Using this power in the name of fighting banditry, the Koglweogo has targeted the local Fulani population in the north. ⁶⁴ The Fulani, a Muslim ethnic group known as nomadic herders in the Sahel, have frequently been cast as scapegoats of the growing jihadist insurgency in the north. ⁶⁵ As a result, they developed their own self-defense group, the Rouga. ⁶⁶ Their mandate has been to protect the local Fulani population against increasing persecution, and they have taken action to protect herders through "herder unions" in eastern Burkina. ⁶⁷

The rising legitimacy of these sub-state groups not only hampers the legitimacy of the State in the region but also renders the State unable to prosecute these groups for violating the Rule of Law.⁶⁸ The result is many of these groups continue with impunity in the regions where they enjoy widespread support. In an attempt to remedy the situation, the government passed a 2016 ruling allowing the Koglweogo to participate in combating internal violence.⁶⁹ Hoping to regulate their

^{59.} Soumahoro, "Burkina Faso," 8; Gaye, "Conflicts," 22.

^{60.} Soumahoro, 8.

^{61.} Soumahoro, 8.

^{62.} International Crisis Group, "Burkina Faso," 9.

^{63.} International Crisis Group, 9.

^{64.} International Crisis Group, 38.

^{65.} Ruth Maclean, "When the Soldiers Meant to Protect You Instead Come to Kill," *New York Times*, June 22, 2020, https://www.nytimes.com/2020/06/22/world/africa/burkina-faso-terrorism.html.

^{66.} International Crisis Group, "Burkina Faso," 38.

^{67.} International Crisis Group, 7.

^{68.} International Crisis Group, 9.

^{69.} Soumahoro, "Burkina Faso," 8.

behavior by incorporating them into the State, Ouagadougou has been unable to find resources to manage their scope. Despite this, the Koglweogo has publicly demarcated themselves from the state security apparatus. As a consequence of the government's absence, the State is unable to maintain its legitimacy and rule of law in the northern regions where the Koglweogo operate.

Failing Legitimacy

According to recent reports, government security forces, in the name of ridding the country of Islamic extremists, have killed nearly as many civilians as jihadists have. But Burkina Faso was not always like this—lack of state law and order inspired the Kogleweogo and other civilian self-defense groups to take up arms in Burkina's rural areas. And while security forces claim they are more present to provide protection, displaced Burkinabè increasingly cite attacks by security forces as the reason for their departure.

This was not the first instance in which government security forces acted with impunity. Protests in 2011 rocked Burkina Faso when soldiers mutinied, abusing civilians and plundering property. Victims of these attacks, predominantly Fulani, sought protection from local militias and jihadist groups. Impunity within security forces trickled down from President Compaoré's regime. During his tenure, he frequently acted outside the law, committing human rights abuses to those he considered to be a threat to his power, in order to maintain his reign. While many Burkinabè consider corruption a pervasive issue in society, many interviewees reported that corruption cases usually fail because judicial sanctions are too weak. This has led to an environment of impunity for officials suspected of corrupt practices in Burkina.

Corruption is one of the most-cited grievances of local Burkinabè

^{70.} International Crisis Group, "Burkina Faso," 9.

^{71.} Gaye, "Conflicts," 22.

^{72.} Maclean, "When the Soldiers Meant to Protect."

^{73.} International Crisis Group, "Burkina Faso," 6; Gaye, "Conflicts," 21.

^{74.} Alexandra Lamarche, "Atrocities and Displacement in Burkina Faso," Refugees International, May 5, 2021, https://www.refugeesinternational.org/reports/2021/5/5/atrocities-and-displacement-in-burkina-faso.

^{75.} Loada and Romaniuk, "Preventing Violent Extremism," 15–16.

^{76.} Crone et al., "Expanding Jihad," 30.

^{77.} Soumahoro, "Burkina Faso," 4.

^{78.} Loada and Romaniuk, "Preventing Violent Extremism," 14.

populations. Access and benefits to political goods are entrenched in a deeply rooted system of patronage.⁷⁹ Since the internal conflict began in 2015, many officials in the Burkinabè government have profited from trafficking and racketeering, further fueling local grievances.⁸⁰ Jihadist groups in the border regions are involved in highly profitable smuggling rings and frequently send money to ruling elite, border officials, and police.⁸¹ The issue is particularly rife in the defense sector, where corruption cripples the government's ability to respond to crises.⁸²

Conclusion

On June 5, 2021, Burkina suffered its deadliest attack yet in Solhan, a small town bordering Niger, killing around 160 people.⁸³ On the verge of becoming a failed state, Burkina Faso is crippled and unable to resolve factors that have riddled the country since the early 2000s. And while the Malian conflict and its refugee crises are important factors in Burkina's descent into conflict, they alone are insufficient to cause the sentiments held by local Burkinabè.

Long thought to be a beacon of stability in West Africa, Burkina Faso holds important lessons for the international community. Structural issues in-country have become a destabilizing factor that can trigger conflict. While the best indicator for civil war next year is whether the country is currently experiencing civil war, policy makers must remember that negative peace is not sustainable peace.⁸⁴ Weak state structures hurt rural communities, especially in West Africa. The inability of the state to provide human security, especially when neighboring areas are experiencing conflict, compounds underlying sentiments of abandonment. The conflagration that follows is the result of avoidable push factors triggered by neighboring wars.

While countries like Mauritania host almost 20,000 more refugees than Burkina Faso does and appear to be unscathed by the refugee

^{79.} Loada and Romaniuk, 15.

^{80.} Iñaki Albisu Ardigo, "Burkina Faso: Overview of Corruption and Anti-Corruption," Anti-corruption Resource Centre, November 4, 2019, 3, https://www.u4.no/publications/burkina-faso-overview-of-corruption-and-anti-corruption.pdf.

^{81.} Crone et al., "Expanding Jihad," 28.

^{82.} Crone et al., 28.

^{83.} Héni Nsaibia, "Sahel 2021: Communal Wars, Broken Ceasefires, and Shifting Frontlines," ACLED, June 17, 2021, https://acleddata.com/2021/06/17/sahel-2021-communal-wars-broken-ceasefires-and-shifting-frontlines/.

^{84.} Collier et al., "Breaking the Conflict Trap," 79.

population, Mauritania lacks the push factors to make these refugees a proximal cause of conflict.⁸⁵ Policy makers should emphasize the protection and enforcement of human security factors in regions neighboring conflict zones to counter potential underlying causes of conflict and bolster the state. Doing so will brace regions surrounding conflict to sustain and survive any pull factors that could potentially cause internal strife.

^{85.} UNHCR, "Refugee Data Finder."