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Terrorism in the Indo-Pacific*

The Year Gone By and the Road Ahead

DR. SAM MULLINS

Globally, terrorism has been on the decline since peaking in 2014, the year that the Islamic State (ISIS) declared its “caliphate” in the Middle East. Nevertheless, terrorism levels are still approximately double what they were a decade ago and around five times what they were in 2001.¹ The Indo-Pacific region, which encompasses most of Asia, as well as North America, Australasia, Oceania, and parts of South America, consistently experiences some of the highest rates of terrorism in the world, and 2019 was no exception.² This article, though by no means an exhaustive account, provides a roughly chronological overview of significant terrorist activities in the Indo-Pacific during the past year, with a particular focus on South and Southeast Asia. This is followed by several important advances in counterterrorism (CT). The article concludes by considering what these, and other developments, may portend for the future.

An Evolving Threat: Significant Developments in 2019

Suicide Bombing in the Philippines

The year began with a deadly, twin suicide bombing of the Cathedral of Our Lady of Mount Carmel in Jolo in the southern Philippines, in which 23 people lost their lives and scores more were injured. Executed by 35-year-old Rullie Rian Zeke and his 32-year-old wife, Ulfah Handayani Saleh, both from Indonesia, the attack was demonstrative of the enduring potency of the Abu Sayyaf Group (ASG), which orchestrated it, as well as Jamaah Ansharut Daulah (JAD), which the two perpetrators had been members of in Indonesia.³ It furthermore underscored the continuing influence of ISIS (with which both ASG and JAD are aligned), the threat of foreign fighters, the heightened popularity of sectarian targets, and the importance of family ties between militants in the region. Also of great concern was the fact that this was the second suicide bombing in the Philippines within the space of six months—a rarity for the archipelagic nation, despite struggling with decades of insurgency and terrorism. Fears that suicide bombing

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is becoming an established tactic in the Philippines were further compounded in June, when the first known Filipino suicide bomber to attack at home (acting together with a foreign accomplice) struck at an army encampment in Indanan, on the island of Sulu, killing five.⁴ Since then, a female suicide bomber blew herself up at a military checkpoint, also in Indanan, and another three intended suicide bombers (two Egyptians and a Filipino) were killed before they could act.⁵

Escalating Tensions between India and Pakistan

In February 2019, attention shifted to South Asia, as archrivals India and Pakistan were yet again thrust into the spotlight following a vehicle-borne suicide bombing of a paramilitary police convoy in Pulwama, Jammu & Kashmir, which killed 40 Indian police personnel. Perpetrated by the Pakistan-based Jaish-e-Mohammed (JeM), it was described as the worst attack in the restive region in 30 years.⁶ Predictably, it resulted in an immediate escalation of tensions between the two nuclear-armed neighbors, as India reiterated its long-standing accusations that Pakistan was ultimately responsible due to its patronage of JeM and similar groups. In response, India launched airstrikes against an alleged terrorist training camp in Balakot, Pakistan, and the Pakistanis returned fire into Indian territory and briefly took custody of an Indian fighter pilot who they shot down over Pakistan-controlled Kashmir. Although relations soon stabilized—the pilot was returned home unharmed and Pakistani authorities arrested 44 suspects believed to be behind the attack—the episode serves as a reminder that terrorism in the region is not only extremely deadly but also has the potential to spark all-out conflict, perhaps even nuclear war.⁷

The Rise of Right-Wing Terrorism

March proved to be yet another landmark month for terrorism in the Indo-Pacific, but this time in a place that no one would have predicted. On 15 March, Brenton Tarrant—a 28-year-old Australian national—shot and killed 51 worshippers at the Al Noor Mosque and Linwood Islamic Centre in Christchurch, New Zealand. Although he seemingly acted alone, the attack is part of a much broader trend of growing right-wing extremism and terrorism that is very much transnational in nature. Attacks of this kind are motivated to varying degrees by white nationalist, anti-immigrant, Islamophobic, anti-Semitic, antigovernment and even misogynist beliefs, and although they are typically committed by lone males, the perpetrators are frequently in communication with others who share their twisted worldview. Of particular note is the fact that these individuals are heavily influenced by the actions of others who have gone before them, and in

turn then serve as inspiration for future terrorists.⁸ This is especially the case when attackers leave behind manifestos offering justification for their deeds, and in Tarrant's case this was further magnified by the fact that he live-streamed his attack.⁹ The following month, 19-year-old John Earnest attempted to emulate Tarrant as he opened fire on the congregation of the Chabad of Poway synagogue in California, killing one, though fortunately the live-feed failed and his weapon apparently jammed, thus preventing more casualties.¹⁰ The United States would suffer a similar attack in August when Patrick Crusius—who was targeting Mexican immigrants—shot and killed 22 people at a Walmart in El Paso, Texas. Both Earnest and Crusius cited Tarrant, among others, as a source of inspiration.¹¹

Islamist Terrorism Comes to Sri Lanka

While the world was still reeling from the attack in New Zealand, Salafijihadist terrorists again stole the limelight with multiple, coordinated suicide bombings on Easter Sunday in Sri Lanka, which claimed the lives of more than 250 people. Though no stranger to terrorism, this was the first major Islamist-motivated terrorist attack in the country. Until that point, the groups held to be responsible (little-known, local outfit National Thowheed Jamath and the even more obscure Jammiyathul Millathu Ibrahim) had done little more than vandalize Buddhist temples.¹² Such a quantum leap in capability would seem to suggest some form of external support, and so it came as little surprise when ISIS claimed responsibility for the atrocities just two days later (despite the fact that Sri Lanka was not a part of the anti-ISIS coalition).



Figure 1. A Sri Lankan security officer stands guard in the aftermath of the 2019 Easter attacks

Nevertheless, the precise nature of ISIS's involvement appears to be as yet unknown. The claim of responsibility was accompanied by a video of the attackers

pledging allegiance to (then) ISIS leader Abu Bakr al-Baghdadi, which is demonstrative of at least some form of online connection. Shortly afterward, it was reported by the *Wall Street Journal* that one of the attackers, 37-year-old aeronautical engineering graduate Jameel Mohammed Abdul Latheef, had spent up to six months in Syria before being sent home to conduct attacks.¹³ But these allegations have yet to be clearly substantiated, and Sri Lankan police announced in July that thus far there was insufficient evidence to show that ISIS had a direct hand in the attacks.¹⁴ If indeed this holds true, it must surely be the most deadly example of ISIS-inspired (vs. directed) terrorism to date. What is known for sure is that—contrary to popular stereotypes—the perpetrators were well-educated young men from affluent families, who had plenty of other opportunities in life.

ISIS in Asia

Whether or not ISIS played a substantive role in the bombings in Sri Lanka, the attacks—which took place less than a month after the terrorist group lost its last sliver of territory in Syria—no doubt sharpened its focus on South Asia. Hot on the heels of what for ISIS was a badly-needed success, in May the group announced a reorganization of its operations in the region, creating the new “provinces” of Wilayah Pakistan and Wilayah Hind to deal with Pakistan and the rest of the Indian subcontinent respectively, thereby leaving ISIS Khorasan to focus on its base of operations in Afghanistan.¹⁵ To date, the practical consequences of this move have yet to materialize, and in that sense, it appears to have been largely symbolic—an effort to project beyond the organization’s real, physical presence in an effort to reestablish itself following the destruction of the caliphate and to cultivate more localized recruitment. Even so, such developments should not be dismissed. More recently, it was reported that ISIS was believed to have selected and trained inaugural leaders for India, Kashmir, and Pakistan, thereby seeking to translate words into something far more tangible.¹⁶

Of course, since then ISIS has suffered further setbacks, including the death of al-Baghdadi in October, and—perhaps of greater significance to the Indo-Pacific—the loss of Nangarhar Province, its core of operations in Afghanistan, in November.¹⁷ Although tactical victories such as these are important milestones in the fight against terrorism, it is not apparent that the Salafi-jihadist threat to the Indo-Pacific has drastically altered in the immediate aftermath. Indeed, ISIS affiliates from throughout the region—including Bangladesh, Pakistan, Afghanistan, the Philippines, and Indonesia—were quick to record new pledges of allegiance to al-Baghdadi’s replacement, Abu Ibrahim al-Hashimi al-Qurashi, despite him being relatively unknown, even within jihadist circles.¹⁸ This is particularly notable for the ISIS supporters in Southeast Asia, who had been side-

lined by al-Baghdadi in April after he neglected to mention the terror organization's East Asia province.¹⁹ More importantly, jihadist terrorists from throughout the region have a long track record of resiliency in the face of adversity, often predating ISIS by many years, and are unlikely to be dissuaded from their chosen course of action. Within two months of al-Baghdadi's death, there was a suicide bombing in Indonesia, at least three explosives attacks in the Philippines, and multiple ISIS-related raids and arrests in Indonesia, the Philippines, India, and Pakistan.²⁰ It is only a matter of time before terrorists inspired by—if not directly connected to—ISIS strike again within the region.

The Naval Air Station Pensacola Shooting

Although there are so far no reports of connections to ISIS, as 2019 was coming to an end, jihadist terrorism again reared its ugly head in the Indo-Pacific, this time in the United States. Early in the morning of 8 December, 21-year-old Mohammed Alshamrani—a second lieutenant in the Saudi Air Force who was attending an aviation training program at Naval Air Station Pensacola in Florida—opened fire in a classroom on base, killing three American Sailors and injuring several others, before he was shot dead by local law enforcement.²¹ During the attack, Alshamrani fired approximately 180 rounds, using a legally purchased handgun, and made statements critical of US military actions overseas.²² Shortly after the attack, investigators found a Twitter account, believed to belong to the shooter, featuring anti-American and anti-Israeli postings, as well as quotes from al-Qaeda figures Osama bin Laden and Anwar al-Awlaki.²³ Attorney General William P. Barr subsequently reported that the incident had been confirmed as an act of terrorism “motivated by jihadist ideology.”²⁴ At the time of writing, however, it is not known whether Alshamrani was inspired by any specific group, and he is thus far believed to have been acting alone.²⁵

Notwithstanding the fact that there is much we still do not know, the Pensacola shooting is notable for several reasons. To begin with, it is one of the most significant cases of foreign infiltration of the United States for purposes of terrorism since 9/11, particularly as it involved a member of the Saudi armed forces. As a result, it raised important questions about vetting of foreign military personnel attending courses in the United States (including as it relates to social media), which caused the Pentagon to develop new security protocols in response.²⁶ At the same time, it once again raised the thorny issues of gun control, and the “Apple vs. FBI” debate, which came up after the FBI reported that it was unable to access the contents of Alshamrani's smartphones.²⁷ The repercussions of this attack will, therefore, be felt well into 2020 and beyond.

India's Extreme Left

Besides violent jihadists—who understandably tend to dominate discussions of terrorism, given their transnational reach and frequent, mass-casualty attacks—the Indo-Pacific continued to face a variety of other terrorism threats in 2019. A large part of the reason why India ranks so highly in the list of countries suffering from terrorism (coming in third place in number of attacks worldwide in 2018) is because of the actions of extreme left-wing terrorists, known as the Naxalites.²⁸ Although far less deadly than their jihadist counterparts, they are much more active, conducting almost twice as many attacks as all jihadist groups combined in 2018 (the most recent year that we currently have data for).²⁹ During the past year, the Naxalites continued to face setbacks, thanks to a combination of internal organizational fault lines and an increasingly effective counterinsurgency campaign.³⁰ Nevertheless, they were still active in as many as 90 districts spread across 11 states,³¹ and they retained lethal capabilities, including the killing of 15 police officers and their driver in a landmine attack in Maharashtra in May 2019.³² For India, combatting the Naxalites thus remains a high priority in the fight against terrorism, even as the insurgency continues to weaken.

The New People's Army in the Philippines

Also representing the extreme left, the most active group in the Philippines—heavily contributing to the fact that it ranked fifth in number of terrorist attacks in 2018—is the Communist New People's Army (NPA).³³ In 2019, the group's 50th year of insurgency, the NPA continued to extort the civilian population and conduct attacks against Philippine security forces. Major attacks included an ambush on troops on Samar Island in April that resulted in a prolonged firefight in which six soldiers were killed,³⁴ and a similar incident, again in Samar, in which another six soldiers lost their lives and 20 more were wounded in November, after the terrorists detonated multiple improvised explosive devices and proceeded to open fire with automatic weapons.³⁵ Most recently, a holiday ceasefire broke down in late December after the NPA carried out attacks in Iloilo, Quezon, and Camarines Norte, placing future peace talks in jeopardy.³⁶

Thailand's Southern Insurgency

Elsewhere, separatist insurgencies continue to smolder with varying degrees of intensity. In Thailand's Muslim-majority deep south, attempts at formal negotiations between the government and militants have been stalled since April 2018, and although violence has been at the lowest levels since 2004, tensions flared following the death of an insurgent suspect in army custody in August 2019.³⁷

While it is unclear whether this was the driving factor, November saw the bloodiest attack in the region since 2001, when gunmen killed 15 people, including village defense volunteers, at a security checkpoint in Yala.³⁸ In contrast to this, a glimmer of hope emerged in January 2020, when a delegation from the largest rebel group in the south, the Barisan Revolusi Nasional, met with representatives from Bangkok in what was the first official bilateral meeting between the two since 2013.³⁹ Although this is certainly a welcome development, for the time being, the outlook for a peaceful political settlement in southern Thailand remains bleak.

Ethnonationalists in Northeast India

By comparison, separatist violence in India's northeast appeared to take a slightly more positive turn in 2019. Insurgency-related incidents had already declined by as much as 66 percent from 2013 to 2018,⁴⁰ and although deadly attacks and related criminality continued last year (including the murder of a local member of parliament in Arunachal Pradesh in May⁴¹), a "historical breakthrough" was achieved in October when negotiators overcame a long-standing deadlock between the central government and the National Socialist Council of Nagaland (Isak-Muivah) (NSCN [IM]).

Multilateral peace talks had been on the verge of falling through due to the latter's insistence on demands for the establishment of Greater Nagaland and a separate constitution. But once the NSCN (IM) agreed to place these conditions on hold in return for being allowed to fly a separate state flag, it brought them in line with the other seven insurgent organizations involved in the talks (collectively known as the Naga National Political Groups), thus paving the way for further potential progress.⁴² Tempering this optimism, the passing of the Citizenship Amendment Act (CAA) in December, which grants citizenship to non-Muslim persecuted religious minorities from neighboring countries, was met with widespread protests throughout the northeast, where it is believed it will increase migration to the region and is thus viewed as a threat to indigenous identities and way of life.⁴³ Ethnonationalist sentiment and distrust in central government were similarly stirred in relation to developments in Kashmir (more on this below) and are likely to complicate peace talks with insurgent groups in the region, if not result in further violence.

Balochistan

Meanwhile, in Pakistan, the Baloch separatist insurgency continued to simmer, despite the surrender of hundreds of militants in recent years under an amnesty program that continues to have success.⁴⁴ According to the Pak Institute for Peace

Studies, Baloch nationalists conducted 51 attacks in Balochistan in 2019, killing 71 people and wounding 162 others (compared to 80 attacks the previous year, which killed 96).⁴⁵ Notable operations included the murder of 14 military personnel near the town of Ormara on Pakistan's south coast in April, which was claimed by the Baloch Raji Ajohi Sangar (the Baloch National Freedom Movement or BRAS)—a coalition of previously disparate separatist groups that came together in November 2018.⁴⁶ The following month, the Baloch Liberation Army (BLA), which is part of the BRAS alliance, launched a 20-hour assault on the luxury Pearl Continental Hotel, killing five. Afterward, the BLA issued a warning to China to halt its “exploitative projects in Balochistan” or risk further attacks⁴⁷—a direct reference to the multibillion dollar China–Pakistan Economic Corridor (CPEC), which has only added to the grievances of the people of Balochistan since it was first established in 2015.⁴⁸ When the activities of violent jihadist and sectarian groups are also taken into account, Balochistan remains one of the regions most affected by terrorism in Pakistan, and in 2019 it saw the greatest number of casualties anywhere in the country.⁴⁹ Balochistan's increasingly prominent position in a complex geostrategic landscape suggests, that despite gradual progress being made, it will be a focal point for terrorism and CT in the months and years to come.⁵⁰

Separatist Insurgency in Myanmar

Further east, China's Belt and Road Initiative (BRI) has run up against yet more ethnonationalist insurgency, this time in the form of various ethnic rebel groups in Myanmar that threaten the China–Myanmar Economic Corridor (CMEC), agreed to in July 2018. During the past year, international attention has remained focused on the plight of the Rohingya, many of whom now live as refugees in neighboring Bangladesh, after being driven from their homes in western Rakhine state. However, much of the recent violence in Rakhine has centered on the activities of the Arakan Army (AA), which is fighting for independence from the central government but has openly condemned the Rohingya using similar, hardline rhetoric.⁵¹ In 2019, the AA intensified its operations, beginning with an attack on border posts in January that left 13 police dead. Several hundred from both sides have been killed since, and many more civilians displaced.⁵² In August, the AA was involved in “one of the most audacious insurgent operations [in Myanmar] in recent years,” this time in Shan state to the east, which shares a border with China.⁵³ Operating under the banner of the Northern Alliance and working together with the Palaung Ta'ang National Liberation Army and the ethnic Chinese Myanmar National Democratic Alliance Army, they overran highway security checkpoints, blew up four major bridges, and fired rockets at the

Defense Services Technical Academy, which has been referred to as Myanmar's West Point.⁵⁴ At least 16 people were reportedly killed in these attacks, and two border gates with China were temporarily closed, prompting much discussion of the longer-term implications for the CMEC.⁵⁵ Fears of terrorism continued to rise in the country in September when the US embassy in Yangon reportedly issued a warning that insurgents—believed to include members of the Karen National Union, the Chin National Front, and the Northern Alliance—were planning attacks in the capital city of Naypyidaw.⁵⁶ Although fortunately, the attacks did not materialize, the incident serves to highlight the level of concern over insurgency and terrorism in the country.

Counterterrorism

Declining Terrorist Attacks

Despite many challenges, terrorists in the Indo-Pacific region have not simply had their own way, and 2019 also bore witness to significant progress in terms of CT. As noted at the start of this article, global terrorist attacks have been on the decline now for several years, and this trend evidently continued in 2019. Nowhere was this more impressive than in Pakistan, which—withstanding continued frustration over its ongoing support for JeM and other externally-focused groups—has seen a dramatic reduction in the number of attacks inside the country as a result of sustained, military-led CT operations and a National Action Plan against terrorism that was launched in 2015. Pakistani think tanks reported further reductions in terrorism in 2019, ranging from 13 to 31 percent.⁵⁷

Meanwhile, international pressure also continued to build on Pakistan to end its selective approach to CT and clamp down on those individuals and organizations it is accused of supporting. Already on the Financial Action Task Force (FATF) “grey list” for failing to implement satisfactory counterterrorist financing and anti-money-laundering measures, Islamabad had until October 2019 to complete a plan of action to bring Pakistan in line with international standards.⁵⁸ Although this was extended until June 2020, the government will have to demonstrate meaningful progress to avoid being placed on the “blacklist,” which carries serious economic implications.⁵⁹ The July 2019 arrest and subsequent indictment of Hafiz Saeed—the founder of Lashkar e-Taiba (LeT) and alleged mastermind of the terrorist attacks in Mumbai in 2008—on charges of terrorism financing is some indication that this pressure is having an effect.⁶⁰ In this environment, Pakistan's stance toward JeM will also be tested, especially since the leader of that organization, Masood Azhar, was finally sanctioned by the UN Security Council

in May, after years of Chinese opposition to the move finally broke down in the aftermath of the attack in Pulwama.⁶¹

Elsewhere in the region, terrorists were also on the back foot. In addition to the decline in violence in India and Thailand (see above), Indonesia, too, saw a drop in the number of attacks in 2019, from 15 the previous year down to eight.⁶² Bangladesh was also relatively successful in limiting the activities of terrorists in the country for the third year in a row since the Holey Artisan Café attack of 2016, though it experienced a small number of low-level attacks against police.⁶³ Authorities in Singapore and Malaysia meanwhile maintained an even tighter grip on security, making numerous raids and arrests to extend their successful records against terrorists operating within their respective borders. Malaysia, in particular, has been relentless, having arrested more than 500 ISIS suspects and thwarted 25 terrorist attack plots since 2013.⁶⁴

The Elimination of Terrorist Leaders

Against this backdrop of continual law enforcement operations, the year was also punctuated by the death of several high-profile militants from the region. This included the killing of “the main Malaysian recruiters” for ISIS, Mohd Rafi Udin and Wan Mohd Aquil Wan Zainal Abidin in Russian airstrikes in Baghouz, Syria, in January and March.⁶⁵ Also in March, the Philippine military eliminated “the last surviving leader” of the ISIS-affiliated Maute Group, Benito Marohomb-sar, aka Abu Dar.⁶⁶ In November, they killed Talha Jumsah (aka Abu Talha), an ISIS-trained bomb maker who was instrumental in helping the ASG carry out suicide bombings and served as a “finance conduit and liaison” between foreign and local jihadists.⁶⁷ Indian CT forces likewise recorded numerous successes in 2019, beginning with the killing of Zakir Musa, the leader of Ansar Ghazwat ul-Hind, an al-Qaeda-linked militant organization operating in Kashmir in May.⁶⁸ The following month they killed the group’s spokesman, Shabir Ahmad Malik, and in October they dispatched with Musa’s replacement, Hamid Lel-hari.⁶⁹ This came hot on the heels of the death of Asim Umar, the leader of al-Qaeda in the Indian Subcontinent (AQIS), in a joint US–Afghan military raid in Helmand province in Afghanistan, further adding to al-Qaeda’s woes in South Asia.⁷⁰ While kinetic operations alone are unlikely to result in lasting strategic victory, they are nevertheless an essential component of CT that help demoralize the enemy and disrupt their operations.

“Soft” Counterterrorism

On the nonkinetic side of things, there has also been progress. Numerous countries in the region, including Indonesia, Malaysia, Singapore, Pakistan, and Australia, have been operating a variety of “deradicalization” and rehabilitation programs for several years, which they continue to refine, and others are now getting on board. In June, for example, it was reported that 21 counseling centers had been established in India’s southern state of Kerala—which has seen the greatest concentration of ISIS supporters in the country—and some 3,000 people had already been deradicalized.⁷¹ Although there are too few details to know exactly what to make of this, it is an indication of growing awareness of the need for more comprehensive approaches to CT. Another example of this comes from the Philippines, where the Anti-Terrorism Council approved a new National Action Plan on Preventing and Countering Violent Extremism (NAP PCVE) in July 2019.⁷² Among other lines of effort, this will involve collaboration between the government and religious leaders to address youth radicalization and the establishment of deradicalization programs within prisons.⁷³ It is also a timely development for the Philippines, as the peace process with the Moro Islamic Liberation Front (MILF) entered into a new phase in February 2019, with the formal establishment of the Bangsamoro Autonomous Region in Muslim Mindanao in the south of the country, following a plebiscite to ratify the Bangsamoro Organic Law (BOL) in January.⁷⁴ This was no doubt a historic development, representing more than 20 years of negotiation with the MILF.⁷⁵ However, the process of disarming, demobilizing, and reintegrating some 40,000 fighters (scheduled to last until 2022) will be extremely challenging, and there is always the possibility that some will return to violence.⁷⁶ On top of this, the Muslim-majority south is still plagued by an assortment of terrorist groups, which remain adamantly opposed to the peace process, including the ASG, the Maute Group, and the Bangsamoro Islamic Freedom Fighters. While the future role of the NAP PCVE in Mindanao is currently unclear, it is there that it will be most needed.

International Cooperation

Besides the efforts of individual nation-states, it is essential that countries work together in the fight against terrorism. Here, too, there were signs of progress. In Southeast Asia, Indonesia, Malaysia, and the Philippines have been conducting coordinated maritime and air patrols together in the Sulu and Celebes Seas through the Trilateral Cooperative Agreement, which began in 2017, largely as a response to the activities of ASG. In July 2019, this was expanded to incorporate a trilateral land-based exercise between the three countries, in the first step toward

developing a ground component to the agreement.⁷⁷ Although there is evidently still much to be done, it is nevertheless a clear sign of progress that may yet pay dividends in the fight against cross-border terrorism and crime. The same three countries have also been working together as part of an Interpol Integrated Border Management Task Force program called Project Riptide, which entails a combination of training courses and on-the-ground operations at border points aimed at enhancing the detection of foreign fighters and criminals.⁷⁸ Between April 2017 and February 2019, more than 800 officers had received training and details of 448 wanted persons—including 105 foreign fighters—were added to Interpol databases.⁷⁹ Interpol provided an additional boost to CT in the region with the establishment of a new Regional Counter-Terrorism Node in Singapore, which was announced in July.⁸⁰

Though the dynamic in South Asia is rather different, there has been a shift toward closer cooperation in matters of CT there too, particularly after the bombings in Sri Lanka, which served to highlight ongoing deficiencies. The good news was that, prior to the attacks, India had passed on detailed intelligence to their Sri Lankan counterparts on three separate occasions that, had it been acted upon, could have potentially prevented the attacks.⁸¹ Unfortunately, amid alleged interpersonal rivalries within the Sri Lankan political and security establishment, this did not take place.⁸² While this speaks primarily to lapses in internal interagency cooperation within Sri Lanka that will need to be addressed by the newly elected Rajapaksa government as a matter of urgency, it also led to the realization that countries in the region need to work more closely with each another. To this end, Indian Prime Minister Narendra Modi vowed to step up CT cooperation with Sri Lanka on a bilateral basis, following his reelection in May, which he then backed up with a 50 million USD line of credit in November.⁸³

More significantly, in the immediate aftermath of the attacks, India renewed its efforts within the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) to ensure that the Convention on Cooperation in Combating International Terrorism, Transnational Organized Crime and Illicit Drug Trafficking—which had been stalled for a decade—will finally come into force.⁸⁴ New Delhi is using the same platform to push for the early signing of the Convention on Mutual Legal Assistance in Criminal Matters between BIMSTEC member states, which include India, Sri Lanka, Nepal, Bangladesh, Bhutan, Myanmar, and Thailand.⁸⁵

The need for stronger cooperation on matters of CT received a further diplomatic boost in November at the 14th meeting of the East Asia Summit (EAS), which includes all 10 members of the Association of Southeast Asian Nations (ASEAN), as well as India, Japan, China, the Republic of Korea, Australia, New

Zealand, Russia, and the United States.⁸⁶ Among other issues, the EAS highlighted the need to work more closely with the FATF and similar regional bodies to counter terrorist financing, as well as the UN Office on Drugs and Crime (UNODC), which provides assistance in developing legislation, enhancing knowledge and skills needed for investigations and prosecutions, and improving international cooperation.⁸⁷ Such declarations assist in highlighting important issues and generating political will but, of course, must also be acted upon if they are going to have any impact. Another limitation is that neither the EAS nor BIMSTEC includes Pakistan. Indeed, part of the reason India is working through the BIMSTEC is due to frustration at the continued ineffectiveness of the South Asian Association for Regional Cooperation (SAARC), for which the India–Pakistan rivalry has proven an insurmountable obstacle. Although there were no signs of this changing in 2019, it is worth noting that, together with the other members of the Shanghai Cooperation Organization (SCO), India and Pakistan took part in a large-scale military exercise with the theme of countering international terrorism in Russia in September.⁸⁸

Yet more effort to enhance international CT cooperation was made in 2019, this time in the realm of cyberspace. At the forefront of these endeavors was New Zealand. Spurred on by the fact that Facebook and other social media companies ultimately failed to prevent the online spread of footage from the attack in Christchurch before it went viral, Prime Minister Jacinda Ardern spearheaded a global initiative to generate stronger commitment to “eliminate terrorist and violent extremist content online” and to build closer cooperation between governments and tech companies. Although it is nonbinding in nature, the “Christchurch Call” includes a series of commitments or guidelines for governments and the tech sector that serve to highlight various lines of effort that need to be pursued with greater vigor. Examples include strategies to develop processes allowing governments and online service providers to rapidly respond to the spread of terrorist content online, to ensure appropriate cooperation with and among law enforcement agencies, and to partner with civil society to promote community-led efforts to counter violent extremism through things like countermessaging.⁸⁹ Among the 18 founding members of this initiative, when it was first signed in May, were New Zealand, Australia, Canada, India, Indonesia, and Japan. Another 31 signatories came on board in September, including the Maldives, Sri Lanka, South Korea, and Chile.⁹⁰ Although each country is responsible for devising its own laws, regulations, and procedures in translating the Christchurch Call into action, at the very least the initiative has raised further awareness of the need to take more decisive action against terrorists in cyberspace, which is a net positive for the region and beyond.

The Road Ahead

Rising Hindu Nationalism in India

As we look to the future, there are a number of controversial issues in the Indo-Pacific that continue to draw international attention and that terrorists, both in and outside of the region, may seek to exploit to their advantage. The rise of Hindu nationalism and the associated Hindutva policies of Prime Minister Modi's Bharatiya Janata Party (BJP) in India is one such issue. For several years now, this development has created an environment in which Hindu extremists are becoming increasingly emboldened, and from 2014 to mid-2019, there were 276 religious bias-driven hate crimes in India, including lynchings of Muslims suspected of slaughtering cows and eating beef.⁹¹ In 2019, there were two particularly inflammatory developments, which yet have the potential to foment radicalization and acts of retaliatory terrorism. The first was the August revocation of Article 370, which had allowed Kashmir significant autonomy from the central government, and the subsequent division of the region into two federally administered states (Jammu & Kashmir and Ladakh). Predicated on the need to further integrate the troubled region with the rest of India and to boost its economic development, critics point out that the revocation paves the way for what they see as deliberate alteration of the Muslim-majority region's ethnic and religious composition, as it allows people from the rest of the country to settle there.⁹² In anticipation of potentially violent protests, tens of thousands of Indian troops were bused into the already highly militarized area ahead of the announcement, after which Jammu & Kashmir was placed on lockdown. This entailed curfews; blackouts of media, social media, and communications; as well as mass arrests, including the house arrest of hundreds of local politicians.⁹³

These added security measures appear to have so far largely contained terrorist activity in the region. However, they cannot continue in perpetuity and are likely to generate widespread bitterness and anger. Sporadic outbreaks of violence (including a grenade attack on security personnel in Srinagar in October) are indicative of this simmering resentment.⁹⁴ Indian security officials have also repeatedly warned that several hundred terrorists are thought to be stationed in Pakistan-controlled Kashmir, waiting for the opportunity to infiltrate.⁹⁵ Although these claims cannot be verified, there is little doubt that groups such as JeM and LeT will view the revocation of Article 370 as an act of aggression, will be eager to exact revenge, and may see an uptick in recruitment. Jihadist organizations in general, including those with few real connections to the region, may also seek to capitalize on India's actions by framing them as part of the perceived, global "war on Islam."⁹⁶ Meanwhile, the Pakistani government has condemned the move as illegal and

vowed to “exercise all possible options.”⁹⁷ On top of all this— as noted above— there are implications for India’s northeast. People there now fear that their own special status, provided for under Article 371, is now also in jeopardy, meaning they will need to be reassured if peace talks are to going to continue to progress.⁹⁸

The second important development in India was the aforementioned enactment of the CAA in December, which granted a pathway to citizenship for non-Muslim “persecuted minorities” from neighboring Muslim states. While people in the northeast protested because it is viewed as a threat to their ethnic integrity, people throughout the rest of the country protested because it is seen as a threat to the secular constitution and as a deliberate move to further marginalize India’s sizable Muslim minority population.⁹⁹ When viewed together with the abrogation of Article 370 and against the backdrop of increasingly strident Hindu nationalism and acts of violent extremism, of which Muslims have been the primary victims, it is possible that together these conditions will create fertile ground for radicalization, which violent jihadists could exploit. To date, India’s Muslim population has been remarkably resistant to Salafi-jihadist messaging, with relatively few becoming involved with groups like ISIS or al-Qaeda. If that were to change, in a worst case scenario, India could experience intercommunal violence on a massive scale, with serious implications for regional stability.

China’s Actions in Xinjiang

Other issues in the Indo-Pacific, which terrorists may seize upon and are worthy of close attention, include China’s treatment of its Muslim (mainly Uyghur) population in Xinjiang and the Rohingya refugee crisis in Myanmar and Bangladesh. The Xinjiang Uyghur Autonomous Region has been subject to increasing securitization, characterized by extensive surveillance measures, since the related flare-up of political violence and acts of terrorism in the country from 2009–2014.¹⁰⁰ During this period there were numerous mass stabbings and multiple suicide bombings, including an incident in Luntai in which 50 people (consisting of 40 “rioters,” six civilians, and four police officers) were killed.¹⁰¹ However, China’s approach to security in Xinjiang began to attract much greater attention only after it resorted to mass internment and “reeducation” of Uyghurs and other Muslim minorities, coupled with efforts to monitor and control the Uyghur diaspora population, beginning in 2017.¹⁰²

Justified by China as necessary steps to counter the “three evils” of terrorism, separatism, and extremism, the internment camps (referred to by the Chinese Community Party [CCP] as Vocational Education and Training Centers) have been widely criticized on human rights grounds since they became public knowledge.¹⁰³ The debate intensified in July 2019 when 22 countries, including the

United States, Canada, Australia, New Zealand, and Japan, issued a joint statement at the UN condemning China's policies.¹⁰⁴ In reply, 37 countries, including Pakistan, the Philippines, Myanmar, Cambodia, Laos, and North Korea issued a letter of support for China.¹⁰⁵ The controversy then further escalated in November when several official CCP documents, containing details of repressive measures employed in the camps, were leaked to the international press.¹⁰⁶

As the drama has unfolded, terrorists have also been watching. Uyghur militants have long-established, deep operational ties to al-Qaeda and the Taliban dating back to at least the early 2000s, and the groups have long expressed solidarity for the Uyghurs' cause.¹⁰⁷ For example, in October 2009, following deadly riots in the Xinjiang regional capital of Urumqi, Abu Yahya al-Libi, then a prominent member of the al-Qaeda leadership, condemned China's "decades of oppression . . . organized cleansing and . . . systematic repression" of the Muslim population, and called on Uyghurs to prepare for Holy War.¹⁰⁸ Similarly, in 2016, al-Qaeda leader Aymen al-Zawahiri railed against China as an "atheist occupier," and in April 2019, al-Qaeda's general command issued a statement in support of the Turkistan Islamic Party (TIP)—which is the primary Uyghur terrorist organization currently operating in Afghanistan and Syria—and called on Muslims to support their cause.¹⁰⁹ ISIS has likewise urged "revenge" against China for Beijing's policies in Xinjiang, and in March 2017 released a video featuring Uyghur members of the group who vowed to return home and "shed blood like rivers."¹¹⁰ As these examples allude to, Uyghur extremists enjoy the support of transnational jihadist groups, thanks largely to the fact that they continue to fight alongside al-Qaeda and ISIS on the battlefield.¹¹¹ Precise numbers are elusive, but it is believed that around 300 Uyghurs joined ISIS in Syria, while many times that number fought alongside Jabhat al-Nusra, and later Hayat Tahrir al-Sham.¹¹² Some estimates suggest the total number of Chinese foreign fighters in Syria (mostly Uyghurs but also including some Han Chinese) to be as many as 5,000.¹¹³

In light of these developments, China is understandably apprehensive that Uyghur terrorists, or their allies, may seek to launch attacks in Xinjiang, elsewhere in China, or against Chinese interests overseas. As noted above, some Uyghurs currently fighting in Syria would like to return home to conduct attacks. This is also in line with remarks made by the leader of the TIP, Abdul Haq al-Turkistani.¹¹⁴ However, not all Uyghur foreign fighters necessarily share these aims, and given the intensity of China's security crackdown, the chances of infiltrating Xinjiang and conducting terrorist activities without being detected are relatively low. An alternative possibility, which might present a more viable option, would be for jihadist veterans of the Syrian war to travel either to Afghanistan or to neighboring countries in Central Asia (Kazakhstan, Kyrgyzstan, or

Tajikistan) and launch attacks from there.¹¹⁵ Uyghur militants are also known to have established ties with jihadist counterparts in Southeast Asia, which was the primary transit route on the way to Turkey and Syria. This has been particularly evident so far in Indonesia, where several Uyghurs have been arrested or killed in CT operations in recent years.¹¹⁶

Furthermore, Uyghurs have already demonstrated the intent and capability to conduct attacks outside of China. Notable examples include the August 2015 bombing of the Erawan shrine in Bangkok, in which 20 people were killed in apparent retaliation for Thailand's forcible repatriation of Uyghurs to China, and the August 2016 suicide bombing of the Chinese embassy in Bishkek, Kyrgyzstan, which was ordered by Uyghur militants active in Syria and carried out by a member of the East Turkestan Islamic Movement.¹¹⁷ Regardless of how the threat eventually manifests itself, China's policies in Xinjiang have undoubtedly enflamed jihadist sensibilities.

This, in addition to BRI projects (discussed above), places China and its interests in the region at heightened risk of attack.¹¹⁸ It may also lead to closer cooperation between China and other countries in matters of CT. While there are some advantages to this, there is also a danger that this will increase China's political leverage, and that, over time, surveillance-heavy, repressive measures will proliferate in the region, which could potentially increase the risk of terrorism in response.

The Rohingya Refugee Crisis

Finally, there is the ongoing Rohingya refugee crisis. Currently, there are around one million Rohingya living in Bangladesh, having fled the appalling violence in Rakhine state in western Myanmar.¹¹⁹ The immediate terrorist threat related to this comes in the form of the Arakan Rohingya Salvation Army (ARSA), whose actions first sparked the current crisis in August 2017 when they attacked more than 30 police posts, killing 12 members of the Burmese security forces, which then responded with indiscriminate violence on a massive scale.¹²⁰ Since then, the ARSA has remained active, but its operations are sporadic (including just two reported incidents in Myanmar in 2019), and the organization does not appear to have advanced beyond a relatively low level of capability.¹²¹

However, as the Rohingya continue to suffer in deplorable conditions, there is concern they will become increasingly vulnerable to recruitment by violent extremists over time. During the past year, several reports have indicated that militants are active in Cox's Bazar, the main refugee camp for Rohingyas in Bangladesh, and the ARSA has been blamed for numerous killings and other atrocities directed against people it regards as traitors or informants.¹²² Women who are deemed not to be dressed moderately enough have also been targeted.¹²³ Accord-

ing to a self-professed member of the group, interviewed by journalists reporting for the German newspaper *Deutsche Welle*, there are as many as 3,500 members of the ARSA living in Bangladeshi refugee camps, and several hundred have snuck across the border to Myanmar to receive military training.¹²⁴ The same individual admitted threatening women who work for aid agencies because “Muslim religion doesn’t support it,” and said that he had been instructed to hit women who were not sufficiently covered.¹²⁵ Meanwhile, Rohingya children living in the camps, deprived of proper education, are being taught in madrassas, some of which are run by “hardline” Islamists with histories of violent activism.¹²⁶

While the plight of the refugees drags on, there is the added fear that Rohingya militants may develop operational connections with transnational terrorist organizations like ISIS and al-Qaeda, which could lead to a significant escalation in conflict. These concerns are founded upon reports such as that the leader of the ARSA, Ata Ullah, and other senior members of the group, were given training by Tehrik e-Taliban Pakistan.¹²⁷ There have also been unsubstantiated allegations of links to LeT.¹²⁸ Additionally, ISIS, al-Qaeda, and other extremist groups have expressed solidarity with the Rohingya and encouraged violent jihad against the government of Myanmar.¹²⁹ For its part, the ARSA has stringently denied any form of connection and, although this cannot simply be taken at face value, there is presently no evidence to prove otherwise.¹³⁰

Nevertheless, a number of seemingly isolated cases have come to light in recent years, including a 2013 plot to bomb the Burmese embassy in Indonesia;¹³¹ the 2016 arrest of an Indonesian extremist in Malaysia, who was allegedly heading to Myanmar;¹³² the 2017 arrest of a British–Bangladeshi in New Delhi, who had reportedly been tasked by al-Qaeda with recruiting Rohingya refugees in north-east India;¹³³ and the May 2019 arrest of an ISIS cell in Malaysia, including two Rohingya, who were plotting attacks on multiple targets, including the Burmese embassy in Kuala Lumpur.¹³⁴ Thus, although the Rohingya issue so far has been largely symbolic for transnational jihadists, some may yet succeed in infiltrating Myanmar and/or Bangladesh, which—as we saw in the Philippines, for example—could result in tactical innovations such as suicide bombing. We might also yet see recruitment of Rohingya to jihadist organizations in meaningful numbers and potential attacks on Burmese targets outside of Myanmar. For the time being, these are possibilities rather than probabilities. Whether or not they materialize is partly dependent on how Myanmar and Bangladesh handle the situation going forward and whether there are renewed flare-ups in violence that serve to refocus international attention on the region.

Foreign Terrorist Fighters

As this discussion shows, the future of terrorism in the Indo-Pacific—though by no means clear—is likely to be shaped, at least in part, by the unfolding of various highly charged, political and social issues that transcend national boundaries and provide terrorists with opportunities they can exploit. Of course, there are myriad factors specific to individual countries that will shape the threat as well—not least being their CT strategies and how they are implemented. Importantly, the evolution of the threat is also dependent on events outside of the region. The rise of ISIS in Syria and Iraq had an invigorating effect on jihadist terrorists throughout the world. Now that the group has been militarily defeated (at least for the time being), some of the wind appears to have been taken from their sails. Nevertheless, as illustrated in the above discussion of Uyghur militants, an immediate concern for the region is the return of their citizens (foreign fighters and their families), some of whom are still at large, while others are currently languishing in Kurdish detention camps in northern Syria. For the most part, the numbers and identities of these individuals appear to be unknown, but it is believed that several hundred Indonesians, 80 Australians, 65 Malaysians, and around 32 Canadians are still in Kurdish custody.¹³⁵

Although most of these individuals are women and children, the worry is that returnees from Syria will conduct attacks and/or spread Salafi-jihadist ideas. So far, these fears have been confirmed in at least three cases. In April 2015, Malaysian police arrested a returnee named Murad Halimmuddin Hassan, who along with his son, was later convicted of plotting to kidnap government officials and conduct attacks targeting the police and military.¹³⁶ In Bangladesh, the mastermind of the aforementioned Holey Artisan Café attack in July 2016 was a Bangladeshi–Canadian named Tamim Chowdhury. Having radicalized in Canada, he had joined ISIS in Syria before being sent to oversee the group's operations in his country of birth.¹³⁷ In July 2017, another veteran of the war in Syria named Syawaludin Pakpahan, together with an accomplice he had recruited, stabbed a police officer to death in Indonesia.¹³⁸

Because of such occurrences, governments have been understandably reluctant to bring their citizens back. However, following the Turkish incursion into Kurdish occupied Syria in October 2019, there is an added sense of urgency to ensure that detainees are accounted for and repatriated before they can escape or are potentially set free. Those foreign fighters who are still at large might relocate elsewhere, but ultimately, it seems inevitable that those who are detained will have to return home. When that eventually takes place, judicial systems and re-

integration programs, such as already exist in places like Indonesia and Malaysia, will be tested.

Attacks involving returnees are likely to remain rare but, of course, cannot be ruled out. Far more likely, and in many ways more difficult to prevent, will be continued efforts by returnees to spread their twisted beliefs, which is likely to occur both in and outside of prison. The effects of this may be felt for many years to come.

A closely related concern is that, with the Middle East now a much less viable prospect for terrorist activities, parts of the Indo-Pacific may emerge as attractive destinations for foreign fighters, both from within the region and elsewhere. In the Philippines, this is already the case. Abu Bakr al-Baghdadi had encouraged Muslims to support the jihadist struggle in Mindanao as early as 2015, and ISIS stepped up its recruitment efforts for the region the following year.¹³⁹ After the siege of Marawi ended in October 2017, the Philippine military reportedly identified 32 foreigners among the tally of terrorists they had killed, mostly from Indonesia and Malaysia, but also thought to include some from Saudi Arabia, Yemen, and Chechnya.¹⁴⁰ Since then, there have been reports of foreign terrorist suspects making their way to the Philippines from as far afield as Egypt and Spain, and in November 2018, a high-ranking intelligence officer was quoted as saying there were “about 40” foreign fighters still in the country.¹⁴¹ Moreover, as noted at the beginning of this article, foreign militants have been instrumental in orchestrating the recent rise in suicide bombing in the Philippines, beginning with an attack by a German–Moroccan man at a security checkpoint in southern Basilan in July 2018.¹⁴²

Another prospective destination for foreign fighters in the region could be Pakistan, where numerous jihadists traveled to after 9/11 but before the conflict in Syria. More recently, there have been signs that it is again attracting this sort of attention, as reflected in arrests made by US authorities in New York in February and July of 2019. The first of these cases involved 29-year-old Jesus Wilfredo Encarnacion, who was planning to join LeT, while the second involved 33-year-old Delowar Mohammed Hossain, who ultimately intended to join the Taliban in Afghanistan.¹⁴³ As discussed above, Myanmar and Bangladesh could also potentially attract jihadist travelers because of the Rohingya issue, as could places like Indonesia and Malaysia, given the involvement of some of their citizens in international terrorist networks and their proximity to the Philippines. Thus, although the Philippines currently stands out as a future draw for jihadist foreign fighters, there are numerous other possibilities. In any of these cases, the numbers involved are likely to be very small in comparison to conflict zones such as Syria, and most of it is likely to involve intraregional, rather than global travelers. However, even

a few skilled terrorist operatives can have an outsized impact, and this will therefore remain a concern for Indo-Pacific countries for some time.

“Frustrated” Foreign Fighters, “Home-Grown” Cells, and Lone Actors

A closely related set of challenges concerns so-called “frustrated” foreign fighters, meaning those who wanted or attempted to travel to Syria but were unsuccessful, as well as “home-grown” cells and lone-actor terrorists who choose to act at home. On the one hand, these groups and individuals tend to be relatively low in capability, because they have not had access to the kind of training and experience that they could acquire in a conflict zone. On the other hand, their bloodlust remains unsatisfied, and their intent to do harm is often high. Furthermore, they sometimes manage to team up with local groups or organizations that augment their capabilities and provide them with opportunities to act. The Indonesian couple responsible for the suicide bombing in Jolo, mentioned at the beginning of this article, is a prime example. In January 2017, they had attempted to go to Syria but had been deported by Turkish authorities.¹⁴⁴ On returning home, they completed a one-month reintegration program, but by December 2018, they had made their way to the Philippines, where they joined with ASG (effectively becoming foreign fighters on their second attempt).¹⁴⁵ By comparison, those who act independently generally achieve far less in terms of casualties but are especially difficult to prevent and can still sometimes have a significant impact. The October 2019 stabbing of Wiranto, Indonesia’s top security minister, by a peripheral member of JAD named Syahrial Alamsyah is a case in point. Although Alamsyah was on the Indonesian intelligence radar, he appears to have told no one except his wife (who was arrested alongside him in the attack) about his plan, and although the stabbing was not fatal, it demonstrated the vulnerability of even high-ranking government officials.¹⁴⁶

As governments in the region become more successful in constraining the activities of established terrorist organizations and dismantling their networks (as Indonesia has against JAD), it is likely that we will see further acts of terrorism committed by (semi)autonomous groups and individuals. This is also likely to be the most common manifestation of the threat in countries that are already relatively secure, such as Singapore and Malaysia. It will furthermore remain the dominant *modus operandi* of right-wing terrorists operating in countries such as the United States, Canada, Australia, and New Zealand. Given the renewed intensity with which the right-wing movement is now being scrutinized, it seems unlikely they will be given sufficient room to scale up their level of organization and related capabilities as they might like. Yet we will almost certainly continue to

see sporadic acts of right-wing violence committed by lone actors, occasionally punctuated by mass-casualty incidents as we saw in Christchurch and El Paso.

Terrorist Use of the Internet

Going forward, a related challenge for the region—and a central component of both right-wing and jihadist terrorism—will be terrorist use of the Internet. As discussed earlier, significant progress is being made, as highlighted by the launch of the Christchurch Call. In late 2019, there was also a big push, spearheaded by Telegram in collaboration with Europol, and subsequently taken up by a variety of smaller companies, to deny terrorists access to Internet-based communication platforms. As *the* preferred application for terrorists for some time now, the decimation of their accounts and channels on Telegram was a significant step. ISIS supporters in particular were targeted, first on Telegram and then on each of the other platforms, they turned to (including Riot, TamTam, Hoop Messenger, MeWe, and Mastadon).¹⁴⁷ But as necessary as this sort of action is, it is difficult to sustain indefinitely across a wide enough online space. Less than a month after Telegram's purge, terrorism scholar Thomas Hegghammer observed that “[W]e are definitely witnessing an online jihadi renaissance. Not quite at 2012-14 levels, but much higher than 6 m[on]ths ago, and overwhelming to monitor.”¹⁴⁸

This furthermore dovetails with observations from the region. For example, in September Bangladesh's Counter Terrorism and Transnational Crime Unit reported that 82 percent of recently arrested terrorist suspects there were recruited online.¹⁴⁹ Similarly, following the death of ISIS leader al-Baghdadi in October, the chief of CT police in Malaysia stated, “What we are most worried about now are ‘lone wolf’ attacks and those who are self-radicalized through the Internet. We are still seeing the spread of IS teachings online.”¹⁵⁰ Terrorist activities on the Internet are also not limited to radicalization and recruitment. As Indonesia's Vice-Minister for Foreign Affairs stated in a speech at the UN in March, “There is a clear indication that terrorist financing is shifting towards high-tech cyber activities, including sophisticated online transactions.”¹⁵¹ It will, therefore, be imperative for countries to work closely with the tech sector (per the Christchurch Call and the joint efforts of Telegram and Interpol) in an effort to keep pace with evolving terrorist methodologies.

The Specter of Chemical, Biological, Radiological, or Nuclear Terrorism

A final concern for the future of terrorism in the Indo-Pacific involves the potential weaponization of chemical, biological, radiological, or nuclear (CBRN) materials. Two recent plots within the region have featured attempts to develop

chemical and biological agents, respectively. The first of these was a plot disrupted in Australia in July 2017, in which brothers Mahmoud and Khaled Khayat had intended to first bring down an airliner using a conventional improvised explosive device (IED), and then to develop poisonous gas using viable instructions sent to them by an ISIS handler located overseas (though at the time of their arrest, they had only conducted one test involving chemicals and had not actually manufactured any poison).¹⁵² The second plot was uncovered in October 2019 in Indonesia, where a group affiliated with JAD had acquired rosary pea seeds, which they were using (or had perhaps even managed already), to produce the deadly biological toxin abrin, which they planned to add to an IED.¹⁵³ Both of these developments are obviously concerning, especially when viewed alongside ISIS's other efforts to use chemical and biological materials—including dozens of alleged attacks using chlorine and sulfur gas in Iraq and Syria as well as a plot to poison people with ricin that was disrupted in Germany in June 2018.¹⁵⁴ Together, these incidents are indicative of terrorists' continued, if not growing, interest in developing CBRN weapons. We must not overlook the fact that this also applies to right-wing terrorists, who have collectively established a concerning track-record in this area.¹⁵⁵ However, it is important to recognize that intent is rarely matched by capability or the opportunity to act. The more successful states are in weakening established terrorist organizations, the more that capability is curtailed. Moreover, even ISIS supporters are generally conservative in that most of their attacks involve explosives, firearms, or even more basic weapons such as vehicles and knives.

Thus, although an unsophisticated CBRN attack somewhere in the Indo-Pacific is certainly possible, and governments must do all they can to prevent this from happening, it is not a likely scenario for the foreseeable future.

Conclusion

When dealing with a region as vast and varied as the Indo-Pacific, it is impossible to keep track of everything that takes place and easy to lose sight of important developments. Looking back on the previous year's events, terrorists have unfortunately reminded us many times of their continued potency. The attacks in Jolo, Pulwama, Christchurch, and Colombo, in particular, were each devastating for the respective countries and were also of regional, even worldwide, significance. The kaleidoscope of insurgencies that continue to churn away in the background, often receiving little attention from the media, should also not be overlooked. Together, they are indicative of continued, widespread deficiencies in governance in the region, which persist even as the insurgents and terrorists are gradually beaten down.

On the positive side of things, efforts to counter terrorism have significantly reduced the scale and severity of terrorism in the Indo-Pacific, and terrorist organizations in many places are on the back foot. Tactical successes are also increasingly complemented by soft approaches that have the potential to further reduce the violence and, in some cases, pave the way for lasting stability. In addition, there were several notable advancements in international cooperation during the past year, which signify the gradual, collective strengthening of CT in the region.

Looking ahead, there is no immediate end in sight to any of the terrorism problems discussed. Jihadist terrorism may also further ignite in response to smoldering political issues in India, China, Myanmar, and Bangladesh. The threat will also continue to evolve as jihadist veterans of the Syrian war and their families return home or relocate to other locations in the region. Here, the Philippines appears to be particularly vulnerable, but the threat may yet transform in unpredictable ways. Added to this is the numerically greater challenge of frustrated foreign fighters, home-grown cells, and lone actors, many of whom remain steadfast in their commitment to violence. Western countries within the region will also have to contend with right-wing terrorists, who in many ways mirror the jihadist threat. In either case, the Internet will prove to be a key battleground in the fight to prevent and counter the spread of radicalization, while simultaneously monitoring and disrupting existing terrorist networks. Terrorists may seek to innovate in other ways too, such as CBRN attacks, but these remain relatively unlikely.

Naturally, there are innumerable other developments that may take place, and many more challenges that countries of the region will have to grapple with: the increasingly prominent role of women and children in terrorist networks; the burden of expanding terrorist populations in prison; the sobering realization that many of those prisoners will soon be released; the potential resurgence of ISIS in the Middle East, Afghanistan, or elsewhere; a possible comeback for al-Qaeda and associated groups like Jemaah Islamiyah (JI) in Indonesia; terrorist use of drones or other emerging technologies; the stubborn persistence of so-called “root causes” of terrorism; and of course, the unending, precarious balancing act needed to maintain security without falling into the terrorists’ trap and sacrificing civil liberties in the process. How each nation responds and copes with each of these challenges will ultimately shape their future, and the future of the region. 🌟

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Comparing Space Sectors Down Under

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In the last decade, the global space sector has grown dramatically. Part of this growth has been fueled by the privatization of the space sector. Unlike during the Cold War, nowadays private firms, not just governments, are taking leading roles in space activity. Investors are channeling significant funds into private business, and in 2019 space firms raised \$5.8 billion USD over 198 investment rounds.¹ The largest new space firm, SpaceX, has launched 350 satellites to low Earth orbit to start creating Starlink, its constellation to provide satellite-based Internet.² Growth is being spurred not just by privatization but also by geographic diversification; the number of countries involved in space activity is growing beyond the traditional space powers. Global launch attempts increased 39 percent in the last decade, and 82 countries now have satellites in orbit.³ Thirteen governments have established space agencies in the last decade.⁴

Two countries have made particularly dramatic strides: Australia and New Zealand. Australia's space sector recently crossed the \$5 billion AUD revenue mark.⁵ New Zealand's space sector is smaller at \$1.69 billion NZD, but this is still impressive given the sector doubled in size between 2018 and 2019.⁶ Both countries recently established space agencies—New Zealand in 2016 and Australia in 2018. New Zealand's space sector is notably defined by its hosting a successful up-and-coming launch-services firm called Rocket Lab—the firm launched six rockets last year from its launch facility in the Mahia Peninsula on the east coast of New Zealand's North Island.⁷ Australia, on the other hand, which has long played a supporting role in terms of ground stations tied to National Aeronautics and Space Administration (NASA) and European Space Agency (ESA) missions, is supporting the development of its own sovereign launch capacity, as well as other business areas.⁸ For both countries, the US connection is strong—for New Zealand, Rocket Lab is registered in the United States, and many of its customers are American government entities; and for Australia, government funding schemes often relate to upcoming NASA missions.⁹

At first glance, the two countries' space sectors appear similar. Both countries have close relationships with the United States. Both countries are building up their launch capabilities—New Zealand already has Rocket Lab, and Australia has a promising firm, Gilmour Space Technologies, that is developing its own rocket.¹⁰ Both countries are English-speaking, which facilitates interaction with the largely monolingual American space sector, and both are located in the South

Pacific, which gives them similar geographic competitive advantages for certain types of launches. Both countries also have similar political economic systems; New Zealand and Australia are on the neoliberal end of the political economic spectrum, espousing free-market values and resisting explicit government intervention. Given all these similarities, are the two countries competing for the same role in the global space sector? Or may they end up playing complementary roles? Are they developing similarly, and will they continue to develop along similar lines? Or are they developing differently, and will they end up with space sectors unique from each other?

This article seeks to highlight how New Zealand's and Australia's space sectors are more different than they appear. Emphasizing differences builds a nuanced perspective about how the two space sectors have grown and will likely continue to grow. Such a perspective benefits individuals interested in the two countries' space sectors—it helps government bureaucrats devise policy, firms decide business strategy, and investors place their capital.

This article applies a comparative political economy perspective, based on the developmental state literature, to show that New Zealand's and Australia's governments are intervening differently in their space sectors than each other. This article first explains what similarities the literature indicates one would expect to find between the two countries' space sectors. Then, the article describes how there is little evidence for these similarities—comparing the two countries according to expected similarities instead highlights their differences. Finally, the article assesses what these differences imply for the two space sectors' continued development.

Expectations of Australia's and New Zealand's Space Agencies

The developmental state literature does not at first seem to be a relevant literature to analyze New Zealand's and Australia's space sectors—it was established in the 1980s to explain how Japan was able to so quickly develop its economy.¹¹ The literature is relevant, however, if one traces how it has evolved since the end of the Cold War up until the present day. In recent years, developmental state scholars have expanded the scope of countries of interest. In doing so, they have derived some conclusions about how countries like New Zealand and Australia intervene in markets, which is relevant to understanding how New Zealand and Australia are developing their domestic space sectors, and how they will likely continue to develop them.

As mentioned above, the developmental state literature originated to explain the impressive rise of Japan's economy, which was fascinating because Japan's "miracle" transformation came after its economy had been decimated during World War II.¹² How had Japan been able to reverse course, transforming from a war-torn country to an economic powerhouse? The founding scholar of the lit-

erature, Chalmers Johnson, proposed one of the reasons for Japan's rapid growth was because it was "plan rational"—in Japan, the appropriate role of government is to guide markets.¹³ He contrasted this with the United States, which is "market rational"—the government's appropriate role is to remove barriers to doing business and to enforce rules of competition.¹⁴ Japan's plan rationalism combined elements of each side of the Cold War capitalism–communism dichotomy—it "[conjoined] private ownership with state guidance."¹⁵

As more scholars joined the literature, they showed that other "developmental states" existed besides Japan, most notably Singapore, South Korea, and Taiwan.¹⁶ They described how, besides plan rationalism, two other characteristics defined developmental states' approach to intervening in markets: their use of financial mechanisms to subsidize desired business areas; and their preference for channeling subsidies to firms that were already working in those planned business areas.¹⁷ In other words, scholars identified three characteristics that define how developmental states tend to intervene: (1) government plans market growth; (2) government intervenes primarily via subsidies; and (3) government channels those subsidies toward firms that are already working in areas that align with planned growth areas.

The relevance to New Zealand's and Australia's space sectors is that, more recently, some developmental state scholars have begun examining market rational countries, herein called "regulatory states," which are the foil to the developmental states. Traditionally, developmental states are portrayed in contrast to regulatory states; developmental states are portrayed as being more interventionist than regulatory states, which use a light-touch approach to guiding markets. The issue is that regulatory states are traditionally given short shrift in the literature; they are briefly mentioned in passing before moving on to the real meat of the literature's intellectual enterprise: analyzing the developmental state. The recent intellectual turn toward focusing on regulatory states, however, means there is more understanding in the literature about how regulatory states intervene in markets. Scholars find regulatory states do not intervene less than developmental states but instead differently than developmental states; the difference is quality of intervention, not quantity of intervention.¹⁸

Three characteristics of regulatory states' approach to intervention parallel, yet differ from, the three aforementioned characteristics of developmental states' approach to intervention. The three characteristics are as follows: (1) government removes barriers to doing business, meaning it focuses on reducing unnecessary transaction costs; (2) government intervenes primarily via business support services, meaning it helps firms develop their business strategies through various means, such as networking support, market analysis, and gaining access to private financing; and (3) government prefers supporting firms that have viable business

plans, meaning it prefers supporting firms that can prove they are likely to succeed in the market.¹⁹ These characteristics of regulatory-state intervention cohere with what one would expect from a market rational state that values free-market principles; government's role is to facilitate business by removing barriers and by helping competitive firms to refine their strategies.

New Zealand and Australia are regulatory states. More accurately put, they are likely regulatory states, since developmental state scholars have not yet explicitly defined what constitutes a regulatory state; to date, most scholars studying regulatory states have solely focused their research on the United States.²⁰ However, Australia and New Zealand are likely also regulatory states if one borrows a category from another comparative political economy literature. The category, from the varieties of capitalism literature, is the "liberal market economy," a type of political economy that is characterized by light-touch government intervention and institutionalized market transactions.²¹ Conceptually, the "liberal market economy" is very similar to the regulatory state; developmental state scholars sometimes mention the similarity, and the exemplary case for both conceptual categories is the United States.²² New Zealand and Australia are liberal market economies, and they are thus also very likely regulatory states.²³

Using the liberal market economy as a proxy for the regulatory state indicates New Zealand and Australia should intervene in markets as one would expect regulatory states to do.²⁴ For both New Zealand and Australia, the lead government entities for intervening in their space sectors are the new space agencies. This means that, in terms of how those space agencies go about developing their national space sectors, one can expect to see them intervening as follows: (1) the two agencies will focus on removing barriers to doing business in their respective space sectors; (2) the two agencies will intervene in their space sectors primarily via business support services; and (3) the two agencies will channel support toward firms with strong business cases. These characteristics essentially define the agencies' missions, mechanisms, and preferences.

Is this in fact how the New Zealand and Australian agencies go about intervening in their space sectors? A review of government documents from both countries shows that both countries do not conform to these expectations. More specifically, New Zealand mostly does, and Australia mostly does not. New Zealand is more of a regulatory state than Australia is; the expectations mostly hold true for New Zealand, but hardly hold true for Australia. The section below explains these differences, setting the stage for the next section of this article, which discusses these differences' implications for the future development of the two countries' space sectors.

How do New Zealand's and Australia's Space Agencies Compare?

This section has three parts comparing how New Zealand's and Australia's space agencies intervene to develop their space sectors. The first part assesses the extent to which New Zealand and Australia hold true to their theorized mission: removing barriers to doing business in the space sector. The second part assesses the extent to which New Zealand and Australia hold true to intervening in their space sectors via the theorized mechanism: business support services. The third part assesses the extent to which New Zealand and Australia hold true to their theorized preferences: channeling support toward firms with strong business cases. These are the three indications—about missions, mechanisms, and preferences—from the literature about how the agencies are likely to support their space sectors' development.

Mission: Do New Zealand's and Australia's space agencies remove barriers to doing business?

Regarding the first indication, New Zealand's space agency very much aligns with expectations about removing barriers to doing business. On its website, the agency highlights its regulatory functions: issuing permits, meeting international obligations, and managing liability.²⁵ The purpose of these various regulatory functions is to remove barriers to doing business: "Our laws minimize unnecessary prescription, by including detailed requirements in regulation. Compliance costs are also minimized, by enabling overseas licenses to satisfy New Zealand requirements."²⁶ The first sentence is quintessentially what one would expect of a regulatory state: its mission is to create clear rules that reduce transaction costs and "level the playing field" for all firms about understanding what the rules are for doing business.

The second sentence similarly focuses on reducing costs, but it is quite stunning when one considers it; it allows companies to use other governments' licensing to facilitate doing business in New Zealand. This lowers the cost of doing business in New Zealand for firms by allowing them to, at least partially, secure permits from their home governments to do business in New Zealand. In what other instance does a government outsource permit processes to enable rocket launches? This author is not aware of any other instances. These regulations primarily benefit Rocket Lab, which can secure launch licenses from America's Federal Aviation Administration and then use those licenses to launch in New Zealand.²⁷

As expected, since New Zealand is a regulatory state, the New Zealand Space Agency (NZSA) does not indicate it "transforms" or "leads" business activity, which is what one would expect to find in a developmental state. It instead describes itself as a facilitator, not as a leader. The agency characterizes New Zealand as being "an

ideal location for New Space” because of geographical and cultural factors.²⁸ Growth in the space sector is only natural, in other words. The role of New Zealand’s space agency is to enable firms to work in the space sector, not to lure them in.

Turning to the Australian Space Agency (ASA), there is a significant contrast: the agency’s mission does not appear to be removing barriers to doing business. Instead, its stated purpose is to “transform the space industry”; it has a plan for how the market should grow and it intends to influence firms to work in ways that align with that plan.²⁹ When summarizing its role, the agency highlights its “industry programs and funding” more than its regulatory activities, thus emphasizing its role of incentivizing certain types of planned business behavior.³⁰ The agency describes itself as “coordinating Australia’s domestic civil sector activities . . . supporting the growth of Australia’s space industry and the use of space across the broader economy . . . leading civil space engagement . . . [and] inspiring the Australian community and the next generation of space entrepreneurs.”³¹ This all sounds very much like the verbiage one would expect to hear from a developmental state, not a regulatory state. Whereas the New Zealand agency is a facilitator that enables business, the Australian agency is a leader that guides it.

The ASA makes a few nods to free-market principles. For instance, in order for firms to access financing under its International Space Investment initiative, firms must show their projects “target a gap in the market, market failures, and inefficiencies.”³² And the agency describes its regulatory role as ensuring “regulations meet technology advances and don’t unnecessarily inhibit innovation”; like New Zealand, the stated purpose of the agency’s regulatory function is to give firms greater freedom.³³ Generally, though, despite these nods to neoliberal values, the ASA emphasizes how its function is to incentivize particular types of business activities. The emphasis of its self-described mission is not facilitating business. It is instead leading business. In this sense, the agency’s mission is similar to what one would expect to see for government entities in developmental states like Japan and Singapore.

Mechanism: Do New Zealand’s and Australia’s space agencies give business support services?

The second indication from the literature is that New Zealand’s and Australia’s space agencies are likely to intervene primarily via business support services. Unlike developmental states, which primarily intervene via financial incentive schemes, regulatory states are expected to help firms refine their business strategies. Is this the case? In fact, neither the New Zealand nor Australian agencies align with expectations. The NZSA does not provide any significant business sup-

port services; the agency instead primarily restricts its intervention to regulatory matters. The ASA, on the other hand, primarily intervenes in the space sector through financial incentive schemes, as one would expect of a developmental state.

Turning to the NZSA first, the agency rarely works directly with firms in the space sector; it provides little assistance in terms of financing or research and development support, for instance. There are government programs for space-sector firms, but these programs do not pertain to the NZSA—instead, the agency's parent ministry, the Ministry of Business, Innovation, and Employment (MBIE), manages such programs. The American space debris management firm LeoLabs, for instance, received support via MBIE's Innovative Partnerships program, which gives access to investment, research-and-development (R&D) support, tax breaks, commercialization assistance, and special visas.³⁴ The New Zealand satellite thruster company Dawn Aerospace, on the other hand, received financial assistance via MBIE's Catalyst Fund.³⁵ MBIE is also cofinancing a methane-detecting satellite to be launched in 2022 (most financing will be from the American non-governmental organization the Environmental Defense Fund).³⁶ Another entity supporting firms is Callaghan Innovation, which is another MBIE daughter organization and thus a sister entity to the NZSA. The only support coming from the space agency itself toward specific recipients is a small internship program that funds students to go to the United States and gain work experience with NASA.³⁷

The literature indicates a regulatory-state agency will primarily intervene by helping firms to refine their business strategies, but the NZSA is not involved in such activities. The agency focuses almost exclusively on regulatory support and helps students go abroad on internships. It is true that the government provides some firm-specific support, but this support comes mostly from the space agency's parent organization MBIE. That support includes business support services, which one would expect of regulatory states (i.e., R&D support and commercialization assistance), but it also includes financial incentives, which one would expect of developmental states (i.e., grants and tax breaks).

The ASA also intervenes in unexpected ways, though differently than the NZSA. The ASA conforms to expectations one would have for a developmental state, not a regulatory state—the space agency's favored mechanism for intervention is financial incentive schemes, not business support services. The ASA oversees three major financing schemes: the International Space Investment initiative, the Space Infrastructure Fund, and the Moon to Mars initiative. The first two are elements of the Australian Civil Space Strategy, which is the Australian government's overarching plan for developing the space sector and which is implemented “through the [space] agency.”³⁸ The Moon to Mars initiative was formed after the

creation of the Australian Civil Space Strategy and is thus not mentioned in the strategy, but the space agency is described as having “launched” it.³⁹

The Mars to Moon initiative is not yet fully implemented, but the International Space Investment initiative and the Space Infrastructure Fund have both been underway for some time and they have already begun distributing funds. The International Space Investment initiative provides grants to firms that range from \$100,000 to \$4 million AUD.⁴⁰ In total, the initiative is providing \$15 million AUD in such funding over three years.⁴¹ The Space Infrastructure Fund, in turn, is investing \$19.5 million AUD in seven space-related infrastructure areas.⁴² There is little indication on the ASA’s site that it provides the business support services that one would expect of a regulatory state’s government agency. Australia’s agency is not, for instance, providing R&D support, nor is it helping firms strategize about how to go about commercializing their technology. Rather, the agency’s main mechanism for intervening is financial incentive schemes, precisely the favored mechanism used by developmental states.

Preference: Do New Zealand’s and Australia’s space agencies prefer helping competitive firms?

The third indication from literature regards preference; according to the literature, regulatory states prefer supporting competitive firms—the firms that can prove they are most likely to achieve business success are those which government prefers to support. This is unlike in developmental states, where government prefers supporting firms that align with economic development plans; the most important criterion in developmental states is alignment with development plans. On this third matter, the NZSA behaves as expected—it supports competitive firms. Australia’s agency, on the other hand, acts like a developmental state agency—its main preference criterion is how much firms align with development plans.

Turning to the NZSA first, as previously discussed, it sticks mostly to regulatory oversight as opposed to firm-specific support, but even so, it has preferences about which firms should benefit from its regulations. This is abundantly clear in the case of Rocket Lab, which is prominently featured on the agency’s website as the most notable company in New Zealand’s space sector. Rocket Lab launches from the Mahia Peninsula, but it is only able to do this because of agreements made among the New Zealand government, Rocket Lab, and the United States government. In June 2016, the two governments agreed to allow US launch vehicles to launch from New Zealand.⁴³ In September 2016, the New Zealand government and Rocket Lab agreed to allow Rocket Lab to launch from New Zealand; the launches needed to hold “a US license and all other necessary licenses,

approvals, authorisations and consents required under the laws and policies of the United States of America.”⁴⁴ In May 2017, the US Federal Aviation Administration permitted Rocket Lab to carry out launches from New Zealand.⁴⁵

All these agreements were made shortly after the NZSA was established in April 2016. The space agency administers the main piece of legislation that guides oversight of launch activity in New Zealand, including requirements related to the treaty with the United States.⁴⁶ On its website, the space agency advertises how these agreements let firms launch from New Zealand by using “overseas licenses to satisfy New Zealand requirements.”⁴⁷

Rocket Lab very much fits the mold of the sort of company that one expects government agencies in a regulatory state to support; it had a strong business case. Although Rocket Lab had not yet provided launch services when the agreements were put in place, the company had already received millions of dollars in American government financing.⁴⁸ Rocket Lab was at the time indicating that it wanted to return to New Zealand to set up launch operations; Rocket Lab was originally registered as a New Zealand company before it re-registered in the United States, and the founder, Peter Beck, repeatedly stated he would like the firm to launch from New Zealand.⁴⁹ Rocket Lab likely re-registered in the United States to gain access to larger sources of private financing and also contracts with the American government.⁵⁰ With close ties to the United States military–industrial complex, the largest demander of launch services in the world, Rocket Lab was a firm with strong commercial potential. The NZSA made a typically regulatory–state decision to put agreements in place to facilitate this promising firm’s ability to do business in New Zealand. No other space firm has benefited as much from New Zealand government support as has Rocket Lab.

Compared to its New Zealand counterpart, the ASA has different support preferences that are very akin to what one would expect of a developmental state. The agency does not facilitate business for large firms with solid prospects like Rocket Lab, as New Zealand’s space agency did. The ASA instead has a vision about which business activities it would like to see grow in Australia, and the agency targets its support to firms in such business areas. It prefers channeling support toward firms that align with economic development plans.

The ASA has a clear preference, for example, to spur the growth of local small- and medium-sized enterprises (SMEs). Of the Space Infrastructure Fund’s seven tracks, for instance, four of their descriptions highlight roles for SMEs.⁵¹ To be eligible for financial assistance on such projects, applicants must be active Australian (i.e., not foreign) firms.⁵² The space agency has signed several memoranda of understanding (MOUs) with international corporations like Airbus and with state governments. These MOUs often mention benefits for Australian SMEs

and startups.⁵³ Intervention is, in other words, designed to spur the SME portion of the space ecosystem.

In terms of specific functional business areas, the International Space Investment initiative has several priorities: position, navigation, and timing; Earth observation; communications technologies and services; space situational awareness and debris monitoring; leapfrog R&D; robotics and automation on Earth and in space; and access to space.⁵⁴ This is a specific list of functional areas in which firms must be active to access government financial support. This is quite unlike the NZSA, which essentially facilitated regulatory requirements in response to Rocket Lab's intention to launch from New Zealand. The NZSA, unlike the ASA, does not have a list of aspirational business areas that it is trying to make more attractive through the creation of regulatory frameworks.

One last preference for the ASA worth noting is its push for firms to deepen ties to the American space sector. The International Space Investment initiative invests in "strategic space projects that grow the Australian space industry and build collaboration with international space agencies."⁵⁵ Though this does not specifically mention the United States, NASA is the best-funded space agency in the world and already has an established presence in Australia, which clearly makes it the most likely "international space agency" with which applicants will collaborate.⁵⁶ The agency's Moon to Mars initiative, on the other hand, explicitly focuses on linking Australian firms with the American space program.⁵⁷

What Do the Differences Mean?

The preceding section shows that New Zealand's and Australia's space agencies intervene differently to develop their respective national space sectors. The NZSA behaves more or less as one would expect a regulatory-state government entity to behave. The ASA, on the other hand, behaves more unexpectedly like a developmental state government entity. The table below summarizes the differences:

Table 1. Differences between the two agencies

	New Zealand Space Agency	Australian Space Agency
Mission	Regulatory; mission is to remove barriers to doing business	Developmental; mission is to plan and coordinate business activity
Mechanism	Unexpected; refrains from providing firm-specific support	Developmental; favors using financial incentive schemes
Preference	Regulatory; prefers supporting firms with competitive business cases	Developmental; prefers supporting firms that align with plans

What does this mean in terms of how New Zealand's and Australia's space sectors will evolve? Given the above differences in terms of the space agencies' missions, mechanisms, and preferences, the two space sectors seem bound for

different trajectories. The rest of the section is broken down into four parts: the first three parts respectively address the implications of each of the differences, and the fourth part outlines areas for future research. A final brief section follows with some concluding remarks.

Implications of Mission Difference

The first difference relates to the space agencies' missions. The NZSA is first and foremost focused on removing barriers to doing business in New Zealand's space sector. Two implications arise from this mission focus for New Zealand: (1) the space sector will likely see more domestic growth in industries with relatively few barriers; and (2) business will come from other countries into industries that are relatively barrier-free in New Zealand. In terms of the first implication, wherever barriers are fewest, firms in the domestic market will likely grow faster. For instance, if the NZSA focuses on reducing barriers to doing business in the ground communications industry, but not for satellite manufacturing, then there will likely be more growth in ground communications than in satellite manufacturing. If it becomes cheaper to get a permit for operating a ground station, whereas the price of getting a permit to manufacture satellites remains the same, then all else being equal, there will be a proliferation of ground station operators compared to what there would have otherwise been. Where the agency focuses on reducing barriers, therefore, will shape the sector's growth.

In terms of the second implication about attracting foreign business into industries with relatively few barriers, this means that for some industries, the relative absence of barriers compared to barriers in other countries will lure in foreign business. Rocket Lab's history in New Zealand is a case in point. Peter Beck wanted to launch from New Zealand, but he only ended up doing so because the NZSA designed and implemented agreements to facilitate launches. If the New Zealand government had not allowed US permits to facilitate launches in New Zealand, then this would have made New Zealand a significantly more difficult place to work for Rocket Lab—the firm would have had to deal with more bureaucratic processes to secure authorization. Given that the NZSA continues to advertise it allows other countries' permits to facilitate launches, New Zealand likely will continue to attract launch service providers from other countries. If a foreign launch service provider is looking for a country from which to launch, New Zealand will be relatively attractive compared to other jurisdictions where governments require meeting multiple sets of regulatory requirements. The relative absence of barriers could occur in other industries, also; in industries where the space agency reduces barriers compared to other countries, international business will flow in.

By comparison, the ASA has a different mission: it plans and coordinates business activity. The implications of this mission for Australia's space sector are two-fold: (1) domestic business growth is most likely to occur in industries that the agency plans to grow; and (2) business from abroad will be attracted to industries in Australia where government incentives are more abundant compared to incentives elsewhere. The first point is relatively straightforward. The government will sustain support for certain industries, and it is in these industries where local firms will grow more than they would otherwise. If the ASA, for instance, commits to supporting Earth observation (as indeed it does according to its International Space Investment initiative), but it is not committed to supporting space resource extraction, then there will be more business growth in the first industry.

The second implication is that, in the industries in its space sector where the ASA is offering relatively abundant incentives, international firms will come to Australia more than they otherwise would. The more resources Australia commits to supporting growth in an industry, relative to the overall amount of resources all governments around the world are committing to that industry, then there will be more inflows of international business. If Australia, for instance, doubles the amount of resources it commits to supporting the growth of the Earth observation industry, but no other governments increase their resource commitments to that industry, then more international business will flow into Australia's Earth observation industry. The industries that the agency plans to grow, in other words, will grow faster than they otherwise would, both due to domestic and international business activity.

Implications of Mechanism Difference

The second difference between the two countries regards their mechanisms for intervening. Unexpectedly, the NZSA does not favor using firm support services. Rather, it focuses on designing and implementing regulations. There are two implications that stand out from this regarding the likely future trajectory of New Zealand's space sector: (1) there will be relatively few government-financed firms; and (2) growth will concentrate in industries where there is clear market demand. The first implication is fairly obvious. If the government refrains from providing support to specific firms, then there will be few government-financed firms. There will be few firms, in other words, that depend on government finance, whether directly (e.g., via up-front funding) or more indirectly (e.g., via government contracts on the backend).⁵⁸

The second implication is growth will likely be in industries with clear market demand; business will grow in industries where other market actors seek goods or services. If, for instance, supply of launch services exceeds demand—a possibility

given the likely impending global recession due to COVID-19—then there will be little incentive for launch services firms to build up their business in New Zealand. If, however, there is clear demand for services based on satellite-provided data, then there would be a growth in related business areas—firms using satellite imagery to provide precision farming support services, for instance. This responsiveness to markets will be more than it otherwise would be if the government were actively intervening with financial incentive schemes. If that were the case, its incentives schemes would distort demand—government incentives would increase demand for certain types of business.

The ASA, on the other hand, favors intervening with financial incentive schemes. As such it seems likely that Australia's space sector will evolve as follows: (1) there will be relatively many government-financed firms; and (2) growth in the sector will depend on government support. The first point is that there will be many firms that directly or indirectly depend on government financing. To use launch services as an example, if the government provides significant financial incentives to facilitate “access to space,” as is indicated in its International Space Investment initiative, then there will likely be more firms in the launch services industry that depend on government financing than there otherwise would be. This dependence could come up front in the form of loans or grants or tax breaks. It could also come at the backend—the government could be a customer that purchases launches, or it could subsidize other entities' buying launches. In both cases, firms depend on government financing.

The second implication, tied to the first, is that growth in the sector will depend on government support. Financial incentives essentially amount to subsidies, and a well-known shortcoming of subsidies is that they lead to dependence. In some cases, government subsidies can spur particular industries' growth, and then government financing can be scaled back to form a self-sustaining industry. This has arguably happened in Brazil, for instance, with the production of plant-based fuel alternatives for vehicles.⁵⁹ It will therefore be of interest to anyone participating in a growing industry in Australia's space sector to monitor the ASA's associated financial incentive schemes. There will be a risk that if those schemes are shrunk, then the industry's growth will slow significantly. If, for instance, the ASA incentivizes growth in Earth observation and this leads to a proliferation of Earth observation firms, then those firms should be wary of what will happen if the agency shrinks incentive schemes.

Implications of Preference Difference

The third major difference between the two agencies relates to their preferences—how they decide where to channel their support. The NZSA prefers sup-

porting firms with strong business cases that appear likely to succeed. As such, New Zealand's space sector will likely: (1) be defined by large successful firms; and (2) be difficult to enter for latecomers. The two implications are related. The first one is simply highlighting the fact that removing barriers to doing business for strong firms has the potential to have a multiplier effect on their success. In another unrelated sector in New Zealand's economy, the primary goods industry, one can arguably see this is the case with Fonterra, which is a powerful producer of dairy products that disproportionately benefits from government intervention to facilitate the exports of dairy products.⁶⁰ The same possibility holds true for the space sector. Reducing barriers to doing business in New Zealand's launch industry, for instance, has clearly benefited Rocket Lab more than other aspiring launch providers like Dawn Aerospace, a Christchurch-based satellite thruster firm that is also developing technologies to provide launch services.⁶¹

The second implication relates to the first. As the government removes barriers to doing business, this primarily benefits firms that are already successful and paradoxically grows barriers to entering the industry for latecomers. Again, the Rocket Lab–Dawn Aerospace comparison is illustrative. It may be that Dawn Aerospace becomes a successful launch company, but it now faces a steep uphill battle to win market share from Rocket Lab. This is due to economies of scale—the more market share a firm has, the better it can defend that market share. This is especially so in capital-intensive industries, which the launch services industry certainly is. The NZSA enabled Rocket Lab's growth and entrenched the firm's market position. Furthermore, the agency's neoliberal ideology means it may hesitate to intervene to prevent monopolization; government should not, after all, from a market rational perspective, be hindering successful business.⁶² The end result of all this is that the NZSA's preference for supporting successful firms may make certain industries more difficult to access for newcomers.

Australia's space agency differs from New Zealand's in that the ASA prefers supporting firms that align with economic development plans. This preference seems likely to have two implications for the future evolution of Australia's space sector: (1) the sector may come to be defined by firms that specialize in accessing government incentive schemes; and (2) for firms that do not align with government plans, it will be difficult to succeed. The first implication means that if large financial incentives schemes become important enablers of success, firms will naturally tailor their activities to increase their chances of accessing those incentive schemes. The more firms succeed in accessing incentive schemes, the greater will be their ability to succeed in accessing future incentives; they will build up specialization in accessing incentive schemes.

The second implication relates to the first. If a key determinant of success in Australia's space sector is accessing financing schemes, and if specialization for accessing them concentrates in a select number of firms, then it will be difficult for all other firms to access the incentives. Thus, it will be difficult for the nonspecialists to succeed. As stated in the previous section, the International Space Investment initiative provides grants to firms that range from \$100,000 to \$4 million AUD. If the Australian government continues to regularly put out grant offerings for which firms must compete, some firms will start to specialize. The more incentives a firm succeeds in accessing, the better it will become at accessing such schemes in the future—a firm that successfully wins three grants knows better than a firm with no experience how to win an upcoming funding round.

Areas for Future Research

The implications described above are not certain. To better understand if these trajectories are likely, there must be more research done regarding comparative space-sector development. Four areas stand out as potentially fertile grounds for research. First, more countries need to be studied to better understand the differences between space agencies in terms of their missions, mechanisms, and preferences. As mentioned early in this article, several governments have created space agencies in the last decade. How do these space agencies compare to their counterparts in New Zealand and Australia? By focusing on New Zealand and Australia in this article, differences between them are stark. But perhaps in comparison to space agencies in the Philippines and Turkey, for example, the New Zealand and Australian space agencies' approaches to intervention will appear more similar. The more countries' space agencies that are examined, the better one can identify the characteristics that make each of them unique, and thus the better one can identify implications for how their space sectors will develop.

Second, research ought to be done to monitor the evolution of space sectors to understand if the implications listed above have any validity. While the differences between New Zealand and Australia in terms of missions, mechanisms, and preferences are backed by empirics, the implications of these differences for the future development of their space sectors are speculative. Will it actually turn out to be the case that New Zealand's space sector will be dominated by private firms, whereas Australia's space will feature more state-subsidized firms? To know whether these implications about trajectories are valid requires monitoring the situations in both countries. What is to be monitored will, of course, depend on if more countries are studied—as discussed above, if a greater number of countries are examined, then understanding of their differences and the implications of those differences will likely change.

A third area for research is studying historical cases of space-sector development. The theorized differences discussed in this article are based on developmental state scholars' analyses of political economies. Those scholars, however, do not specifically examine space sectors; instead, they focus on other sectors like renewable energy and consumer electronics.⁶³ Perhaps by looking at historical cases of space-sector development, especially in well-known developmental and regulatory states like Japan and the United States, clearer implications will emerge for how the space sectors of New Zealand, Australia, and other countries will evolve.

A fourth area of research is to compare New Zealand and Australia again, but to this time focus on more than just their space agencies. The literature clearly indicates that in developmental states there are lead agencies that intervene, but there is less certainty about the importance of lead agencies in regulatory states like New Zealand and Australia.⁶⁴ In either case, it is not necessarily the case that the space agencies are in fact the lead agencies. As noted in this article, for instance, Callaghan Innovation, a sister organization to the NZSA, intervenes with firm-specific support in the space sector. Perhaps the differences between New Zealand and Australia would be different if more than just their space agencies were examined. It is thus worth comparing the two countries' intervention in all-of-government terms rather than solely in terms of the space agencies.

Conclusion

This article started with the question of whether New Zealand and Australia's space sectors are likely to develop along similar trajectories. Will they end up occupying similar niches, or will they occupy different positions in the global economy? Will they complement or compete with each other? The findings of this article are admittedly tentative, but they indicate that New Zealand's and Australia's space sectors will indeed diverge in terms of their future development. More research should be done to confirm that this will be the case, in line with the suggestions above. It seems safe to assume that if the global economy can sustain growth in both of their national space sectors, New Zealand and Australia will not be occupying the same niche.

A bigger outstanding question, though, is whether the global space sector will indeed be large enough to sustain growth in the national space sectors of New Zealand, Australia, and other countries. This was already an open question, but now that the COVID-19 pandemic indicates the global economy is set for a recession, many sectors will likely experience limited growth for many years to come. It is easy to imagine the space sector will be especially hard-hit, given its benefits to society are not widely appreciated. Just as individual space-sector firms are about to undergo a "great winnowing" as a result of the pandemic, so too will

national space sectors.⁶⁵ The fate of New Zealand's and Australia's space sectors, therefore, depends on more than just their ability to occupy unique niches—which this article indicates will likely be the case—but also on whether the global economy will be big enough to provide them with niches to fill. ✪

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13. Johnson, *MITI and the Japanese Miracle*, 26.
14. Johnson, *MITI and the Japanese Miracle*, 19–21.
15. Meredith Woo-Cumings, "Introduction: Chalmers Johnson and the Politics of Nationalism and Development," in *The Developmental State* (Ithaca, NY: Cornell University Press, 1999), 2.
16. Peter Evans and Alice H. Amsden each wrote about developmental states in South Korea, respectively in *Embedded Autonomy: States and Industrial Transformation* (Princeton, NJ: Princeton University Press 1995) and *Asia's Next Giant: South Korea and Late Industrialization* (New York: Oxford University Press, 1989).

17. Developmental states' emphasis on using financial incentives was well summarized by Alice H. Amsden in *Asia's Next Giant*, where she stated that developmental states intervene by "providing private investors with a battery of incentives that, simplified, boil down to subsidies" (13). Peter Evans provided extensive accounts of developmental states' focus on channeling support to firms in desired business areas in *Embedded Autonomy*. He described this focus as developmental state governments openly embracing "midwife" or "husband" roles; government's proper function is to cultivate business areas that align with developmental goals (80–81). In fact, there are other key characteristics to developmental states' approaches to intervention besides these three. However, it is these three characteristics that stand most in contrast to the characteristics of so-called "regulatory states" like Australia and New Zealand. It is these three characteristics that are thus worth highlighting in this paper.

18. These findings parallel similar discussions in public administration scholarship. As the public administration scholars put it, liberalization's spread is not so much a "retreat of the state," but it is rather "public authority . . . expanding by colonizing new areas with more formalized regulation" (Magetti 2014, 281). Put succinctly, "What is observed in practice is never a dismantling of all regulation – a return to a situation of *laissez-faire* which in fact never existed" (Majone 1996, 2). In other words, neoliberalization does not mean less intervention. It just means a different sort of intervention. Regulatory state scholars agree. See the following for reference, Martino Magetti, "Institution change and the evolution of the regulatory state: evidence from the Swiss case," *International Review of Administrative Sciences* 80, no. 2 (2014): 276–97; and Giandomenico Majone, "Introduction," *Regulating Europe* (New York: Routledge 1996), 1–5

19. This summation of the characteristics of regulatory state intervention is based off reading of three primary texts: Fred Block, "Swimming Against the Current: The Rise of a Hidden Developmental State in the United States," *Politics & Society* 36, no. 2 (2008): 169–206; Robert MacNeil, "Seeding an Energy Technology Revolution in the United States: Re-conceptualising the Nature of Innovation in 'Liberal-Market Economies,'" *New Political Economy* 18, no. 1 (2013): 64–88; and Linda Weiss, *America Inc.? Innovation and Enterprise in the National Security States* (Ithaca, NY: Cornell University Press, 2014). It is worth noting that there is no consensus about these characteristics defining regulatory state intervention. Unlike the core developmental state literature, the offshoot that studies regulatory states is still nascent. There is a notable absence of review articles summarizing consensus views about regulatory states. There are many such articles for developmental states.

20. The three authors mentioned in the previous note—Fred Block, Robert MacNeil, and Linda Weiss—all focus on the United States. A notable exception to the focus on the United States is Seán Ó Riain, who wrote about Ireland's "developmental network state" in *The Politics of High-Tech Growth: Developmental Network States in the Global Economy* (Cambridge: Cambridge University Press, 2004). Ó Riain is an intellectual inspiration for the others; Block and MacNeil both directly respond to Ó Riain, and Weiss indirectly does, since she directly responds to Block.

21. Peter A. Hall and David Soskice, "An Introduction to Varieties of Capitalism," in *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (New York: Oxford University Press, 2001), 1–68.

22. Weiss, in her aforementioned 2014 book, studies the United States. She quite forcefully states that the liberal market economy category in the varieties of capitalism literature, just like the regulatory states in the developmental state literature, underestimates the extent of state intervention: "[Varieties of capitalism] theorists link US success in transformative innovation to the predominance of the free market. . . . This makes sense, of course, only if you fence off a large part of the system. . . . This is precisely what the [varieties of capitalism] approach has done" (12). The United States is the most often referenced regulatory state in the developmental state literature (including in the founding text written in 1982 by Chalmers Johnson). The United States is also the quintessential liberal market economy as described in the varieties of capitalism literature (including in the founding text by Peter A. Hall and David Soskice—see next endnote).

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Chasing the Chimera of the Indigenous Jet Fighter

China's Stealth Fighters and the Lessons of Recent Aviation History

OWEN L. SIRRS

Abstract

China has demonstrated an apparent capability to develop stealth fighters. While Chinese aviation technology should not be underestimated, this essay strikes a cautionary note. Using historical examples from Argentina, Egypt, and India, the author contends that Chinese stealth fighters are being unveiled in part to highlight China's arrival as a global power; however, future Chinese jet fighter development will be hindered by technical challenges such as the development of indigenous engines—not to mention advanced weapons and sensors.

Introduction

In recent years China has unveiled two stealth fighters on the eve of visits to Beijing by two US secretaries of defense. These apparent stealth projects generate obvious concern in Washington, yet US officials concede they know little about China's stealth capabilities and how they fit into that country's overall force modernization.¹

At first glance, the development of China's stealth fighters appears to be motivated by the US deployment of similar aircraft for more than two decades; from Beijing's perspective American capabilities must be matched if China is to maintain a credible air force. Yet, behind military need, other forces seem to be at work too: according to one observer, stealth fighters reveal China's ambitions to become more than just a regional power armed with "Soviet hand-me-down" weapons.² Still, questions linger: Are these aircraft technology demonstrators or prototypes intended for eventual production? Are they mainly political symbols, and if so, will they ever enter service? How indigenous are they? Will China rely solely on Russian engines to power these aircraft, or are viable domestic alternatives in the offing? What about advanced radars, avionics, and weapons systems?³

History can help answer some of these questions. While historical cases never exactly parallel current realities, there are certain boundaries imposed by physics and technology that offer pointers in evaluating China's stealth capabilities. For

instance, we know that few countries have successfully developed and produced their own jet fighters with indigenous resources and technology. Indeed, other than the United States, Russia, France, the United Kingdom, and a few others, many indigenous fighter programs failed, compelling their sponsors to obtain combat fighters from abroad.⁴

This essay explores why some states engage in costly aviation projects and analyzes the reasons behind numerous aviation failures. In doing so we examine the failed jet fighter programs of Argentina, Egypt, and India.⁵ These countries were selected in part because they are regional powers, albeit in different parts of the globe. During the Cold War, these nations were led by ambitious leaders who shared the notion of “non-alignment” between the superpowers and a belief that aviation was a potent symbol of technical prowess, strength, and political legitimacy.⁶ All three were at similar levels of aviation development when they embarked on their jet fighter projects, and each relied on German design teams led by Kurt Tank or Willy Messerschmitt. In the end, all three failed. This paper attempts to explain why they failed and then applies those lessons to the more recent Chinese case.

Argentina’s Pulqui-II

Argentina’s Pulqui-II was inspired by the expansive vision of Juan Domingo Perón, who first governed the country from 1946 to 1955. Essentially a political totem, the Pulqui-II’s fortunes were closely tied to those of its promoter. When Perón was ousted in a 1955 coup, the dreams of an Argentine jet fighter were over.

Context

At the end of World War II, Argentina was a rising power with strong regional leadership aspirations. Few were able to express those ambitions in a more charismatic manner than Juan Perón, an army officer who was elected president in 1946. In Perón’s view, Argentina deserved to be one of the world’s great powers because of its natural resources, young population, national will, and his dynamic leadership.⁷ Perón was equally convinced that only a neutral Argentina could avoid the catastrophic nuclear war between the superpowers that he believed was imminent.⁸

Motivations

Economic autarky was essential to Perón’s “Third Way”: Argentina must nationalize infrastructure, pursue import substitution, and promote state industry to augment her status as an independent actor in world affairs. Above all, Argentina

eventually had to be self-sufficient in supplying her military needs, and that meant weaning her armed forces off their traditional British and American suppliers.⁹

From 1938–1940, Perón had served as a military attaché in Mussolini's Italy, where he developed a lifelong interest in fascism.¹⁰ Like Il Duce, Perón viewed indigenous aviation as a propaganda symbol that extolled national progress, pride and strength: "It was only recently that we considered aviation as the means of transport of the future. To-day that dream has materialized. Aeroplanes are no longer a future promise but the miracle of the present. . . . In the war waged against time and distance, aviation represents a victory."¹¹

Argentine officers were impressed by aviation-related technologies unleashed during World War II such as atomic bombs, long-range bombers, radar, jet fighters, and rockets. Aviation represented the cutting edge of the scientific frontier, and Perón made the development of a national aeronautical industry a top priority in Argentina's first five-year plan.¹² Indeed, for Perón, aviation *symbolized* the import substitution approach; it would spur industrial development and provide political legitimacy to the government.¹³

Aviation offered potent images of progress, technological advancement, and national strength, but above all, it conferred legitimacy to regime policies.¹⁴ In 1948, the government issued a lavishly illustrated study of Argentina's aviation potential, which established bold objectives in grandiose terms: "[N]ational aviation is created on the basis of courage and fortitude, a nest of condors where civilians and military officers alike, united by the same ideals, are forging the nascent 'aeronautical conscience' . . . imbued with progress and well-being while leaving the past behind."¹⁵

Jets also symbolized speed. According to one account the genesis for the Pulqui-II lay in the regime's desire to break a world speed record recently set by a British Gloster Meteor.¹⁶ If there was a military requirement for the Pulqui-II, it lay in the fact that the Argentine Air Force (Fuerza Aérea Argentina or FAA) wanted to replace its own British-origin Meteors.¹⁷

Program History

Argentina enjoyed advantages in finance and technology when she embarked on the Pulqui-II. During the war, the country was a major creditor to the United Kingdom and built substantial sterling reserves based on exports of wheat, beef, and other goods.¹⁸ Indeed, as part of Britain's postwar debt payments, London delivered Rolls Royce Derwent 5 and Nene II engines to Buenos Aires.¹⁹ Argentina also possessed a small aeronautical institute in Córdoba dedicated to the licensed production of foreign aircraft designs, although it also developed a jet prototype called the Pulqui-I.²⁰ Underpowered and hampered by design defects,

the Pulqui-I nonetheless sustained Argentina's claim to be the eighth country to design and fly its own jet aircraft.²¹

The Pulqui-I's failures motivated the Argentines to recruit Kurt Tank, a German aviation expert who had designed the Luftwaffe's FW-190 fighter and long-range FW-200 Condor reconnaissance airplane during World War II. Tank was an ideal candidate: his expertise in aviation design, testing, and production management were crucial to the Pulqui-II's success.²²

Shortly after Tank's arrival in Argentina, he met Perón, and throughout the remainder of his stay in Argentina, Tank enjoyed direct access to the president. Not only did this show Perón's personal interest in the Pulqui-II, it also helped Tank overcome the bureaucratic obstacles thrown in front of him.²³ After signing his contract, Tank recruited some 60 German aviation experts who helped him refine his incomplete paper design for a jet fighter called the Ta-183.²⁴ With a swept wing and all-metal construction, the Ta-183 evolved into the Pulqui-II, a revolutionary plane for its time and a rough equivalent to the Soviet MiG-15 and the American F-86 Sabre.²⁵

Five prototypes were built between 1950 and 1959. The first was a glider to test aerodynamic properties, while the second flew for the first time on 16 June 1950, powered by a Rolls Royce Nene II engine. This second prototype crashed the following year, along with the third and fourth in 1952 and 1954 respectively. The fifth first flew on 18 September 1959 and was later transferred to the National Aviation Museum in Morón.²⁶

Reasons for Failure

Why did the Pulqui-II never enter production even though most of its developmental problems were eventually resolved? One answer lies in the aircraft's poorly defined mission requirements. As noted earlier, this program was built mainly as a status symbol, and by 1951, it had become a propaganda tool in Juan Perón's reelection campaign and a symbol of his "new Argentina."²⁷ On 8 February 1951, Perón hosted an air show in Buenos Aires in which Kurt Tank put the Pulqui-II through its paces in front of the president, senior officials, and a large crowd of onlookers.²⁸ For Perón and his supporters, this was heady stuff: "It was truly a day of joy with the public converging in large numbers from all parts of the city. Expectations were very high for this proud model of aeronautical engineering which had influenced national public opinion and extended beyond our borders."²⁹

Yet the Pulqui-II's future remained in doubt, and Argentina sponsored another jet fighter program that competed with it for scarce funding and technical resources. Reimar Horten, a German aviation designer, led a much smaller team in researching a supersonic, delta-winged fighter. While Tank occasionally assisted

Horten's projects, the two otherwise did not work together.³⁰ The existence of two competing and underresourced jet programs suggested a lack of coordination and poor management by the government.

Cultural and professional differences presented additional difficulties for the Pulqui-II team. When Tank started work on his project, the bulk of the Argentine engineers who had worked on the Pulqui-I were transferred out.³¹ For those native experts who remained, there were frequent clashes with the Germans over design flaws and engineering deficiencies. The Germans were perceived by some as "closed," "arrogant," and generally reluctant to share their knowledge with their employers.³² For their part some of the German experts also recorded differences with the Argentines: "Their temperament was of course different from [Tank's] own. There was a mercurial quality in their thinking which contrasted oddly with his own more thorough methods."³³

Air force skepticism was another hurdle. The FAA was mulling a replacement for its obsolete Meteors, but it preferred the American F-86 over a risky, domestic alternative.³⁴ This suspicion was compounded by a 1951 accident with a Pulqui-II prototype that resulted in the death of an air force test pilot.³⁵

Then there was the issue of cost. From the outset, the government was determined to produce as many Pulqui-II components domestically as possible. This insistence on relative autarky—the Rolls Royce engine was a major exception—meant that development costs were very high, even when research costs were excluded.³⁶

Cost was not the only consequence of "national content." The Pulqui-II was also plagued by delays imposed by shoddy parts and inexperienced technicians, which deterred prospective customers like Egypt and the Netherlands from making firm commitments to buy.³⁷ Even when North American Aviation, the builder of the rival F-86, expressed interest in purchasing the Pulqui-II design, the Perón government refused to sell for "nationalist" reasons.³⁸ Thus, the costs of aircraft development were borne by Argentina alone.

Whether that country could fund the Pulqui-II on its own became increasingly doubtful as the program limped on. Unlike the early postwar years when Argentina was flush with foreign currency, the picture had changed dramatically by the early 1950s due to global economic forces and government policies. There was a decline in demand for Argentina's exports, and declining exports meant shrinking foreign currency earnings, even as the government spent heavily on social welfare and nationalization.³⁹ In the end, the Pulqui-II could not ride out the economic shocks that crippled the country and helped trigger the 1955 coup against Perón.

The vicissitudes of Argentine politics were the final blow. First was an ill-advised attempt to merge the Pulqui-II with the national automobile industry,

which diluted an already small pool of scientists, engineers, and technicians.⁴⁰ But the death knell came with the September 1955 anti-Perón coup that removed the Pulqui-II's most fervent backer and promoted some of the project's greatest skeptics. Even Tank was briefly arrested for possessing a false passport (given to him by Argentine intelligence when he first traveled to Argentina in 1949), and this only hastened the disintegration of the Pulqui-II team.⁴¹ Shortly afterward, Tank departed for West Germany and then India. In December 1956, the FAA announced that it had selected the F-86 over the Pulqui-II.⁴² The dream of an Argentine jet fighter was dead.

Long-term Consequences

Argentina went from the vanguard of combat aviation in the early 1950s to purchasing all its jet fighters from abroad by the end of the decade.⁴³ Although the Córdoba plant went on to design and produce a small number of turboprop combat aircraft like the Pucará, Argentina never exported a single plane.⁴⁴ There is nostalgia for the Pulqui-II among those Argentines who remember a brief period in their country's turbulent history when things seemed to be going right. In 2007, for example, a movie was released in Argentina with the telling title, *Pulqui: An Instant in a Country's Happiness*. As one reviewer put it, the film was about "lost dreams," an attempt "to resurrect an artifact that represented the once powerful rise of Argentina as an industrial player on the post-World War II landscape."⁴⁵

Egypt's HA-300

While Argentina's hopes of producing indigenous fighters were fading by the mid-1950s, Egypt was laying the foundations for its own fighter called the HA-300. Just like Perón before him, Gamal Abd al-Nasser used the HA-300 as a propaganda tool for regime legitimacy.

Context

In July 1952, army officers ousted the monarchy and set Egypt on an ambitious course of land reform, industrialization, and rearmament. Their leader was Gamal Abd al-Nasser, a charismatic army colonel who intended to make Egypt the leading power in a newly independent Middle East and North Africa.⁴⁶ Nasser believed that Egypt must avoid entanglement in superpower struggles, and he became an early adherent to the Non-Aligned Movement (NAM) forged by India's Jawaharlal Nehru and Yugoslavia's Josip Broz Tito.⁴⁷ Yet, the NAM alone would not give Nasser the autonomy he craved. Just as Perón pursued economic autarky,

so too did Nasser eventually nationalize industry, create import substitutes, and expropriate property owners.⁴⁸

Motivations

Self-sufficiency helped drive Egypt's jet fighter project. During the 1948–49 Arab–Israeli War and the 1956 Suez conflict, British and American arms embargoes hampered Egyptian military operations. As a result, Egypt sought long-term self-sufficiency in weapons production, but for the short term, she diversified her arms suppliers to include the Soviet Union.⁴⁹

The symbolic importance of aviation for Nasser's regime cannot be underestimated.⁵⁰ Much as the Soviets did with their annual May Day and October Revolution parades, the Egyptians used the anniversary of the 23 July 1952 coup to showcase military hardware. For instance, in 1960, four "Egyptian-made" (they were actually Spanish) HA-200 jet trainers flew above Cairo; three years later, the HA-300 jet fighter was rolled out for public viewing.⁵¹ Finally, just as Argentina had proudly announced that it was only the eighth country to build an indigenous jet fighter, so too did Egypt declare that it was the sixth country to design and build a *supersonic* jet when the HA-300 conducted its maiden flight in 1964.⁵²

The military rationale for the HA-300 was rather vague. In 1960 discussions with American diplomats, Nasser made the case that Egypt was losing the arms race with Israel in part because the latter was acquiring supersonic aircraft from France. Nasser admitted he was seeking the Soviet MiG-19 to correct this imbalance; however, this confession undercut a military argument for investing scarce resources in a costly supersonic domestic fighter when cheaper, more reliable imports were available.⁵³ While a domestic fighter might have eventually saved money that would otherwise have been spent on imports, it certainly did not mean that the overall cost per plane would be lower—rather the contrary. Egypt may have been counting on export sales to other Arab states to keep unit costs down. For example, Algerian president Ahmed Ben Bella considered purchasing the HA-300 but opted for Soviet aircraft instead.⁵⁴

Program History

Egypt embarked on its indigenous fighter quest with a basic aircraft design and license production capability. Built in 1950, Helwan's Aircraft Factory 36 was originally intended to produce the British de Havilland Vampire; however, that project foundered due to fraying UK–Egypt relations in the 1950s.⁵⁵ In 1959, the factory was retooled for production of Spain's HA-200 Saeta jet trainer.⁵⁶ Next

door to Factory 36 was a separate plant dedicated to designing and producing jet engines based on the reverse engineering of several French models.⁵⁷

This infrastructure was meager when measured against the daunting requirements of designing and eventually producing a viable supersonic fighter. For starters, Egypt lacked experts, tools, materials, and wind tunnels. To correct some of these shortcomings, the Egyptians recruited Willy Messerschmitt, who had designed the first operational jet fighter, the Luftwaffe's Me-262.⁵⁸ Messerschmitt had been in Spain working on a delta-winged fighter capable of Mach 2, but Madrid cancelled the project in 1960 because of spiraling costs and cheaper American alternatives. Cairo, which had just purchased the rights to produce the HA-200, now acquired the plans and tooling for the HA-300 as well.⁵⁹

Originally, the HA-300 was built around the British Orpheus 703 engine, but British production ceased before the HA-300 prototypes were completed, and Egypt had only a few on hand.⁶⁰ In any case, the Egyptians had decided to produce their own jet engines, even though this was an ambitious undertaking itself. However, Cairo was not deterred by the formidable challenges involved in designing and producing jet engines. To this day, few countries have consistently and successfully developed their own jet engines, and Egypt is not one of them. Even so, the Egyptians recruited some outstanding foreign talent, such as the Austrian Ferdinand Brandner, who had developed engines for Nazi Germany and the Soviets.⁶¹ Once Brandner's contract was inked, he recruited some 250 German and Austrian engineers, technicians, and scientists to work alongside the Egyptians at Helwan. In June 1963, this team conducted its first static engine test of the new E-300 power plant—the engine intended for the HA-300.⁶²

Engine development costs posed a major challenge, but fortune intervened when Brandner learned of Indian interest in the E-300.⁶³ As will be seen Kurt Tank was helping India design a supersonic fighter called the HF-24 Marut, which lacked an adequate engine. In March 1963, Brandner led a delegation to India, where he met Tank and negotiated a deal under which India would share E-300 costs, donate a modified HF-24 capable of carrying the E-300, train Egyptians as test pilots, and contribute a senior Indian test pilot to assist in HA-300 development.⁶⁴

Egypt and India trumpeted the symbolic value of their new association. After all, these were two NAM giants working together on a shared dream of producing combat jets outside the superpower monopoly. As the Indian test pilot Kapil Bhargava commented later, "The Indian press was still full of euphoria generated by this. On seeing a hint of collaboration between India and Egypt, they wrote learned editorials about the emergence of a third military bloc, of the non-aligned and its impact on the global balance of military power."⁶⁵

The HA-300 first flew on 7 March 1964, and a total of 135 test flights were completed before the program was halted in May 1969.⁶⁶

Reasons for Failure

Nasser's political fortunes peaked between 1957 and 1961, and this period coincided with Egypt's pursuit of indigenous jet fighters and ballistic missiles. Nasser thrived on "power symbols" during these years, and the most prominent of these was the High Dam being built at Aswan. However, the dam was not alone, for every anniversary of the 23 July 1952 coup featured a new weapon such as the HA-200 jet trainer (1960) and the two-stage Al-Ra'id ballistic missile (1963).⁶⁷

On 23 July 1963, the Egyptians unveiled yet another "triumph" to highlight their progress in national defense, when Indian test pilot Kapil Bhargava taxied the HA-300 in front of Nasser, Anwar al-Sadat, and others. According to Bhargava's later account, when the Egyptian president asked him for his opinion of the plane, Bhargava replied that the plane was an "interesting research project," but it would never enter production. In response, Nasser "just smiled. I concluded that, despite any difficulties that might hinder the project, he had his reasons for persisting with it and that too under the control of foreigners. He obviously believed that a successful flight test would be sufficient to strengthen his hand in international negotiations."⁶⁸

None of Nasser's indigenous weapons ever achieved military success. The ballistic missile program was a costly failure, while the HA-300 limped along until the 1967 Arab–Israeli War put an end to it. Yet, as Bhargava observed, Nasser did not view the HA-300 as a military priority but rather as a useful (if costly) symbol that buttressed his regime's claims to legitimacy.

We have already seen how German aviation experts encountered cultural differences with their Argentine colleagues, and the same was true in Egypt, where Messerschmitt's reputation for being an opinionated perfectionist grated on Egyptian and Indian sensitivities as well.⁶⁹ Matters only got worse when Messerschmitt fired some of his staff, and the Egyptians failed to pay salaries on time.⁷⁰

The promising Egyptian–Indian partnership was also marred by discord. At least some Indian officials erroneously believed that Egypt would eventually buy the HF-24 Marut along with the E-300 power plant. However, the Egyptians had no intention of doing so, and their problems with the Indians were aggravated by technical difficulties that plagued and ultimately killed the E-300 project.⁷¹

Moreover, while Cairo made much of its "Egyptian-made" fighter, the fact remained that it was designed by a German, tested in European wind tunnels, employed foreign parts, and relied on a British engine.⁷² Unlike the Argentines, who

made a spirited bid to ensure that the Pulqui-II used domestically produced components, the same could not be said for the Egyptian's efforts with the HA-300.

Cost was always a major issue for the Egyptians, who were committing scarce foreign currency reserves and technical talent to several projects like the High Dam, steel factories, and ballistic missiles. According to one estimate the HA-300 program cost over 100 million Egyptian pounds—or the equivalent of Egypt's total investment in its civilian industry throughout the 1960s.⁷³

The June 1967 war, which began with a preemptive Israeli air raid that destroyed much of the Egyptian Air Force on the ground, doomed the HA-300. In the aftermath of that humiliation, Nasser needed a new air force and fast. He could not afford to pour more money into a white elephant jet fighter that was already obsolete. Only the Soviets could address the immediate needs of the devastated Egyptian Air Force, and the result was cancellation of the HA-300 in return for procuring the superior MiG-21 at favorable prices.⁷⁴

Long-term Consequences

Egypt never designed and produced jet fighters. According to one source, the Helwan aviation plants were forced to lay off 5,000 workers, hundreds of skilled experts fled to aviation programs in North America, and Helwan resorted to producing parts for Egypt's Soviet-built fighters.⁷⁵ As for the HA-300, all that remains is a static display at a German aviation museum.

India's HF-24 Marut

Argentina's decision to cancel the Pulqui-II was India's gain, for in late 1955 Kurt Tank moved to Bangalore to help the Indians develop a supersonic fighter called the HF-24 Marut. While there are numerous similarities between the Indian, Argentine, and Egyptian fighter projects, one important distinction separates India from the others: the HF-24 entered production even though it never met its design objectives.

Context

Modern India was born out of a protracted struggle for independence from the United Kingdom followed by a bloody partition that created a hostile neighbor: Pakistan. The country's founding fathers were not only committed to independence through passive resistance, they also espoused an economic philosophy of self-sufficiency known as *swadeshi*.

As India's first prime minister, Jawaharlal Nehru sought to make his country a vibrant democracy that could overcome its sectarian, ethnic, and linguistic divides

and thereby become a great power in its own right.⁷⁶ After all, India possessed a considerable land area, large population, legacies of achievement in math and science, and a substantial natural resource base.⁷⁷ Indian leaders emphasized the value of science and technology in developing India's full potential, and Nehru framed this perspective in a 1958 speech: "Science has developed at an ever-increasing pace since the beginning of the century, so that the gap between the advanced and backward countries has widened more and more. It is only by adopting the most vigorous measures and by putting forward our utmost effort into the development of science that we can bridge the gap."⁷⁸

Motivations

Nehru and his confidant, Defense Minister V.K. Krishna Menon, were convinced that India must be self-reliant in weapons research and production. Indeed, shortly after Indian independence Nehru sought advice on defense matters from a British physicist who recommended India develop its own aviation industry.⁷⁹ When Nehru joined Tito, Nasser, Indonesia's Sukarno, and others at Bandung, Indonesia, in 1955 to form the nucleus of the NAM, he was trying to position India as leader of a "third bloc" of nations that would stay neutral in the Cold War.⁸⁰ In this context, a domestic arms industry in general and an indigenous jet fighter in particular were the *sine qua non* of Indian prestige. In fact, Nehru and Menon ordered this fighter more with an eye to self-sufficiency and national pride than meeting military requirements.⁸¹

Nehru and Menon also concluded that the HF-24 could spur India's industrialization by stimulating research and development in other sectors of the economy. Knowledge gained in Bangalore could be shared with other technology-intensive industries and thereby facilitate India's modernization.⁸²

India did have a military requirement for a supersonic fighter in the late 1950s. To New Delhi's consternation, the United States sold Pakistan F-86s and F-104/Starfighters, which upset the regional balance of power—at least from India's perspective.⁸³ Rather than approach the United Kingdom, France, or Soviet Union for additional jet fighters, Nehru and Menon opted for a domestic program aimed at producing an indigenous, multirole jet fighter capable of high-altitude interception and strike missions. The specifications called for a maximum speed of Mach 2, combat radius of 500 miles, and an airframe that could be modified for all-weather, aircraft carrier, and advanced trainer missions.⁸⁴

Program History

India had a small aviation infrastructure that maintained, repaired, and overhauled Allied warplanes during World War II. After the war, this facility near Bangalore was renamed Hindustan Aviation Limited (HAL) and produced the de Havilland Chipmunk, the Vampire, and the Folland Gnat.⁸⁵ What HAL lacked, however, were aviation designers, testing infrastructure, and experienced production engineers.⁸⁶ In the words of one expert, the research-and-development shop was “woefully inadequate.”⁸⁷ Not only was there no hangar space for building prototypes, India also lacked tools, test stands, and runways for flight testing.⁸⁸ In other words, India faced many of the same technical challenges that plagued Argentina and Egypt when they embarked on their respective jet projects.

The Indian government sought German experts to help bridge the gap between ambition and reality. As early as 1948, Willy Messerschmitt was approached for advice on establishing a national aviation industry.⁸⁹ Since Messerschmitt was content at that time with his work in Spain, the Indians searched for another aviation designer of equal stature, and eventually found Kurt Tank, who had departed Argentina after the September 1955 coup. In August 1956, Tank visited HAL, accepted the Indian job offer, and began recruiting assistants.⁹⁰

Eventually Tank hired 18 German designers to work on the HF-24, a much smaller number than the 60 or so employed in Córdoba. In fact, Tank agreed to a division of labor, whereby his European team was employed strictly for design, while the Indians focused on prototype construction and eventual production.⁹¹ Concurrent with Tank’s hiring was a major expansion of HAL’s domestic labor force to handle the new requirement.⁹²

Work on the Marut began in June 1957, and four years later, the first jet-propelled prototype commenced flight testing.⁹³ At the end of 1962, orders were placed for Maruts, although the plane still lacked viable engines after the British firm backed out of the project.⁹⁴ As a consequence, HAL had to switch to the less powerful Orpheus-703, which could not meet the Marut’s performance requirements.⁹⁵

The engine impediment refused to go away. First, the Indians failed to convince the Orpheus-703 builder to add an afterburner.⁹⁶ Then the Soviets were approached with a proposal to modify an existing engine for use on the HF-24, but this was rejected for technical reasons.⁹⁷ Then the Indians cooperated with Egypt on the Brandner E-300, an engine whose projected capabilities were adequate for the Marut; however, trials in Egypt proved that even this engine could not power the plane past Mach 1.1. On 1 July 1969, the Indian team was recalled from Egypt and cooperation ceased.⁹⁸ Failure to obtain a suitable engine meant that the Marut was never able to meet its designed speed. Still, 145 Maruts were eventu-

ally produced, of which 130 entered service with the Indian Air Force (IAF). The last HF-24s were retired in 1990.⁹⁹

Reasons for Failure

Unlike the other cases, the HF-24 raises the question of what constitutes failure. After all, this aircraft entered production and served in the IAF for more than two decades. Moreover, as one observer put it, the Marut could hardly be called a failure when “its accident rate was unbelievable—just one accident and no aircraft lost in combat.”¹⁰⁰ Others were less charitable, with one judging the Marut to be a “long drawn-out failure.”¹⁰¹ So how do we explain these discrepancies? If the measuring stick is production for its own sake, then the Marut was a success when compared with the Pulqui-II and the HA-300. On the other hand, if performance criteria laid down by the Indian Air Staff are selected, such as speed or aircraft carrier operability, then the Marut was a failure.

Although the original Air Staff specifications were intended to fill a military need, it was equally apparent that political forces were driving a project that exceeded Indian capabilities. One observer later noted, “As the project proceeded it passed from the hands of politicians to the military and finally to industry. Or, to put it another way, the politicians defined the possibilities, the military defined the problem and industry was left to define the answer.”¹⁰²

Poor management hindered the Marut as well. When the aircraft failed to reach its performance objectives, the IAF ordered design changes, even as production was underway. This inevitably caused delays and increased costs. The engine fiasco in particular highlighted an ad hoc approach to a problem that was never resolved.¹⁰³

From a cost-benefit analysis, the HF-24 was an embarrassment. Not only did the IAF receive an aircraft incapable of performing several intended missions, it did so at a cost greater than superior aircraft offered by the Soviets.¹⁰⁴ Furthermore, excessive production costs, frequent delays, and disappointing performance meant that India could not attract foreign buyers.¹⁰⁵

For an aircraft touted as “Indian-made,” the Marut was surprisingly cosmopolitan when it came to its designers, parts, and tools.¹⁰⁶ One expert put it this way: “India remained dependent upon external design sources for all vital systems and materials. Lacking a significant commercial-industrial base, it also remained dependent on foreign sources for high-grade steel and aluminum for aircraft production.”¹⁰⁷

Still, India had to start somewhere, and the costs and delays plaguing the HF-24—even its relatively poor performance—were not unusual for a first effort. Unfortunately, there are few indications that India used the lessons learned from the Marut to build better aircraft in the future. This point is discussed further below.

Not surprisingly, the IAF had its doubts about the HF-24. The Air Staff preferred foreign aircraft and, if given the choice, would have selected imports like the MiG-21 or Mirage III instead.¹⁰⁸ However, the IAF did not have options in a matter already decided by the politicians and was forced to settle for an aircraft incapable of fulfilling many of its design requirements.¹⁰⁹

As with any new aircraft, the HF-24 had its share of design faults, many of which were not adequately addressed as the aircraft was rushed into production. For instance, the Marut suffered from excessive aerodynamic tail drag, and it was incapable of firing all four of its 30-mm cannons at once.¹¹⁰ Finally, constant redesign, plus an over-burdened production shop, resulted in chronic parts shortages early in the HF-24's career; many became "hangar queens" awaiting delivery of parts.¹¹¹

Meanwhile, the Soviets were marketing the superior MiG-21 fighter at an attractive price. This was an offer that could not be refused, and in August 1962—only one year after the first Marut test flight—India signed a MiG-21 contract with favorable financing and licensed production of this aircraft at home.¹¹²

Long-term Consequences

India never achieved Nehru's dream of self-sufficiency in combat aviation, despite the vast sums poured into the HF-24. During the 1971 war with Pakistan, 40 percent of India's air order of battle was of Soviet origin. Twenty years later, the picture had not improved: 75 percent of India's interceptors and 60 percent of its strike aircraft were of Soviet origin.¹¹³ Moreover, license production of the MiG-21 was not equivalent to designing and producing domestic combat jets. Unlike Argentina and Egypt, however, India never lost the desire to develop her own fighters. In the early 1980s, the IAF issued a requirement for a light combat aircraft that would be designed and produced domestically. Nearly three decades later, and after numerous delays and cost overruns, those requirements crystallized in HAL's Tejas fighter—an aircraft that may be obsolete before it has been built.¹¹⁴ Others point to the Tejas's American engine and question the aircraft's claim to indigenous origins.¹¹⁵ Still, a country embarking on the road to self-sufficiency in combat jets has to start somewhere. While the HF-24 Marut was essentially still-born, perhaps the Tejas will be the start of a promising future for India's military aviation industry.

Conclusions

At the beginning of this article we proposed to examine indigenous jet fighter development through two key questions: (1) what motivates some states to pursue domestic fighter jets? (2) Why do many of these projects fail? The scope was nar-

rowed to Argentina, Egypt, and India, each of whom pursued indigenous fighters for similar motives and with disappointing results.

Motivations

In each case, ambitious political leaders shared the goal of non-alignment and decreased reliance on the superpowers for weapons. They viewed aviation as a symbol of status, prestige, and power or, as one historian puts it, “nation-building experiments.”¹¹⁶

Why aviation? During the Cold War, aircraft, missiles, and satellites represented the cutting edge of science, and as such, they were not only status symbols but also measuring sticks used in comparisons with rivals. The Soviet Union’s launch of Sputnik in 1957 represented a highly visible advance in the superpower competition that triggered a national drive for science education in the United States. Yet, the superpowers were by no means unique in exploiting the symbolic value of aerospace. In his study of aviation in Mussolini’s Italy, Federico Caprotti encapsulates the airplane’s attraction for regimes searching for legitimacy: “Almost every visible part of the aeroplane was fetishized, in some form or other, by the time the fascist regime took power in Italy. Aeroplanes, wings, engines and flight were used as metaphors both in the political and economic sphere.”¹¹⁷

This study shows how Perón, Nasser, and Nehru used aviation to enhance regime legitimacy. From the beginning, Argentina’s Pulqui-II was very much a political device, whose impetus was breaking a speed record and building popular support for Perón’s policies. The public exhibition of the Pulqui-II was very much in line with traditions established by other countries like Mussolini’s Italy. According to Caprotti, “One of the characteristics of propaganda flights which should be highlighted is that the aeroplane, technology and the *ebbrezza* (thrill) of flight were to be as central as mass participation by crowds of onlookers in the spectacle of aviation and, by corollary, in the spectacle of fascism.”¹¹⁸

A similar example is found in Egypt, where Nasser used “Egyptian-made” missiles and jets to celebrate important anniversaries, highlight scientific achievement, and build support for government policies.¹¹⁹ Indeed, other countries like the USSR appreciated the utility of aviation to celebrate national holidays. As Soviet aviation expert, K.E. Bailes writes, “The twentieth anniversary of the October Revolution in 1937 gave special emphasis to air records as symbolic of the regime’s attainments in numerous scientific and technical fields; massive flights of aircraft became traditional on this holiday.”¹²⁰ In the end, whether it was Argentina, Egypt, Italy, or the Soviet Union, aviation often helped confer legitimacy by demonstrating that a regime was “progressive” and “modern.”

So, what about military imperatives? The degree to which national politics overrode military necessity varied from case to case, yet even in the Indian example, politicians insisted on a domestic aircraft when their air force chiefs preferred superior foreign alternatives. At bottom, the mixture of political versus military inputs in these cases offers clues to the failure of each of the indigenous jet projects.

Reasons for Failure

In each case, infrastructure available at the start of the aviation project was roughly the same. None of the countries in question had any experience in fighter jet design, nor did they have a deep bench of native experts. So, they turned to the Germans, Kurt Tank and Willy Messerschmitt, to lead their design teams. All invested heavily in infrastructure to lay the foundation for their jet fighter efforts. This yields another reason for program failure: cost.

For developing countries like Argentina, Egypt, and India, indigenous fighters were a questionable expense when measured against competing civilian priorities such as a national automobile industry or public works. As noted, jets demand large, often prohibitive, outlays in capital for infrastructure, material, tools, and trained labor; it was these expenses that ultimately drove Argentina and Egypt to cancel their programs before production began. As for India, the HF-24 did enter production but was hampered by another hurdle: engines.

Argentina and India chose foreign designs to power their aircraft, raising the question of what constitutes true self-sufficiency.¹²¹ As for Egypt, a bold attempt was made to develop an indigenous jet engine; yet, this project used foreign suppliers for virtually all its parts, tools, and materials. In the end, Egypt's E-300 jet engine was a failure.

Jet engines are a major challenge for any country seeking to develop and produce jet fighters. In most cases, foreign engines are selected, even if this comes at the expense of national self-sufficiency. Indeed, the jet engine is the "long pole in the tent" of any country seeking true self-sufficiency in indigenous combat jet design. Michael Neufeld puts a finer point on this: "Jet engines were the Achilles heel of advanced aircraft projects outside the leading powers, as they were complex, expensive and difficult to develop, and much easier to subject to export controls than airframe design expertise."¹²²

Engines aside, there are other roadblocks in combat jet development, such as sensors and weapons. As the fighter jet evolved from the relatively primitive designs of the early 1950s, a veritable revolution in capabilities was taking place. It was no longer a matter of fusing together airframes, swept wings, and jet engines but now involved the integration of radars, electronic countermeasures equipment, avionics, and missiles. In light of such developments, it is doubtful whether

Argentina, Egypt, and India could ever have kept pace with more technologically advanced powers.

Indeed, obsolescence haunted each of the cases studied here. Even as Argentina, Egypt, and India struggled with their pioneering efforts, delays were inevitable, and the result was fighters that were increasingly outdated before production. This was the inevitable cost of the “learning curve,” but none of the governments seemed to accept it as the necessary price of a long-term, indigenous combat jet capability. India is especially noteworthy in this regard by neglecting to build on her Marut learning curve to develop new generations of aircraft. Instead, several decades were to pass before India once again entered the domestic jet fighter business with the Tejas light combat aircraft.

In at least two of the three cases, the domestic fighter failed to overcome the skepticism of its air force customer. Neither the Argentine nor the Indian air staffs were enthusiastic about the prospect of operating home-grown fighter jets, preferring cheaper, superior foreign aircraft such as the MiG-21. In all three cases, the services ultimately imported fighters to address most—if not all—of their military requirements.

As noted above, politics and symbolism were powerful considerations in each of the case studies. In the Argentina and Egypt examples, politics motivated the Pulqui-II and HA-300 projects respectively, but politics offered an easy rationale to kill them too. After the 1955 coup removed Perón from power, it was relatively easy for the new junta to pull the plug on his Pulqui-II. For Egypt, the disastrous 1967 war with Israel provided cover to terminate the HA-300, which had outlived its usefulness as a political totem anyway.

Chinese Stealth Fighters

So, let’s return to the Chinese J-20 and J-31 “stealth” fighters that introduced this discussion. To the extent that history can serve as a guide, we may now examine these fighters more closely.

First: Appearance is not always reality when it comes to indigenous fighter jets. As the historical cases demonstrate, regimes often pursue combat aviation more for political symbolism than military need. In a characteristically subtle manner, China is using its stealth prototypes to demonstrate its growing power and authority on the world stage. Still, opportune “glimpses” of prototypes from a distance should not lead observers to make initial, alarmist conclusions, since much about these aircraft is still wrapped in mystery.

Second: China’s development of jet fighters has been uneven. It has made tremendous strides in indigenous aviation design in recent years; yet, to date, its frontline operational fighters still rely exclusively on Russian-built jet engines.¹²³

Both stealth prototypes so far appear to be using Russian engines; yet, by relying on Russia for its engine needs, China is still not demonstrably self-sufficient in one of the most important technologies in fighter aviation. This lack will affect aircraft performance and export potential.¹²⁴ What about low observability, avionics, weapons systems, electronic countermeasures, and radar? More than ever it is the integration of these latter technologies and capabilities that determine the true worth of a modern fighter.¹²⁵ As a leading US aviation journal cautions, “[I]t’s one thing to develop a prototype or technology demonstrator and test the aircraft. It is an entirely different matter to take such a design and perfect it into a multi-mission stealthy aircraft that can be manufactured and is as advanced as, say, the F-22 or F-35.”¹²⁶

Third: Obsolescence is another consideration. As the cases show, aviation technology is extremely time sensitive, and what seems advanced today will, inexorably, be obsolete several years from now (if not sooner). So how advanced will the J-20 or J-31 be when and if they enter production eight to ten years from now as some anticipate? Recall that these aircraft will be employing technologies that were, in some cases, pioneered by the United States more than two decades ago. Finally, advances in aviation technology, especially sensors and combat drones, could render some of these Chinese stealth capabilities obsolete.

More than 70 years after the first jet fighter took to the skies over Germany, only a small handful of countries are capable of designing, testing, and producing each of the core technologies necessary for an advanced fighter to enter service.¹²⁷ The membership of this unique club is unlikely to expand by much in the near term for reasons of cost and technological complexity. If anything, the gap between haves and have-nots in the world of combat aviation is expanding rather than shrinking, as fighter jets evolve into a “system of systems,” an integrated, software-intensive package of sensors, weapons, engines, electronic countermeasures, and avionics. Unlike the historical examples cited above, China is likely to one day join this elite given its ample financial, technical, and personnel resources; however, numerous obstacles loom on the horizon before we see China’s first operational stealth fighter take flight. ✪

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Notes

1. Paul Koring, "China Trumpets Stealth Warplane as New Status Symbol," *Globe and Mail*, 6 January 2011, <https://www.theglobeandmail.com/>; and David Axe, "Questions Abound as China Unveils another Stealth Jet," 16 September 2012, <http://www.wired.com/>.

2. Koring, "China Trumpets Stealth Warplane."

3. David A. Fulghum, Bill Sweetman, Bradley Perrett, and Robert Wall, "Expanded Reach: China's Power Projection and Space Activities are Steadily Increasing," *Aviation Week and Space Technology* 173, no. 31 (2011), 29; and Bill Sweetman, "Out of the Mist," *Aviation Week and Space Technology* 173, no. 31 (2011), 18.

4. In addition to the examples discussed in this paper, other failed indigenous jet fighter programs include Canada's CF-105 Arrow and Israel's Lavi.

5. Studying the cases of Argentina, Egypt, and India also helps fill information gaps identified by Michael Neufeld, "The Nazi Aerospace Exodus: Towards a Global, Transnational History," *History and Technology* 28, no. 1 (2012): 49–67.

6. For more on the rich symbolic value of fighter aircraft see, for example, Thomas F. Crowder-Taraborrelli, "Evita in Wonderland: Pulqui and the Workshop of Underdevelopment," *CineAction* 77, no. 3 (2009), 2; and Federico Caprotti, "Technology and Geographical Imaginations: Representing Aviation in 1930s Italy," *Journal of Cultural Geography* 25, no. 2 (2008): 181–205.

7. Robert Jackson Alexander, *The Peron Era* (New York: Columbia University Press, 1951) 171.

8. Ricardo Burzaco, "Perón y Los Científicos Alemanes," *Todo es Historia* 334 (1995): 11–27; Isidoro Gilbert, *El Oro de Moscú* (Buenos Aires: Editorial Sudamericana, 2007) 175; Jonathan D. Hagood, Hagood, "Why Does Technology Transfer Fail: Two Technology Transfer Projects from Peronist Argentina," *Comparative Technology Transfer and Society* 4, no.1 (2006), 77; and Alexander, *Peron Era*, 74.

9. Hagood, "Why Does Technology Transfer Fail," 75; Alejandro Artopoulos, *Technología e Innovación en Países Emergentes: Aventura del Pulqui II* (Buenos Aires: Lenguajeclaro Editora, 2012) 7; and Burzaco, "Perón y Los Científicos Alemanes." Burzaco notes that Argentina relied heavily on wood for its airframes during World War II since it was largely cut off from aluminum: Ricardo Burzaco, *Las Alas de Perón: La Aeronáutica Argentina 1945–1960* (Buenos Aires: Ediciones Eugenio B, 2007) 4–5, 21.

10. Stanley G. Payne, *A History of Fascism 1914–1945* (Madison: University of Wisconsin Press, 1996) 347–49; and Federico Finchelstein, *Transatlantic Fascism: Ideology, Violence and the Sacred in Argentina and Italy 1919–1945* (Durham, NC: Duke University Press, 2010) 165–66.

11. Government of Argentina, *Peron Speaks* (Buenos Aires: Office of the Presidency, 1949) 61–62.

12. Artopoulos, *Technología e Innovación en Países Emergentes*, 14; Burzaco, "Perón y Los Científicos Alemanes"; and Burzaco, *Las Alas de Perón II*, 22.

13. Hagood, "Why Does Technology Transfer Fail," 80, 89.

14. Hagood, "Why Does Technology Transfer Fail," 93. The British Air Attaché to Argentina put it this way in 1949: "As a political weapon, however, it [Argentine Air Force], is powerful and the effect of persistent propaganda has earned for it the esteem of the masses." British Air Attaché, Buenos Aires, "Annual Report on Argentine Air Force: 1949," FO 371/81210.

15. República de Argentina, *La Aeronáutica Nacional al Servicio del País* (Buenos Aires: Secretaría de la Aeronáutica de la Nación, 1948). This "mission statement" for national aviation is filled with illustrations of winged Greek and Roman deities such as Icarus and Victoria as well as evocative symbols linking aviation with progress.

16. Artopoulos, *Technología e Innovación en Países Emergentes*, 13.

17. Burzaco, "Perón y Los Científicos Alemanes." In 1949, Argentina had over 90 Meteors in its order of battle: British Air Attaché, "Annual Report," FO 371/81210.

18. Burzaco, "Perón y Los Científicos Alemanes."

19. Artopoulos, *Technología e Innovación en Países Emergentes*, 13, 27. Under the terms of the Rolls Royce agreement, Argentina assembled Derwent 5 engines under license. See British Air Attaché, "Annual Report," FO 371/81210

20. Artopoulos, *Technología e Innovación en Países Emergentes*, 18.
21. Artopoulos, *Technología e Innovación en Países Emergentes*, 26; Heniz Conradis, *Design for Flight: The Kurt Tank Story*, translated by Kenneth Kettle (London: Macdonald, 1960) 181–82; Hagood, “Why Does Technology Transfer Fail,” 74, 80. According to Artopoulos, the countries and dates of their indigenous jets are: (1) Germany - 1938; (2) United Kingdom - 1941; (3) United States - 1942; (4) Japan - 1945; (5) Soviet Union - 1946); (6) France - 1946; (7) Sweden - 1948; and (8) Argentina - 1949.
22. Conradis, *Design for Flight*, 14, 49, 182; Artopoulos, *Technología e Innovación en Países Emergentes*, 13, 25–26, 37; and Burzaco, *Alas de Perón*, 29.
23. Burzaco, “Perón y Los Científicos Alemanes”; and Conradis, *Design for Flight* 181–84.
24. Artopoulos, *Technología e Innovación en Países Emergentes*, 36–37; Conradis, *Design for Flight*, 185. Others suggest a lower number of 45. See Neufeld, “The Nazi Aerospace Exodus,” 53.
25. Artopoulos, *Technología e Innovación en Países Emergentes*, 15, 34–35.
26. Artopoulos, *Technología e Innovación en Países Emergentes*, 15, 60.
27. Burzaco, “Perón y Los Científicos Alemanes.”
28. Conradis, *Design for Flight*, 187; and Artopoulos, *Technología e Innovación en Países Emergentes*, 43.
29. Burzaco, “Perón y Los Científicos Alemanes”
30. Burzaco, “Perón y Los Científicos Alemanes”; Artopoulos, *Technología e Innovación en Países Emergentes*, 54–55; and Burzaco, *Alas de Perón*, 25. The official designation for Horten’s fighter jet was IAe-37.
31. Artopoulos, *Technología e Innovación en Países Emergentes*, 35–36.
32. Hagood, “Why Does Technology Transfer Fail,” 76, 84–85; and Artopoulos, *Technología e Innovación en Países Emergentes*, 70.
33. Conradis, *Design for Flight*, 181.
34. Burzaco, “Perón y Los Científicos Alemanes”; and Artopoulos, *Technología e Innovación en Países Emergentes*, 13, 15, 29, 56.
35. Conradis, *Design for Flight*, 187; and Artopoulos, *Technología e Innovación en Países Emergentes*, 56.
36. Hagood, “Why Does Technology Transfer Fail,” 90.
37. Burzaco, “Perón y Los Científicos Alemanes.”
38. Artopoulos, *Technología e Innovación en Países Emergentes*, 62–63; and Burzaco, *Las Alas de Perón*, 3.
39. Artopoulos, *Technología e Innovación en Países Emergentes*, 50, 58, 69.
40. British Air Attaché, Buenos Aires, “Annual Report on the Argentine Air Force for the Year, 1955,” FO 371/119893; British Air Attaché, Buenos Aires, “Annual Report on the Argentine Air Force for the Year 1951,” FO 371/97415; Hagood, “Why Does Technology Transfer Fail,” 91, 94; Artopoulos, *Technología e Innovación en Países Emergentes*, 81, 63; and Burzaco, *Alas de Perón*, 23, 25.
41. Burzaco, “Perón y Los Científicos Alemanes.”
42. Artopoulos, *Technología e Innovación en Países Emergentes*, 59. Burzaco suggests the FAA had abandoned the Pulqui-II in favor of Horten’s IAe-37 delta-winged fighter, but nothing came of that project either. See Burzaco, *Alas de Perón*, 25.
43. Burzaco, “Perón y Los Científicos Alemanes.”
44. Artopoulos, *Technología e Innovación en Países Emergentes*, 63.
45. Crowder-Taraborrelli, “Evita in Wonderland.”
46. Gamal Abdel Nasser, *Egypt’s Liberation: The Philosophy of the Revolution* (Washington, DC: Public Affairs Press, 1956); and Robert Stephens, *Nasser: A Political Biography* (New York: Simon & Schuster, 1971) 141–43.
47. Anthony Nutting, *Nasser* (New York: E.P. Dutton, 1972) 100–01.
48. Stephens, *Nasser*, 325–26.
49. Ali Muhammad Labib, *Al-Quwab al-Thalitha: Tarikh al-Quwat al-Jawwi yah al-Misriyah* (Cairo: al-Hayah al-Misriyah al-Ammah lil-Kitab, 1977) 119, 217–20; M. Jawadi, *Muddakirat Qadaal’Askariya al-Misriya 67–72: Fi ‘Aqab al-Naksa* (Cairo: Dar al-Khayyal, 2001) 366; R.G. Matthews, “Egyptian Defense Industrialization,” *Defense and Security Analysis* 8, no. 2 (1992), 119, 129.
50. Owen Sirrs, *Nasser and the Missile Age in the Middle East* (London: Routledge, 2006) 82–83.

51. Labib, *Al-Quwah al-Thalitha*, 221–22; Sanche de Gramont, “Nasser’s Hired Germans,” *Saturday Evening Post* 236, no. 26 (1963), 63; ‘Naher Osten: Rüstung: 36, 135 und 333’, *Der Spiegel* 19, no. 37 (1963) 58; “New Arab Steeds,” *Flight International* 2872, no. 85 (1964) 467–68; and Frank Vann, *Willy Messerschmitt: First Full Biography of an Aeronautical Genius* (Somerset: Patrick Stephens, 1993) 242.

52. Labib, *Al-Quwah al-Thalitha*, 119, 221; and “New Arab Steeds,” 467.

53. Telegram from Department of State to American Embassy Cairo, no subject, no. 465 (3 October 1960) National Archives and Records Administration, Reports Group 59.

54. Labib, *Al-Quwah al-Thalitha*, 221; ‘Al-Majmua’ 73 Mowarikhin Mashrua’ al-Ta’era al-Qahera 300’, <https://group73historians.com/>.

55. Lon Nordeen and David Nicolle, *Phoenix over the Nile* (Washington, DC: Smithsonian Institution Press, 2006) 178; Robert R. Ropelewski, “Improvisation Key to Egyptian Growth,” *Aviation Week and Space Technology* (13 November 1978) 38; and Labib, *Al-Quwah al-Thalitha*, 222.

56. Inge Deutschkron, *Bonn and Jerusalem: The Strange Coalition* (Philadelphia: Chilton Book Company, 1970) 223; and Nordeen and Nicolle, *Phoenix over the Nile*, 178.

57. Michel Bar-Zohar, *The Hunt for German Scientists* (New York: Avon Books, 1967) 206–07; Ropelewski, “Improvisation Key to Egyptian Growth,” 38; and ‘Rüstung: 36, 135 und 333,’ 60.

58. Nordeen and Nicolle, *Phoenix over the Nile*, 178; Bar-Zohar, *Hunt for German Scientists*, 203; and Neufeld, “The Nazi Aerospace Exodus,” 54.

59. Vann, *Willy Messerschmitt*, 238; “New Arab Steeds,” 468; Kapil Bhargava, “Messerschmitt’s HA-300 and Its Indian Connection,” <https://web.archive.org/>; ‘Al-Majmua’ 73 Mowarikhin Mashrua’ al-Ta’era al-Qahera 300’; and Labib, *Al-Quwah al-Thalitha*, 222.

60. Vann, *Willy Messerschmitt*, 242; and ‘Al-Majmua’ 73 Mowarikhin Mashrua’ al-Ta’era al-Qahera 300.’

61. Labib, *Al-Quwah al-Thalitha*, 222; ‘Al-Majmua’ 73 Mowarikhin Mashrua’ al-Ta’era al-Qahera 300’; Bar-Zohar, *Hunt for German Scientists*, 202–03; Deutschkron, *Bonn and Jerusalem*, 232; and ‘Rüstung: 36, 135 und 333,’ 57–58.

62. ‘Maudua: al-Muqattila al-Misriya Helwan 300 al-Nasr al-Misria la thimina’amin al-Tahliq,’ <https://web.archive.org/>.

63. ‘Rüstung: 36, 135 und 333,’ 60; and Bar-Zohar, *Hunt for German Scientists*, 206–207.

64. ‘Rüstung: 36, 135 und 333,’ 60; Kapil Bhargava, “Eyewitness to the Six-Day War,” <https://web.archive.org/>; Nordeen and Nicolle, *Phoenix over the Nile*, 178–79; and ‘Maudua: al-Muqattila al-Misriya Helwan 300 al-Nasr al-Misria la thimina’amin al-Tahliq.’ Under a July 1957 agreement, India was to train up to 1,000 Egyptian pilots, although this number was never achieved. See British National Archives, FO 371/125495.

65. Bhargava, “Eyewitness to the Six-Day War.”

66. Clarence A. Robinson, “Nation Seeks Larger Production Base,” *Aviation Week and Space Technology* (4 January 1982) 41; Bhargava, “Messerschmitt’s HA-300”; Ropelewski, “Improvisation Key to Egyptian Growth,” 38; and ‘Maudua: al-Muqattila al-Misriya Helwan 300 al-Nasr al-Misria la thimina’amin al-Tahliq.’

67. Sirrs, *Nasser and the Missile Age*, 82–83. As a 1967 CIA intelligence assessment put it: “Although troublesome, time consuming, and costly, the problems associated with the [missile] program apparently have not been considered critical enough by [Egypt] to override the regime’s desire for a domestically produced advanced weapons status symbol.” See Central Intelligence Agency, Intelligence Report, *Soviet Military Aid to the United Arab Republic, 1955–66*, RR IR 67-9, March 1967, originally classified Top Secret, <https://www.cia.gov/>.

68. Bhargava, “Messerschmitt’s HA-300.”

69. Vann, *Willy Messerschmitt*, 240–41.

70. Wolfgang Lotz, *The Champagne Spy* (New York: St. Martin’s, 1972) 120–21; Bhargava, “Messerschmitt’s HA-300”; and Sirrs, *Nasser and the Missile Age*, 155.

71. Bhargava, “Messerschmitt’s HA-300.”

72. De Gramont, “Nasser’s Hired Germans,” 63; “New Arab Steeds,” 468; Vann, *Willy Messerschmitt*, 238; and ‘Rüstung: 36, 135 und 333,’ 59.

73. Matthews, "Egyptian Defense Industrialization," 121. Egyptian sources report the total amount of the HA-300 exceeded 135 million Egyptian Pounds. See 'Maudua: al-Muqattila al-Misriya Helwan 300 al-Nasr al-Misria la thimina'amin al-Tahliq.'

74. Robinson, "Nation Seeks Larger Production Base," 41; Nordeen and Nicolle, *Phoenix over the Nile*, 178–79, 227; "New Arab Steeds," 468; Neufeld, "The Nazi Aerospace Exodus," 58; and Central Intelligence Agency, *Soviet Military Aid to the United Arab Republic*, 5.

75. Ropelewski, "Improvisation Key to Egyptian Growth," 38; and Matthews, "Egyptian Defense Industrialization," 120. Some believe the Soviets killed the HA-300 in order to monopolize jet fighter sales to the Middle East and Africa and make Cairo more dependent on Moscow for combat aviation. See Labib, *Al-Quwab al-Thalitha*, 219; and 'Maudua: al-Muqattila al-Misriya Helwan 300 al-Nasr al-Misria la thimina'amin al-Tahliq.'

76. Raju G.C. Thomas, "Nonalignment and Indian Security: Nehru's Rationale and Legacy," *Journal of Strategic Studies* 2, no. 2 (1979), 156–58; and Stanley Wolpert, *Nehru: A Tryst with Destiny* (New York: Oxford University Press, 1996) 466.

77. M. Pardesi and R. Matthews, "India's Tortuous Road to Defence-Industrial Self-Reliance," *Defense & Security Analysis* 23, no. 4 (2007), 419.

78. Quoted in N. Jayapalan, *Indian Political Thinkers: Modern Indian Political Thought* (New Delhi: Atlantic Publishers, 2003) 286.

79. Pardesi and Matthews, "India's Tortuous Road," 419–20.

80. Ibid.

81. K. Chatterjee, "Hindustan Fighter HF-24 Marut; Part I: Building India's Jet Fighter," <https://web.archive.org/>; and Chris Smith, *India's Ad Hoc Arsenal: Direction or Drift in Defense Policy?* (Stockholm: SIPRI, 1994) 160–62.

82. Pardesi and Matthews, "India's Tortuous Road," 419–21.

83. Smith, *India's Ad Hoc Arsenal*, 160–62.

84. Chatterjee, "Hindustan Fighter HF-24 Marut"; Timothy D. Hoyt, *Military Industry and Regional Defense Policy* (London: Routledge, 2007) 32–33; Robert Guttman, "India's HAL HF-24 Confounded Detractors with Its Respectable Combat Record," *Aviation History* 12, no. 5 (2002): 6–19; and Pardesi and Matthews, "India's Tortuous Road," 419–21.

85. Kapil Bhargava, "Early Design & Development of the HF-24," 24 November 2010, <https://marutfans.wordpress.com/>; Chatterjee, "Hindustan Fighter HF-24 Marut"; Hoyt, *Military Industry and Regional Defense Policy*, 32–33; Polly Singh, "When the Wind Blows," <https://web.archive.org/>; Guttman, "India's HAL HF-24," 16–19.

86. Chatterjee, "Hindustan Fighter HF-24 Marut."

87. Guttman, "India's HAL HF-24," 16–19.

88. Conradis, *Design for Flight*, 198–99; and Chatterjee, "Hindustan Fighter HF-24 Marut."

89. Pardesi and Matthews, "India's Tortuous Road," 421–23.

90. Chatterjee, "Hindustan Fighter HF-24 Marut"; Singh, "When the Wind Blows"; Conradis, *Design for Flight*, 194–95; and Hagood, "Why Does Technology Transfer Fail," 81–82.

91. Hagood, "Why Does Technology Transfer Fail," 85, 88; and Conradis, *Design for Flight*, 198–99.

92. Chatterjee, "Hindustan Fighter HF-24 Marut."

93. Burzaco, "Perón y Los Científicos Alemanes"; and Chatterjee, "Hindustan Fighter HF-24 Marut."

94. Chatterjee, "Hindustan Fighter HF-24 Marut."

95. India was counting on the Bristol Orpheus 12 to power its Marut; however, the British firm cancelled development. See Hoyt, *Military Industry and Regional Defense Policy*, 32–33; and Chatterjee, "Hindustan Fighter HF-24 Marut."

96. Smith, *India's Ad Hoc Arsenal*, 160–62.

97. Hoyt, *Military Industry and Regional Defense Policy*, 32–33; and Chatterjee, "Hindustan Fighter HF-24 Marut."

98. Chatterjee, "Hindustan Fighter HF-24 Marut."

99. Chatterjee, "Hindustan Fighter HF-24 Marut."

100. Arun Dev, "Pilots, Engineers Relive Their Tryst with Marut," *Times of India*, 18 June 2011, <https://timesofindia.indiatimes.com/>.
101. Smith, *India's Ad Hoc Arsenal*, 160. Pardesi and Matthews label the HF-24 a "complete failure." See Pardesi and Matthews, "India's Tortuous Road," 426.
102. Smith, *India's Ad Hoc Arsenal*, 161.
103. Smith, *India's Ad Hoc Arsenal*, 161.
104. Hoyt, *Military Industry and Regional Defense Policy*, 32–33; and Pardesi and Matthews, "India's Tortuous Road," 423.
105. David A. Brown, "India's Aircraft Industry Grows," *Aviation Week and Space Technology*, 17 January 1977, 14.
106. Hoyt, *Military Industry and Regional Defense Policy*, 32–33; and Smith, *India's Ad Hoc Arsenal*, 160–62.
107. Pardesi and Matthews, "India's Tortuous Road," 424.
108. Pardesi and Matthews, "India's Tortuous Road," 426; and Smith, *India's Ad Hoc Arsenal*, 160–62.
109. Smith, *India's Ad Hoc Arsenal*, 161.
110. Hoyt, *Military Industry and Regional Defense Policy*, 32–33.
111. Chatterjee, "Hindustan Fighter HF-24 Marut."
112. Pardesi and Matthews, "India's Tortuous Road," 424.
113. Pardesi and Matthews, "India's Tortuous Road," 425–26.
114. Neelam Matthews, "Troubles for Tejas and . . .," *Aviation Week and Space Technology*, 17 January 2001, 26; and Pardesi and Matthews, "India's Tortuous Road," 427.
115. Matthews, "Troubles for Tejas," 26. The Tejas is powered by American-designed GE-404 and GE-414 engines.
116. Neufeld, "The Nazi Aerospace Exodus," 49.
117. Caprotti, "Technology and Geographical Imaginations," 187.
118. Caprotti, "Technology and Geographical Imaginations," 195–96.
119. The term "Egyptian-made" features prominently in Labib's history of the Egyptian Air Force: Labib, *Al-Quwah al-Thalitha*.
120. Kendall E. Bailes, "Technology and Legitimacy: Soviet Aviation and Stalinism in the 1930," *Technology and Culture* 17, no. 1 (1976), 66.
121. According to a 1955 report by the British Air Attaché, Argentina could not machine its own parts for the British-Derwent 5 engine let alone design, test and produce its own engines. See British Air Attaché, "Annual Report," FO 371/119893.
122. Neufeld, "The Nazi Aerospace Exodus," 57–58.
123. Bill Sweetman, "I Spy," *Aviation Week and Space Technology*, 5 November 2012, 72.
124. Bradley Perrett, Robert Hewson, and Reuben Johnson, "Stealth Bazaar," *Aviation Week and Space Technology*, 19 November 2012, 26.
125. Perrett, Hewson, and Johnson, "Stealth Bazaar"; Editorial, "Remain Watchful of China's Ascent," *Aviation Week and Space Technology*, 10 January 2011, 58.
126. "Remain Watchful of China's Ascent."
127. Among those producers, we find the United States, Russia, France, and various European consortiums consisting of the United Kingdom, Germany, Italy, and Spain.

A Footprint of Unfreedom

The Future of Naval Support Facility Diego Garcia

DR. PETER HARRIS

For over 50 years, the United States has maintained a military base on Diego Garcia, the largest island of the Chagos Archipelago in the central Indian Ocean.¹ The United Kingdom (UK) governs Diego Garcia and the rest of the Chagos Islands as the British Indian Ocean Territory (BIOT), a colonial jurisdiction created in 1965 for the sole purpose of facilitating the militarization of Diego Garcia.² In February 2019, the International Court of Justice (ICJ) ruled in an advisory opinion that the UK's occupation of the Chagos Islands is illegal under international law and that the islands rightfully belong under Mauritian sovereign control.³ The ICJ further advised that all members of the United Nations (UN) are obligated to work toward the decolonization of Chagos. Three months later, 116 states voted in the UN General Assembly (UNGA) to endorse the ICJ's decision and call upon the UK government to transfer the Chagos Archipelago to Mauritius. Only four states joined with the UK and United States to oppose the resolution.⁴

What do these legal and political developments mean for the future of UK sovereignty over the Chagos Islands? What are the implications for the continued use of Diego Garcia by the US military? Because London has been dedicated to governing the BIOT in a way that privileges the military interests of the United States, it has long been assumed that continued UK sovereignty over Chagos is critical to the success of Naval Support Facility Diego Garcia. In what follows, I challenge this conventional wisdom to argue that the ICJ's ruling, the UNGA vote, and other related developments show that UK control has become an unnecessary strategic liability for the United States. I argue that the historical (colonial) origins of the BIOT as a discrete administrative unit have encumbered the territory with some damaging political pathologies. These problems cannot be remedied by decision makers in London or Washington and will only worsen over time.⁵ I conclude that the United States should now back Mauritian sovereignty over the Chagos Islands—not only because supporting decolonization is the ethical and legally required thing to do (although these motivations ought to weigh heavily on US decision makers) but also because there is a hardheaded strategic rationale for preferring Port Louis over London as a landlord.

To be sure, there will be costs to the United States if Diego Garcia and the rest of the Chagos Islands come under Mauritian control. Namely, the archipelago

would no longer be contained within a jurisdiction purpose-built for the conduct of US military operations (as is the case with the BIOT). It will take careful diplomatic work to ensure that the transition from UK to Mauritian sovereignty does not impose new burdens upon Naval Support Facility Diego Garcia. However, as I describe below, even the UK government recognizes that Mauritius will assume control over the Chagos Islands at some point—an undertaking that is binding upon the UK under international law. There is even a nontrivial possibility that the UK could initiate a handover of sovereign authority to Mauritius without US consent. Combined with mounting international pressure for decolonization, these political uncertainties create a strong rationale for the United States to acknowledge Mauritius's claims sooner rather than later with a view toward securing an enduring say over the future of the territory. To do otherwise would be to risk being overtaken by events and perhaps losing access to Diego Garcia altogether.

Background: Political Pathologies in Britain's Last Colony

The island of Diego Garcia was first identified as the potential site of a US military base in the 1950s, in the context of the intensifying Cold War between the United States and the Soviet Union.⁶ Serious discussions over the creation of a base began in the early 1960s, with the United Kingdom and United States signing a formal agreement to open up the territory for military purposes in 1966.⁷ Construction began in March 1971, and just two years later Diego Garcia was home to a fully operational communications facility charged with monitoring Soviet naval activity in the Indian Ocean.⁸ Over the course of the 1970s and 1980s, a series of geopolitical events—especially the Iranian Revolution and the Soviet invasion of Afghanistan—prompted the United States to greatly expand the base. The island's lagoon was dredged to create a ship channel, turning basin, and berthing space for warships, and its runway and hangar space were expanded.⁹ By the end of the 1980s, Diego Garcia had become a vital hub for pre-positioned air and naval forces in the Indian Ocean region. The base played key roles in the First Gulf War (1990–1991), Operation Desert Fox (1998), and the post-9/11 invasions of Afghanistan (2001) and Iraq (2003).

Naval Support Facility Diego Garcia has been a successful military base for two main reasons. Geographically, the island of Diego Garcia occupies a strategically valuable location in the center of the Indian Ocean—almost exactly equidistant between the east coast of Africa and the Indonesian island of Aceh, making it indispensable as a staging post for operations in the entire Indian Ocean region—and boasts natural features that make it capable of hosting large numbers of naval vessels and aircraft.¹⁰ Just as important as its geostrategic assets is the island's

unique political situation: the BIOT is the only fully discrete (albeit nonsovereign) territorial jurisdiction in the world to have been created for the sole and explicit purpose of housing a military base. Up until 1965, Diego Garcia and the rest of the Chagos Archipelago had been part of the UK-controlled Crown Colony of Mauritius. At the Lancaster House Constitutional Conference in September 1965, however, UK officials convinced a delegation of Mauritian independence leaders to allow the British Empire to retain control over the Chagos Archipelago even after Mauritius became a fully sovereign state. The UK's negotiators acknowledged that the islands would be returned to Mauritian control once they were no longer required by the United Kingdom (and, by extension, the United States) for military purposes.¹¹ Weeks later, Queen Elizabeth II approved an order in council to create the BIOT—a new jurisdiction and the last colony ever created by the British Empire.¹² Mauritius duly obtained its independence in 1968 without the Chagos Archipelago as part of its internationally recognized territory.

The reason for excising Chagos from the Crown Colony of Mauritius to form the new Crown Colony of BIOT was that both London and Washington wanted to avoid a situation where any new military base would be dependent upon a postcolonial landlord.¹³ If the archipelago had remained part of Mauritius and had thus been under the sovereign authority of Port Louis from 1968 onward, the concern among American strategists was that the territory might easily come under the sway of communist or otherwise anti-US groups. These were reasonable fears: numerous postcolonial states in Africa and Asia took anti-US positions in the Cold War era, with some, such as Iran, switching from being stalwart US allies to implacable adversaries. In the mid-1960s, nobody in London or Washington could be sure that Mauritius would remain tightly aligned with the United Kingdom and United States after it gained independence. Given these geopolitical uncertainties, keeping the Chagos Archipelago under the direct control of the UK government was viewed as a prudent way to provide the United States with guaranteed long-term access to Diego Garcia—effectively creating a legal-political umbrella beneath which the islands would be sheltered from the vicissitudes of postcolonial and anti-imperialist politics.

In the event, the BIOT's creation did not provide as clean a break with Mauritius as strategic planners in London and Washington had anticipated. In 1980, the government of Mauritius formally laid claim to Chagos on the basis that, when the BIOT was created, prevailing international law had prohibited colonizers from carving up their existing imperial possessions into new jurisdictions.¹⁴ In 1983, a select committee of Mauritian parliamentarians further concluded that their country's leaders prior to independence had been under duress when they agreed at Lancaster House to the excision of Chagos.¹⁵ From this view, the sepa-

ration of Chagos from Mauritius had been improper and should be regarded as an ongoing violation of international law—an argument subsequently endorsed by international political bodies such as the Organization for African Unity, the African Union, and the UNGA before being confirmed by the ICJ’s advisory opinion in February 2019.¹⁶ Every Mauritian leader since the early 1980s has made it clear that Chagos is an integral part of Mauritius—a commitment enshrined in the country’s constitution—placing considerable strain on Mauritius’s bilateral ties with both the United Kingdom and United States.

Archival documents show that UK diplomats in the 1960s knew full well that excising Chagos from Mauritius was in violation of international rules and, if not done carefully, would draw unwanted scrutiny from the UN’s Special Committee on Decolonization (“Committee of 24”).¹⁷ However, violating the territorial integrity of Mauritius was hardly the worst crime knowingly perpetrated by British officials as part of the creation of the BIOT. Between 1965 and 1973, around 1,500 indigenous Chagos Islanders were forcibly expelled from their homes to satisfy the needs of Diego Garcia’s new military occupants.¹⁸ The islanders were misrepresented to external audiences as migrant laborers, despite the authorities’ clear knowledge that many Chagossian families had lived on the islands for generations. The rationale for the expulsions was that the Chagos Islands had to be made rid of a permanent population if they were to play host to a US military base. As one UK official wrote: “We must surely be very tough about this. The object of the exercise is to get some rocks which will remain ours. There will be no indigenous population except seagulls who have not yet got a committee (the Status of Women Committee does not cover the rights of birds).”¹⁹

The Chagossians never acquiesced in their exile. They fought back—protesting vigorously in both Mauritius and the United Kingdom.²⁰ These efforts produced some important victories: financial compensation from the UK government,²¹ recognition of UK citizenship (and thus the ability to migrate onward to the United Kingdom),²² and even—if only briefly—the technical right to return to the Chagos Islands (discussed in more detail below). In Mauritius, the left-wing political parties Lalit and Mouvement Militant Mauricien made the Chagossians’ plight part of their electoral platforms. The fate of the islanders even became an issue in US domestic politics for a brief time, with lawmakers in the House of Representatives raising the issue of the islanders’ mistreatment during a 1975 hearing on whether to expand the base on Diego Garcia.²³

In the United Kingdom, the Chagossians’ cause has never been a high-profile political issue—but neither has it been entirely buried. In the late 1970s and 1980s, left-wing members of the Labour Party such as Tam Dalyell and Robin Cook made intermittent efforts to raise the issue with government ministers. Be-

ginning in the late 1990s and early 2000s, a larger number of parliamentarians began to work together to support the islanders—eventually coming together to form the All-Party Parliamentary Group on the Chagos Islands in 2008.²⁴ Between 2010 and 2015, the Chagossians could even count several members of the UK Cabinet as (at least nominal) supporters of their right of return—including Deputy Prime Minister Nick Clegg. In 2015, a longtime ally of the Chagossians—Jeremy Corbyn—became leader of the Labour Party and thus leader of the official opposition in Westminster. Corbyn has continued to speak out in favor of the Chagossians since becoming the UK’s nominal prime minister in waiting.

Up until now, no amount of campaigning by Mauritius, the Chagossians, or their supporters has been enough to shake UK political control over Chagos. Officials in London admit that the expulsion of the Chagos Islanders was regrettable and even illegal in its original manner of execution but always couple their professions of contrition with the twin insistences that (1) the islands will revert to Mauritian control once they are no longer needed for military purposes but will be treated as sovereign UK territory until that time; and (2) the current ordinances preventing the islanders’ return to Chagos are legal and, in any case, resettlement of the archipelago would be prohibitively costly.²⁵

London as Landlord: Diminishing Returns, Emerging Threats

The sole purpose of the BIOT’s creation was to furnish London and Washington with a territory that could be made exclusively available for military purposes. Judged against this criterion, the BIOT has been a resounding success. The United Kingdom has ensured that there is no permanent civilian population in the Chagos Islands (thus, no representative government and no adjacent communities to accommodate), provides little meaningful oversight of US military activities, and extends few laws to the jurisdiction. As Peter H. Sand has argued, Diego Garcia is essentially a “legal black hole” in the Indian Ocean—the perfect place for a military base to exist in near-total seclusion.²⁶ Moreover, the United Kingdom does not charge rent for the base.²⁷ For all these reasons, Anglo–American cooperation over Diego Garcia can be judged to have been a worthwhile arrangement from the perspective of the United States.

Governing the BIOT in service of US interests has required the UK government to be active along two fronts: (1) to oppose Mauritius’s claims to sovereignty; and (2) to oppose the exiled Chagossians’ fight for a right to return to the islands. For a long time, Whitehall found itself busiest on the second of these fronts. As already mentioned, the Chagossian community won a High Court victory in 2000 that technically restored their right to return in UK law.²⁸ At the time, the UK foreign secretary was Robin Cook—a longtime supporter of the Chagossians since

his days as a backbench Labour MP. After losing to the islanders before the High Court, Cook undertook on behalf of the UK government to accept the ruling in full and investigate the possibility of facilitating a return to the outer Chagos Islands (that is, those islands other than Diego Garcia).²⁹ It was not until 2004, in the aftermath of the invasion of Iraq, that Cook's successor, Jack Straw, used new orders in council to exile the islanders afresh. These legal instruments—a form of primary legislation made by UK ministers using royal prerogative³⁰ rather than a piece of legislation promulgated by the BIOT commissioner—had to be defended in court against robust challenges from the Chagossians and their lawyers, resulting in eight years of litigation that cost the British taxpayer millions of pounds and placed a bright spotlight on the US military's activities on Diego Garcia.³¹

Fighting to keep the Chagossians in exile was a public relations disaster for the UK government. Human rights groups and news organizations have been scathing in their coverage. One of the first in-depth reports into the territory was published in 1982 by the Minority Rights Group, which excoriated the UK government for its failure to uphold the Chagossians' rights despite being willing to wage war against Argentina in defense of the Falkland Islanders.³² Two decades later, the investigative journalist John Pilger produced a TV documentary (*Stealing a Nation*) to chronicle the Chagossians' story. In 2008, activists from Greenpeace tried to land on Diego Garcia to protest the islanders' treatment.³³

Also in 2008, the UK government was forced to admit that Diego Garcia had been used by the US military for extraordinary rendition flights—despite having earlier assured Parliament that no such flights had visited the territory.³⁴ This admission fueled a string of allegations that the United Kingdom had made itself complicit in the operation of a Central Intelligence Agency (CIA) “black site” on Diego Garcia.³⁵ And in 2010, the news media reported that the UK government had “manipulated” the results of a 2002 feasibility study into resettlement of the Chagos Islands in an attempt to stymie the efforts of the exiled islanders to return home.³⁶ Taken together, these two developments—reports of a CIA detention facility and allegations that the UK government was using underhand methods to keep the Chagos Islanders in exile—gave rise to the impression that the Chagossians' mistreatment was entirely at the behest of a US government intent on using Diego Garcia for shadowy purposes. It did not help that, some years later, UK officials were accused of lying about the availability of flight logs pertaining to Diego Garcia.³⁷

Even withstanding this torrent of negative publicity, it still could be argued that the BIOT administration provided the United States with a relatively secure political unit within which to house its base on Diego Garcia. However, from 2010 onward, even this advantage of the BIOT framework began to unravel after Lon-

don decided to create a Marine Protected Area (MPA) in the Chagos Archipelago. An international coalition of conservationist organizations including Pew Environment first put forward the idea of creating an MPA in Chagos was in 2009.³⁸ The UK government, especially Foreign Secretary David Miliband, warmly welcomed the proposal, partly because politicians like Miliband wanted to secure a “green legacy” for themselves and partly because officials believed that a new layer of environmental protections in the Chagos Archipelago would constitute an additional barrier to the islanders’ return.³⁹ Mauritius and most major Chagossian organizations argued against the creation of the MPA—or at least, argued for a greater say in its formation and management. However, in April 2010 (on a day that the UK Parliament was in recess), the Foreign and Commonwealth Office announced that it had decided to designate an MPA in the Chagos Islands. At the time, it was the largest MPA of its kind in the world—a (green) feather in the cap of Miliband and the outgoing Labour prime minister, Gordon Brown.

The creation of a formal MPA in Chagos created new legal and political opportunities for Mauritius and the Chagossians to press their interests against the UK government. For their part, the Chagossians leveraged WikiLeaks-released diplomatic cables (which suggested that the creation of the MPA had been done cynically to thwart the islanders’ hopes of resettlement) to request a judicial review of the MPA decision.⁴⁰ This effort ultimately failed to overturn the MPA’s creation—although it went all the way to the UK Supreme Court. At the same time, Mauritius lodged formal protests with the UK government that the manner of the MPA’s creation had violated its rights pertaining to the BIOT, including certain legal rights deriving from the UN Convention on the Law of the Sea (UNCLOS). Finding its diplomatic overtures rebuffed by London, Port Louis opted to take its case to the Permanent Court of Arbitration (PCA) in The Hague, which has jurisdiction to rule on disputes arising from states’ participation in the UNCLOS regime.

Contrary to the wishes of the UK government, the PCA decided to hear Mauritius’s arguments and, in 2015, an arbitral tribunal ruled in a binding decision that the manner of the MPA’s creation had indeed contravened international law.⁴¹ Among other things, the PCA held that Mauritius should have been afforded more of a say in the creation of the MPA because of its abiding interest in the governance of the territory, which stems from the repeated undertakings given by the UK government that Mauritius will, one day, be awarded sovereignty over the islands. The ruling thus established in public international law that Mauritius must be consulted on issues concerning the future governance of the islands—not just when it comes to marine conservation, but on other matters too. The UK government seems to have accepted these findings, subsequently arguing before

the UNGA that “we acknowledge Mauritius’s long-term interest in the archipelago” and “we [have] offered . . . a framework for the joint management, in environment and scientific study, of all the islands of the territory except for Diego Garcia.”⁴² In other words, the United Kingdom has accepted in light of the PCA decision that its sovereignty over the Chagos Archipelago is not absolute and that consultations with Mauritius are an international legal requirement going forward. This is a consequential development, which calls into question London’s ability to govern the islands without interference from Mauritius. It was also an entirely unforced error—the biggest sign yet that UK sovereignty over Chagos will not always be exercised in ways conducive to US interests.

The ICJ’s advisory opinion in February 2019 was even worse for the UK government. Having become frustrated with the UK government’s handling of its claims to Chagos in the wake of the PCA decision, the government of Mauritius decided in 2017 that it would seek an advisory opinion from the World Court on the question of sovereignty. As per UN rules, Port Louis formally requested that the UNGA refer the matter to the ICJ. In June 2017, the General Assembly approved Mauritius’s motion by an overwhelming majority. The United Kingdom lobbied hard to prevent the matter from coming before the ICJ, but, when the question of a referral came to be voted upon, London could not even count on the support of most European Union member states—a telling indictment of the United Kingdom’s declining influence in the world.⁴³ That the UK government could not stop the case being referred to the ICJ was a powerful demonstration of how little diplomatic clout London can muster in defense of UK national interests. That the United Kingdom *lost* the ensuing case just served to compound the humiliation. For even though the ICJ’s ruling was not binding, its decision was unambiguous and damning: that UK control over the Chagos Islands has been illegal under international law ever since 1965 and should be brought to a swift end.

One major implication of the ICJ ruling is that the World Court has now formally advised that every UN member, including the United States, has an obligation to decolonize Chagos. Before February 2019, the United States has been able to hide behind the fig leaf of insisting that the question of sovereignty over Chagos was a purely bilateral matter to be decided between the United Kingdom and Mauritius. This position was never entirely watertight, but it helped to shift international attention away from the base on Diego Garcia.⁴⁴ Now, however, the ICJ has articulated a powerful legal reality that, in fact, the continued colonization of the BIOT is an offense against all—including the United States. This is a difficult recommendation for the US government to dismiss altogether.

Thanks to decisions rendered by the PCA, ICJ, and UNGA, the legal and ethical reasons for decolonizing Chagos are plain to see. However, as argued here,

there is also a compelling pragmatic reason for why the United States (and its military planners in particular) should support decolonization. In short, the political and legal status quo in the BIOT is becoming unsustainable. On the one hand, the PCA's ruling concerning the Chagos MPA has made it clear that Mauritius has an actionable interest in the territory and must be consulted over major changes to the governance of the BIOT—a set of legal rights that the United Kingdom has accepted, and which could later be pressed in ways that neither London nor Washington approve of. On the other hand, the ICJ has leveraged some clear rules on decolonization to show that the United Kingdom should not be in Diego Garcia in the first place and that the BIOT should cease to exist as a jurisdiction. Meanwhile, an overwhelming majority of the world's states have expressed a view to concur with the ICJ's advisory opinion that Mauritius is the legitimate sovereign power in the Chagos Archipelago. In short, UK sovereignty is being squeezed. In the eyes of American strategists, at what point does London's stewardship of the islands start to look like a strategic liability?

In addition to these international threats to the political status quo in the BIOT, there is also a domestic threat emanating from the United Kingdom that warrants mentioning. As noted above, the current leader of the official opposition, Jeremy Corbyn, is a longstanding and outspoken supporter of the Chagos Islanders.⁴⁵ He could easily become a future UK prime minister. Such a premiership would constitute an existential threat to the BIOT. In April 2019, Corbyn wrote to Prime Minister Theresa May to condemn her decision to ignore both the ICJ ruling and the UNGA resolution on the status of the BIOT.⁴⁶ The implication of Corbyn's letter was that he supported Mauritius's demands that the BIOT be decolonized—a position in keeping with his longstanding record on the issue. This suggests that, if he ever became prime minister, Corbyn might voluntarily initiate the process of ceding the Chagos Archipelago to Mauritius. Other plausible options would be for Corbyn to submit the issue to a binding arbitration by the ICJ or to simply authorize the resettlement of the islands under UK supervision.⁴⁷ And as prime minister, Corbyn could implement any of these scenarios via the exercise of royal prerogative powers. He would not require any new legislation—or even the agreement of the United States.

Even if Corbyn never becomes prime minister, it must now be regarded as at least feasible that some other future leader could choose to relinquish UK sovereignty over Chagos or else initiate a resettlement over and above the objections of the United States. Indeed, a restoration of the Chagos Islanders' right of return seemed entirely possible during the 2010–2015 coalition government of Conservatives and Liberal Democrats. In September 2010, the Business Secretary Vince Cable even released a letter to announce that the government had agreed to allow

resettlement to proceed.⁴⁸ The information contained within the letter turned out to be an inaccurate reflection of government policy, but the bizarre circumstances surrounding its release were nevertheless suggestive of a high level of support enjoyed by the Chagossians in the cabinet at that time.

The bottom line is that the United Kingdom can no longer be considered the reliable landlord it once was in Chagos. Its political leaders cannot be trusted to indefinitely toe the line for the United States—especially when they incur significant embarrassment from doing so but without any discernible benefits in return. How long will it be before a government in London decides that the legal, political, and ethical problems associated with the BIOT are too serious to ignore? What will happen if the United Kingdom decides to initiate the transfer of sovereign control to Mauritius before the United States has had an opportunity to plan for a change in ownership?⁴⁹ It makes strategic sense for the United States to avoid the grave uncertainties bound up with these questions by simply choosing of its own violation to opt for Mauritian sovereignty.



(US Navy photo by Ensign Victor Obando)

Figure 1. Infrastructure improvements. US Navy Seabees deployed with Naval Mobile Construction Battalion (NMCB) 5's Detail Diego Garcia work with civilian contractors during a concrete placement that will form a pad for the foundation for a tension fabric structure in support of the US Air Force. NMCB-5 is deployed across the Indo-Pacific region, conducting high-quality construction to support US and partner nations to strengthen partnerships, deter aggression, and enable expeditionary logistics and power projection.

After Decolonization: Looking to the Future

The United States does not have a direct say over who controls the Chagos Islands—nor should it. However, Washington does have a powerful indirect say. As already discussed, the UK government's position is that it will cede the islands to Mauritius upon such a time as they are no longer needed for defense and security purposes. And because the US base on Diego Garcia is the only means by which any of the Chagos Islands are used for such purposes, it follows that the United Kingdom will relinquish sovereignty over the archipelago as soon as the United States offers its acquiescence. At least, there would be no reason for London to object to Mauritian sovereignty over Chagos if it was something that the United States supported.

I have suggested that the United States should use its leverage to bring about the transfer of sovereignty to Mauritius. The obvious objection to this proposal is that Mauritian sovereignty might prove to be more of a constraint on US military activities than the BIOT regime has been. This is a reasonable objection. It is difficult to imagine any political ordering that could be more favorable to the US military than that which has been provided by the BIOT—not even US sovereignty over the islands. However, the supposed drawbacks of full Mauritian control over Chagos can be managed if US leaders show foresight. And in any case, the BIOT is already showing signs of collapse. The jurisdiction belongs to a different era and cannot be expected to last forever. My argument is that decision makers in Washington would be best served by accepting the inevitable and shifting their focus toward working with Mauritius to forge a long-term understanding about the US presence on Diego Garcia.

How should the United States seek to shape the future of Diego Garcia and the rest of the Chagos Islands? There are several available options. One possibility would be to encourage London and Port Louis to agree upon a phased transfer of sovereignty over the Chagos Archipelago, beginning with the so-called outer Chagos Islands. After all, most of the islets in the Chagos Archipelago are more than 100 miles away from Diego Garcia. None of this land has ever been used for defense and security purposes and so, even by UK standards, it should be transferred to Mauritius.

It would not be the first time that the BIOT has been dismembered in such a way. At the time of the BIOT's creation in 1965, it comprised not just the Chagos Archipelago but also the island groups of Farquhar, Aldabra, and Desroches—each of which were excised from the then-Crown Colony of the Seychelles. The latter three sets of islands were never militarized and, as a result, were handed back to the Seychelles in 1976 upon that territory becoming an independent state.

Because the United States only uses Diego Garcia for military purposes, Washington has little interest in keeping the outer Chagos Islands under UK control. These islands could therefore be returned to Mauritius immediately, pending a final agreement on the status of Diego Garcia. While it is unlikely that Mauritius will agree to give up its territorial claim to Diego Garcia altogether, Port Louis might agree upon an extended timetable for the transfer of sovereign control over that island—one that would provide certainty for all concerned, satisfy international demands for decolonization, and give the United States and Mauritius enough time to conclude a comprehensive bilateral agreement on the future use of Diego Garcia for military purposes.

In the long-term, though, the only option for the United States is to prepare for the eventual transfer of sovereignty over Diego Garcia as well as the outer islands. This cannot be avoided for several reasons. First, from the Mauritian perspective, Diego Garcia is just as much Mauritian territory as the other Chagos Islands. Port Louis will not give up its demands for total decolonization. However, as I have argued, there are also powerful reasons of self-interest for why the United States should prefer Mauritian sovereignty over Diego Garcia. Namely, it is possible that a future UK government will decide (or be forced) to decolonize without giving much notice to the United States—whether because of unbearable international pressure or because of a domestic change in attitudes toward the alliance with the United States. It would be better for the United States to cultivate a willing and enthusiastic partner in Port Louis rather than be left in the position of having to begin talks with Mauritius once decolonization has become a *fait accompli*.

In 2016, Mauritius assured the United Kingdom and United States that it had “no objection” to the continued use of Diego Garcia for military purposes.⁵⁰ This position has been the same since the early 1980s.⁵¹ Of course, this does not mean that discussions with Mauritius will be straightforward. There will have to be a bilateral status of forces agreement, for example, and an agreement over financial compensation—items that have never had to be negotiated with the United Kingdom because of the nature of the BIOT arrangement. Such talks might prove to be somewhat burdensome for the United States. Mauritius might wish to impose limits over the storage of certain weapons, for example (especially nuclear weapons),⁵² and could insist on Diego Garcia not being used for practices such as the detention of prisoners. However, there will be silver linings: concluding a formal agreement (treaty) with the government of Mauritius would give the US base on Diego Garcia a much firmer legal footing than it currently enjoys via the United Kingdom and the BIOT.

There is always a remote possibility that Mauritius will decide against hosting a US base on Diego Garcia, whether now or in the future. This is the case with

every country that hosts a US military installation; foreign governments always have the outside option of denying the United States the right to conduct military operations on their sovereign territory. Nevertheless, the best outcome for the United States would be to convince decision makers in Port Louis that security cooperation with the United States is in their national self-interest. A self-enforcing voluntary agreement with Mauritius would be an infinitely more durable foundation for the base on Diego Garcia than continuing to rely upon the UK government's ability to justify its occupation of an illegal colony before domestic and international audiences.

Convincing Mauritius of the benefits of close security cooperation with the United States should not be difficult. Mauritius does not have a standing army of its own, instead tacitly relying upon others to guarantee its national security and a tranquil regional environment. Moreover, there is already some military cooperation between the US and Mauritian governments—especially in terms of anti-piracy operations. Hosting a US military base on Mauritian soil would allow Port Louis to upgrade its security ties with the United States to a level of a credible military partnership: cooperation over Naval Support Facility Diego Garcia would provide American leaders with an enduring stake in the military security and political independence of Mauritius—no small thing in the context of a shifting balance of power in the Indian Ocean region.

Once Mauritius assumes sovereignty over Chagos, it is likely that the archipelago will be treated as a discrete subnational jurisdiction. The model for this would be Rodrigues, which is an autonomous region of Mauritius and has its own regional assembly.⁵³ Talks should begin with Mauritius's Ministry of Local Government and Outer Islands, then, to see whether there might be the potential for different laws and immigration rules to be put in place for Chagos than Mauritius proper, with a view to limiting tourism and the size of a permanent resettlement. If a new civilian administration in the Chagos Islands can borrow (as can Rodrigues) then this might even open the door to a direct financial relationship between the United States and a new autonomous government in Chagos in terms of lending, aid, and investment; the United States would have the chance to become a partner in facilitating the managed resettlement of Chagos rather than an impediment. It might even be the case that the unitary island of Diego Garcia could be organized into a discrete administrative unit, separate from both Mauritius proper *and* the outer Chagos Islands. If so, this would create additional opportunities for the base on Diego Garcia to be treated in a distinct fashion.

Talks should begin with the Chagossians, too. Mauritius has a checkered past when it comes to its treatment of the Chagossian diaspora, but, at least officially, Port Louis supports the resettlement of Chagos by the Chagossians (and, perhaps,

other Mauritians).⁵⁴ US planners must therefore assume that Mauritian sovereignty over Chagos will be accompanied by the civilian resettlement of all or some of the islands. This would naturally pose some challenges for Naval Support Facility Diego Garcia. While not all islanders have protested the base in the past,⁵⁵ some have expressed their opposition to the US military. Others have formed political alliances with leftists in Mauritius who call for the shuttering of the base. For the most part, these have been “pragmatic” alliances.⁵⁶ Nonetheless, it means that the US government will face something of an uphill struggle to convince the islanders that their interests are compatible with those of the Pentagon.

There are several practical appeals that the United States could make to the islanders to ensure that resettlement need not compromise the security of the base on Diego Garcia. Indeed, it might even be the case that US leaders will have significant leverage in any conversations on resettlement. After all, the US military will have unique wherewithal to assist resettled civilians with everyday needs such as transport, communications, healthcare, and employment. If it undertakes to assist in the practicalities of resettlement, the Pentagon could secure for itself a meaningful say in the form and extent of any such efforts. If the United States continues to ignore the Chagossians, however—or if it engages with the islanders in a way that appears cynical, insincere, or insensitive—then this will only succeed in empowering those who wish to see the base closed.⁵⁷

Of course, it would be absurd to argue that the US base will be unaffected by the assumption of Mauritian sovereignty over (and resettlement of) the Chagos Islands. Without question, the base will have to change to accommodate new political realities. However, it is worth recapitulating what makes Diego Garcia so valuable to the US military in the first place: not just its political seclusion but its geographic endowments, too. And while the decolonization of the Chagos Archipelago will obviously undermine the political shelter that London has offered the US military since the BIOT’s creation in 1965, the geographic advantages offered by Diego Garcia are fixed. The goal of the United States should be to make sure that Diego Garcia can continue to be utilized to the maximum extent possible. In the current context, this means supporting Mauritian sovereignty instead of attempting to prop up the ailing colonial-era edifice that is the BIOT. The road to securing lasting access to Diego Garcia runs through Port Louis, not London.

A Crowded Ocean?

As a final note, it is worth remembering that it is not just US military strategists who have a stake in the future of Chagos. As Mauritian sovereignty over Chagos becomes more likely, other groups can be expected to fight for the ears of Mauritian politicians to shape the political situation in the islands. The exiled is-

landers are the most obvious constituency in this regard. And, as I have argued here, it is right and proper that the United States begin talks with the Chagossians to discuss ways to coexist in a post-BIOT political environment. However, the Chagossians are not the only group with an interest in Chagos. They might not even be the most powerful.

First, the international network of environmentalists who campaigned for the creation of an MPA in Chagos have a firmly vested interest in the future of the islands. After all, it was this group of campaigners who convinced the UK government to create an MPA in Chagos despite stark warnings from UK civil servants that such a move would create legal and political problems in terms of the BIOT's long-term governance (as turned out to be the case). It is prudent to expect that this same coalition of environmentalists will remain engaged in Chagos during and after any transfer of sovereignty. The conservationists themselves have never been opposed to the base on Diego Garcia, preferring to work with the UK and US authorities to facilitate scientific research and conservation work. Indeed, those environmentalists most closely associated with Chagos have viewed the base through a positive lens—celebrating the unparalleled seclusion that its existence has brought upon the rest of the Chagos Archipelago.

That said, not all environmentalist groups are at ease with large military bases. Some take a dim view of Naval Support Facility Diego Garcia in particular. It is therefore possible that conservationist organizations might lobby Mauritian leaders to pursue a green legacy of their own in Chagos rather than continue to be associated with the US military. One obvious option would be for Mauritius to seek UNESCO World Heritage Site recognition for the Great Chagos Bank—the largest coral reef structure in the world, and one that has been left in near-pristine condition except for the waters around Diego Garcia.⁵⁸ Such a proposal might be eminently attractive to politicians in Mauritius because it would provide a public relations-friendly way to accommodate the Chagossians (as custodians of the natural environment),⁵⁹ attract revenue from ecotourism, and brandish Port Louis's environmentalist credentials, while simultaneously bolstering Mauritius's geopolitical status as a so-called *large ocean state*.⁶⁰

On a more strategic level, it is also possible that Mauritius could be approached by China or India (or both) when it comes to deciding the future of the Chagos Islands.⁶¹ Beijing has made significant efforts to court Indian Ocean states over the past decade, and New Delhi has a long history of involvement in Mauritian affairs—most recently concluding an agreement to establish coastal radar stations on Mauritian territory. Of the two, China would be most eager to see American forces evicted from Diego Garcia—but it is not a stretch to imagine that either of these Indo-Pacific powers would be interested in establishing naval bases of their

own on Diego Garcia. Already, India has inked a deal with the Seychelles to establish a base on Assumption Island (the Seychelles). China, meanwhile, operates a military facility in Djibouti. Securing even limited access to Diego Garcia would be an enormous boon to either government. Guarding against the influence of America's great power rivals over Mauritius will therefore be a high priority for US diplomats in a post-BIOT world. It can be done most easily by supporting Mauritian sovereignty as soon as possible and working to ensure that the US–Mauritian relationship is strong and self-enforcing.

Conclusions

In an article published in 1982, political scientist Joel Larus wrote that the US military presence on Diego Garcia might not be quite as durable as imagined by the architects of the 1966 executive agreement to establish the base.⁶² Larus called Diego Garcia a “crucial platform for the projection of U.S. military power throughout all sectors of the Indian Ocean, including the Persian Gulf–Arabian Sea”⁶³—an analysis that many scholars of international security would agree with today. However, he feared that the United Kingdom “appear[ed] to have acquired something less than full and unrestricted sovereignty in 1965” owing to Mauritius's claims over the territory.⁶⁴ Moreover, he noted that domestic forces inside the United Kingdom—particularly on the left of the Labour Party—were hostile to US military interests and could not be regarded as reliable partners going forward. Both points seem prescient considering recent events.

Back then, Larus's preferred solution was that the United States should seek sovereignty over Diego Garcia. This would no longer be feasible. Mauritius would never agree to it, and it would provoke uproar in the international community. Today, Mauritian sovereignty is the only way to resolve the political pathologies that undermine the security of Naval Support Facility Diego Garcia. The BIOT must be jettisoned altogether. Fortunately, the decolonization of Chagos is one of those rare occasions in US foreign policy where the *realpolitik* course of action also happens to be the moral and legally required thing to do. Even if it was not always thus, it is now: America's long-term strategic interests would be best served by supporting the full decolonization of Chagos and working to make sure that Mauritian sovereignty over the islands will not jeopardize the longevity of the base on Diego Garcia. While there might be some costs associated with consigning the BIOT to history, the long-term benefits of cultivating a lasting strategic ally at the heart of the Indian Ocean are well worth it. ♣

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Notes

1. The Chagos Archipelago comprises around 60 tiny islets totaling nearly 22 square miles of land. Diego Garcia is the largest island, with a land area of around 12.5 square miles, and is the only island with a human population (the military and support personnel of Naval Support Facility Diego Garcia). The archipelago is just over 300 miles south of the Maldives and roughly equidistant between Indonesia and the east coast of Africa.

2. The British government created the BIOT in 1965 as a crown colony. In 1981, the British Nationality Act renamed the UK's crown colonies as British Dependent Territories and, in 2002, the colonies were renamed again to become British Overseas Territories, which is the current nomenclature. As of 2019, the United Kingdom has 14 Overseas Territories, all of which were crown colonies (or part of larger crown colonies) prior to 1981: Anguilla, Bermuda, British Antarctic Territory, British Virgin Islands, the BIOT, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn Islands, Saint Helena, South Georgia and the South Sandwich Islands, and the Turks and Caicos.

3. For an analysis of the ICJ's ruling, see Laura Jeffery, "The International Court of Justice: Advisory Opinion on the Chagos Archipelago," *Anthropology Today* 35, no. 3 (2019): 24–27.

4. These were Australia, Hungary, Israel, and the Maldives. See Rick Gladstone, "Britain Dealt Defeat at U.N. Over Its Control of Chagos Islands," *New York Times*, 22 May 2019, <https://www.nytimes.com/>.

5. Indeed, it has been evident for decades that BIOT is a fundamentally flawed political project. See Joel Larus, "Diego Garcia: Political Clouds over a Vital U.S. Base," *Strategic Review* 10, no. 1 (Winter 1982): 44–55; and Joel Larus, "Diego Garcia: The Military and Legal Limitations of America's Pivotal Base in the Indian Ocean," in *The Indian Ocean: Perspectives on a Strategic Arena*, ed. William L. Dowdy and Russell B. Trodd (Durham, NC: Duke University Press, 1985): 435–51.

6. David Vine, *Island of Shame: The Secret History of the U.S. Military Base on Diego Garcia* (Princeton, NJ: Princeton University Press, 2009), 61–62; and Peter H. Sand, *United States and Britain in Diego Garcia: The Future of a Controversial Base* (New York: Palgrave Macmillan, 2009), 2.

7. Subsequent agreements were signed in 1972, 1976, 1982, 1987, and 1999. Each of these agreements were handled as *exchanges of notes*—that is, executive agreements, not treaties—and so did not require legislative approval by either the US Congress or the UK Parliament. See Sand, *United States and Britain in Diego Garcia*, 69–115.

8. Vine, *Island of Shame*, chapter 7; and Vytautas B. Bandjunis, *Diego Garcia: Creation of the Indian Ocean Base* (San Jose, CA: Writer's Showcase, 2001).

9. Sand, *United States and Britain*, 35–37; and Denis F. Doyon, "Middle East Bases: Model for the Future," in *The Sun Never Sets...: Confronting the Network of Foreign U.S. Military Bases*, ed. Joseph Gerson and Bruce Birchard (Boston: South End Press, 1991), 281–82.

10. On the geostrategic importance of Diego Garcia to the United States, see Andrew S. Erickson, Walter C. Ladwig III, and Justin D. Mikolay, "Diego Garcia and the United States' Emerging Indian Ocean Strategy," *Asian Security* 6, no. 3 (2010): 214–37.

11. This was an unwritten undertaking when originally proffered at Lancaster House, but it has subsequently been made in writing and can be considered official UK policy. See Sand, *United States and Britain*, 3–4. For a recent expression of the United Kingdom's position, see the speech given to the UNGA by Matthew Rycroft, London's ambassador to the UN, in June 2017: "When we no longer need the territory for defence purposes, sovereignty will pass." Matthew Rycroft, "Questions on the British Indian Ocean Territory have long been a bilateral matter between the UK and Mauritius," 22 June 2017, <https://www.gov.uk/>.

12. In its original form, the BIOT also incorporated several island groups that had previously been part of the Colony of the Seychelles: Aldabra, Farquhar, and Desroches. These were never used for military purposes and were later returned to the Seychelles in 1976 upon the latter becoming an independent state.

13. Peter Harris, "Decolonising the Special Relationship: Diego Garcia, the Chagossians, and Anglo-American Relations," *Review of International Studies* 39, no. 3 (2013), 721, citing Richard Gifford, "The Chagos Islands—The Land Where Human Rights Hardly Ever Happen," *Law, Social Justice, and Global Development* 1, no. 1 (2004), 5.

14. Today, Chapter XI, Article 111 of the Constitution of Mauritius explicitly lays claim to the Chagos Archipelago.

15. Stephen Allen, *The Chagos Islanders and International Law* (Portland, OR: Hart Publishing, 2014), 90–91; Laura Jeffery, *Forced Displacement and Onward Migration: Chagos Islanders in Mauritius and the UK* (Manchester, UK: Manchester University Press, 2011), 45.

16. Maureen Tong, "Self-Determination in the Post-Colonial Era: Prospects for the Chagossians," in *Eviction from the Chagos Islands: Displacement and Struggle for Identity against Two World Powers*, ed. Sandra J.T.M. Evers and Marry Kooy (Leiden: Brill, 2011), 165–168; and Jeffery, "The International Court of Justice." For the ICJ's full decision, see <https://www.icj-cij.org/>.

17. Vine, *Island of Shame*, 101–02.

18. Richard Gifford and Richard P. Dunne, "A Dispossessed People: The Depopulation of the Chagos Archipelago 1965–1973," *Population, Space and Place* 20, no. 1 (2014): 37–49; and Vine, *Island of Shame*; Jeffery, *Forced Displacement*.

19. Sir Paul Gore-Booth, quoted in Vine, *Island of Shame*, 91. Bird is a common slang word for woman in British English.

20. Jeffery, *Forced Displacement*; and Vine and Jeffery, "Give Us Back Diego Garcia," in *The Bases of Empire: The Global Struggle against U.S. Military Posts*, ed. Catherine Lutz (New York: New York University Press): 191–200.

21. At the time of the Chagossians' expulsions, the United Kingdom provided Mauritius with £650,000 to help cover the costs of resettling the islanders. It is commonly agreed that this money was held up by the Mauritian government for too long to make a meaningful difference to the lives of the Chagossian refugees. In 1982, then, the UK government relented to pressure to provide an additional £4 million to the islanders. See Charles Cawley, *Colonies in Conflict: The History of the British Overseas Territories* (Newcastle-Upon-Tyne: Cambridge Scholars, 2015), 158. To this day, Chagossians who were removed to the Seychelles have received no financial compensation.

22. Jeffery, *Forced Displacement*; and Jeffery, "Unusual Immigrants," or, Chagos Islanders and their Confrontations with British Citizenship," *Anthropology in Action* 18, no. 2 (2011): 33–44.

23. Vine, *Island of Shame*, 122–25.

24. David Snoxell, "The Politics of Chagos: Part Played by Parliament and the Courts Towards Resolving the Chagos Tragedy," in *Fifty Years of the British Indian Ocean Territory: Legal Perspectives*, ed. Stephen Allen and Chris Monaghans (Cham: Springer, 2018).

25. See, for example, "Update on the British Indian Ocean Territory: Written statement," 16 November 2016, <https://www.parliament.uk/>; and Rycroft, "Questions on the British Indian Ocean Territory."

26. Sand, "Diego Garcia: British-American Legal Black Hole in the Indian Ocean?" *Journal of Environmental Law* 21, no. 1 (2009): 113–37.

27. Contrary to what is frequently reported in the news media, the United States does not have a "lease" to cover its use of Diego Garcia. There is only an executive agreement between the UK and US governments—a form of international agreement that does not require legislative underpinning in either state. The only compensation received by the UK government in return for the provision of Diego Garcia was a USD 14 million discount off the cost of Polaris missiles in the 1960s. See Sand, *United States and Britain*, 6–8.

28. In 1965, Queen Elizabeth II had vested legislative authority to one individual: the BIOT Commissioner (an official based in London). In 1971, the BIOT commissioner at the time (Bruce Galbraith) promulgated an immigration ordinance to ban all civilian habitation of the territory, providing legal underpin-

nings for the expulsion of the Chagossians and for denials of their right of return. In its 2000 decision, the High Court ruled that this legislative instrument had been illegal because it is incumbent upon UK colonial authorities to govern according to the principles of peace, order, and good governance. Ridding a territory of its entire native population cannot be construed as in keeping with these principles, the court ruled.

29. Cook could have appealed to the Judicial Committee of the Privy Council, then the highest court of appeal in the UK judicial system. That he chose not to do so called into question London's willingness and ability to keep the BIOT devoid of a permanent civilian population.

30. Ronan Cormacain, "Prerogative Legislation as the Paradigm of Bad Law-Making: The Chagos Islands," *Commonwealth Law Bulletin* 39, no. 3 (2013): 487–508.

31. Between 2004 and 2012, the Chagossians fought the UK government all the way to the European Court of Human Rights (ECtHR). See Vine, "Decolonizing Britain in the 21st Century?: Chagos Islanders Challenge the Crown, House of Lords, 30 June–3 July 2008," *Anthropology Today* 24, no. 4 (2008), 26–28; Jeffery, "Chagossians Refused Right to Return Home: A Sequel to Vine (AT 24 [4])," *Anthropology Today* 25, no. 1 (2009), 24–26; and Harris, "Dead End or Crossroads? The Chagossians Fail in Strasbourg," *Anthropology Today* 29, no. 3 (2013), 26. The ECtHR ultimately declined to hear the Chagossians' case, citing their receipt of financial compensation from the UK authorities in the 1980s.

32. John Madeley, "Diego Garcia: A Contrast to the Falklands," *Minority Rights Group No. 54* (London: Minority Rights Group, 1985 [1982]).

33. Campbell, "British Campaigners Arrested at Sea in Diego Garcia Protest," *Guardian*, 12 March 2008, <https://www.theguardian.com/>.

34. *Extraordinary renditions* are defined as government-sponsored abductions and extrajudicial transfers of a person from one country to another with the intent of circumventing the former country's laws on interrogation, detention, and/or torture.

35. These allegations intensified after the publication of the US Senate's report into the CIA's use of torture in 2014. See, for example, Peter Forster, "British Gave 'Full Co-operation' for CIA Black Jail on Diego Garcia, Report Claims," *Telegraph*, 10 April 2014, <https://www.telegraph.co.uk/>.

36. Catherine Philp and Dominic Kennedy, "Study into Return of Chagos Islanders Was Manipulated, Consultant Claims," *Times*, 22 April 2010, <http://www.thetimes.co.uk/>. A subsequent feasibility study conducted by the KPMG auditing firm found that resettlement was indeed possible, contrary to the findings of the government's first study.

37. Oscar Webb, "UK Government Changes Its Line on Diego Flight Logs Sought in Rendition Row – Again," *VICE News*, 12 September 2014, <https://news.vice.com/>.

38. See Laura Jeffery, "We Are the True Guardians of the Environment': Human-Environment Relations and Debates about the Future of the Chagos Archipelago," *Journal of the Royal Anthropological Institute* 19, no. 2 (2013): 300–18.

39. See Fred Pearce, "Chagos Marine Reserve Polluted by Politics," *New Scientist*, 24 September 2014, <https://www.newscientist.com/>; and Adam Tomkins, "Environmental Protection Versus the Right of Abode: A Case-Study in the Misuse of Power," in *Fifty Years of the British Indian Ocean Territory*, ed. Allen and Monaghan, 43–54.

40. Jeffery, "Neither Confirm nor Deny: WikiLeaks Evidence and the Vienna Convention on Diplomatic Relations in the Judicial Review of the Chagos Marine Protected Area," *Anthropology Today* 30, no. 3 (2014), 9–13.

41. Harris, "Why Law and Politics Matter for Marine Conservation: The Case of the Chagos Marine Protected Area," *Environmental Policy and Law* 45, no. 5 (2015), 204–07.

42. Rycroft, "Questions on the British Indian Ocean Territory."

43. Owen Bowcott, "EU Members Abstain and as Britain Defeated in UN Vote on Chagos Islands," *Guardian*, 23 June 2017, <https://www.theguardian.com/>.

44. Sand, *United States and Britain*, 9.

45. See his "Perspectives of a UK Member Of Parliament: 'Chagos, Just Plain Injustice,'" in *Eviction from the Chagos Islands*, ed. Evers and Kooy, 217–18.

46. Owen Bowcott, "Corbyn Condemns May's Defiance Chagos Islands Ruling," *Guardian*, 1 May 2019, <https://www.theguardian.com/>.

47. Lest this be considered unlikely, it should be remembered that Robin Cook chose not to appeal the High Court's 2000 decision restoring the legal right of return. Corbyn has been far more outspoken on the issue of the Chagossians' rights than Cook ever was.

48. Sean Carey, "Government Will Drop Case against Chagos Islanders, Says Cable," *New Statesman*, 13 September 2010, <https://www.newstatesman.com/>.

49. It might even be possible that the United Kingdom's withdrawal from the European Union ("Brexit") will lead to the break-up of the kingdom into its constituent parts. How would the United Kingdom's 14 overseas territories be distributed among the successor states of the kingdom? Will a rump United Kingdom (i.e., England and Wales) want to keep them? The political ramifications of Brexit are impossible to fully predict.

50. Snoxell, "The Politics of Chagos," 374.

51. Larus, "Diego Garcia: Political Clouds Over A Vital U.S. Base," 54.

52. Mauritius is party to the African Nuclear-Weapon-Free-Zone (Pelindaba) Treaty, which, among other things, bans the stockpiling, possession, or stationing of nuclear weapons.

53. The island of Rodrigues is around 400 miles east of Mauritius. Although part of Mauritius since 1968, it became an autonomous region in 2002. Unlike the Chagos Archipelago, Rodrigues does have a permanent civilian population (of over 40,000).

54. The Chagossians' right to return to Chagos formed part of Mauritius's submission to the ICJ.

55. Vine, "What If You Can't Protest the Base? The Chagossian Exile, the Struggle for Democracy, and the Military Base on Diego Garcia," *South Atlantic Quarterly* 111, no. 4 (2012): 847–56.

56. Jeffery, *Forced Displacement*, chapter 2; and Jeffery, "Victims and Patrons: Strategic Alliances and the Anti-Politics of Victimhood among Displaced Chagossians and their Supporters," *History and Anthropology* 17, no. 4 (2006): 297–312.

57. Engagement will need to be done carefully, learning from past mistakes made by the UK government. See Rebecca Rotter and Laura Jeffery, "'We No Longer Have Faith and Trust in Anyone': Misadventures in Community Consultation on the Future of the Chagos Archipelago," *International Development and Planning Review* 38, no. 4 (2016): 383–403.

58. The idea of turning the Great Chagos Bank into a UNESCO World Heritage Site is an old one. See, for example, Rodney V. Salm, "Coral Reefs in the Western Indian Ocean: A Threatened Heritage," *Ambio* 12, no. 6 (1983): 349–353.

59. Jeffery, "'We Are the True Guardians of the Environment': Human-Environment Relations and Debates about the Future of the Chagos Archipelago," *Journal of the Royal Anthropological Institute* 19, no. 2 (2013): 300–18.

60. The United Kingdom claims an exclusive economic zone of over 245,000 square miles around Chagos.

61. See Erickson, Ladwig, and Mikolay, "Diego Garcia: Anchoring America's Future Presence in the Indo Pacific," *Harvard Asia Quarterly* 15, no. 2 (2013), 25–27.

62. Larus, "Diego Garcia: Political Clouds over a Vital U.S. Base."

63. *Ibid.*, 44.

64. *Ibid.*, 53.

China's Rising Missile and Naval Capabilities in the Indo-Pacific Region

Security Implications for India and Its Allies

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ASHOK KUMAR MURUGESAN

China's military rise is a stepping stone toward China's dream for global power, which inevitably poses a security threat to nations in the Indo-Pacific region.¹ This study uses the theoretical base of structural realism's component of "offensive realism and defensive realism."² China's doctrine of "off-shore waters defense" with "open seas protection" enhances its comprehensive defense, counterattack, and deterrence capabilities near its territory and overseas maritime domain. However, China's naval modernization, establishing overseas naval base, and militarization of ports represents security threats to countries in the Indo-Pacific region.

China's military deployments in the South China Sea (SCS) and its missile capabilities pose security threats to India's mainland and maritime security in the Indo-Pacific region. China's energy requirements rely on the import of oil and natural gas through the Indian Ocean and Eastern Siberia–Pacific Ocean (ESPO) pipelines from Russia, but Beijing's major energy transportation and maritime trade route transits through the Indian Ocean region. Therefore, to protect sea lines of communication (SLOC), China has established ports across the Indo-Pacific in addition to its overseas naval base in Djibouti.

China's Belt and Road Initiative (BRI) provides benefits to the countries along its route. Additionally, the initiative fulfills Beijing's global trade ambitions and energy requirements and supports China's establishment of overseas military bases. To generate maritime connectivity, over the last decade China financed 35 ports around the world, out of which 14 ports are located throughout the Indian Ocean region and three ports are in the Pacific Ocean.³ More than 85 percent of China's oil import is transported across the Indian Navy–guarded Indian Ocean and passes through the Straits of Malacca. China's Maritime Silk Road (MSR) mainly involves the SCS region and the Indian Ocean region. China needs to protect its SLOCs across these regions.

To build a powerful navy for the protection of seaborne transportation, strategic passageway for energy supplies, and exploitation of resources in international waters, the People's Liberation Army Navy (PLAN) has pursued a rigorous re-

gime of modernization.⁴ India's maritime influence in Indian Ocean region starts from the Gulf of Aden to the Straits of Malacca. To gain parity in the region, China has established an overseas military base in Djibouti and developed a port in Hambantota, Sri Lanka. China also developed the port of Kuantan port on the east coast of Malaysia, which connects the SCS and the Indian Ocean. These ports and overseas military bases are strategically located on the sea lane of the MSR, encroaching upon India's maritime domain. This causes greater strategic deterrence for India's maritime security in the Indian Ocean.

China's Defense and Offensive Capability to Secure the Maritime Silk Road in the Indo-Pacific Region

The state of advancements in technology is the vital point of offense as well as defence for attrition and strengthening China's security. To secure its global trade and exploit energy resources, Beijing is building its military's offensive and defensive powers in the Indo-Pacific region and expanding its blue water naval might. Hence, China is determined to increase its number of nuclear-powered submarines, ballistic missile launch submarines (SSBN), aircraft carriers, surface combat ships, intercontinental ballistic missiles (ICBM), medium-range ballistic missiles (MRBM), and combat aircraft to strengthen its comprehensive security in the Indo-Pacific region. This section investigates Chinese deployments in the SCS and its arms capabilities that deter New Delhi and India's allies in the Indo-Pacific region.

The militarization of artificial islands in the natural resource-rich SCS through the establishment of air force bases and naval dockyards in the Spratly Islands (Subi Reef, Fiery Cross Reef, and Mischief Reef) and Paracels (Woody Island) pose security threats to neighboring countries in the region. In May 2016, the PLAN conducted extensive naval deployments in the SCS, Western Pacific, and in the eastern Indian Ocean. Also, a PLAN task force conducted maritime interdiction training in the Indian Ocean region.⁵ In December 2016, the PLAN's first aircraft carrier, *Liaoning*, conducted a task-group integration training exercise in the SCS region. To increase maritime capability, China commissioned a domestically designed and produced aircraft carrier, the *Shandong*, which entered service in 2019.⁶ Additionally, the PLAN's first nuclear-powered aircraft carrier will likely enter service by 2025.⁷ This latter aircraft carrier will greatly enhance China's naval capability for blue water naval operations, strengthening its maritime defense power to protect its MSR initiatives in the Indo-Pacific and Arctic regions. Eventually, China plans to field four aircraft carriers into PLAN service by 2030, with an advanced electromagnetic catapult to launch aircraft from the carrier

deck.⁸ China is significantly ahead of India's aircraft carrier program; although, India's three aircraft carriers currently under construction will probably come into operation roughly the same time as China's new carrier are slated to roll out for the PLAN.

To protect natural resources and promote Beijing's stance on the many maritime territorial dispute with China's neighbors in the SCS, the PLAN deployed more naval forces in the South Sea fleet equipped with Jin-class SSBNs, Shang I-class nuclear attack submarines, and missile patrol craft, when compared to its North and East Sea fleets.⁹ Also, the PLAN categorizes its theater missile defense (TMD) as a layered maritime defensive system to provide offensive and defensive security challenges in the East China Sea and SCS regions. Beijing's defensive layer ranges from 540 to 1,000 Nautical miles (nm), which covers Japan, the SCS, the Philippines, Brunei, and the Straits of Malacca strait. These regions are patrolled by submarines and occasionally engaged by anti-ship ballistic missiles for long-range maritime strike in this region to strengthen China's antiaccess/area denial (A2/AD) capability in the SCS region.¹⁰

As part of China's military exercises and practice of militarizing islands in the SCS, the People's Liberation Army Air Force (PLAAF) landed a H-6K nuclear-capable, long-range strategic bomber on Woody Island.¹¹ This bomber carries six electro-optic or infrared imaging guided air-launched cruise missiles capable of precision striking.¹² The H-6K's strike range is enhanced from the base 3,500 km-range to a heightened 5,000 km-range by the incorporation of the CJ-20 air-launched Land-Attack Cruise Missile (LACM) for conventional/nuclear strike. From the SCS, the CJ-20 is capable of reaching Singapore, Thailand, the Philippines, Vietnam, Indonesia, and Malaysia in the first island chain. The missile plays a vital role for China in the SCS region, as it helps to overcome refueling of combat aircraft from its nearest air bases from outposts in the SCS. It also strengthens the offensive capability of China through the air without flying over air defence identification zones (ADIZ) of other countries; thus, avoiding the need for authorization of overflight rights and evading missile defense systems, such as Vietnam's Russian-made surface-to-air S-300 anti-aircraft missile system. Additionally, China's man-made islands in the SCS equipped with DF-15 short-range ballistic missiles, HQ-9B surface-to-air missiles, and a ground-launched variant of the YJ-12B missile, which, along with H-6K strategic bomber, pose significant threats to India's maritime trade with Association of Southeast Asian Nations (ASEAN) countries across the region.

To strike highly secured and military significant targets, China developed the DF-ZF hypersonic glide vehicle (HGV), through ballistic missile boosters. HGVs can pull-up after reentering the atmosphere and approach the target in a

relatively flat glide, lessening the time it can be detected, fired at, or reengaged if an initial attack fails. Gliding makes the weapon more maneuverable and extends its range. The People's Liberation Army Rocket Force (PLARF) tested the DF-17 MRBM for carrying the DF-ZF to deliver both conventional and nuclear payloads against targets. The DF-ZF is expected to become operational in 2020.¹³ This weapon system is capable of reaching the Andaman Sea and Straits of Malacca, if it strategically operated from Hainan Island in China's southern theater command.¹⁴ It could also reach Visakhapatnam and the Bay of Bengal region if it strategically operated from Xizang in China's Western theater command. THE HGV travels with hypersonic speed and could reach a maximum terminal velocity of Mach 10, which makes it challenging for conventional missile defense systems to intercept at the terminal phase of flight. With high impulse, it is capable of penetrating to intercept aircraft carriers or unmanned warships and ultimately destroy the targets accurately and quickly, before command and control, battle management, and communication (C2BMC) reacts to determine its optimized trajectory for target destination. This HGV will deter India's naval presence across the Indo-Pacific region.

China deployed the DF-26 intermediate-range hypersonic ballistic missile for conventional or nuclear strike within the range of 4,023 km,¹⁵ which is capable of a precision strike on surface combatants far from the Chinese coast. This weapon strengthens China's theater missile defense in the Pacific region. If this dual-use DF-26 is strategically operated from Hainan Island to attack land targets, it is capable of reaching the central region of India, the entire eastern coast of India, the Straits of Malacca, and Guam in the Pacific Ocean. China's advanced hyperspectral imaging satellite (able to scan the different nature of object using a wide band of the electromagnetic spectrum) with incorporation of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) will support ballistic, cruise missiles, and antiship ballistic missiles (ASBM) for precision-strike on moving targets (aircraft carriers and surface combatants) in the Indo-Pacific region. To strengthen long-range offensive striking capabilities, China developed the strategic CSS-X-20/Dong Feng 41 (DF-41) ICBM with a range of 12,000km to 15,000 km. It is capable of carrying 10 multiple independent re-entry vehicles (MIRV) with a conventional or nuclear payload capacities of 2,500 kg. Its nuclear warheads can yield up to 150 Kiloton on each MIRV.¹⁶ The DF-41 operated from China's Western theater command is capable of reaching the central part of India in less than five minutes or striking any location in India and the Indo-Pacific region. Furthermore, China is developing next-generation tactical nuclear weapons,¹⁷ which are capable of devastating designated targets in the Indian Ocean littoral region.

PLAN Submarines and Surface Combat Capability to Protect MSR in the Indo-Pacific Region

The PLAN modernized its Type-093 nuclear-powered attack submarines to carry YJ-18 submarine-launched antiship cruise missiles to countermeasure enemies' destroyers and missile threats. Additionally, China has deployed more PLAN submarines to patrol and secure its SLOCs. The PLAN currently has two Shang I-class (Type-093) SSNs, four Shang II-class attack submarines (Type-093A) with acoustic quietening technologies to reduce the noise for stealth mode of operation, and four Jin-class (Type-094) SSBNs. According to a United States Department of Defense report, the latter sub can carry 12 JL-2 nuclear-armed SLBMs and has a strike range of 7,400 km. With this striking range, the JL-2 is capable of reaching any location in India, Australia, and naval bases in the Indian Ocean region, as well as certain parts of Alaska.

Next, the PLAN's next-generation Type-096 SSBN will likely be commissioned in 2020 and is expected to be armed with next-generation JL-3 SLBMs. Thus, in 2020, the PLAN submarine inventory is expected to include 58 submarines, of which 48 are SSK-Diesel-electric power submarines and 10 are nuclear-powered submarines.¹⁸ Compared to China, India has less than half the number of conventionally powered and nuclear-powered submarines. To avoid human errors and enhance faster response under crucial situations, China is developing artificial intelligence for navigation and combat-control actions for its submarines, aimed at making appropriate decisions without human intervention. By 2020, most of the PLAN's submarines will be armed with advanced long-range ASBMs.¹⁹

The PLAN has a plethora of surface combatants to patrol and protect its aircraft carriers, including Type-054A frigates; Type-056 and Type-056A corvettes; and Type-052B, Type 052C, and Type-052D destroyers. Nevertheless, to prove China's maritime superiority in the Indo-Pacific region, Beijing developed Asia's largest surface combat vessel: the Type-055 destroyer, a class of stealth guided missile destroyers designed for multimission roles, including area air defense and antisubmarine warfare capabilities surpassing previous Chinese surface combatants. At present, four Type-055 destroyers are in service. The PLAN has equipped these ships with 112 universal canister-based vertical launch missile modules to strike targets at various ranges from hundreds to thousands of kilometers, utilizing YJ-18 long-range ASCMs (with up to a 500 km-range to strike the target at supersonic velocity of Mach 3), HHQ-9 surface-to-air missiles (with a maximum 100 km-range), and CJ-10 land-attack cruise missiles (with target maximum range of 2,000 km), and torpedo-carrying antisubmarine missiles. To destroy the target in the

range of 100 nautical miles, China is looking to incorporate electromagnetic rail guns into warships to fire the warheads with the hypersonic velocity of Mach 7, enabling them to destroy targets with high momentum at a longer distance. This hypersonic naval gun will likely be fielded on the Type-055A destroyer, which is expected to enter service by 2025.²⁰ To compete with global maritime powers, China has announced plans to build 500 warships by 2030,²¹ this could elevate the PLAN to be the strongest naval power in Indo-Pacific region.

Though China's neighbors are increasing their A2/AD capabilities,²² China keeping pace with its commitment to develop advanced military technologies. The PLAN is improving its over-the-horizon (OTH) radar,²³ which uses low-frequency electromagnetic waves to reflect off the ionosphere and travel over a long distance beyond the horizon with less attenuation to detect long-range targets. OTH radar can support China's early warning systems. Additionally, the PLAN is developing reconnaissance satellites, which are capable of locating the target over thousands of kilometers and support China's long-range precision strike of targets from its mainland. Development of the DN-3 exo-atmospheric HGV hit-to-kill missile interceptor, real-time surveillance capabilities, reconnaissance, cruise missiles, PL-15 long-range air-to-air missile, ASBMs, multi-kilowatt fiber optic strategic laser weapons, new-generation surface combatants, and microwave weapons strengthen China's A2/AD capability to defend threats from neighboring regions.

In addition to the aforementioned defense technology developments, China is committed to developing quantum information technology for unhackable data transfer in cyberspace for secure communications. In August 2016, China launched the world's first quantum satellite: the Quantum Experiments at Space Scale (QUESS).²⁴ The following year, China successfully carried out the first communication by using quantum encrypted messages with entangled photons for secure communication. This pioneering work led to the building of the world's first quantum network between Beijing and Shanghai for secure communication. Quantum encryption ensures that efforts to tamper with communications are instantly known by sender and receiver alike, using quantum key distribution, and alters the content of the message being sent. China aims to build its quantum key distribution for quantum communication network by 2020 and for global communication by 2030.²⁵ Additionally, QUESS will be a useful to perform space-scale tests on photon teleportation experiments, establishing quantum networks at space-scale to transfer entangled photons for unhackable secure communication around the globe. Chinese defense agencies will probably implement these developments in advanced quantum technology in the Strategic Support Force

(SSF), combat control, ballistic missile defense (to identify the nature of war-heads), and maritime navigation for naval ships.

Stealth Breaking Quantum Technological Capabilities of China

By overcoming the challenge of decoherence of entangled photons in the turbulent atmosphere over a long distance, China can construct “quantum radar” to locate stealth objects at great distances—potentially thousands of kilometers.²⁶ Quantum radar can unmask stealth fighter aircraft and stealth missiles at long ranges, essentially rendering stealth technology obsolete, including “cyber stealth” that causes virtual disappearance of aircraft in radar by an onboard sophisticated software program that nullifies the image of aircraft in the opponent radar network systems.

China’s Indo-Pacific Maritime Strategy in Sri Lanka

Sino-Sri Lankan defense relations were established during the presidency of Mahinda Rajapaksa. From Beijing’s perspective, the Liberation Tigers of Tamil Eelam (LTTE) terrorist organization was a potential threat and hindrance to China’s future investments in Sri Lanka. Additionally, the LTTE’s sea control capability irked China. In April 2007, Sri Lanka signed an agreement with China to purchase the 37.6 million USD worth of weapons,²⁷ including Jian fighter jets, anti-aircraft guns, and 3D surveillance radars.²⁸ In the final years of the island’s civil war, China delivered weapons to warehouses in Galle, on the southern coast of Sri Lanka. These were immediately distributed to battlefields in the northeastern part of the island to support the Sri Lankan military.²⁹ China granted 1564 million Sri Lankan Rupees to construct an auditorium at the Sri Lanka Military Academy at Diyathalawa.³⁰ In addition, Sri Lanka procured six MA-60 aircraft from China, worth of 105.4 million USD.³¹

When the civil war persisted in Sri Lanka, the United States declared the LTTE as a deadly terrorist organization, hoping to curb its terrorist attacks and strangle its global criminal network.³² The United States provided more military equipment to improve Sri Lanka’s maritime security against the LTTE, including sophisticated maritime radar and training Sri Lankan soldiers counterterrorism tactics in Sri Lanka.³³ However, according to Beijing, it was China’s aid that led to the annihilation of LTTE and secured China a position for preferred partnership in future investments. China influenced Sri Lanka through infrastructure development projects, offering economic “support” in the form of loans, which instead of helping the island rebuild on a stable financial foundation, seduced Sri Lankan leaders into a “debt trap.” Then, when the Sri Lankan government was

unable to make payments, China took over its assets to establish its MSR infrastructure project in Sri Lanka.

The construction of the Hambantota port commenced in 2008. By 2010, Beijing had invested 1.5 billion USD in the project. In December 2017, Sri Lanka, unable to make its payments on the port, handed over the Hambantota Port to China for 99 years. Additionally, Sri Lanka allowed China to construct special economic zones. The strategic location of this port is only a few nautical miles from the main sea lane of the MSR in the Indian Ocean, which connects the Straits of Malacca to China. Sri Lanka decided to move its Southern Naval command to Hambantota Port to protect its special economic zone in the southern province of Sri Lanka.³⁴ Though, currently, it is used as commercial port, in the future, the Hambantota port could act as a naval dockyard for China in the Indian Ocean. This would give China an easy means to move its fleet in the Indian Ocean very near to India's sphere of influence in the southern part of India, posing a serious security threat to southeastern India. Moreover, another Sino-Sri Lankan venture, the Colombo Port City Project (CPCP) would be a transit trade hub for China in the Indo-Pacific region, and once again poses a serious debt trap for the island.

China's Indo-Pacific Strategy in Pakistan

China is developing a China-Pakistan Economic Corridor (CPEC) as a BRI infrastructure development project. India has long objected to the CPEC, as a portion of the project's route passes through Pakistan-occupied Kashmir.

Additionally, China has built the largest deepwater seaport at Gwadar, Pakistan, as a part of the SLOCs for the MSR. To contain China, India built Chahabar Port in Iran on the Gulf of Oman, as part of an India-Iran-Afghanistan partnership. To secure the Gwadar port, China decided to build an overseas naval base in Jiwani, near Gwadar port, in Pakistan's Balochistan province. The strategic location of this naval base places it near both Chahabar and Gwadar.

Aside from the development of infrastructure projects in Pakistan, China provides conventional weapons, including warships, fighters, short-range missiles, and diesel submarines to Pakistan, which serves to contain India, China's giant competitor on the Asian continent. China sold Pakistan 48 units of Wing Loong II medium-altitude long-endurance multirole drones, which are designed to carry air-to-surface missiles and laser-guided bombs.³⁵ This multirole drone can be utilized for combat and surveillance operations against India. Additionally, China provides military support to Pakistan to maintain regional strategic stability,³⁶ which protects China's strategic plan in Pakistan for its BRI project. India tested the nuclear-capable Agni-V ICBM, which has a strike range of 5,000 km and is capable of reaching the Chinese mainland. To deter India's mis-

sile development, China provides technical assistance to Pakistan for its missile development programs.

Pakistan is engaged in developing MIRVs and, in January 2017, successfully conducted its first test launch of its nuclear-capable Ababeel surface-to-surface MRBM with MIRV. To identify the missile, high-quality imaging optics are essential for gathering visual information of missile from its launch to different phases of flight and reentry of warhead into the atmosphere. This optical tracking system with an integrated telescope will track the MIRV at a different phase of flight and trace the trajectory of the terminal phase projection of its warheads.³⁷ The tracking system is an essential component to accelerate the missile development program to support Pakistan's program. China sold optical tracking and measurement systems to Pakistan that were developed by the Chinese Academy of Sciences' Institute of Optics and Electronics. China's assistance will accelerate Pakistan's missile developments, which inevitably raise security threats to India and help Pakistan to monitor India's space defense programs.

North Korea's Missile Threats in the Indo-Pacific Region

In addition to China's rising missile threat, Sino-North Korea relations also threaten regional stability in the Indo-Pacific. Although, Beijing condemns Pyongyang's nuclear arms and missile tests, both countries maintain diplomatic relations under strain. China calls for lifting international sanctions on North Korea to avoid the collapse of Kim Jong-un's regime,³⁸ because China's investments in the Korean Peninsula depend on North Korea, Pyongyang's political and economic stability is an important concern for China. In addition, North Korea's financial requirements depends on Beijing's aid. Beyond this, both countries want to deter the US presence in the Korean Peninsula. The US military's demoployment of the Terminal High Altitude Area Defense (THAAD) ballistic missile interceptor in South Korea hinders North Korea and Beijing's ballistic missile tests.³⁸ Beijing's goal in leveraging its influence in North Korea is for a quid pro quo to weaken US alliance in this region. On May 2017, North Korea successfully tested its Hwasong-12 mobile intermediate-range ballistic missile (IRBM), which has a maximum strike range of 4,500 km.³⁹ When fully operational, this missile will have the capability of reaching northeastern India, the northern part of the Bay of Bengal, and the western entrance to the Straits of Malacca if it is strategically operated from South Hwanghae Province in western North Korea. Furthermore, North Korea developed long-range nuclear-capable missiles, testing two Hwasong-14 (KN-20) ICBMs in July 2017, which traveled on highly lofted trajectories that over the Sea of Japan, east of North Korea.⁴⁰ These ICBMs have a strike range of 10,000 km, enabling Pyongyang to strike

India and as far away as Hawaii, including the US Pacific Missile Range Facility, Barking Sands. North Korea's commitment to developing long-range nuclear-capable missiles and IRBMs pose security threats to the countries and military assets in the Indo-Pacific Region.

Are India–Indonesia Bilateral Relations a Game Changer in Indo-Pacific Region?

On 29–30 May 2018, Indian Prime Minister Narendra Modi visited Indonesia. During his visit, Modi and Indonesian president Joko Widodo discussed the views of two countries regarding maritime cooperation for promotion of peace, and economic development (including defense manufacturing) in the Indo-Pacific. The bilateral relationship between these two countries and the creation of a naval base for India at Sabang Island represent a significant strategic deterrent and vulnerable choke point to China in the Straits of Malacca.⁴¹ Sabang lies at a strategic location near the straits, meaning Chinese vessels would have to pass through Indian Navy–controlled waters in the Andaman Islands.

Sabang's port is ideal for military vessels, including submarines, serving as a naval dockyard for India and Indonesia to establish a combined naval base in this region.⁴² India's naval base in the Andaman Islands and maritime involvement in Sabang Port will create a vulnerable choke point for China to access the western approach to the Straits of Malacca in the Indian Ocean, potentially forcing China to seek alternate sea lanes of transportation for its trade and energy requirements. One alternative might be the proposed Kra Canal in Thailand, which, if realized, would connect the Gulf of Thailand with the Andaman Sea.

Conclusion

China's commitment to develop new naval, avionics, missiles, direct energy weapons, artificial intelligence technologies and advanced materials for state-of-art technology and quantum communications will raise China's comprehensive (land, air, maritime forces, and cyber space) defense capabilities and further Beijing's intent to become a global superpower. The advances also strengthen China's abilities to protect its SLOCs in the Indo-Pacific region and expand its blue water naval capabilities—including aircraft carriers, nuclear-powered submarines, and SSBNs—and improve its global trade and hunt for energy resources.

Besides weapons developments, China's military strategy in other countries, particularly in Sri Lanka and Pakistan, also plays a vital role in deterring its adversaries in the region. To strengthen India's maritime security, it is necessary to analyze China's strategy in Sri Lanka and Pakistan. In the future, the strategic loca-

tion of these two countries supports China's ability to project immediate offense force against India, greatly deterring India's security strategy in Asia and the Indian Ocean region. North Korea's threat in the Indo-Pacific is also a great concern for the United States, its allies, and friends.

The rise of China as a superpower will govern the geo-economics and geopolitics of the BRI in the Indo-Pacific. Thus, it is necessary for other actors in the region to seek balance for the trade and military power in the region to assure a free-and-open Indo-Pacific region.

Security Implications and Policy Prescriptions

The eastern part of India is prone to be highly insecure due to its proximity to China's strategic launch locations and missile capabilities, specifically China's new HGV, which is capable of reaching vital Indian naval assets in Visakhapatnam and air force assets in Hyderabad. The DF-26 is also capable of reaching any portion of India's eastern coast—as is the JL-2, which could launch from anywhere in Chinese waters. China's surveillance activity in the South Pacific from its optical tracing system in Vanuatu, Beijing's ensnaring of Sri Lanka and control of that island's ports, and the PLAN's increasing maritime activity in the Indian Ocean endangers southeastern India.

India's naval capability should be increased in eastern and southeastern of India to deter the Chinese maritime threat. Doing so will also ensure the maritime security of the Bay of Bengal region. The Eastern Naval Command at Visakhapatnam is insufficient to protect the entire eastern coast of India. We suggest the establishment of an additional naval command at Chennai and two new naval-air bases in that eastern naval command to confront Chinese threats to Chittagong Port in Bangladesh, Sittwe Port in Myanmar, and the future Kra Canal region. The exiting Indian Air Force training base at Kodiyakarai should be upgraded to a Naval Air Base, as it is a strategically important location for containing Sri Lanka's Palaly Military Base formerly Jaffna International Airport, which was recently converted to a Sri Lankan Air Force base. Other naval-air bases would be appropriately located between Thoothukudi and Kanyakumari in the Indian state of Tamil Nadu to confront tactical multidirectional attack and undermine the first-strike capability of China. Also, the Ministry of Defense must strengthen INS Parundu naval air base at Uchipuli, (Tamil Nadu), and Thanjavur Air Force Station (Tamil Nadu) to thwart the growing Chinese presence near the Sri Lankan island of Katchatheevu and Northern Province of Sri Lanka. To deter China's maritime strategy in Thailand, India must establish a combined naval base with Thailand in Surat Thani province to strengthen India's future maritime security and to choke the PLAN's fleet in the Indian Ocean region.

It is appropriate to establish integrated three-layer missile defense in the north-eastern and southeastern parts of India to strengthen missile defense against security threats from the Chinese mainland, South Pacific, and Indian Ocean. We also call for the establishment of a multitier missile defense along with direct energy weapons in northern India to deter missile threats from China's western theater command. These latter measures will also defend the Eastern Naval Command and northern part of the Bay of Bengal from the threat of China's new HGV.

China's advanced ballistic missile technology challenges India's ability protect its land and maritime domains. It is appropriate to incorporate Indian navy battleships with free-electron lasers to defend against existing and future ballistic missile threats.

To deter against China's stealth-breaking Quantum technology, India's stealth aircraft must be improved—possibly through the use of multicolor entangled photon cloaking with additional quantum-state processes—to attain air superiority over China in the Indo-Pacific.

To deter China in Sri Lanka, we propose establishing joint air force bases in Trincomalee and Batticaloa, creating greater defense cooperation between Indian and Sri Lankan Air Forces and weaning the island from its dependence on China and Pakistan. Moreover, India and the United States must put diplomatic pressure on Colombo to reach a federal solution to the island's prolonged ethnoreligious conflict.

Finally, we argue for the need to develop an architecture of comprehensive security not just for balancing but collective security measures for maintaining order and security in the Indo-Pacific region by India and its allies. 🌐

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Notes

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Caught in the Middle

An Empirical Assessment of the Impact of the Trade War and Beijing's Taishang Incentive Policies on the Taishang's Movement in and out of Mainland China

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KUAN-WU CHEN

Abstract

What is the impact of the US–China trade war on Taiwanese direct investment (TDI) in mainland China, by Taiwanese businesspeople, or “Taishang”? Are the Taishang incentive policies issued by Beijing and implemented by the Chinese local governments effective in keeping Taishang from withdrawing from mainland China, especially during the trade war period? With the newly available TDI data from the Republic of China Ministry of Economic Affairs, we utilized the difference-in-difference (DID) estimation upon the monthly data of TDI within 31 provinces in China in 2018. We found that the third wave of the trade war did not have any statistically significant impact on cumulative TDI or monthly manufacturing TDI, despite some negative impact on the nonmanufacturing TDI. We also found that the Taishang incentive policies play a significant role in attracting Taishang and was not weakened by the outbreak of the trade war.

Introduction

What is the impact of the US–China trade war on Taishang? Are the Taishang incentive policies issued by Beijing and implemented by the Chinese local governments effective in keeping Taishang from withdrawing from mainland China, especially during the trade war period? None of the existing studies have empirically examined the effect of the coexistence of the trade war and the Taishang incentives policies. Existing qualitative analyses have shared the concern that the close trade relationship across the Strait and its important role in global supply chain, and the volatile US–China relationship make it unavoidable for Taishang to suffer loss in this trade war. Thus, Taishang are expected to be the major losers in the US–China trade tensions. Despite this, Taishang have been granted significant preferential policies by the Chinese national and local governments to help Taishang maintain sustainable development in mainland China. Therefore, during the US–China trade war, Taishang faced both risks and opportunities in mainland China. It is important to conduct serious empirical investigation on

how the interaction between the risks (i.e., the trade war) and the opportunities (i.e., the Taishang-preferential policies) impact the Taishangs' movement in and out of China.

To better explore these questions, we first review the cross-Strait economic relationship and analyze the rationale on the impact of trade war and Taishang incentive policies on Taishangs' movement in and out of mainland China. Then, we utilize the monthly TDI data and conduct empirical analysis on whether Taishangs' movement in and out of China has been affected by the outbreak of the trade war, the issuing of the Taishang-preferential policies by the Chinese local governments, and the interactions between the two. Next, we analyze our empirical findings. Last, but not the least, we summarize this article and make a conclusion.

Review of Cross-Strait Economic Relationship and Its Impact on Taishang

The cross-Strait economic relationship has been heavily influenced by the political and economic development on each side of the Strait, by the two countries' bilateral relationship, and by global political and economic developments. Since 1949, when the Chinese Communist Party (CCP) established the People's Republic of China (PRC) and the Nationalist Party (KMT) established Taiwan under the name of the Republic of China (ROC), each side has claimed to be the sole legitimate government of China. During the 1971 United Nations General Assembly, the international community switched its recognition of China from the ROC to the PRC. Two decades later, the two sides of the Strait reached an agreement to disagree regarding to the sovereignty issue, which was exemplified by the 1992 Consensus across the Strait. According to this consensus, both sides agree that there is only "One China" and each side can have its own interpretation on what that nomenclature means. Under the relatively peaceful environment across the Strait, the cross-Strait economic activities became increasingly active in the 1980s.¹ In the late 1980s, when the first group of Taishang moved out of Taiwan due to its rising labor cost and structural change, they arrived in mainland China to take advantage of the low wages, cheap land, and tax breaks.² This first group of Taishang greatly energized China's economy under its marketization reforms.³

The Taishangs' development of mainland China from the 1990s and 2000s continued, and cross-Strait economic ties strengthened, although the legalization of the investment across the Strait did not happen until 2008. Despite this, during this stage the Taishang faced many more challenges, due to the industrial upgrading made by mainland China, particularly under the pressure of the global financial crisis of 2008, China's improved labor protection policies (e.g., the new Labor

Contract Law), and the new environmental protection regulations.⁴ On top of these challenges, the Taishang faced a much more competitive market in mainland China, particularly given the rising competitiveness of Chinese domestic private firms and state-owned enterprises and the inflows of competitive foreign direct investment (FDI) from the more advanced economies.⁵ According to Chun-yi Lee, the Taishangs' privileges at the early stage of Chinese economic openness has faded, and the Chinese private firm and state-owned enterprises increasingly are gaining more privileged treatments from Chinese local authorities.⁶

Last, but not the least, since 2016, when the newly elected Taiwanese president, Tsai Ing-wen, took office, Beijing suspended official talks with Taiwan due to Tsai's refusal to accept the 1992 Consensus. Since then, the cross-Strait relationship has been tense. This is another major challenge for the Taishang. Given the above major challenges faced by Taishang in recent years, has the trade war between the United States and China driven many Taishang to withdraw from mainland China? Are Beijing's Taishang-preferential policies helpful in keeping the Taishang from moving out of mainland China? Were Beijing's Taishang-preferential policies still effective following the outbreak of the trade war? The following three sections will address these questions respectively.

The Taishangs' movement in and out of mainland China has important political implications for the cross-Strait relationship. According to Robert F. Ash and Y. Y. Kueh, "economic integration is essentially a process of unification—the means whereby coherence is imposed upon previously separate, even disparate, geographical regions."⁷ As to the Taishangs' political role, there has been a mainstream argument that Taishang serve as an important constituency in assisting with communications across the Taiwan Strait,⁸ despite the some arguments that Taishang are business animals and cannot be depended upon for political purposes.⁹ Given the strategic importance of the Taishang, their movement in and out of China deserves closer investigation, particularly in light of the recent US–China trade war and the new Taishang incentive policies provided by the mainland Chinese national and local governments.

The Impact of the Trade War and Taishang Incentive Policies

Most observers suggest the trade war between the United States and China started in early 2018, although there had been a series of tariff increases on certain products before that. With many rounds of trade talks between Washington and Beijing and claims of victory from both side, there are few signs that this trade war has truly run its course.¹⁰ Generally, existing studies divided the trade war up to now into three rounds. The first round began on 6 July 2018, when the United States imposed a 25-percent tariff on 34 billion USD of Chinese goods. The sec-

ond round began on 7 August 2018, when Washington released a revised version of tariffs on a final list of 16 billion USD-worth of imports from China and planned to implement a 25-percent tariff on them on 23 August. The third round started on 17 September 2018, when Pres. Donald Trump announced a 10-percent tariff on 200 billion USD-worth of Chinese goods to begin on 24 September 2018 and aimed to increase to 25 percent by 1 January 2019. On 2 December 2019, the United States and China agreed to a temporary truce and reached an agreement to refrain from increasing tariffs or imposing new tariffs for 90 days, up to 1 March 2019, while the two countries negotiated toward a larger trade deal. While the first two rounds of the trade war did not impact Taishang significantly, the third wave greatly affected almost all export-oriented Taishang in China due to the tariff increase.

Despite the unpredictability of the trade war, the occurrence of the imbroglio and the PRC's issuing of the Taishang-preferential policies in 2018 provide us an ideal environment to investigate (1) whether trade war caused the reduction of TDI in China; and (2) whether the Taishang incentive policies play a positive role in attracting TDI; and (3) whether the impact of the trade war weakened Taishang incentive policies.

Causal Mechanism of Trade War and TDI in Mainland China

In this article we divide Taishang into two categories: Taishang in the manufacturing sector and those in the nonmanufacturing sector. We argue that Taishang in the manufacturing sector are negatively impacted by the trade war, although Taishang in other sectors (especially the service sector) may not be affected as much. During the past three decades, about 70 percent of Taishang in China operate in the manufacturing sector.¹¹ ROC-PRC-US trade mainly involves manufacturing production. This triangular trade relationship has been characterized as the following model: the United States delivers purchase orders to Taiwan firms located in Taiwan, which then request the Taishang (i.e., Taiwan-invested companies) in mainland China to produce the products ordered by the US market given the lower cost of producing in mainland China than in Taiwan. As the Taishang in mainland China finish producing the products, they will export these products to the United States directly from mainland China. Meanwhile, to produce the products to satisfy the needs of the US markets, Taishang in mainland China need to import large amounts of intermediate goods/components/parts from Taiwan. This contributed to Taiwan's high trade balance toward mainland China. A majority of Taishang in mainland China are mainly producing for the US market and serve as the original design manufacturers (ODM) for US manu-

facturing companies. Therefore, Taishang in the manufacturing sector play an important role in mainland China's exports to the US market.

Given the above trade model, when the trade war occurred, the exporting of the final products from mainland China to the United States would decrease due to the rise of tariffs. The rising cost would lead to increased prices for the final products sold on the US market. Due to the supply-and-demand equilibrium, the rising prices would lead to the decrease of demands of such products imported from China and, thus, reduce the number of orders delivered by the US market to the Taiwanese companies in Taiwan. This would reduce the number of orders that are forwarded to the Taishang in mainland China. As the value-added earned in the assembling factories in mainland China are usually small, the major way for them to make profits is to export large quantities with relatively lower tariffs. With the trade war outbreak, both tariffs and export quantities went up, which made it very costly for the manufacturing Taishang to continue their production. Meanwhile, when the scale of production by mainland Taishang decreases, the demand for the imported intermediate goods/components from Taiwan decreases as well. This will lead to the downscaling of the Taiwan firms in Taiwan and reduce Taiwan's exports to mainland China. Due to the above reasons, we expect that the number of new TDI investment projects in the manufacturing sector in mainland China would decrease and the dollar amount of the TDI investment in mainland China would decrease as well, particularly with the outbreak of the third round of the trade war, given everything else held constant. In comparison, since the Taishang in the non-manufacturing sector are less tied to the ROC-PRC-US trade triangle, it is expected they would not be impacted much by the trade war.

Hypothesis 1.1: Trade war has negative impact on Taishang in the manufacturing sector in mainland China.

Hypothesis 1.2: Trade war has no impact on Taishang in the nonmanufacturing sectors in mainland China.

Causal Mechanism of the Impact of Beijing's Taishang-preferential Policies on Taishang during the Trade War

During the trade war period, Taishang played an important signaling role for mainland China. TDI mainland China seemed to serve as a positive signal for FDI from other source countries. The logic is that, given the tense and hostile relationship across the Strait, if the Taishang continue increasing their investment in their adversarial economy, it indicates a certain reliability of mainland China as an FDI-hosting countries. To the same token, with the trade war escalating, if the Taishang had been withdrawing, despite their advanced and established industrial

chain in mainland China,¹² it would send a signal that mainland China is no longer a reliable or profitable location for FDI. This can cause a domino effect and incentivize other FDI withdrawal from China as well. Therefore, retaining the Taishang is not only important politically and strategically but also economically, considering the loss of TDI would snowball into further losses of FDI.

As a matter of fact, some serious Taishang incentive policies for retaining TDI in mainland China were issued before the outbreak of the US–China trade war. Despite the tension across the Strait and the challenges Taishang are facing in mainland China in the post-2009 period, mainland China reemphasized its preferential policies toward Taishang at the beginning of 2018. On 28 February 2018, the Mainland Taiwan Affairs Office under the State Council issued one of the most important Taishang-preferential policies, referred to as “measures to promote cross-strait economic and cultural exchanges and cooperation.” This new policy has provided 31 Taishang-preferential policies to benefit Taishang in mainland China and has been termed as “the 31 Taishang-preferential Policies.” These policies mainly affect Taishang and Taibao (i.e., the Taiwan people living in mainland China) in the fields of industry, fiscal policies, land-use policies, finance, employment, education, cultural exchanges, medical care, and so forth. The major theme of the 31 Taishang-preferential Policies was to grant the special status to Taishang and Taibao so that they could be treated equally with the mainland domestic firms and PRC citizens in mainland China. The first 12 items on the 31 Taishang-preferential Policies are for the Taishang in mainland China, and the latter 19 items are for the Taibao. The English translation of the Taishang-preferential policies (the first 12 items of the 31 Taishang-preferential Policies) are in the index.

The issuing of the 31 Taishang-preferential Policies aimed to reduce the cost of production for Taishang and assist with their industrial upgrading. It also sought to help the Taishang to explore mainland markets and settle down in mainland China. Moreover, the policies also provide means to facilitate the Taibao to study, start business, find jobs, and settle down in mainland China. The general goal of the 31 Taishang-preferential Policies is to increase the economic and cultural integration across the Strait. The width and depth of this openness to Taishang and Taibao are unprecedented for mainland China, and Taishang and Taibao seem to find mainland China a very attractive location for conducting business and settling down. Taiwanese society is concerned about the brain drain, as the nation’s elite, high-skilled human capital is flowing from Taiwan to mainland China to take advantage of the new policies under the 31 Taishang-preferential Policies, particularly given the oversupply of high-skilled labor in Taiwan. There are also concerns that the 31 Taishang-preferential Policies may change the identity of the Taishang

and Taibao as they settle down in mainland China and enjoy such preferential treatment. Following this logic, Taipei perceives the 31 Taishang-preferential Policies as another of Beijing's mechanizations for cross-Strait reunification.

However, several months after the State Council's issuing of the 31 Taishang-preferential Policies, the trade disputes broke out in early June and continued escalating until the end of 2018. It is important to investigate whether the 31 Taishang-preferential Policies played a positive role in attracting Taishang after the outbreak of the trade war.

Although Beijing issued the 31 Taishang-preferential Policies in February 2018, it took the local governments some time to interpret and carry out these policies in their jurisdictions. After all, all FDI are local, as such arrangements need to work with the local governments in China for their everyday business operations. Most provinces in China have broken down the 31 Taishang-preferential Policies into more detailed measures and implemented their local versions of the policies at various times following their issuance. For example, Shanghai started carrying out the policies on 29 May 2018, which was followed by Fujian province on 6 June 2018. Other provinces started carrying out the policies later that year. Some provinces started before the trade war, and others after the trade war. By the beginning of 2019, almost all the 31 provincial units in China had publicly issued their local version of the policies and announced the beginning of their application.¹³ This provides us an ideal opportunity to investigate whether the issuing of the local versions of the 31 Taishang-preferential Policies played a positive role in attracting TDI inflows by holding all other social/economic factors constant for different provinces.

We expect that the 31 Taishang-preferential Policies would play a positive role in attracting Taishang in both the manufacturing and nonmanufacturing sectors.

Hypothesis 2.1: the 31 Taishang-preferential Policies had a positive impact on Taishang investment in the manufacturing sector in mainland China.

Hypothesis 2.2: the 31 Taishang-preferential Policies had a positive impact on Taishang investment in the nonmanufacturing sector in mainland China.

Does the Outbreak of the Trade War Offset the Incentivizing Role of the 31 Taishang-preferential Policies?

According to the 31 Taishang-preferential Policies, the first (item 1, 2, and 3) and last three items (10, 11, and 12) highlighted the preferential policies granted to the Taiwan elites in the research-and-development field and the Taishang in the finance sector. The Taishang in construction and agriculture sectors, as mentioned in items 4 and 9, are also provided with equal treatment status with the

mainland counterparts. Items 5, 6, 7, and 8 can apply to any Taishang in mainland China, including those in traditional manufacturing, which account for more than 75 percent of the total Taiwanese in mainland China. These preferential policies toward Taishang in the manufacturing sector reduce the land-use fees for Taishang, prioritize Taishang in land-use approvals, allow them to make government purchases and form joint ventures with state-owned enterprises, and help the low-end manufacturing Taishang to relocate, upgrade, and take advantage of the Chinese market.

In other words, although Taishang expected cost increases in producing in mainland China, some of the 31 Taishang-preferential Policies were designed to reduce the production cost for the Taishang. Moreover, these policies are expected to increase the high-tech, service-oriented, and market-oriented Taishang to move to China. Therefore, we anticipate that the 31 Taishang-preferential Policies may neutralize the negative impact of trade war on Taishang in mainland China. Also, since the trade tensions across the Strait is still changing dynamically and it is very costly for Taishang to move out of mainland China given the unique and irreplaceable huge supply chain in China, we expect the 31 Taishang-preferential Policies may neutralize some of the negative impact of the trade war on Taishang. Meanwhile, we expect that the strength of the marginal effect of Taishang-preferential policies has weakened with the outbreak of the trade war. Therefore, we made the third hypothesis in this article as follows.

Hypothesis 3: with the outbreak of the trade war, the marginal effect of the 31 Taishang-preferential Policies weakens.

Research Design

To investigate the above theory and hypotheses, we first conducted some descriptive analysis. Then we used the differences-in-differences (DID) with fixed effect estimation to empirically test the impact of trade war and the 31 Taishang-preferential Policies on Taishang in general—and manufacturing and on nonmanufacturing Taishang specifically.

Data Description

To test our theory and hypotheses, we utilized several datasets sourced from the ROC Ministry of Economic Affairs (MOEA) Investment Commission. This source provides yearly and monthly TDI for Taishang at provincial level in China. The social and economic indicator data of the 31 provinces in China are sourced from the National Statistics Bureau of the PRC. To empirically test the impact of the 31 Taishang-preferential Policies and the third wave of the trade war, we used

the monthly data at the provincial level for 2018. Our unit of analysis is province-month. The temporal domain is from 1 January 2018 to 31 December 2018. The spatial domain includes 12 provinces¹⁴ whose Taishang data have been consistently recorded by the Investment Commission in the ROC.

Empirical Model and Measurements of Variables

To test our theory and hypotheses, we built the following empirical model:

$$\text{Taishang}_{it} = \beta_0 + \beta_1 \text{TradeWar3}_{it} + \beta_2 \text{NewTaishangPolicies}_{it} + \beta_3 \text{TradeWar3}_{it} * \text{NewTaishangPolicies}_{it} + \text{TradebyFDI}_{it} + \text{GDP at provincial level}_{it} + \text{Loss of profits by companies}_{it} + \text{Taiwan trade to mainland China}_{it} + \text{Construction areas for commerce}_{it} + \text{Retail commodity price index}_{it} + \text{Investment in fixed assets}_{it} + \text{Consumer Price Index}_{it} + \text{AddedValuesofIndustries}_{it} + \varepsilon_{it}$$

The first set of dependent variables includes the dollar amount (in 100 million USD) of (1) the monthly approved TDI in manufacturing sector; (2) the monthly approved TDI in the nonmanufacturing sector; and (3) the cumulative dollar amount of TDI in a given province up to a given month. To correct the skewness of these dependent variables, we took natural log for them. Another set of dependent variables includes the number of cases/projects of (1) the monthly approved TDI manufacturing sector; (2) the monthly approved TDI in the nonmanufacturing sector; and (3) the cumulative number of Taishang cases in a given province up to a given month. The data for all the dependent variables are from the ROC MOEA Investment Commission. The temporal domain of our data is from 1 January 2018 to 31 December 2018. The spatial domain of our data includes 31 provinces in China.

Table 1. Descriptive statistics of the variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Cumulative amount of Taishang	116	13842.9	16088.2	412.4	55725.0
Cumulative cases of Taishang	116	3326.2	3906.7	102	13210
Monthly amount of Taishang	120	63.1	93.2	0	474.7
Monthly cases of Taishang	120	4.8	6.2	0	31
Third wave of trade war	116	0.4	0.5	0	1
New Taishang Policies	116	0.5	0.5	0	1
Monthly provincial GDP	116	10775.4	7598.5	2099.7	32425.9
Investment in industrial equipments	116	9.0	20.1	-26.9	99.4
Monthly export from Taiwan to China	116	8315.7	648.1	7285.5	9767.3
Profit losses by companies	116	12.9	24.9	-43.8	77.9
Construction areas for business	116	-4.7	3.6	-12.5	5.6

Variable	Obs	Mean	Std. Dev.	Min	Max
Retail commodity price index	116	101.8	0.7	99.8	103.9
Investment in fixed assets	116	6.8	6.1	-13.9	13.8
Consumer price index	116	102.0	0.5	101.1	103.4
Industry growth rate	116	5.6	4.3	-7	15.7
Month	116	7.6	2.9	3	12

The key independent variables include the trade war treatment, the 31 Taishang-preferential Policies treatment, and the interaction of these two treatments. Trade war treatment variable is coded as “1” if the month is larger or equal to “9” and “0” otherwise. The reason for this coding is because the first two waves of trade war did not influence Taishang that much and the third wave of trade war impacted Taishang the most due to the large variety of goods on the tariff lists. The 31 Taishang-preferential Policies treatment is coded as “1” if a given province started issuing and carrying out its local version of the 31 Taishang-preferential Policies, and “0” otherwise. The interaction of these two treatments is created by multiplying them. We manually coded this variable based upon the official news reports presented by various provincial government websites.

The key control variables are all sourced from the National Statistics Bureau of the PRC, except that the Taiwan trade to mainland China data is sourced from the ROC MOEA. The first control variable is a given province’s dependence upon export-oriented foreign investment, which is measured by the total trade made by the FDI in a given province in a given month. We argue that the more a given province is dependent upon the export-oriented foreign investment, the more manufacturing Taishang it would attract, because most manufacturing Taishang are original equipment manufacturers (OEM). The second control variable is the GDP at provincial level, which measures the economic development level in a given province in a given month. We argue that the more developed a given province is in a given month, the more Taishang it would attract. The third control variable is the loss of profits by companies in a given province. We argue that the higher the loss of profits by companies in a given province, the less Taishang it would attract. The fourth control variable is the dollar amount of trade from Taiwan to a given province in mainland China in a given year. We argue that the more Taiwan trades with a given province in a given month, the more Taishang it would attract. The fifth control variable is the construction areas for commerce, which measures how active the businesses are in a given province in a given month. It is expected to have a positive impact on Taishang in a given province in a given month. The sixth control variable is the retail commodity price index, which is expected to have a positive impact on Taishang investment in mainland China,

because the higher commodity price could lead to higher profits. The seventh control variable is the consumer price index (CPI), which is expected to have positive impact on Taishang investment in mainland China, because the higher CPI, the higher level of living conditions in a given province in a given month. The last control variable is the added value of industries in a given province in a given month, which is expected to have a positive impact on Taishang, because the high added value of industries indicates more profits and thus could attract more Taishang inflows. Table 1 shows the summary statistics for our variables.

Analysis

After conducting DID analysis, we made several findings based on the estimation results presented in tables 2 and 3. Table 2 reports the results based on the dollar value of the TDI, and table 3 presents the results based on the number of Taishang projects. According to table 2, under the situation where there is no issuing of the new Taishang policies, the third wave of the trade war did not have any statistically significant impact on cumulative TDI or monthly manufacturing TDI. However, it does have negative and statistically significant impact on non-manufacturing TDI. This finding is contrary to our hypotheses 1.1 and 1.2. This indicates that the monthly changes of the newly approved TDI in the manufacturing sector is not significant. This is possibly because the TDI in the manufacturing sector had already been decreasing over the past three years, and the outbreak of the trade war did not add much more negative impact on the downward trend. However, the nonmanufacturing TDI was increasing at the beginning of the 2018, and this upper trend was set back by the outbreak of the trade war.

Another important finding according to table 2 is that the new Taishang policies did not have significant impact on the monthly approved new Taishang inflows, but did have positive and statistically significant impact on the cumulative dollar amount of the Taishang in mainland China. This indicates that although the new Taishang policies did not dramatically encourage the inflows of the newly approved Taishang, they did encourage added investment from existing Taishang in mainland China. This indicates that the new Taishang policies strengthened the confidence of the existing Taishang in mainland China, but the policies' impact on the new Taishang is still not apparent.

In addition, table 2 also indicates that the impact of the new policies did not change significantly with the outbreak of the third wave of the trade war for either manufacturing TDI or nonmanufacturing TDI. This indicates that the resilience of the new Taishang policies during the post-trade war period.

Table 2. Differences-in-differences estimation results with dynamic linear panel regression on the dollar amount of Taishang in a given year in a given month

	Cumulative TDI	Manufacturing TDI	Nonmanufacturing TDI
Variable Names	Est. Coef.	Est. Coef.	Est. Coef.
Trade War 3	-0.1248 (0.1138)	5.575 (19.042)	-46.761. (26.331)
New Taishang policies	0.0067*** (0.0031)	-0.138 (0.964)	-1.057 (0.670)
Interaction	-0.0041 (0.0041)	1.061 (1.240)	1.341 (1.166)
Monthly trade by FDI	0.0006** (0.0003)	-0.272 (0.157 [†])	0.398** (0.179)
Monthly GDP	0.1427** (0.0723)	2.387*** (0.621)	1.472 [†] (0.785)
Loss of profits by companies	-0.0002 (0.0001)	0.001 (0.013)	-0.003 (0.012)
Taiwan trade to mainland China	0.0484 (0.0631)	10.951 (22.039)	-50.773 [†] (28.486)
Construction areas for commerce	0.0010 (0.0020)	0.143 (0.211)	-0.351 (0.270)
Retail commodity price index	-0.0050 (0.0038)	0.326 (0.440)	-0.297 (0.573)
Investment in fixed assets	0.0008 (0.0011)	0.056 (0.045)	-0.054 [†] (0.033)
Consumer Price Index	0.0041 (0.0037)	0.281 (0.502)	-2.084*** (0.649)
Added values of industries	-0.0001 (0.0004)	-0.084 (0.068)	-0.022 (0.058)

Significance levels: * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$. Standard errors in this table are in the parenthesis and they are WC-Robust standard errors.

In addition to testing the dollar amount of TDI, we also tested the number of cases of Taishang in mainland China. Table 3 shows the results for the cumulative cases of Taishang, the cases of manufacturing Taishang and the cases of the non-manufacturing Taishang, respectively. The result shows that the outbreak of the trade war actually increased the number of newly approved manufacturing Taishang and increased the number of cumulative Taishang projects in mainland China, despite the trade war's insignificant impact on the cases of the nonmanufacturing Taishang. This indicates that despite the risks faced by Taishang during the trade war, the attractiveness of mainland China as a potential investment destination remains. Another possible reason is that the newly approved Taiwan are participating more in the "Red Supply Chain" to serve the domestic market within China. However, the issuing of the new Taishang policies did not play a statistically significant role in attracting more Taishang projects as desired. This is possibly because the time range under this study is still too short. Moreover, the

impact of the new Taishang policies did not change much with the outbreak of the third wave of the trade war.

Table 3. Differences-in-differences estimation results with dynamic panel model for count data on the number of Taishang projects in a given year in a given month

	Cumulative Cases of Taishang	Cases of Manufacturing Taishang	Cases of Nonmanufacturing Taishang
Variable names	Est. Coef.	Est. Coef.	Est. Coef.
Trade War 3	0.0940* (0.0510)	9.172** (3.936)	-7.768 (7.957)
New Taishang policies	0.0005 (0.0007)	0.504 (0.465)	0.069 (0.178)
Interaction	-0.0004 (0.0015)	0.592 (1.026)	-0.058 (0.109)
Monthly trade by FDI	-0.0001 (0.0002)	-0.098 (0.117)	1.006** (0.413)
Monthly GDP	-0.0031 (0.0283)	1.291*** (0.385)	-0.002 (0.009)
Loss of profits by companies	-0.0001** (0.0000)	0.000 (0.007)	-6.638 (9.357)
Taiwan trade to mainland China	0.0871*** (0.0161)	13.555*** (4.369)	-0.050 (0.078)
Construction areas for commerce	0.0002 (0.0004)	0.082 (0.086)	-0.007 (0.274)
Retail commodity price index	0.0016 (0.0014)	0.229 (0.273)	0.005 (0.020)
Investment in fixed assets	0.0007 (0.0006)	-0.011 (0.034)	0.010 (0.590)
Consumer price index	0.0024 (0.0019)	-0.056 (0.322)	-0.044 (0.039)
Added values of industries	-0.0003** (0.0001)	0.003 (0.040)	-0.044 (0.039)

Significance levels: * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$. Standard errors in this table are in the parenthesis and they are WC-Robust standard errors.

Summary and Conclusion

Despite the economic risks under the third wave of the trade war and the political risks across the Taiwan Strait, many Taishang decided to stay, and some new Taishang continued to move to mainland China, which makes the total number of Taishang in mainland China increase in the recent several years. Our empirical findings show that the third wave of the trade war did not have any statistically significant impact on cumulative TDI or monthly manufacturing TDI, despite some negative impact on the nonmanufacturing TDI. Moreover, our empirical findings show that the outbreak of the trade war actually had a positive impact on

the cumulative existing Taishang projects in mainland and on the number of monthly newly approved Taishang projects in mainland China.

In addition, our study also found that Beijing's new Taishang policies have already started playing a positive role in encouraging more reinvestment by the existing Taishang in mainland China, although it has not shown any significant impact on the monthly approved new Taishang in mainland China. Meanwhile, the marginal effect of the new policies did not strengthen or weaken with the outbreak of the trade war. This indicates the possible resilience of the new policies. Another possible explanation is that it will take a little longer for the new policies to show a positive effect.

It is important to investigate the Taishang issue, since these businesspeople are important assets for the PRC in both the economic and political sense. The exit of Taishang would not only weaken the communication channel across the Strait but also reduce the PRC's leverage upon Taiwan. Thus, Beijing issued the 31 Taishang-preferential Policies, which aim to incentivize Taishang to continue investing in mainland China. Following the central government's policies, the local governments in China also carried out their own versions of the policies, aiming to retain the Taishang in their jurisdictions and attract new Taishang to flow in. For future studies, it is worth continuous investigation as to how effective these policies are. In addition, more work needs to be done to expand the temporal domain of this study, as the trade war continues developing and more data will become available. The major weakness of focusing on the 12 months of the year 2018 is that the impact of the trade war may not have taken effect given the short time range. We will continue collecting the monthly data for Taishang and conduct further analysis with the development of the trade war. Finally, we will incorporate the ROC's Taishang incentive policies in our future statistically models as well. ★

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Notes

1. Gunter Schubert, Lin Rui-Hua, and Jean Yu-Chen Tseng, "Taishang Studies: A Rising or Declining Research Field?," *China Perspectives* 1 (2016): 29–36.

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7. Robert F. Ash and Y. Y. Kueh, "Economic Integration within Greater China: Trade and Investment Flows between China, Hong Kong and Taiwan," *China Quarterly* 136 (1993): 711–45.

8. Schubert, Lin, and Tseng, "Taishang Studies." Also see Shu Keng and Gunter Schubert, "Agents of Taiwan–China Unification? The Political Roles of Taiwanese Business People in the Process of Cross–Strait Integration," *Asian Survey* 50, no. 10 (2010): 287–310; and Syaru Shirley Lin, *Taiwan's China Dilemma: Contested Identities and Multiple Interests in Taiwan's Cross–Strait Economic Policy* (Stanford, CA: Stanford University Press, 2016).

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10. Ana Swanson and Jim Tankersley, "As Trump Moves to End Trade War With China, Business Asks: Was It Worth It?," *New York Times*, 4 March 2019, <https://www.nytimes.com/>.

11. Republic of China Ministry of Economic Affairs (MOEA) Investment Commission 2018.

12. Douglas B. Fuller, "Moving along the Electronics Value Chain: Taiwan in the Global Economy," in *Global Taiwan: Building Competitive Strengths in a New International Economy*, edited by Suzanne Berger and Richard K. Lester, 159–87 (New York: Routledge, 2015).

13. Five provinces did not publicly announce their carrying out of the 31 Taishang Preferential Policies, including Shanxi, Jilin, Heilongjiang, Tibet, and Xinjiang. This does not necessarily mean that these provinces did not carry out the policies. It only means that we did not find information on them on publicly available news media.

14. These 12 provinces include Beijing, Tianjin, Liaoning, Jilin, Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Shandong, Hubei, Hunan, Guangdong, Chongqing, and Sichuan.

Exporting Nuclear Norms

Japan and South Korea in the International Nuclear Market

DR. JAMES E. PLATTE

Introduction

Nuclear energy has been connected to notions of national security since the advent of nuclear reactor technology during the Manhattan Project in the early 1940s. Countries have taken different views of nuclear energy's connections to national security, but these views can be broadly placed into two themes. First, nuclear energy can significantly contribute to energy security, due to the relatively small amount of fuel required for commercial power reactors, the inherent ability for nuclear fuel to breed more fuel during use, and the stability of many nuclear fuel supplier countries. Second, nuclear materials and technologies can also have strategic military applications, such as nuclear weapons and nuclear propulsion for naval vessels, which has led to national and international efforts to control the spread and use of nuclear energy.

Cases for both views have been made in the United States, but arguably the prevailing stance has been that a strong nuclear power industry, both in the domestic and export markets, gives the United States the ability to enforce nuclear nonproliferation, safety, and security norms worldwide. The United States has used various policy tools to enforce these norms, and US export partners are expected to abide by these norms in their domestic nuclear industries. However, the domestic US nuclear industry has struggled in recent years due to poor economics for some existing nuclear plants, particularly those in deregulated state markets, cost overruns on new nuclear plant construction, and strong competition from cheap natural gas, and US dominance in the global nuclear energy market also has waned. This has led to worries that China and Russia would supplant the United States and that Washington would no longer be able to enforce its nuclear norms around the world, which is particularly concerning when considering that much of the anticipated growth for nuclear power could occur in developing countries with little or no experience operating commercial nuclear power plants.

Russia currently is the leading nuclear reactor exporter in the world, with seven reactors under construction and 22 more reactor exports either contracted or ordered.¹ China entered the export market more recently, and only Pakistan has imported Chinese nuclear reactors, including four operational units and two units under construction.² Yet, like Russia, China is aggressively pursuing other reactor export projects around the world, and Russian and Chinese bids are bolstered by

strong domestic industries and a variety of state-backed financing options for importers, both of which are key factors that can give China and Russia an edge over bids from private US nuclear vendors. Beijing and Moscow also place strategic and political importance on nuclear reactor exports (e.g., Beijing's inclusion of nuclear technology in the Belt and Road Initiative), making export projects not just a matter of economics for their state-owned nuclear enterprises. Beyond economics and geopolitics, some experts cite lax safety and security standards in China and Russia as reason for concern about what types of norms they would impart to their export partners, particularly to potential export partners in Africa, the Middle East, and Southeast Asia.³

With the US position in the international nuclear energy market falling, could like-minded US allies and partners step up and enforce similar nuclear nonproliferation, safety, and security norms? In particular, could Japan or South Korea become leaders in enforcing nuclear norms in the export market? Japan and South Korea have been major US trade partners in nuclear energy, as both countries imported and indigenized US nuclear reactor technology early in the development of their nuclear industries. Both countries also have been subject to US policies enforcing nuclear norms, and at times, the terms of nuclear cooperation have been the subject of contentious debate, despite being close US allies. Many Japanese and South Korean nuclear firms maintain close ties or partnerships with US nuclear firms, but Japanese and South Korean firms may play more leading roles in future export projects. In addition to being close US allies, Japan and South Korea can be viewed as middle powers with the ability to influence the international system and spread norms to other countries.

Building from US views on the connections between nuclear power and national security, this article will explore how Japan and South Korea have received and interpreted nuclear norms from the United States and how they have or could enforce norms with export partners. Concepts of middle-power diplomacy will be used as a theoretical base to analyze Japanese and South Korean views of their role in enforcing nuclear norms and to project future behavior.

This article will proceed as follows. The second section will summarize US views on nuclear power and national security, along with the history of US efforts to enforce nuclear nonproliferation, safety, and security norms around the world. Next, section three will provide an overview of the nuclear power sectors in Japan and South Korea and how those countries view the nuclear export market. Section four will introduce concepts of middle-power diplomacy and use those concepts to analyze Japan and South Korea's role in enforcing nuclear norms internationally. The article then will conclude with policy implications for the United

States, Japan, and South Korea on enforcing nuclear norms and competing with China and Russia in the global nuclear marketplace.

Nuclear Power, National Security, and Enforcing US Nuclear Norms

Since the beginning of the nuclear age, the United States has sought to control the international flow and use of nuclear technology, and Washington has especially focused on limiting the proliferation of nuclear materials and technology that could be used in a nuclear weapons program. Starting with the Acheson–Lilienthal report and the Baruch plan that the United States presented to the United Nations in 1946, the US government has led numerous bilateral and multilateral initiatives to enforce nuclear norms around the world.⁴ One of the most prominent initiatives was President Dwight Eisenhower’s Atoms for Peace program that led to the creation of the International Atomic Energy Agency (IAEA) in the 1950s.

In the Atoms for Peace program, the United States supplied nuclear materials and technology to recipient countries, with the aim of both spreading the benefits of civilian nuclear technology and restricting the military applications of nuclear technology. The United States was the clear world leader in nuclear technology at the time and, thus, could effectively employ such supply-side tools to enforce nuclear nonproliferation. Supplying US nuclear technology and training to recipients also meant that US norms on nuclear safety and security could be spread around the world, but again, the ability to do this was based on the dominant US position in the global nuclear market.

The United States initially wanted to give responsibility for safeguarding nuclear materials worldwide to the IAEA, but while the IAEA built its system, the United States proceeded with signing bilateral agreements for cooperation in the civil uses of nuclear energy (so-called 123 Agreements). These bilateral cooperation agreements included provisions for safeguards, and 35 bilateral agreements were in effect by the mid-1960s.⁵ But as IAEA capabilities grew, the United States worked to transfer responsibilities for safeguards to the IAEA. In this way, Washington institutionalized its norms on nuclear nonproliferation in the international system.

As the United States transferred safeguards responsibilities to the IAEA, US companies dominated the international nuclear market, providing over 90 percent of the world reactor export market through the early 1970s.⁶ This market position allowed the United States to dictate the terms of other countries’ nuclear energy programs, but even at that time, this level of influence appeared time-limited. Most countries starting nuclear energy programs at the time planned to use US

vendors for their first reactors, indigenize the technology, and then transfer production for future reactors to domestic companies.⁷ License transfer agreements from US nuclear vendors to export partners helped facilitate the transfer of US nuclear technology and know-how, but such agreements also helped other countries develop their own nuclear reactor design and production capabilities.⁸

In addition to exporting its reactor technologies around the world, the United States was the primary supplier of uranium enrichment and nuclear fuel fabrication services to its export partners. But the 1973 oil embargo and 1974 Indian nuclear explosive test heightened US concerns about energy supplies and nuclear weapons proliferation, respectively. The US government responded to these pressures by announcing that it could not accept new contacts for enrichment services, pushing to stop any further spread of enrichment or reprocessing technology, and suspending domestic reprocessing and breeder reactor development.⁹ While Pres. Jimmy Carter later sought to increase US enrichment capacity to lock in foreign supply contracts and enforce nonproliferation norms, US nuclear export partners saw the economic and political risks of excessive reliance on the United States for nuclear materials and technology. Some US partners, such as France, Germany, and Japan, responded by increasing their domestic capacity, seeking export contracts, and further internationalizing the global nuclear market.

This impending relative decline in US market position made the role of the IAEA and of IAEA member states even more important, something an official from the US Arms Control and Disarmament Agency noted in the mid-1960s: “Whether the IAEA will be able to act as an international instrument for regulating the peaceful uses of atomic energy will depend for the foreseeable future on the national policies of the Member States.”¹⁰ In addition to the IAEA itself, the continued enforcement of US nuclear norms is dependent on IAEA member states remaining committed to the norms that Washington transferred to the IAEA.

The US domestic nuclear market experienced a major shock with the partial meltdown at the Three Mile Island (TMI) nuclear power plant in 1979, which remains the most serious accident in the history of the US commercial nuclear industry. Nuclear power in the United States already was experiencing increasing reactor construction costs in the late 1970s, and the TMI accident thrust nuclear reactor safety to the top of the public consciousness. The US nuclear industry struggled in the face of economic and public acceptance challenges, and more than 30 years passed between new reactors construction starts, from 1977 to 2013.¹¹ Construction on four reactors at two nuclear power plants in Georgia and South Carolina began in 2013, but none of those reactors has entered operation yet. Construction on the two reactors in South Carolina was ceased in 2017, and the construction projects in Georgia face economic difficulties, cost overruns, and delays.

The domestic US nuclear industry faces other challenges in addition to the lack of new construction starts over the past 40 years. Several reactors have shut down in recent years, leading to a slow decline in the number of operating reactors in the United States. There currently are 97 operable nuclear reactors, down from a peak of 112 in the 1990s. Research and development on new reactor technology continues, but “on a smaller scale and less relevant for substantial improvements in power production or sophistication.”¹² The United States lacks significant nuclear fuel cycle capabilities, including inadequate uranium enrichment capacity, no commercial spent nuclear fuel reprocessing, and no permanent repository for spent nuclear fuel. The commercial nuclear industry also faces significant economic competition from natural gas and renewable energy sources.

In the export market, US nuclear vendor Westinghouse completed four AP1000 reactors, the same type that are being built in the US state of Georgia, in China in 2018 and 2019. These marked the first reactors built abroad by a US company since the 1990s.¹³ However, there are no other US-led nuclear reactor projects in the world, bringing the US share of global nuclear reactor exports to zero.

The struggles of the domestic US nuclear industry and declining export market position has led to a robust debate in recent years about restoring US leadership in the global nuclear market. In a 2018 article in *The Washington Quarterly*, Laura Holgate and Sagatom Saha succinctly state the prevailing view on the need for US leadership: “The United States must participate in the commercial export market so it can insist on strict protocols that promote nuclear security, deter nuclear theft, and prevent weapons development.”¹⁴ Moreover, they argue that “exporting nuclear reactors helped the United States develop critical diplomatic and economic links throughout Europe and the Asia-Pacific . . . and design international standards for nonproliferation and security.”¹⁵

On nuclear safety, Michael Wallace, Amy Roma, and Sachin Desai claim that being a leading exporter of nuclear reactor technology meant that the United States “was able to promote reactor designs and standards that favored nuclear safety . . . which has made nuclear power the safest of all energy sources around the world.”¹⁶ Related to these commercial ties, the US Nuclear Regulatory Commission (NRC) has worked with partners around the world “to develop codes and standards worldwide to ensure that regulatory environments are based on sound approaches.”¹⁷ Proponents of the US nuclear industry argue that the United States must remain involved in the global nuclear market to instill robust safety culture principles in other countries’ nuclear operators and regulators, particularly important for influencing countries with new nuclear programs.¹⁸

Holgate and Saha also clearly identify what they view as the risks if the United States loses its ability to set global nuclear norms and cedes leadership in the in-

ternational nuclear export market to China and Russia: “Both China and Russia are known for lax standards on nuclear security and poor track records on nuclear safety.”¹⁹ They add that these risks “would inevitably worsen as nuclear reactors are sited in countries with fragile institutions, weak regulatory environments, and unstable security situations.”²⁰ The Middle East and Southeast Asia are cited as two regions with strong potential for nuclear growth, but most of the countries in those regions have no experience with commercial nuclear power and face some of the problems stated by Holgate and Saha.

Yet, the United States must not necessarily regain its position of preeminence in the global nuclear market. The United States worked to build an international architecture for spreading nuclear norms, principally through the IAEA, and worked closely with export partners to instill US norms in them. Given the problems in the US domestic nuclear industry, it would be prudent to consider whether close US partners, particularly Japan and South Korea, could continue to uphold the nuclear norms that the United States has worked to spread and enforce. The next section will examine the nuclear industries of Japan and South Korea and how they view nuclear exports.

Nuclear Power in Japan and South Korea

Following Eisenhower’s Atoms for Peace speech, Japan and South Korea were early adopters of US nuclear technology. Both countries lack significant domestic energy resources and viewed nuclear energy as a way to relieve their dependence on energy imports, especially fossil fuel imports. Seoul and Tokyo also believed that developing domestic nuclear industries would grow their countries’ science and engineering workforce and bring international prestige.

Despite being close US allies, turbulent politics and concerning regional security developments in the 1960s and 1970s prompted Japan and South Korea to consider their options for nuclear weapons development. Tokyo studied the matter internally in the late 1960s and determined that developing nuclear weapons would be too costly.²¹ Seoul initiated a clandestine program to develop nuclear weapons in the 1970s but abandoned the program by the early 1980s.²² Preserving close, positive relations with the United States was a key factor in both countries’ decisions to not develop nuclear weapons. While speculation lingers regarding nuclear hedging or latent nuclear weapons capabilities, energy security has remained the primary impetus for their nuclear programs and connection between nuclear power and national security.

Japan and South Korea joined the IAEA in 1957, but Tokyo started its civilian nuclear power program a few years earlier in 1954. Japan imported its first commercial nuclear power reactor, a gas-cooled reactor, from the United Kingdom,

and that reactor began operating in 1966. Every reactor constructed in Japan after that first reactor has been based on US light-water reactor (LWR) technology.²³ Starting in the early 1970s, Japan aggressively expanded its fleet of commercial nuclear power reactors and had 54 operable reactors in 2010, with plans to keep growing. The Fukushima nuclear disaster of 2011 halted Japan's nuclear growth.

All Japan's nuclear reactors shut down after the disaster, and the process of re-starting reactors after new safety reviews has been long and difficult. In addition to the four reactors destroyed by the earthquake and tsunami in March 2011, utilities decided to decommission some reactors instead of going through upgrades and safety checks, and Japan has only 38 operable nuclear reactors today.²⁴ Since the first reactors restarted in 2015, the nuclear share of electricity generation in Japan has only been a few percent, down from around 30 percent before 2011.

Japan also is pursuing a closed nuclear fuel cycle, including indigenous uranium enrichment, spent nuclear fuel reprocessing, and fast breeder reactor (FBR) capabilities. Japan has an operating uranium enrichment facility at Rokkasho in northern Japan, but the reprocessing plant at Rokkasho has faced a series of delays and has yet to enter operation. FBR development has suffered similar delays, and there currently is no operating FBR in Japan. Japan's closed fuel cycle development has been controversial at times in the United States, but Tokyo received consent from Washington to develop these technologies in the 1980s—the only nonnuclear weapons state outside of Europe to receive such consent. This consent is granted in the 123 Agreement governing bilateral civil nuclear cooperation between Japan and the United States, which was extended indefinitely in 2018.²⁵

South Korea began its civil nuclear program in the late 1950s, soon after Japan did. Construction on South Korea's first commercial nuclear reactor, a turnkey plant imported from Westinghouse, began in 1972 and finished in 1977. South Korea also imported Canadian and French reactor technology in the 1970s and 1980s, but in 1987, the Korea Electric Power Company (KEPCO) selected an LWR design from US-based Combustion Engineering as the basis for developing an indigenous South Korean reactor design. By the early 2000s, South Korean firms were responsible for all major aspects of nuclear reactor design, supply, construction, and operation.²⁶

South Korea now has 25 operable commercial nuclear reactors, with four reactors under construction, and nuclear power provides nearly 25 percent of the country's electricity.²⁷ However, the South Korean nuclear industry faces an uncertain future, as current Republic of Korea (ROK) president Moon Jae-in announced a policy in 2017 to phase out nuclear power over the next 40 years.²⁸ The phase-out plan allows current reactor construction projects to finish but does not allow new reactors to be planned. The plan also does not allow existing reactors to operate

beyond 40 years. South Korea's reactor fleet is relatively young, so the phase-out plan will not have a large, immediate impact on electricity generation. Moon cannot be reelected after his presidential term ends in 2022, and it is uncertain if the next South Korean president would continue with this phase-out plan.

Unlike Japan, South Korea has an open nuclear fuel cycle, and the 123 Agreement between South Korea and the United States does not give Seoul advanced consent to develop enrichment or reprocessing technologies. The US–South Korea 123 Agreement was renewed in 2015, and Seoul pushed for advanced consent in the renewal negotiations. While Washington did not accede to Seoul's request, the two countries are conducting a joint fuel cycle study in the United States, and the new 123 Agreement formed a High Level Bilateral Commission to discuss nuclear cooperation issues in the future.²⁹

Despite the challenges facing both countries' nuclear industries, Japan and South Korea possess robust nuclear sectors, developed with close US cooperation. Their nuclear related firms, including Hitachi, Toshiba, KEPCO, and Doosan, are among the leading firms in the world, and both countries' governments and private firms are active in the global nuclear market. Yet, neither country is truly a great power with the ability to unilaterally set global norms. The next section will explore Japan and South Korea's nuclear exports and their role as middle powers in spreading nuclear norms.

Middle-Power Diplomacy and Exporting Nuclear Norms

To analyze the roles for Japan and South Korea as middle powers exporting nuclear norms, middle-power diplomacy and the roles that middle powers can play in international affairs must be defined. John Ikenberry and Jongryn Mo simply defined a *middle power* as “neither super power nor small power.”³⁰ Then–South Korean president Lee Myung-bak also offered a simple definition in 2010 by saying that the “world can be split into two groups: One group sets global rules, the other follows. South Korea has successfully transformed itself from a passive follower into an active agenda-setter.”³¹

With the third-largest economy in the world, it may seem debatable to term Japan as a middle power, but based on these definitions, Japan should be considered a middle power that can participate in setting global rules and agendas. Ikenberry and Mo also state that “traditional middle powers are fully developed countries” and that “many new middle powers are emerging as new developed powers.”³² Japan could be placed in the traditional middle-power category, and South Korea is a new middle power.

Importantly for the context of this article, the United States views itself, China, and Russia as the world's great powers, which would place Japan and South Korea

in the next tier of middle powers. As US allies, Washington should expect Seoul and Tokyo to uphold norms on issue areas, such as nuclear exports and the liberal international order. Ikenberry and Mo argue that “[m]iddle powers, both traditional and emerging, can help the international system stay liberal because it is in their interests to support liberal international order.”³³

A 2015 report from the East Asia Institute (EAI) describes how middle powers can support the liberal international order and uphold nuclear norms. The EAI argues that middle powers “derive their status from being a part of a network” and “function as a collective.”³⁴ Acting as a bridge or connector in the network, middle-power diplomacy “aligns great powers and smaller powers together, and as long as a middle power keeps genuine its intentions of contributing to the greater international good, they cannot be accused of harboring hegemonic intentions . . . a middle power acts as ‘norm diffuser.’”³⁵ In addition, a middle power “needs to possess material capability that places it in a position that is measured as relatively influential enough to attract and establish itself within a wider network or community of like-minded nations.”³⁶ The EAI then describes four identities that middle powers can adopt in pursuing this type of diplomacy:

1. Early mover: elevating their respective statures in the international society by adopting the “me first” approach and leading by example;
2. Bridge: mediating between opposing groups and seeking measures that would satisfy all parties involved;
3. Coalition coordinator: building coalitions of like-minded states to advance shared interests and address common concerns; and
4. Norm diffuser: contributing to the global diffusion of norms and standards.³⁷

In the global nuclear market, Japan or South Korea could possibly take on any of these four identities individually or in combination. Both countries were early movers in adopting nuclear power and US norms, and other developing countries, in particular, could learn from the example set by the commercial nuclear industries in Japan and South Korea. Seoul or Tokyo could operate as bridges or coalition coordinators between the United States and other nuclear exporters or countries looking to start a nuclear energy program. Finally, arguably the most important role that Japan or South Korea could play in the nuclear export market is that of a norm diffuser, spreading US and IAEA norms on nuclear nonproliferation, safety, and security.

However, Japan and South Korea face limitations in their conduct of middle-power diplomacy on nuclear energy issues. Writing on South Korea as a middle

power promoting international cooperation on nuclear security, Scott Snyder states that Seoul's "efforts on nuclear security came about primarily in the context of the US-ROK alliance."³⁸ Snyder also added that South Korea's contributions to international governance and to forming global networks occurred primarily outside of Northeast Asia. Snyder argues that Seoul faces these limitations due to its relatively smaller economy and military compared to other regional powers and to its reliance on the US alliance for security.³⁹ Snyder writes that Seoul is now able to "pursue greater autonomy through self-help but within the context of the country's continued need for the alliance as a bulwark against threats from major powers."⁴⁰ He adds that South Korea is "able to act more autonomously when its policy preferences align with those of the United States and when Seoul has Washington's backing."⁴¹

While Snyder wrote about South Korea, much of the preceding also could apply to Japan's conduct of middle-power diplomacy. Japan's economy is larger than South Korea's economy, but the two countries' defense expenditures are similar. According to the Stockholm International Peace Research Institute (SIPRI), Tokyo's defense budget in 2018 was \$46.6 billion USD, and Seoul spent \$43.1 billion USD on defense in 2018.⁴² Those numbers also do not account for the legal and social restrictions on offensive capabilities for Japan's Self-Defense Forces, which do not constrain South Korea's military. Similar to South Korea, Japan remains relatively weaker than its chief regional rival, China, and relies on the US alliance for security.

Another limitation on Seoul and Tokyo acting as middle powers on nuclear energy issues is the poor state of their bilateral relationship. Lingering tension and disputes related to the legacy of Japan's colonization of Korea in the first half of the twentieth century have persistently plagued bilateral relations. The latest flaring of tensions in 2019 resulted in both countries removing the other from white lists of preferred trade partners, complicating the trade of sensitive technologies between the two countries. While Japan and South Korea hold similar views on nuclear norms and work together in some multilateral forums, bilateral diplomatic and trade tensions and the strategic nature of nuclear technology would make closer cooperation in the nuclear export market more difficult. This would mean that Seoul or Tokyo likely would act individually as a coordinator or bridge, rather than forming a bilateral partnership to act in these roles together.

Overall, Japan and South Korea are each in a strong position to act as a middle power in spreading and enforcing nuclear norms with their export partners, even if they do not explicitly partner with each other to spread and enforce nuclear norms. Either country can act as coordinators in bringing together like-minded partners to work in concert on enforcing robust norms in nuclear exports, and

they can diffuse nuclear norms to their export partners. However, given US sensitivities toward nuclear proliferation and Tokyo’s and Seoul’s reliance on their alliances with the United States, the two countries would likely need to closely coordinate nuclear export activities with the United States and would have to remain aligned with US nuclear norms. As Snyder argued, middle powers like Japan and South Korea also have benefited from the US-led liberal international order and have incentive to perpetuate this order, including enforcing US nuclear norms rather than allowing China and Russia to revise existing international norms.

Demonstrating their standing to act as responsible, effective middle powers in spreading existing nuclear norms to export partners, Japan and South Korea are parties to the major international instruments related to nuclear nonproliferation, safety, and security. These multilateral commitments are in addition to the bilateral 123 Agreements with the United States that hold Seoul and Tokyo to strict nonproliferation standards. Table 1 summarizes the international instruments that Japan and South Korea are parties to.

Table 1. Japanese and South Korean members in international instruments on nuclear norms. Data compiled from individual country matrices at “Committee Approved Matrices,” 1540 Committee, 23 December 2015, <https://www.un.org/>.

Nuclear Norms	Major International Instruments
Nonproliferation	<ul style="list-style-type: none"> • Nonproliferation Treaty • Comprehensive Safeguards Agreement with the IAEA • Additional Protocol • Nuclear Suppliers Group • Zangger Committee • Missile Technology Control Regime • Hague Code of Conduct • Australia Group • Wassenaar Arrangement • Proliferation Security Initiative
Safety	<ul style="list-style-type: none"> • IAEA Code of Conduct on Safety and Security of Radioactive Sources • Convention on Nuclear Safety • Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management • Convention on Early Notification of a Nuclear Accident • Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
Security	<ul style="list-style-type: none"> • Convention for the Suppression of Acts of Nuclear Terrorism • Convention on Physical Protection of Nuclear Material

Among instruments listed in table 1, China is not party to the Missile Technology Control Regime, Hague Code of Conduct, Australia Group, Wassenaar Ar-

rangement, and the Proliferation Security Initiative, and Russia is not party to the Australia Group or the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.⁴³

In addition, Japanese and South Korean firms have worked with the NRC on reactor design certifications. Even though NRC certification is not required for Japanese or South Korean firms to export reactors to third-party recipients, such importers view NRC design certification as a gold-standard stamp of approval for the highest standards of safety, security, and performance. In 2019, the South Korean-designed APR1400 became the first non-US reactor design to receive standard design approval from the NRC.⁴⁴ GE-Hitachi Nuclear Energy received NRC certification for its Economic Simplified Boiling-Water Reactor in 2014, and General Electric received NRC certification for the Advanced Boiling-Water Reactor (ABWR), which is similar to the international version operating in Japan, in 1997. Mitsubishi also has a design under review for NRC certification.⁴⁵

In interviews that the author conducted in Japan and South Korea in July and August 2019, representatives from government and private sector all expressed their desire to continue partnering with US firms on nuclear export projects, even if Japanese or South Korean firms lead reactor design or construction. A South Korean government official said that Seoul closely follows US government policy and intentions in nuclear exports, and Seoul requires export partners to meet and adhere to IAEA standards on safeguards, safety, and security.⁴⁶ Japanese government and private-sector officials said they want to partner with US firms on nuclear export projects to bolster Japanese firms' competitiveness.⁴⁷

While Japan and South Korea sign bilateral cooperation agreements with their nuclear export partners that have similarities to 123 Agreements, partnering with US firms would require that those export partners sign 123 Agreements with the United States. As Seoul and Tokyo still look to the United States for leadership on nonproliferation, requiring a 123 Agreement with the United States would impose strict nonproliferation requirements on recipient countries.⁴⁸ Norms on safety and security would then be transferred and enforced through cooperation with the IAEA, NRC, and private-sector firms and government organizations from Japan, South Korea, and the United States.

This model of cooperation with the United States was used for South Korea's export of four nuclear reactors to the United Arab Emirates (UAE), which was Seoul's first reactor export project. The UAE selected a KEPCO-led consortium in 2009 to build four APR1400 reactors at the Barakah nuclear power plant. KEPCO's proposal was selected over proposals from Areva and GE-Hitachi, with the lower cost offered by KEPCO being a major factor for securing the bid.⁴⁹



(Photo courtesy of Emirates Nuclear Energy Corporation)

Figure 1. The UAE's Barakah Nuclear Energy Plant

In addition to KEPCO and several other South Korean companies, the consortium included Westinghouse and other US companies providing engineering services and supplying components. Westinghouse's participation was required because Westinghouse still considers South Korean reactors to be Westinghouse-licensed products, which then necessitated the UAE to sign a 123 Agreement with the US government and subjected the project to US export control requirements.⁵⁰ Toshiba also was originally involved in the consortium as the majority owner of Westinghouse, but Westinghouse's bankruptcy in 2017 forced Toshiba to sell their ownership of Westinghouse.

The UAE also signed a bilateral cooperation agreement with Seoul that included provisions restricting the UAE from enriching uranium above 20 percent or reprocessing any nuclear material transferred through the deal. It prohibits the UAE from using materials or technology transferred through the agreement for military purposes. The agreement also requires the UAE to have a comprehensive safeguards agreement with the IAEA but does not require the Additional Protocol, although the UAE signed the Additional Protocol in 2009.⁵¹ On security, the agreement requires INFCIRC/225/Revision 5, Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities, and it calls for consultation and cooperation on safety issues.⁵²

No Japanese firm has led a nuclear reactor export project yet, but Japan has been involved in the nuclear export market in other ways. As mentioned above, Toshiba was originally involved with the Barakah project due to its then-ownership of Westinghouse, and Hitachi has worked with General Electric due to their joint venture (Hitachi-GE Nuclear Energy in Japan and GE-Hitachi Nuclear Energy in the United States). Mitsubishi Heavy Industries cooperated with Areva in the past and is now partnered with French nuclear companies Framatome and

EDF.⁵³ Japanese nuclear firms also are pursuing nuclear projects in Europe and Asia, with the intention of partnering with US firms and government agencies on such projects, and Japan would use the IAEA Milestones Approach to ensure that a recipient country is adhering to international nuclear norms.⁵⁴ Japan also has worked with the IAEA to promote nuclear nonproliferation, safety, and security norms and capacity building.

Employing middle-power diplomacy, Seoul or Tokyo can work to diffuse US nuclear norms on their own, but as discussed above, each country also prefers to work as a bridge or coordinator to keep the United States involved in setting global nuclear norms. Given bilateral tensions between Seoul and Tokyo, this likely would take the form of separate Seoul–Washington and Tokyo–Washington partnerships, but Japan and South Korea can work with the United States to maintain international norms on nuclear nonproliferation, safety, and security and counter the rising influence of China and Russia. The next section will go into more detail on the policy implications of this middle-power diplomacy in the global nuclear market.

Conclusion and Policy Implications

The international nuclear power industry is in a much different state today than it was when Washington launched the Atoms for Peace program in the 1950s. At that time, the United States was the global leader in nuclear technology and the most dominant actor in setting international nuclear norms. Washington used bilateral agreements, namely 123 Agreements, and multilateral instruments, mainly the IAEA, to set and enforce nuclear norms with export partners, and US nuclear firms sold their reactor technologies around the world. But as the domestic US nuclear industry declined over the last few decades, other countries have risen to prominence in the global nuclear market, primarily Russia and an ascendant China.

US partners, like Japan and South Korea, also have risen in prominence since indigenizing US reactor technology and now may be in a position to use middle-power diplomacy to continue spreading and enforcing international nuclear norms. Yet, Japan and South Korea also face uncertainties in their domestic nuclear markets, and as middle powers, they still prefer to partner with the United States to set agendas and enforce norms. They also must overcome formidable competition from China and Russia to secure reactor contracts. In this context, this article offers the following policy implications for the United States, Japan, and South Korea to consider when operating in the nuclear export market.

- Japan and South Korea can be effective nuclear norms diffusers.

- Seoul and Tokyo used nuclear power to fuel their economic growth and transition into developed economies, and they adopted US-origin nuclear technology and norms at the start of their programs. As middle powers, they are committed to preserving the existing system of nuclear norms espoused by the United States and the IAEA. They can spread these norms by building on their existing export practices that stipulate adherence to IAEA norms, establish education and training programs for other countries' nuclear programs, and providing world-class nuclear technologies. Their ability to diffuse norms will be especially important when working with countries starting a nuclear energy program and when exporting new reactor technologies.
- The United States can still lead from a supporting position.
- While Japan and South Korea can effectively diffuse norms, they are not able to unilaterally set or revise the international system, which is one of the reasons that they still prefer to partner with the United States in nuclear export projects. The domestic US commercial nuclear industry likely will continue to struggle for the foreseeable future, which will make it even harder for US nuclear firms to win future reactor export contracts. But with Seoul or Tokyo acting as a coordinator, Washington can still provide leadership on enforcing strict safety, security, and nonproliferation norms around the world. South Korea's reactor export project with the UAE provides a model for how Washington can work with newcomer nuclear countries, even when US firms do not lead the project. There are legal concerns that still tie Westinghouse with KEPCO, but more importantly, the policy preference for Japan and South Korea is to partner with the United States on their reactor export projects.
- The United States also could explore using nuclear norms as an issue of mutual concern and interest to promote Japan–South Korea cooperation. Seoul and Tokyo prefer working with the United States on nuclear exports, and all three countries seek to counter the growing influence of Russia and China. Past efforts to use nuclear energy as an issue on which to improve Japan–South Korea cooperation have not been as successful as hoped, but it is worth continuing such efforts.
- Japan or South Korea could be a bridge to nuclear cooperation with Saudi Arabia.
- While regions like Southeast Asia and Europe contain the potential for nuclear growth, the strongest and most contentious future reactor importer is Saudi Arabia. A tender for bids for exporting reactors to Saudi Arabia is expected in 2020, and US, South Korean, Russian, Chinese, and French firms

are involved in preliminary talks with Riyadh.⁵⁵ Despite the project's projected lucrative nature, the idea of exporting nuclear reactors to Saudi Arabia is controversial due to statements from Saudi officials about wanting to acquire enrichment technology, nuclear hedging against Iran, and the Saudi government's lack of transparency. These concerns have prevented Washington from concluding a 123 Agreement with Riyadh, which has balked at US demands that Saudi Arabia sign the Additional Protocol.⁵⁶ However, Japan or South Korea could act as a bridge between Washington and Riyadh to come up with an agreement that meets the needs of all parties. Seoul, in particular, could build on its experience with the UAE and bring together a coalition to work with Riyadh's nuclear ambitions while still enforcing US and IAEA nuclear norms.

- Spreading nuclear norms is only possible with export contracts.
- The biggest challenge facing Japan, South Korea, and the United States in the nuclear export market is becoming more competitive with Chinese and Russian state-owned nuclear firms. A 2019 study on nuclear reactor export competitiveness found that the most important criteria for importing countries are the financing package, an existing reference reactor, total capital investment costs, the economic package, and sustainability of the exporter's domestic nuclear industry.⁵⁷ On an individual head-to-head basis, Seoul, Tokyo, or Washington would have a difficult time competing with Beijing or Moscow on those categories, mainly due to the robust financing that the Chinese or Russian government can provide. But working as middle-power coalition coordinators, Japan or South Korea could increase competitiveness by assembling consortia with the United States and other like-minded countries, such as Canada, to make stronger, more cost-competitive supply chains to back reactor export proposals.
- French economist Francois Leveque writes that such consortia also could offer other goods and services, such as arms sales or infrastructure development projects, to bolster their reactor export bids. Leveque further argues that the nuclear industry has traditionally been dominated by vertically integrated companies operating under one flag, but firms operating in stagnant domestic markets would be more able to break free from this structure and form multinational consortia, which would more resemble the oil and gas supplies and service industry.⁵⁸
- Competitiveness could be increased further by marketing reactor designs that Japan and South Korea have recent experience building, namely the ABWR or APR1400. Two separate studies by French and Japanese scholars

both show that design and component standardization and recent construction experience can decrease costs for subsequent construction projects.⁵⁹ For all these reasons, forming consortia led by Seoul or Tokyo would improve competitiveness with China and Russia and help further strengthen international nuclear norms. ✪

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Chinese Communist Party Information Warfare

US–China Competition during the COVID-19 Pandemic

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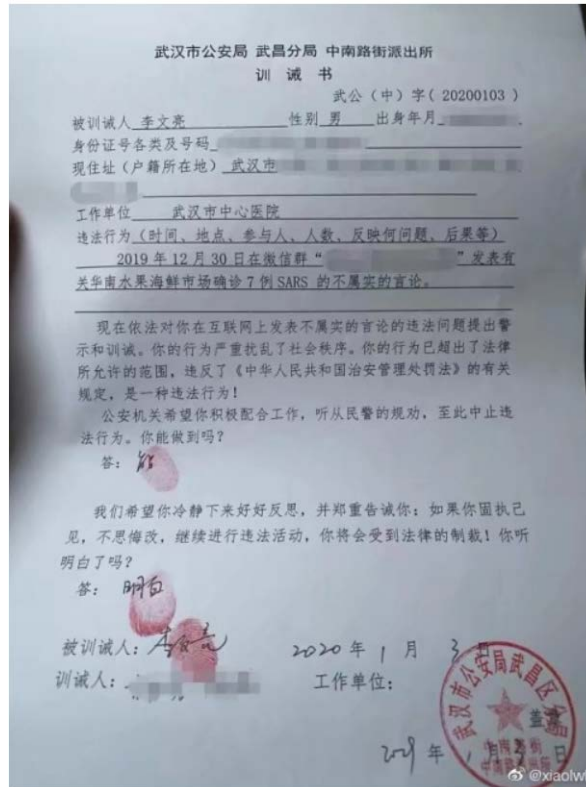
Geopolitics does not stop during a pandemic. In fact, competition between the United States and the People’s Republic of China (PRC) has accelerated. The Chinese Communist Party (CCP) is waging an aggressive information warfare campaign to obfuscate its role in propagating the COVID-19 pandemic and to portray its response as a triumph of its authoritarian model of governance. This article will articulate how Beijing is carrying out its information warfare strategy and provide recommendations for how the US can respond.

Background

For the CCP, 2019 was a rough year: a trade war with the United States, massive protests in Hong Kong, the African Swine Flu epidemic, international outcry over internment camps in Xinjiang, and a slowing economy. To cap it off, the greatest challenge to the CCP to date arose in December 2019 from Wuhan, the capital of Hubei province. Wuhan has deep symbolism in modern Chinese history; in 1911, virulent nationalism and imperial mismanagement there was the catalyst for the Wuchang Uprising, which led to the ousting of the last imperial dynasty. Today, Wuhan is the origin of the virulent pneumonia COVID-19, with CCP mismanagement badly damaging perceptions of the Party, with potentially lasting geopolitical repercussions.

As the timeline of the initial spread of COVID became better known, the extent of Party’s cover-up and mismanagement has correspondingly become more evident. In early December 2019, doctors in Wuhan detected the virus; by late December, they were already suspicious that the virus was spreading via human-to-human transmission.¹ On 30 December, Dr. Li Wenliang, a physician at Wuhan Central Hospital, used the Chinese social media platform WeChat to send warning of a “SARS-like” virus to a number of classmates from medical school. Regional Party authorities, upon learning of the warning, did not take steps to probe these medical concerns. Instead, on 3 January, the Wuhan Public Security Bureau detained Dr. Li for “spreading rumors,” forcing him to sign a letter re-

nouncing the medical warning and threatening him with further punishment if he did not remain quiet. Additionally, the local government even ordered the destruction of COVID samples that had been collected.² Wuhan mayor Zhou Xianwang insinuated that he could not share information about the virus earlier because of “regulatory requirements for local governments to seek Beijing’s approval before making such disclosures.”³



(Weibo photo from Dr. Li Wenliang)

Figure 1. The Wuhan Public Security Bureau Warning Letter to Dr. Li Wenliang. On 3 January 2020, the Wuhan Public Security Bureau detained and forced Dr. Li to sign a warning letter. As translated: “According to the law, this letter serves as a warning and reprimand over your illegally spreading untruthful information online. Your action has breached the law, violating the relevant rules in ‘Laws of the People’s Republic of China on Penalties for the Administration of Public Security.’ This is an illegal act! The law enforcement agency wants you to cooperate, listen to the police, and stop your illegal behavior. Can you do that? (Answer: *I can.*) We want you to calm down and reflect on your actions, and solemnly warn you: If you insist on your views, refuse to repent, and continue the illegal activity, you will be punished per the law! Do you hear and understand? (Answer: *I understand.*)”

Could faster action have prevented the spread of the virus? According to research from Southampton University, if intervention had occurred one week ear-

lier, the pandemic's toll could have been curtailed by 66 percent; if two weeks earlier, by 86 percent; and if three weeks earlier, by 95 percent.⁴ According to Mayor Zhou, by the time the mass-quarantine was initiated on 23 January, five million people had already left Wuhan.⁵ As of 25 April 2020, 3 million people worldwide have contracted COVID-19, with some 200,000 deaths. The Party turned what could have been a minor regional outbreak into a worldwide pandemic. CCP General Secretary and Chinese President Xi Jinping understood early on that international realization of this would lead to an enormous global backlash—in his first publicized speech to the Politburo Standing Committee on 3 February, he urged the Party to “take the initiative and effectively influence international public opinion.”⁶ In response, the Party has started an integrated global information warfare campaign, which has been unprecedented in scope.

The Structure of CCP Information Warfare

The CCP places a premium on the control of information flow. This was true during the SARS pandemic in 2003, and little has changed since then—except the Party has become far more aggressive in the use of *offensive* information warfare, which is designed to *obfuscate* and *shape a new narrative* versus simply censoring information. Defensively, the CCP continues to use censorship against information detrimental to its image: for instance, after the Chinese media outlet *Caixin* began questioning the official COVID death toll given the number of urns stacked outside of funeral homes, funeral homes were no longer authorized to disclose data.⁷ Similarly, research papers on COVID origins now need to be vetted through the Ministry of Science and Technology prior to publication.⁸ This older method of information control is now complemented by offensive information warfare. In this case, the propaganda apparatus (PRC media such as *Xinhua*, *People's Daily*, *Global Times*, etc.) broadcasts constant messaging both domestically and internationally framing the CCP response as a triumph of its disciplined authoritarian system over the chaotic democratic system of the West. Finally, taking a page from the 2016 Russian disinformation campaign, the PRC has flooded Western social media with false narratives and conspiracy theories to cause societal confusion and discord.

Through analysis of PRC media and CCP proclamations, there are three predominant themes in this offensive information warfare: (1) highlight Xi Jinping's personal leadership, (2) portray China as a responsible great power, and (3) promote anti-US messaging and conspiracy theories.

Theme 1: Highlight Xi Jinping's personal leadership

In early January, as the virus rapidly spread through Wuhan, CCP central leadership fell uncharacteristically silent as local authorities struggled to contain the infections and censor the populace. The first references to General Secretary Xi's involvement came on 20 January, when *Xinhua* released a short news statement that Xi had "ordered resolute efforts to curb the spread of the novel coronavirus."⁹ By this time, *Xinhua* noted, the virus had already gone regional, with cases appearing in Thailand, Japan, and Korea.

It was not until almost a month later, on 15 February, that the official Party magazine *Qiushi* ("Seeking Truth") finally published direct quotes from Xi: a speech he had reportedly given two weeks earlier to the Politburo Standing Committee, referenced above. Xi stated that while he had put forth "requirements for the prevention and control of the new coronavirus," the crisis had worsened due to "poor public health management" from *regional* Party officials, accusing them of "bureaucratic formalism" and "failure to implement central leadership directives."¹⁰ Xi then made an example of some of these officials: the Communist Party leaders of Wuhan and of Hubei province were both fired and replaced with Xi loyalists. The Party took similar action in the case of Dr. Li Wenliang. With public sentiment in Wuhan simmering over Li's death on 7 February from COVID, the Central Commission for Discipline Inspection, the Party's top disciplinary body, had the Wuhan Public Security Bureau revoke Li's earlier censure, punished two low-level police officers, and had the Bureau publicly apologize to Dr. Li's family. Finally, Dr. Li was given the title of *martyr*, the highest honor the Party grants to civilians, and lauded in propaganda as a loyal member of the Party and a *nationally advanced individual resolutely implementing General Secretary Xi's instructions*.¹¹

By early March, as cases in Wuhan began to plateau, the tenor of the propaganda changed. Instead of deflection, PRC media now declared that the abatement of COVID in Wuhan was a testament to General Secretary Xi's leadership. On 10 March, Xi landed in Wuhan, beginning a weeklong media showcase of him thanking frontline medical workers, conducting a "work inspection" of a local hospital, sitting down with shop owners, and walking through a neighborhood waving at residents.

Xi leads people's war on epidemic

(China Daily) 09:08, March 12, 2020

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President Xi Jinping inquires about purchasing and supply of people's daily necessities at a community in Wuhan, March 10, 2020. (Xinhua/Xie Huanchi)

Response not only protected Chinese, also impeded global spread of illness

(Screenshot from Xinhua)

Figure 2. People's Daily depiction of Xi's visit to a Wuhan market. On 10 March 2020, CCP General Secretary and PRC President Xi Jinping visited Wuhan, COVID-19's outbreak origin. The visit was designed to be a media showcase demonstrating Xi's leadership and control over all aspects of the crisis, from medical research to hospital operations to food supply. Note the early use of the now-standard CCP propaganda line about how the PRC response bought the world time to prepare for the pandemic.

Xi then foreshadowed the upcoming international propaganda campaign by saying that the success demonstrated the "distinct political character and advantage" of the PRC system.¹²

Theme 2: Portray China as a responsible great power

By mid-March, Xi had the Party propaganda apparatus shift to international information operations following the passing of the immediate crisis in Wuhan. These operations have been a whole-of-nation effort to create a well-publicized display of generous foreign aid and medical competence.

One example of this is the media coverage surrounding the COVID donations of Party member Jack Ma, the founder of Alibaba. On 16 March, Ma announced that his foundation would send 500,000 testing kits and one million masks to the United States,¹³ as well as 20,000 testing kits, 100,000 masks, and 1,000 sets of personal protective equipment to all 54 African countries.¹⁴ In PRC media, ostensibly private donations are framed as having been *coordinated through the Party and government*. Depending on China's specific relationship with the respective country, *China's donation* will be portrayed as being that of an *iron-clad friendship/all-weather friend* (Cambodia, Serbia, Pakistan, Saudi Arabia, Zimbabwe),¹⁵ or alternatively, a symbol of *the desire to jointly build a community with a shared future* (United States, Japan, South Korea).¹⁶ Finally, the article/media presentation will usually end with a quote from a local dignitary exhorting the international community to thank China—with extra media space if the dignitary makes a favorable comparison between China and the West.

One of the most prominent demonstrations of this was when Serbian president Aleksandar Vučić, on 15 March, remarked that “European solidarity does not exist. That was a fairy tale,” and that the “only country that can help us is China.”¹⁷ This was given significant media attention both inside China and in PRC international media, with a number of articles released during this time quoting “European experts” as being grateful to China for assistance while dismissing the European Union or the United States.¹⁸



(Twitter photo from @Serdjosega)

Figure 3. Progovernment tabloid billboard in the center of Belgrade, Serbia. A few days after President Aleksander Vučić blasted the EU and appealed to China for support on 15 March 2020, billboards and banners praising Xi Jinping were placed on the streets of Belgrade. “Thank you, Big Brother Xi.” This banner was featured prominently in PRC media along with pictures of the Serbian president kissing the Chinese flag against the backdrop of a PRC plane carrying medical cargo.

Direct PRC government aid is also heavy on symbolism, serving to highlight existing CCP political-economic international initiatives with a COVID twist. On 21 March, PRC media heavily covered a train loaded with 110,000 masks and 776 protective suites from the industrial city of Yiwu in Zhejiang province, to Madrid, Spain—a journey of over 6,200 miles/13,000 km, which took the train 17 days to cover.¹⁹ Despite the obvious disadvantages of train transport in delivering urgently needed medical supplies, the reason for both the train usage and route was to highlight the CCP's New Silk Road political-economic megaproject (the “Belt” of the more widely known Belt and Road Initiative [BRI]).

Similarly, the CCP has used COVID aid to revive a previously moribund initiative, the Health Silk Road. This was an initiative that Xi first raised in 2017 as an addendum to the New Silk Road project; after getting the World Health Organization (WHO) to sign a memorandum of understanding to commit to its construction in January 2017, Xi then had the current WHO Director-General, Dr. Tedros Adhanom, promote the initiative as “visionary” during his visit to Beijing in August 2017. Afterward, it was little discussed for several years. However, on 16 March 2020, during a phone conversation with Italian prime minister Giuseppe Conte, Xi promised Conte medical teams, supplies, and assistance in building the Health Silk Road. Xi brought up the initiative with Conte for a reason; in March 2019, Conte had been the first European leader to join China's BRI.

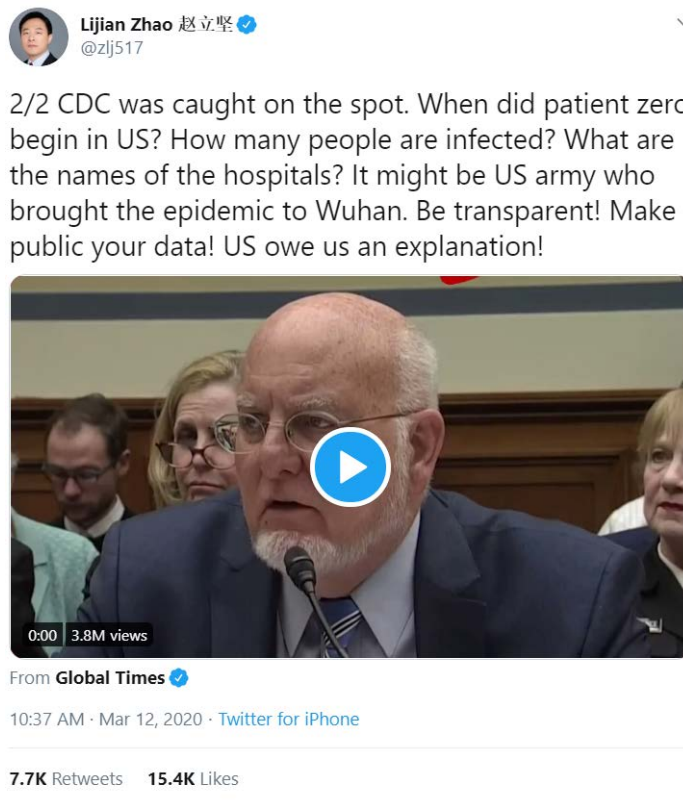
Theme 3: Promote anti-US messaging and conspiracy theories

The CCP has not been content with simply promoting its international medical aid. Instead, the Party has also taken the opportunity to vastly expand negative media coverage of the US response to the crisis and Washington's ability to lead. Furthermore, the CCP has integrated Russian disinformation tactics into its already robust Internet information warfare apparatus to spread conspiracy theories and disinformation on US social media.

Anti-US messaging is promoted in several ways. The first is through “official” channels, such as speeches/pronouncements/interviews with PRC government officials, printed in PRC flagship media like *People's Daily* or *Xinhua*. The higher ranking the PRC government official involved, the more these pronouncements are reliant on misdirection or euphemisms, for a sheen of professionalism. For instance, following French president Emmanuel Macron's 22 April declination to join in the Australia/US call for an international probe into the origins and spread of COVID, PRC foreign minister Wang Yi praised France for its “independent diplomatic style, especially its adherence to multilateralism.” This was duly published in *Xinhua*.²⁰ Australia, on the other hand, was attacked as being “keen to parrot” the Americans—by an unnamed spokesperson at the PRC Embassy in

Canberra, in response to a question by the ultranationalist PRC tabloid *The Global Times* (which itself is a subsidiary to the “more respectable” *People’s Daily*).

This differentiation is even more apparent in anti-US messaging spread through “unofficial” channels, where there is a level of plausible deniability. The most notable example of this is the PRC Ministry of Foreign Affairs’ spokesman Zhao Lijian’s conspiratorial Twitter post on 12 March, blaming the US Army for deliberately spreading COVID in Wuhan; this accusation was then shared by over a dozen Chinese diplomats on Twitter.²¹



(Twitter, @zlj517)

Figure 4. PRC Ministry of Foreign Affairs’ spokesman Zhao Lijian Twitter post, 12 March 2020. The CCP use of “unofficial” channels (Twitter is blocked in China) to spread conspiracy theories is complemented by “official” channels using more “reasonable” disinformation. Note Zhao’s use of the *Global Times* tabloid media.

The “official” PRC response following the widespread international backlash over Zhao’s tweet is a demonstration of the complementary nature of the official–unofficial spread of disinformation. On 22 March, PRC Ambassador to the United States Cui Tiankai gave an interview to *Axios* in which he stated in re-

sponse: “Eventually, we must have an answer to where the virus originally came. But, this is the job for scientists to do, not for diplomats, not for journalists to speculate, because such speculation will help nobody.”²² While this was widely reported in Western media as a rebuke to Zhao, this was actually the use of an official channel to spread a “reasonable” alternative to the easily laughed-off conspiracy theory: obfuscation under the guise of scientific uncertainty.

Furthermore, the PRC has also deployed Russian-style disinformation techniques—social media bot spam—to insert false narratives and increase discord in US society. *Pro Publica*, an investigative news organization, recorded a recent uptick in the number of pro-CCP accounts exclusively focused on criticizing the United States. Their report tracked over 10,000 such accounts, and mapped how these suspect users interacted with one another to advance PRC narratives.²³ One technique involves using “bespoke” social media accounts—an account with the features of a real social media profile, such as a long account history, regular posts, direct messaging—to post an “eye-catching” comment, which would then be boosted via likes, retweets, and pasted comments by spam accounts to game platform algorithms for promotion.

In mid-March, the United States received an indication of the power of these amplification techniques during a pandemic. Chinese operatives, via Twitter, Facebook, and text messaging, pushed a false narrative that the United States was about to go into national lockdown, to be enforced by the Department of Homeland Security and the military. Per the *New York Times*, “The messages became so widespread over 48 hours that the White House’s National Security Council issued an announcement via Twitter that they were ‘FAKE.’”²⁴ This type of panic mongering represents a more aggressive use of disinformation and deflection than the standard PRC *50 Cent Army* method of blanketing US social media networks with stilted CCP propaganda on perceived “anti-CCP” topics. In this case, causing general mayhem was the goal, and by itself is a troubling indication of the PRC escalation of information warfare.

Responding to the Challenge

As the PRC has chosen to embark on an escalatory global information warfare campaign during the most serious pandemic in a hundred years, the United States must respond accordingly. We propose three national-level responses to seize the initiative in the US–PRC great-power competition and pressure the CCP into ceasing escalation in the information domain.

Create a Twenty-first-Century Arsenal of Democracy

Washington should expedite the transition of our nation's manufacturing capacity toward producing medical equipment on a truly massive scale, to supply not just the United States but also our allies, partners, and our would-be allies/partners in a Twenty-first-century Arsenal of Democracy. It has become clear that having an enormous portion of the global medical supply chain in the PRC is an invitation for the CCP to promote its political-economic objectives in the name of medical aid. Worse yet, it has allowed the CCP to openly threaten the United States by imposing pharmaceutical export controls and thus plunge America into a "mighty sea of coronavirus."²⁵ We can only protect ourselves and our friends against this type of pressure with the creation of a strategic reserve of medical supplies.

Collaborate with allies and partners to counter Beijing's narrative

The CCP is now openly advocating for the superiority of their authoritarian system. This is a significant change from past propaganda, which narrowly advocated the Party's leadership and system being appropriate for China itself (i.e., the 1980s-era Deng Xiaoping motto, "*Socialism with Chinese characteristics.*") This is not something that is a threat to the United States alone: the CCP is now targeting the EU with propaganda about the inefficiency of democratic countries. In France, the PRC embassy posted an article stating that in Western countries, careworkers in nursing homes abandoned their jobs and left residents to die.²⁶ Against this systematic challenge, backed by PRC economic pressure, individual efforts are insufficient. For instance, an EU report documenting PRC disinformation was delayed and then heavily watered down following pressure from Beijing.²⁷ The United States must work with fellow democracies to push back against this pressure and, more fundamentally, against the myth of efficient autocracies. This means highlighting successful cases of democratic countries dealing with the virus, such as South Korea or Taiwan. This means placing economic pressure on the PRC when the PRC tries to impose economic pressure to enforce their political will. This means actively demonstrating how autocratic systems break down the transparent information transfer that is critical to stopping the virus. Dr. Li Wenliang did not die *for* the Party; he died *because of* the Party.

Reinvigorate US leadership of international organizations

By now, the failure of the WHO to adequately check the claims of the CCP in January 2020—the most critical point in the shift from regional outbreak to global pandemic—is now clear. In mid-January, the WHO declared that there was "no evidence of human-to-human transmission of the virus," even while doctors in

China were being warned against spreading “rumors” to that effect. The WHO director-general, on 28 January, *praised* China for “setting a new standard for outbreak response.”²⁸ The co-opting effects of the PRC on international organizations, even while PRC funding for these international organizations is a mere fraction of the US level, demonstrates the degree to which US influence in these international organizations has atrophied. The United States must once again regain its leadership mantle at these organizations, because we have now seen the *national*-level effects of neglect. This does not necessarily mean more funding. This means using what funding we do provide to greater effect; working with allies and partners to confront PRC propaganda at every step, vice dismissing it. This means shoring up fellow democratic partners such as Taiwan in these international organizations: Taiwan’s response to COVID has been exemplary, with the free flow of information and deft use of technology not to deceive, but to empower its citizens. This would be the type of expertise that the WHO should welcome, instead of the deceptions of the CCP.

Conclusion

CCP COVID propaganda states that the virus is our common enemy and that nothing is more important than life. It is clear from the early handling of COVID-19 that the Party views anything that threatens the system is our common enemy, and that the Party’s grip on power is more important than life. This is true not only for the PRC’s own citizens but also for the rest of the world.

The repercussions of this realization by the international community has led Xi Jinping to take great risks in an escalation of information warfare. The propaganda has changed. The method of execution has changed. The days of a cautious CCP are over. Through this disinformation campaign, the PRC has demonstrated its intent to be an aggressive, revisionist power. We must clearly contest China’s manipulative narrative, but simple rhetoric is not enough. We must revitalize American leadership by placing our strengths at the fore: our economy, our relationships with our allies, and our ability to lead. There is more than American power at stake; American values are threatened as well. Much like a virus, values can spread, and the CCP is doing its best to propagate the Party’s values. Just as we rise to the COVID challenge, so must we rise to the CCP’s challenge. ✪

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Kashmir

Beyond Imbrolios*

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Abstract

Kashmir is a picturesque region straddled by the boundaries of India, China, Pakistan, and Afghanistan. It has seen a lot of turmoil in the last 30 years. Moreover, Pakistan and India have engaged in multiple wars and skirmishes over the territory. The history of Kashmir can be traced back to the transfer of territory to the Hindu Maharaja in the Treaty of Amritsar in 1849. Local resistance was subdued through colonial-era autocratic mechanisms. The rule of Gulab Singh's successors was seen as one labeled as "post-autocratic fiscalty." Politico-legal instruments were thereafter leveraged to marginalize the majority Muslim community in Kashmir and resulted in an unfair system. In 1947, riots started after the 3 June Mountbatten Plan was announced. This led to the migration of population from one region to the other. There was no clear demarcation of boundaries by the colonial regime. This was delayed after the announcement of independence of the two nation-states of Pakistan and India. The postponed Radcliffe Award and the unclear nature of the Instrument of Accession of Princely States caused a horrid situation that resulted in turmoil.

Moreover, contrary to what Dalbir Ahlawat and Satish Malik have stated, the colonial regime coined the term *Kashmiriyat*, which is an empty signifier that disregards the ground realities. In violation of international law, India's unilateral abrogation of Article 370 and 35-A show that New Delhi is taking steps that are detrimental to regional peace and stability. Furthermore, India has made Kashmir one of the most militarized zones in the world, with a ratio of security personnel to local population of 1:8. Due to the imminent threat of a conflict between nuclear-armed neighbors, the oppression and subjugation of the Kashmiris makes regional stability and peace precarious. The obduracy of India's successive governments over the years to resolve the dispute is causing concern for policy makers around the world. The issue should be resolved through pacific settlement of disputes as enunciated in Article 33 of the UN Charter. The *International Religious*

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Freedom Report has categorically stated that India's use of intimidation tactics against its minorities is akin to state terrorism.

Conclusively, this article argues that the right to self-determination, which is an integral part of any international covenant, including but not restricted to the International Covenant on Civil and Political Rights (ICCPR); the International Covenant on Economic, Social and Cultural Rights (ICESCR); and most importantly United Nations Declaration on Human Rights (UNDHR), should be upheld and the conditions of Kashmiris ought to be bettered as a fundamental human right.

Introduction

The picturesque Himalayan region of Kashmir sits at the juncture of Pakistan, India, Afghanistan, and China,¹ and represents the primary bone of contention between the two dominant South Asian rivals: India and Pakistan. The dispute over Kashmir has embroiled India and Pakistan in two major wars, a limited battle at Kargil, and numerous border conflicts since 1947. It was the *casus belli* for the wars of 1947–48 and 1965 and saw heavy fighting in the 1971 war as well.² The dispute has consumed precious resources in blood and treasure from both countries, which have been diverted away from the pressing concerns of poverty, disease, malnutrition, and climate change. The two countries have become nuclear powers since 1998, and the perennial contest over Kashmir on diplomatic, information, legal, military, intelligence, and political grounds continues—albeit this time under an ominous nuclear umbrella.

In this regard, it is necessary that a more nuanced and comprehensive viewpoint be presented to a global audience, which can foster both wider international engagement as well as a richer understanding of the salient features and undercurrents that permeate Jammu & Kashmir (J&K) and the South Asian region at large. In the end, such engagement is a necessary step in ushering a more stable and prosperous South Asia, which still reels from the aftershocks of colonialism and welters under the specter of a localized, but no less brutal, neocolonialism now being imposed by the Indian police state in the Kashmir Valley.

The prominence of the Kashmir conflict has indeed enthused many attempts to grapple with the subject, and many parties have offered differing terms as means for a rational settlement.³ Yet few have managed to pierce the veil of partisanship with sufficient levels of immersion, in the particular sense that Kashmiris' experiences have not been given their due weight. A recent instance of this can be found in the work of authors Dalbir Ahlawat and Satish Malik, titled "Kashmir Imbroglio" and published in this *Journal of Indo-Pacific Affairs (JIPA)*. An objective of our article is to present a valuable counterperspective to the claims presented by

these authors, in light of much violence and state repression that India has perpetrated in the short period since, particularly after its abrogation of Article 370 on 5 August 2019, which represents an act that violates both international law and the Indian legal corpus. Moreover, this article stresses a more sober historical perspective of the Kashmir region, substantiated by more neutral accounts of historians, anthropologists, and other social scientists.

Many nuances have been lost in reductionist narratives that are most vociferously pressed today, and what this article aims to do above all is inform an enquiry that ties more profoundly with both the historical memory and the lived experiences of Kashmiris as they navigate a tortuous tide of postcolonial subjugation and Hindu irredentism that rises by the day.⁴ The approach of this article arguably offers far more explanatory power regarding the plight of the Kashmiris; the imposition of a “living hell” police state in Kashmir since 5 August 2019;⁵ and the risk of an escalation between India and Pakistan at the behest of an ethnonationalist government in New Delhi that has done away with the pretenses around the myth of “Indian secularism” and which has in more ways than one come to prove Pakistan’s genesis, rooted in the Two Nation Theory, correct in reflection.⁶

Above all, this account is corroborated and vindicated by the immediate retrospect that other authors have not had. In the brief period since Ahlawat and Malik presented their arguments to this journal, the Indian government has abrogated articles 35A and 370, cut off the region from any connection to the outside world, led a crackdown on leaders across the Kashmiri political spectrum (including Indian sympathizers, who are today more hamstrung as apologists),⁷ and undertaken the mass deportation of young men to prisons across the Indian mainland. These events have occurred without any democratic or journalistic access to the epicenter of New Delhi’s excesses. Children as young as nine have been subject to what is constitutionally known as *preventive detention*, in a sort of moral gymnastic routine that shocks even seasoned scholars on Kashmir.⁸ A pronounced assertion can be made thus: scholars with a tolerant bent toward Indian occupation in Kashmir, including Ahlawat and Malik, would have a much harder time pressing the case they did as recently as mid-2019 by the fall of the same year. This is in large part because of the mendaciousness that accompanies an apologist stance toward postcolonial occupation forces that themselves hold deep-seated venality toward the local populations that they annex and dominate.

It is required, in turn, to revisit a justified and grounded perspective that can shed actual light on the “Kashmir imbroglio” in a manner that more fully informs the logic of terror and fascism that now constitute the lived experiences of Kashmiris. The region has been suffering since Gulab Singh acquired Kashmir in March 1846 under the Treaty of Amritsar. What Frantz Fanon described as *Les*

Damnés de la Terre (The Wretched of the Earth)⁹ could not be found any more starkly subsisting in anguish as the Kashmiris who have lived under the occupation forces of New Delhi and the Dogra regime before them. This element of colonial and postcolonial subjugation forms the basis of the fullest inquiry into the plight of Kashmiris.

The Despondence of Kashmiri Muslims under Autocratic Colonial Rule

Kashmir was a region that fell to an autocratic princely state arrangement much more recently than other regions of South Asia did.¹⁰ Only at the apogee of European colonialism was Kashmir converted into a Princely State, when the British recognized Gulab Singh as a tributary and vassal maharaja through the Treaty of Amritsar (1846). This followed the First Anglo–Sikh War (1845–46) and was contingent on payment of 75 thousand Nanakshahee Rupees for the war indemnity. The payment was justified on account of Gulab Singh legally being one of the chiefs of the Kingdom of Lahore and thus responsible for its treaty obligations. Gulab Singh had sided with the British in the Anglo–Sikh war and was thus conveniently confirmed as the ruler of Kashmir by the colonial regime. The vassal Gulab Singh, in turn, imposed exorbitant taxes on the Kashmiris in an attempt to recoup the money he had paid to buy Kashmir.¹¹ This reflected his instrumental approach toward treating Kashmir as a territory rather than as a collective polity and followed a pattern long observed by anthropologists of debt as one of post-occupation autocratic fiscalty.¹²

By the time that the autocrat Gulab Singh had refashioned the economy of the territory he had purchased from Britain to his whims, the Hindus had multiplied their economic domination over the majority Muslim population. The largest beneficiaries of this system were the social agents known as Pandits, the upper-caste Brahmin Hindus who were residents in Kashmir. The Pandits and the Dogra royal family controlled most of the agricultural land, while the majority Muslim population largely toiled in economic subservience to the Pandits and the Dogras. Despite Muslims representing 53 percent of the population in the southern Jammu Province and a full 93 percent in the heavily populated northern Kashmir Province, they were a community in serfdom.¹³ Lt Col Ian Torrens, who was part owner of the *Globe* newspaper and an influential political economist of his time, visited Kashmir (1859–60) during the reign of Ranbir Singh. He painted a grim political picture of the region, stating, “the Hindu rule was run by Hindu faqueers, detested by people that they prey upon, but supported and encouraged by the Government.”¹⁴ He added that “apart from the Pandits, the Kashmiris are all

Mahomedans, and the differences between them and their Dogra rulers does not serve to lessen the unpopularity of the dominant race.”¹⁵

Other avenues where minority power was exhibited included the public administration: Hindus and Sikhs held 78 percent of gazette appointments in the government, while the Muslim representation was only 22 percent, despite their majority of more than three-fourths. The Kashmiri Pandits, thus, used their overrepresentation in the state machinery to reinforce their economic control and political power across the totality of the state.¹⁶ Similarly, the public finances of the state reflected this tyranny in various forms, as when the taxes on Muslims for crop yields that were an eye-gouging 75 percent of their produce, thereby eliminating the possibility of their economic emancipation through surplus production. The Kashmiris had been kept in this subjugated condition throughout history, first by the Mughals, then the Afghans, and lately, before Partition by the Dogras. In fact, the Dogras also reintroduced the forced labor system under which the state could employ workers for little to no payment. In times of economic adversity, Muslims would be squeezed first such that, even at the time of a severe famine in the state during the Dogra rule, the Muslims were allowed to perish rather than slaughtering their cattle, so as not to offend Brahmin sensibilities.¹⁷ We see echoes of this in contemporary India where lynchings against Muslims for perceived slaughtering of cows has gained increasing currency as a vigilante practice.

Additionally, Hindus had monopolies over 83 percent of the access (seats) in state-sponsored (public) education.¹⁸ The tax net was in fact so deep that Kashmiri Muslims had to pay a tax to get married as well.¹⁹ Worse still, the Dogra autocrat is reported to have presented a plan for the forced conversion (in his eyes, “reconversion”) of Muslims to Hinduism—but it is of some ironic quality that the plan was rejected by Benares high priests because they believed that the Muslims would then “contaminate” the purity of Hinduism.²⁰ The forced “reconversion” of India’s Muslims, in addition to those in Kashmir, is a vividly discussed subject by today’s ruling party in New Delhi.²¹

Although most historical–anthropological accounts of Kashmir under Hindu Dogra rule mention incidents and impressions of total class violence as a fairly frequent affair, it appears that July 1931 was seminal to revolutionary action.²² In the aftermath of the 1931 agitations, the British-appointed B.J. Glancy Commission was deputed to examine an extensive array of economic and political grievances believed to have caused the disturbances. Its report of 1932 included a criticism of the Kashmir state’s partisan functioning in favor of its Hindu subjects to the neglect of Muslims.²³

In the 1941 British census of India, Kashmir registered a Muslim-majority population of 77 percent, a Hindu population of 20 percent, and a sparse popula-

tion of Buddhists and Sikhs comprising the remaining 3 percent out of a total population of 4.02 million.²⁴ That same year, Prem Nath Bazaz, a Kashmiri Pandit journalist wrote, “The poverty of the Muslim masses is appalling. . . . Most are landless labourers, working as serfs for absentee [Hindu] landlords . . . Almost the whole brunt of official corruption is borne by the Muslim masses.”²⁵

This was the desperate backdrop of the lived experience within which Kashmiris, contrary to the claims of Ahlawat and Malik for *Kashmiriyat*, recognized their identity as disenfranchised Muslims tyrannized by upper-caste Hindus, who were themselves collaborators and vassals to the British. The class violence was superimposed on the religious identity of the Kashmiris as a distinct people who would stand in class allegiance against the landowning Brahmins who profited in their serfdom.

Thus, the Kashmiris were a clear case of Fanon’s colonial depiction of the *Wretched of the Earth*,²⁶ but the class violence is reinforced in the analysis of Indian scholars as well, as when Bazaz observes that “speaking generally and from the bourgeois point of view, the Dogra rule has been a Hindu Raj. Muslims have not been treated fairly, by which I mean as fairly as the Hindus. Firstly, because, contrary to all professions of treating all classes equally, it must be candidly admitted that Muslims were dealt with harshly in certain respects only because they were Muslims.”²⁷ This helps to explain the widespread appeal of the Pakistan Movement to the majority of Kashmiris living under oppressive conditions, their desire to stand up for the cause of Pakistan and the deliverance it promised—even as their Dogra autocrats sought to suppress them and work out an arrangement with India that would perpetuate their privileges of exploitation.

Riots, Partition, and the Princely State of Kashmir

The era of the British colonial Raj came to an end following World War II and the ensuing inability of the colonial regime to continue financing British foreign depredations. It is stated by one of prominent Pakistani lawyers that, “Centuries of British colonial rule on the Indian subcontinent ended in August 1947, as Winston Churchill puts it, in a ‘premature hurried scuttle.’ The ill-conceived flight of the British left certain far-reaching elements of the decolonization process unfinished, including the political fate of the princely state of J&K in accordance with the wishes of its people and consistent with Partition’s underlying principles.”²⁸

The longstanding repression of Kashmir came to the fore as one of a litany of princely autocratic arrangements that had to choose their postcolonial political status. There were 584 Princely States, along with Kashmir, which had to make this choice per the British arrangements for their exit. The Princely States had maintained a “special relationship” as vassals of the crown, but the “lapse of para-

mountncy” resulted in the transformation of their status and a choice to accede to either the dominion of India or Pakistan or to become independent.²⁹ Out of 584 Princely States during 1947, 13 major Princely States decided to join Pakistan.

In addition, the states of Hyderabad, Junagadh, and Manavadar also decided to accede to Pakistan. However, given that they were surrounded by Indian territory, the Indian state exerted brute force to prevent these accessions from occurring, forcing instead their mergers with the Indian Union under threat of total violence.³⁰ Operation Polo, the Indian military operation to take over Hyderabad state, resulted in massive communal violence and deaths, ranging from official sources of around 35,000 to scholarly estimates of over 200,000.³¹ Kashmir’s maharaja, Hari Singh, who was one of the descendants of the tyrannical vassal Gulab Singh, played a gambit to sign a standstill agreement with Pakistan due to the cultural, linguistic, and religious affinity of the Kashmiri people with the people of Pakistan, besides the land linkage of the state with Pakistan, since the only all-weather road at the time passed through Rawalpindi into Kashmir.

According to Ahlawat and Malik, Hari Singh sought time to persuade the Muslim population, against their wishes, to join India. However, their democratic will had already been expressed, and the decision had long been made by the Kashmiri Muslims, as can be seen in that Ghulam Abbas had broken off from Sheikh Abdullah’s Congress-affiliated National Conference and had revived the Muslim Conference to represent the prevalent Muslim aspirations of Kashmiri Muslims to join Pakistan.³² It was the vassal’s betrayal of the democratic aspirations of the Kashmiri people, which he as well as his forefathers had long exploited and detested,³³ that would erupt in what is known as the Kashmir dispute.

Yet, the faulty and chaotic “Brexite” of 1947 and the poorly executed and partisan partition of subcontinent based on the Radcliffe Award also fueled the flames of the Kashmir dispute. The Muslim-majority Gurdaspur district was given to India, providing New Delhi with a land route to Kashmir. Muhammad Zufrulla Khan, who represented the Muslim League at the Boundary Commission, writes, “If Batala and Gurdaspur had gone to Pakistan, Pathankot tehsil would have been isolated and blocked. Even though it would have been possible for India to get access to Pathankot through the Hoshiarpur district, it would have taken quite a long time to construct the roads, bridges, and communications that would have been necessary for military movements.”³⁴ According to Indian lawyer A. G. Noorani, were it not for the controversial Radcliffe Award, India would not have any access to Kashmir at all.³⁵ The geographical factor was clearly in favor of Pakistan, and so was the demography. Yet manipulation, political expediency, and hastiness led the Radcliffe ploy to disregard both geographical contiguity and demographic (not to mention democratic) logic.³⁶

The rebellion against Maharaja Hari Singh started before independence in Poonch in June–July 1947, where Muslim soldiers of World War II had been disarmed and heavy taxes imposed, creating widespread discontent. Sixty thousand Muslims from the Poonch and Mirpur district had served in the British Army during World War II. Similarly, in Gilgit, the British-led Gilgit Scouts rebelled (their separate decision from the rest of Kashmir to rebel earlier and accede to Pakistan is discussed in a later section).

The flailing Maharaja Hari Singh saw his fiefdom ablaze and decided to flee, but it was in flight from Srinagar that he signed the so-called “Instrument of Accession” with India, something that partisans claim he supposedly signed in October 1947. The authenticity of this document remains in doubt and is likely to be a forgery.³⁷ Assuming, for a moment, that it was not a forgery, then the so-called instrument would have been an abject violation of the standstill agreement already signed with Pakistan. In his letter to the maharaja, bearing the date 27 October 1947, the Governor General of India, Lord Mountbatten, declared that “consistently with their policy in the case of any State where the issue of accession has been the subject of dispute, the question of accession should be decided in accordance to the wishes of the people of the State, it is my Government’s wish that as soon as law and order have been restored in Kashmir . . . the question of the State’s accession should be settled by a reference to the people.”³⁸

Moreover, the UNSC Resolution 47 passed on 21 April 1948 expanded the mandate of the United Nations Commission on India and Pakistan to conduct a plebiscite in Kashmir.³⁹ The resolution explicitly called on the Government of India to ensure the safety of all subjects and their freedom of expression in the vote for accession and ensuring freedom of the press, speech, and assembly and freedom of travel in the state, including freedom of lawful entry and exit. The Indian state continues to violate all the stipulations of the resolution in the current scenario.⁴⁰ In the aftermath of the elections of 1951, in which Sheikh Abdullah’s National Conference claimed a victory in every single one of the 75 seats (73 without contest), there were objections about massive rigging by New Delhi. The manipulated results prompted Josef Korbel, chair for the UN Commission on India and Pakistan, to remark, “No dictator could do better.”⁴¹

UNSC Resolution 91 highlighted this by resolving that any action that the Constituent Assembly (formed through rigging) in Indian Occupied J&K would take or would have taken will hold no value.⁴² Thus, the council decimated the claim of the unlawfully elected Constituent Assembly that Kashmir was an “integral part of India.” Its precise wording is that “the convening of a constituent assembly as recommended by the General Council of the ‘All Jammu and Kashmir National Conference’ and any action that the assembly might attempt to take to

determine the future shape and affiliation of the entire State or any part thereof would not constitute a disposition of the State in accordance with the above principle [impartial plebiscite].”⁴³

Contrary to allowing a plebiscite in Kashmir as mandated by the United Nations, India instead conducted a plebiscite in Junagadh to determine the wishes of that populace. This was due to the fact that Junagadh was a Hindu-majority region, whereas Kashmir was a Muslim-majority region. It was a categorically inconsistent (read: hypocritical) move and one that caused widespread consternation in the subcontinent, setting the tone for constant mistrust between the two nations. Ahlawat and Malik have erred abjectly in their counterfactual guess that a plebiscite in Kashmir might somehow have favored India, based on the notion that Sheikh Abdullah was a Congress ally.⁴⁴ This assumes that New Delhi’s vassal, Sheikh Abdullah, commanded the will of a disenfranchised people and that the Kashmiri people were oblivious to his status as a puppet. Instead, the far greater likelihood, to which Ahlawat and Malik act oblivious, is that the dynamics of the Kashmir region would have led to a plebiscite favoring accession to Pakistan.⁴⁵ Even to this day, the likelihood remains that, if a free and fair plebiscite is conducted in Kashmir Valley, it will most likely go in favor of Pakistan. However, India, which touts itself as the “world’s largest democracy,” has now brazenly abrogated Article 370 and imposed a police state and is loath to accept the democratic wishes of the Kashmiri people (this will be discussed in a later section).

The National Conference that Sheikh Abdullah’s apologist cabal led at the time of Partition worked in close affiliation with the centrist Congress leader Jawaharlal Nehru in New Delhi. However, the National Conference itself had split into the Muslim Conference and the National Conference in 1941 after the passing of Pakistan Resolution. Thereafter, the National Conference could not have represented the aspirations of the people of Kashmir Valley as it was not the sole voice of the Kashmiris anymore. This was similar to the situation in the North-West Frontier Province (now known as Khyber Pakhtunkhwa) where the Khidmatgar party was a Congress ally and was ruling the province. Yet, the people of the province voted in favor of joining Pakistan through a referendum held there at the time of Partition. As has been written by lawyer Yasser Latif Hamdani “the referendum, to decide between Pakistan and Hindustan, held under an impartial governor who enjoyed the confidence of the Congress, with a Congress government in the province, still resulted in a landslide victory for the Muslim League on the Pakistan question.”⁴⁶ Moreover, Sheikh Abdullah’s National Conference government in Kashmir was dismissed in 1953 by the New Delhi central government; thus, the Indian notion that he would have helped India in a plebiscite faded away

with this rift. According to Sheikh Abdullah, his dismissal and arrest were engineered by the central government headed by Prime Minister Nehru.⁴⁷

Indians later bribed the Sheikh through positions of power and money to win back his support, making him the puppet Chief Minister for Kashmir. He traded-off the Kashmiris' right to self-determination, which hinged on a neutral plebiscite and was granted by multiple United Nations Security Council Resolutions, to instead negotiate the 1974 Indira–Sheikh accords.⁴⁸ It was a paltry price to damn his own people, and according to Kashmiri historian Muhammad Ishaq Khan, the move led Abdullah to be dubbed a traitor by even his most ardent supporters.⁴⁹

Indigenous Kashmiri Freedom Movement Starting in 1989

The act of pelting Indian occupation troops with stones has been seen for at least three decades in television reporting that bothers to cover Kashmir (or is even allowed to do so), beginning with the movement that is now remembered as the Kashmiri Intifada of 1989. That said, the stone-pelting intifada was one of several populist uprisings by the Kashmiris emerging with the 1963 Hazratbal riots. Yet, the act of mass uprising made itself fully manifest when a new generation of Kashmiris mobilized en masse in 1989.⁵⁰

In 1987, the state elections in Kashmir were rigged so badly that political scientists often refer to it as a pseudodemocratic “debacle.”⁵¹ Malik and Ahlawat have tried to blame Indira Gandhi and the Indian National Congress for this mockery of democracy.⁵² However, this would be a facile masking of the Indian establishment's longstanding policy to cripple the Kashmiris and their freedom struggle. That said, Malik and Ahlawat are correct to the extent that the Congress and Indira Gandhi were indeed major actors in the crushing of Kashmiri lives, but it would be inaccurate to lay the blame singularly on them when they were merely following a government tradition: the perpetuation of structural violence that had long fomented a rage and disenfranchisement in Kashmir.⁵³

The rigging and subsequent feeling of disenfranchisement among the Kashmiri populace prompted different armed resistance groups to spring up after 1989. Pakistan's support to these groups has come in various forms, but the most significant is in the moral dimension, far outweighing any material extension of help.⁵⁴ Pakistan's policy has remained quite consistent in arguing for the Kashmiris to decide their fate on their own terms, and groups that took up arms to resist that struggle did not pose any intellectual dilemma for Pakistanis who understood this to be the right, if not the only, way to contest hegemony.

Although Indian intelligence agencies tried to incite infighting among the liberation groups, their tactics proved largely futile due to the deep pools of disenfranchisement to which they spoke, and for whom they fought.⁵⁵ This has become

all the more evident as formerly pro-Indian leaders such as Omar Abdullah and Mehbooba Mufti have also started giving profreedom statements and warnings of sinister Indian designs to change the demographics of the region.⁵⁶

According to the Pakistani government, its support for the groups went as far as moral, diplomatic, and political, and the intelligence agencies of Pakistan were not informed or prepared when the armed struggle broke out in Kashmir in 1989. This is corroborated by confessions from Lt Gen (Retd) Asad Durrani, former director general of Pakistan's premier intelligence agency, the Inter-Services Intelligence, in his book *Pakistan Adrift: Navigating Troubled Waters*.⁵⁷ The Indians reacted brutally to the movement, starting by deploying hundreds of thousands of military personnel and Central Police Reserve Force (CPRF) personnel to the region. They then suffocated the region by enacting the Armed Forces Special Protection Act (AFSPA). To put it mildly, the AFSPA violates international humanitarian law and fundamental human rights granted under the UN Charter and ICCPR, of which India is a signatory. Indeed, the United Nations High Commission for Human Rights (UNHCHR) report has criticized the practices created by India's AFSPA as impeding the delivery of justice in the region.⁵⁸ To put it more plainly, if there has ever been a piece of legislation on Earth that should send shivers down one's spine, it is the abomination against the human spirit as encapsulated in the AFSPA.

Since the intifada of 1989, more than 100,000 people have died in the valley, including about 20,000 armed fighters and thousands of civilians.⁵⁹ The UNHCHR report from June 2016 to April 2018 has further said that AFSPA (since 1990) and Jammu & Kashmir Public Safety Act (since 1978) "have created structures that obstruct the normal course of law, impede accountability and jeopardize the right to remedy for victims of human rights violations."⁶⁰ Besides the extrajudicial killings, Indian forces have involved themselves in wide-scale torture, illegal detentions, and rapes (including the infamous Kunan-Poshpora mass rape incident occurring on 23 February, 1991, and the Shopian rape and murder incident of May 2009), among many other draconian acts.

In a 1993 report, Human Rights Watch stated that Indian security forces "assaulted civilians during search operations, tortured and summarily executed detainees in custody and murdered civilians in reprisal attacks," and rape was regularly used as a means to "punish and humiliate" communities.⁶¹ Scholar Seema Kazi says it is used as a weapon of war by the Indian state against the local population. Moreover, mass graves numbering in thousands have been found in Kashmir. Human rights activists say India is hesitant to open the Kashmiri mass graves because it will also expose a hidden secret: years of purported abuses involving torture, gun battles conducted by the police, and the forced abductions of thousands of civilians.

These actions were carried out under the monstrous AFSPA, which bestows immunity to the Indian military from a trial for rights abuses in Kashmir.⁶²

As the COVID-19 pandemic forces entire states into lockdown, it is likely to open the eyes of the world to the lockdown in Kashmir, which is nearing its one-year anniversary. The state-imposed curfew by Indian authorities is already impeding efforts to peace in the region, and if the situation continues, it is likely to result in further aggravating the precarious situation between the two nuclear-armed neighbors.

Three Myths: Kashmiriyat, Sufism, and Gilgit-Baltistan

This section aims to redress three myths propagated widely in literature on Kashmir that is partisan and equivocal and reflected starkly in the scholarship of Malik and Ahlawat. They are three separate categories of misperception, but they are best considered here before the concluding sections apprise the reader of the recent catastrophes created by India (notably Article 370's abrogation) and a final message for reconciliation and peace is articulated.

One: On Kashmiriyat

Ahlawat and Malik's assertion of a supposedly unified and secular *Kashmiriyat* offers a frighteningly reductionist view for two reasons. First, it is a politically engineered term constructed and inserted by an occupation force, akin to the Hutus and Tutsis in Rwanda by Belgians, but with no such staying power. Second, Kashmiris were keenly attuned to world events such as the dissolution of pan-Islamic polities (like the Ottoman Empire) and to the class violence that clearly had religious undertones (a Hindu bourgeoisie over a Muslim proletariat).

On the first point, the Japanese anthropologist Toru Takahashi keenly observes that "the main component of the meanings of Kashmiriyat today was given primarily during the post-1947 days, although the term Kashmiriyat was then yet to be coined. It was the product of India's need to define itself as a secular nation, as well as to justify its military deployment in Kashmir."⁶³ Similarly, the pioneering Indian anthropologist T. N. Madan, who was a Kashmiri Pandit himself no less, wrote on the advent of the term *Kashmiriyat*: "the first thing to emphasize is that Kashmiriyat is not a Kashmiri word. It may not, therefore, be claimed to be a native category of perception. It is an artificially produced clone of Punjabinat and a recent coinage of not earlier than the 1980s."⁶⁴ Unlike the Hutu and Tutsi constructs imposed by the Belgians, Kashmiriyat was meant to pacify rather than stir up communal tensions; yet, like the Belgian construct, it does not have staying power. Kashmiriyat must be identified as a concocted racializing term.⁶⁵

As historical anthropologists have observed, the “propagandist” element of the centrist Congress party that ruled early post-Partition India sought to preach that “Kashmir was the symbol of communal amity not only for itself (between the Muslim majority and Hindu minority) but also for India (between Hindu majority and Muslim minority).”⁶⁶ This tactic was appropriated by the opportunist politician Abdullah, who was later seated as New Delhi’s vassal in Srinagar, in his election campaign in the mid-1970s, and was echoed in sympathetic portions of the Srinagar press for a few decades thereafter. The myth propagated in flimsy and partisan scholarship on Kashmiriyat is effectively demolished by critical anthropologists who trace the history of the term in a more robust manner. The conclusions of their findings are best encapsulated thus: “After the eruption of Kashmiri militancy in 1989, India needed to stress the affinities between India and Kashmir, and Kashmiriyat, now taken as Kashmir’s indigenous secularism that proves Kashmir’s bond with secular India, began to be seen frequently on the mouth of Indian intellectuals. This form of Kashmiriyat may be called India’s (Hindu-majoritarian) version of the idea of secular Kashmir; it was basically the recurrence of Nehru’s definition of Kashmir.”⁶⁷ As such, the term Kashmiriyat came to be known outside the Kashmir Valley only in the early 1990s and should be recognized as a facile concoction for postcolonial state machinery.⁶⁸

On the second point, it is important to note that, as with Muslims across the subcontinent before, during, and after European colonial rule, Muslims in Kashmir were keenly attuned to the tragedies befalling the wider pan-Islamic community, the *Ummat*, and felt a deep sorrow at seeing empires and edifices of their civilization crumble under the juggernaut of both Western as well as non-Western hegemony and violence. In South Asia, the Hindu–Muslim divide was aggravated by elements on both sides of the civilizational divide after the Partition of Bengal in 1905.⁶⁹ The uproar accompanying the Partition as well as the emergence of an “extremist faction” in the Congress party planted the roots for Muslim separatism across the subcontinent’s politics.⁷⁰

The Reunification of Bengal in 1911 brought back the haunting reality to Muslims that, without a separate homeland rooted in *Two Nation Theory*, they would be subject to the *tyranny of the majority*, in enlightenment philosopher John Stuart Mill’s phrasing,⁷¹ because the Muslims would be too dispersed and too few in number across the subcontinent to present their positions in a megastate that would swallow them as minorities.

The divide further deepened in the decade of 1940s, preceding Partition, and was informed by a Muslim awakening that gained increased momentum during the Hindu-dominated Congress rule from 1937–39. It has been argued, including by India’s current government, that Congress’ centrist and supposedly accommo-

dational claims were perceived as hollow rhetoric, by many Hindus movements as well as by the Muslims.⁷² The reality of strife on the streets (as evidenced by the Direct Action Day of 1946 in Calcutta) and the urge for the reassertion of a separate identity and collective consciousness galvanized the Muslims and set them in accord with the Muslim League and its rallying cry for a separate homeland.⁷³ The supposed supremacy of Kashmiriyat as an institution, which purportedly promoted culmination of Kashmir's unique heritage, does not cohere with the realities of the colonial and neocolonial era in the region, and as one Indian scholar aptly describes this so-called *Kashmiriyat*: "it is an empty signifier."⁷⁴

Two: On Sufism

Ahlawat and Malik mischaracterize Pakistan as being an allegedly Deobandi-Salafi-dominated country, contrasting this with Kashmiri Muslims, who adhere to a Sufi brand of Islam.⁷⁵ This misunderstanding is erroneous on two fronts: first, because Sufism enjoys a widespread and mainstream appeal across Pakistan, as reflected in the religious praxis, cultural production, and public discourse articulated by ordinary Pakistanis,⁷⁶ and second, because Salafist political Islam is a much more recent and very marginal movement that represents the aftershocks of the Saudi–Iran rivalry and a counterreaction to the Iranian Revolution of 1979,⁷⁷ and which has begun to recede as quickly as it came.

Despite the fact that Pakistan, during and after the 1980s, faced an extremely challenging situation in which the influx of extremism and the exogenously promoted sectarian divide tried to vandalize Sufi ideology, the latter has in recent times started to reclaim its space effectively. In contemporary Pakistan, Sufism has been transformed into a full-fledged social movement that is represented in the arts, in the press, and the praxis of religious life, including the visitation and veneration of Sufi saints in all Pakistan's provinces.⁷⁸ By contrast, the electoral results of Pakistan's democratic practice evidence the general disdain for extremist or ultraorthodox interpretations of Islam, and this is why parties such as Jammat-e-Ulema Islam (JUI) and Tehreek-e-Labaik (TLP) rarely if ever manage to gain even 5 percent of seats in any national election.⁷⁹ On the other hand, local politicians regularly seek the support of the *Gaddi Nashin* (descendants of the Sufi Saint).⁸⁰ Sufism is thus not a Kashmir-centric phenomenon, nor does it differentiate Kashmiris from their brethren in Pakistan. Are authors really to claim that the Rishi Sufism of Kashmir is more entrenched than Sufism in the Pakistani regions of Bahawalpur, Sukkur, Lahore, or Multan?

Three: On Gilgit-Baltistan

The territory of Gilgit-Baltistan (GB) has a separate history from that of Kashmir, and this requires unequivocal stress at this juncture, given the increasingly irredentist claims of the present government in New Delhi. According to Yaqoob Bangash, GB had historically been an autonomously governed territory, and only under a limited suzerainty of the Maharaja of Jammu & Kashmir. It was leased to the British during the colonial period until 1947.⁸¹ However, the British betrayed their promise to the people of Gilgit, and as per the 3 January 1947 plan, the whole Gilgit agency was handed over to the maharaja. On 1 August 1947, Brig Ghansara Singh assumed the responsibility of Governor of Gilgit.

However, the people of Gilgit agency never accepted the authority of Ghansara Singh.⁸² Sensing their discontent, Major William Brown, the Maharaja's commander of the Gilgit Scouts, mutinied on 1 November 1947 and overthrew Governor Singh. The people of the agency declared Gilgit as part of Pakistan and hoisted the Pakistani flag. The Pakistani political agent, Khan Muhammad Alam Khan, arrived in Gilgit on 16 November to assume the responsibility of the region. Baltistan also formed part of Gilgit agency.⁸³ This is corroborated by various scholars who, in detailing the postcolonial transition of the region, note unequivocally that the people of Gilgit, as well as those of Chilas, Koh, Ghizr, Ishkoman, Yasin, Punial, Hunza and Nagar, joined Pakistan by choice.⁸⁴

Therefore, GB has a separate history and political dynamics from the rest of erstwhile J&K state, and revisionist and irredentist attempts to conflate its history with that of the state only serve to blur historical context. In the Dixon Plan negotiations as well, it was envisaged by Nehru that no plebiscite would be needed in GB (erstwhile Northern Areas), as its people had already decided in favor of Pakistan.

In the negotiations during the Dixon Plan according to Indian commentator Srinath Raghavan, it was first Nehru who proposed a partition-cum-plebiscite plan: Jammu and Ladakh would go to India, Azad Kashmir and Northern Areas to Pakistan, and a plebiscite would be held in the Kashmir Valley. The UN representative, Australian High Court Judge Sir Owen Dixon, favored the plan, which bears his name till this day.⁸⁵ Thus, the current Indian statements of China-Pakistan Economic Corridor (CPEC) passing through a disputed territory—specifically, GB—is contrary to their previous admissions that people of the territory had already decided in favor of Pakistan. Moreover, the Gilgit-Baltistan Order 2018, promulgated by Pakistan, articulates that the federal government intends to grant GB the status of a provisional province, “subject to the decision of the

plebiscite to be conducted under the UN resolutions,” with all privileges provided by the constitution.

Epilogue as Prologue: Abrogation of Article 370 and the Future

At the time of their writing, authors Ahlwat and Malik could not see what the ultranationalist Hindu regime in India would do in betraying its promise to Kashmiris of autonomy under the so-called Instrument of Accession, supposedly signed in October 1947.⁸⁶ Article 370 of the Indian Constitution is purportedly the article on which the Princely State of Jammu & Kashmir is reported to have acceded to India.⁸⁷ While many provisions of Article 370 that granted special status to J&K had been diluted by extending 94 of the 97 subjects in the Union list to the region and 260 of the 395 Articles of the Constitution of India to the state,⁸⁸ Indian-administered J&K still retained certain provisions for those that it defined as permanent residents, effectively denying outsiders from buying property, holding government jobs, or enrolling in government colleges in the state.⁸⁹

The 5 August measures in Kashmir were a watershed event in the region’s history. The special status of the region granted through Article 370 was abrogated through a Presidential Order, which also went on to bifurcate the J&K state into two union territories. This maneuver by the Modi government, besides infringing on international law, is also in direct contravention of Indian Constitution itself and has thereafter been challenged in the Indian Supreme Court. Specifically, the order was in contravention of international law vis-à-vis the definition of an occupying power under Article 42 of Hague regulations 1907 to India in Kashmir,⁹⁰ whereby it is prohibited for an occupying power to annex a territory under its unlawful control. Article 42 states that “territory is considered occupied when it is placed under the authority of the hostile army. The occupation extends only to the territory where such authority has been established and can be exercised.”⁹¹ While neither Pakistan nor India are party to the Fourth Hague Convention of 1907 to which the Hague Regulations are annexed, it is widely accepted as being customary international law applicable to all states.⁹² Pakistan’s position of J&K being a disputed territory and India’s consequent lack of legal title to it has been recognized by numerous UN Security Council resolutions on the matter.⁹³

Moreover, the Indian Constitution required the consent of the Kashmiri Constituent Assembly before Article 370 of the Constitution could be abrogated. However, the Constituent Assembly was dissolved in 1957. The Indian Supreme Court observed on 3 April 2018 that Article 370 had acquired a permanent status because of the dissolution of the Kashmiri Constituent Assembly, citing the Supreme Court’s 2017 judgment in the *State Bank of India vs Santosh Gupta* case.⁹⁴ However, the BJP government still decided to make the Article 370 inoperative

by interpreting the Constituent Assembly to mean “legislative assembly.” To circumvent the legal issue of the nonexistent state constituent assembly, the president used the Clause (I) of Article 370, which conferred him with the power to modify the Indian Constitution on subjects related to J&K.

Thus, the central government first added a new clause to Article 367, which deals with interpretation of the constitution, and then replaced the phrase “Constituent Assembly of the State” with “Legislative Assembly of the State.” However, since in November 2018 the Legislative Assembly was also dissolved, the order says that any reference to the legislative assembly will be construed as a reference to the Governor of Jammu and Kashmir. The governor is an appointee of the central government. Therefore, the Indian government interpreted this as meaning that the Indian Parliament could substitute for the J&K Legislative Assembly.⁹⁵ The sullen leaders of the BJP could not reconcile to their actions being labeled as “ultra-vires” of the constitution by the opposition leaders. They banned opposition leaders from visiting the region, as shown by Rahul Gandhi being asked to return to New Delhi after landing in Kashmir.

According to a retired Pakistani air marshal, the abrogation of Article 370 was the most significant event in the history of South Asia after 1971.⁹⁶ The course of history looks likely to be changed by these unilateral Indian actions, and it is undoubtedly going to lead to increased instability in the South Asian region. From a legal standpoint, the famed and yet never-seen Instrument of Accession, on which India rests its claim of legal title, also denies India the option to take unilateral action in Kashmir. Therefore, by unilaterally abrogating Article 370, India has automatically materially breached the Instrument of Accession (if a document such as that exists).

The reasons for the hurried abrogation of Article 370 may be twofold. Firstly, by hastening the abrogation of Article 370, India was reaffirming its autonomy and independent decision making, irrespective of its relationship with any other country. This should be a cause of concern among the proponents of Indo–US strategic partnership, since New Delhi is unlikely to play an auxiliary role when it comes to India’s own interests. Secondly, the continuing Afghan peace process and India being sidelined in it despite investment outlays of \$2 billion USD in the country may be another reason for the rushed decision.⁹⁷ India is certainly unhappy with Pakistan’s central role in the process and may have liked to shift Pakistan’s attention to sabotage the Afghan peace process.⁹⁸ However, as time has shown, this tactic has proven to be futile, with the signing of the US–Taliban peace accord, which looks to American troops returning home after almost 19 years in Afghanistan and to ensure that the Afghan soil is not used by transnational terror outfits.⁹⁹

At the same time, India's right-wing Hindu nationalist government has pressed into policy its ideology that every step must be taken to ensure that the only Muslim-majority state in the union should have its identity eviscerated and its territory subjugated to their union. Also, by its 5 August steps, the Modi government has shown that in much the same vein as the Dogra tyranny, territory is a resource far more important than the welfare of the indigenous Kashmiri people. An oppressed population facing subjugation in the face of a ratio of 1:8 in security personnel to civilians cannot be lured in through promises of economic opportunities and jobs—certainly not so when the dividends of deploying economic capital will be reaped by the Hindus who will possess the means of production, harkening back to the class violence of Dogra rule.

In a joint session of parliament, PM Imran Khan of Pakistan cautioned that the situation could escalate to a military confrontation due to India's actions, which would not only portend doom for the region but the world as well. He said that Pakistan would fight till the last man and last bullet.¹⁰⁰ Earlier on, the Pakistani leadership was of the view that the BJP had adopted a belligerent attitude toward Pakistan and was coming down tough on Kashmir to appease their right-wing Hindutva voter base before the national elections and that mature negotiations could be conducted thereafter.¹⁰¹ However, soon after gaining reelection by selling to the public India's abject defeat to the Pakistan Air Force's Operation Swift Retort as a farcical victory, the ruling BJP revoked the special status of Kashmir in the constitution through a hurriedly passed bill on 5 August 2019.

Currently, there are more than 800,000 Indian security forces in J&K for less than 500 armed fighters. According to a J&K police report this latter number actually hovers around 200.¹⁰² This demonstrates the ludicrous pretense of such a massive deployment for "security and order" against an armed struggle, indicating that such measures are instead aimed at keeping the entire Kashmiri population in a state of subjugation. This heavy presence of military personnel is also an indication that India is geared up for any cross-border military action. In the past as well, India has repeatedly tried to divert attention away from popular uprisings in the region by heating up the Line of Control (LOC) or mobilizing forces against Pakistan as shown by Operation Parakaram, Operation Brasstacks, and the latest increase of 1,400% in ceasefire violation incidents along the LOC over the past decade. Moreover, India is acquiring the latest weapon systems, such as the S-400 from Russia and Rafale jet fighters from France. This indicates a growing aggressive posture. Moreover, the ultranationalist leadership will look to climb further up the escalatory ladder in any future scenario, as it will be emboldened by the acquisition of these platforms.

Many proposed solutions for the Kashmir dispute have been articulated over the years, including the Chenab Formula and Manmohan–Musharraf four-point formula, among others. However, it should be noted that little by way of advancement can be attained without giving Kashmiris a say and access to the right to self-determination. Any meaningful path forward will comprise the involvement of all three parties to the dispute: Kashmiris, Pakistan, and India. The Musharraf–Manmohan four-point formula incorporated the following elements as the basis for any future solution on Kashmir:

1. Joint supervision mechanism involving all three parties;
2. Self-governance and autonomy but without independence;
3. No change of borders; however, free movement for people across LOC; and
4. Phased withdrawal of forces (demilitarization).¹⁰³

This formula is the closest that the two nations have come to a joint settlement of the Kashmir dispute. However, as the events of the succeeding decade indicate, the two nations look likely to drift further from any meaningful settlement, and this can only worsen the disquiet of the Himalayan region.

UNSC resolutions form the overarching structure through which the Kashmir dispute must be resolved. A plebiscite must be conducted that gives Kashmiris their universally ordained right to self-determination as envisioned under common Article 1 (1) of the ICCPR and ICESCR, as well as the UN Charter. Additionally, the International Court of Justice (ICJ) has resoundingly affirmed such rights in Namibia, Israel, and Chagos Archipelago advisory opinions, as well as the East Timor case, in which the court confirmed its universal *jus cogens* and *erga omnes* character.¹⁰⁴

Furthermore, on 25 November 1947, Nehru informed the Indian parliament: “We have suggested that when people of Kashmir are given a chance to decide their future, this should be done under the supervision of an impartial tribunal such as the United Nations.” Under international law, such unilateral declarations made by heads of government in pristine terms, and demonstrating the will to be bound, have the effect of creating legal obligations. The ICJ has recognized this longstanding rule in nuclear test cases, as has the International Law Commission in its Guiding Principles adopted in 2006, as well as the UN General Assembly in its Resolution 61/34 of 2006.¹⁰⁵ Therefore, international law makes a strong case for the Kashmiris’ right to self-determination, which has been subverted by India for more than 70 years.

Moreover, contrary to what Ahlawat and Malik have stated, much religious-based terrorism is flourishing in India under the guise of extreme nationalist/

terrorist groups, now sanctioned by an irredentist regime that targets minorities with an iron fist. The supposed secular identity which India's forefathers sought to propagate has been jettisoned by the right-wing hardline BJP government. Hindu extremist groups such as the Rashtriya Swayamsevak Sangh (RSS) and Sangh Parivar were sidelined from the mainstream politics,¹⁰⁶ but over time, these extremist Hindu groups have reared their head once again in the political enterprise and have gained ascendancy in the parliament under Prime Minister Modi.¹⁰⁷ The smoke screen behind which Indian secularism existed has been eradicated. US *International Religious Freedom Report*, released in June 2019, said Hindu groups had used "violence, intimidation, and harassment" against Muslims and low-caste Dalits in 2017 to force a religious-based national identity. Furthermore, according to the report, mobile attacks by violent extremist Hindu groups against minority communities, especially Muslims, continued throughout the year amid rumors that victims had traded or killed cows for beef.¹⁰⁸ This extremism, driven by what Prime Minister Khan has termed the neo-Nazi inspired ideology of Hindutva, looks to fan the flames of bigotry across the border into Pakistan and threaten regional stability.¹⁰⁹

The Kashmir dispute necessitates being resolved through amicable means between the two nuclear-armed neighbors, and the historical grievances of the Kashmiri Muslims need to be taken into account. Kashmiris have suffered immensely due to the lingering dispute, and there appears to be no deliverance from the inequities they have suffered. Resources that might otherwise have been expended for the prosperity of the polities of Indian and Pakistan have been diverted to fighting over the territory of Kashmir. This has benefited, if anyone at all, the international arms industry at the expense of the common inhabitant of South Asia. Globally, Pakistan and India are among the top-10 largest importers of arms, with India growing its stash particularly voraciously.¹¹⁰ The mouth-watering profits of the global arms industry notwithstanding, a far greater socioeconomic architecture for development could be constructed following the peaceful resolution of the Kashmir dispute. Perversely, the military-industrial complex as listed on Wall Street and the S&P 500 has an unrelenting incentive to keep the two South Asian neighbors at daggers drawn. The slow, horrid descent into economic stagnation and prevention of economic prosperity of the two nations appear to be the ultimate futile end of this arms race.

The crux of the matter is that Kashmiri Muslims have lived as the *Wretched of the Earth*, as Fanon aptly put it: second-class citizens in their own land ever since Maharaja Gulab Singh acquired the territory after the First Anglo-Sikh War. Despite the best efforts of the imperialist forces to silence and subdue them, the Kashmiris have been fighting for self-determination for a seeming eternity. Today,

neoimperialist efforts to control the valley continue unchecked.¹¹¹ Kashmiri Muslims, as with any other community of the world, have demonstrated a will to stand against state oppression and terrorism. The political inventions of opportunists such as Kashmiriyat notwithstanding, a long historical affinity, a sense of civilization, and cultural-religious ties bind the Kashmiris with their brethren in Pakistan.

Now there is a need for the global community to come forth and listen to the pleas of the wailing Kashmiris and help resolve the imbroglio in accordance with the aspirations of the Kashmiri people and keeping in view international legislation on right to self-determination. The concept of self-determination is a powerful one, as founding director of the Liechtenstein Institute on Self-Determination at Princeton University has stated that “no other concept is as powerful, visceral, emotional, unruly, and steep in creating aspirations and hopes as self-determination.”¹¹² ❄

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