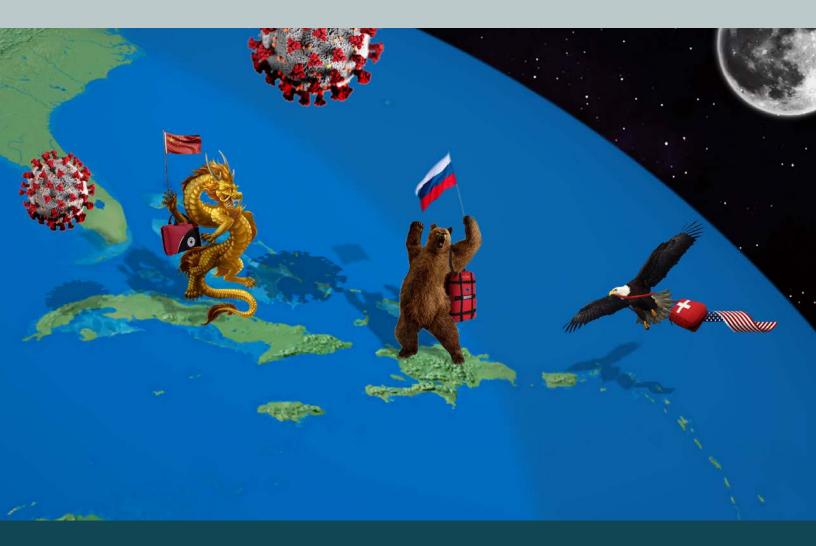
PERRY CENTER OCCASIONAL PAPER

SEPTEMBER 2021

Conventional and Health Geopolitics in the Contemporary Caribbean

By Ivelaw Lloyd Griffith





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Geopolitical pivots are the states whose importance is derived not from their power and motivation but rather from their sensitive location and from the consequences of their potentially vulnerable condition for the behavior of geostrategic players. Most often, geopolitical pivots are determined by their geography, which, in some cases, gives them a special role either in defining access to important areas or in denying resources to a significant player.

-- Zbigniew Brzeziński²

If one were to choose a single word to encapsulate Caribbean history, that word would have to be "geopolitics," the relationship between geography and international relations. The most important part of Caribbean geography has been the sea, which has historically served less as the cliched "inner lake" than as a series of maritime highways linking the Caribbean to the rest of the world.

-- Anthony Maingot³

Introduction

The late renowned geopolitician and erstwhile National Security Advisor to President Jimmy Carter, Zbigniew Brzeziński, focused solely on states in his analysis of geopolitical pivots. However, this geography-power-politics attribute is not limited to states. Indeed, as eminent Caribbeanist Anthony Maingot has asserted in the epigraph, geopolitics long have been a cardinal feature of the region's existence, at least since the fifteenth century. The importance of the region's "maritime highways," to use Maingot's term, is unlikely to diminish in the foreseeable future, although how and by whom the "maritime highways" are used certainly will change over time. Even though the Caribbean has retained its essence as a pivot space, over recent decades there has been a diminution in the scholarly discourse on the geopolitics of the region. The end of the Cold War contributed to this. But other geo's—geonar-cotics and geoeconomics—plus the geopolitics of energy and the geopolitics of migration have trumped

¹ An excerpt of this study was presented at the Florida International University/LACC-Caribbean Policy Consortium Webinar *Geopolitical Competition and Cooperation in the Caribbean in the Age of COVID-19*, held on May 13, 2021. I deeply appreciate the helpful comments on the webinar draft provided by the following colleagues: Anthony Maingot, Bruce Zagaris, Georges Fauriol, Scott MacDonald, David Lewis, and Anthony Bryan.

² Brzezinski, 1997: 41.

³ Maingot, 1994: 1.

geopolitics; those issues gained greater scholarly and policy traction, and for plausible reasons.⁴

Yet, the end of the Cold War and the high premium placed on geonarcotics and other concerns have not diminished the geopolitical valued-added of this "cockpit of the New World," as Ronald Ely (1990) dubbed the region, for China and other great powers and aspiring great powers. Neither have they removed all the Cold War ideological polarization in the hemispheric neighborhood that contributed to some of the Cold War geopolitical flashpoints. Cuba, Venezuela, and Nicaragua still are left-oriented, for instance. Indeed, some analysts worry about the return to a Cold War-like condition, although one respected voice strives to offer some comfort in declaring "The Cold War is back in the Caribbean, but this is not your father's Cold War" (MacDonald, 2019) (My emphasis.) Thus, a discussion on the region's contemporary landscape in terms of geopolitics qua geopolitics seems not just desirable but necessary. This paper aims to contribute to this conversation by assessing the region's current geopolitical landscape and examining some of its continuity and change dynamics, change notably in relation to health geopolitics.

The circumstances in which we find ourselves as global citizens call to mind Charles Dickens' classic *A Tale of Two Cities*, where he writes: "It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, ..." COVID-19 easily fits the "worst of times" and the "age of incredulity" characterization. According to the Johns Hopkins University Coronavirus Resource Center, as of Noon EDT on June 30, 2021, the world had endured 181,940,368 COVID-19 infections—15.9 times Haiti's population—and had suffered 3,940,368 fatalities—9.7 times Belize's populace—because of it.⁵ One study commissioned by *The Economist* in May 2021 found significant undercounting and pegged the fatalities at 10 million (See *The Economist*, 2021). Earlier, at his March 5, 2021 press conference, World Health Organization (WHO) Director General Tedros Adhanom Ghebreyesus revealed that "the COVID-19 pandemic has caused more 'mass trauma' than World War II" (Feuer, 2021). In relation to the United States, not only did the nation suffer 33,654,905 infections and 604,523 deaths as of June 30 of this year, but in June 2021, TIME reported that life expectancy fell by almost two years from 2018 to 2020, the steepest decline since 1943, when World War II was raging (see Szabo, 2021). No doubt, life expectancy has declined in other nations.

Evidently, the pandemic has triggered tectonic shifts within states and societies and upended international affairs, affecting every conceivable aspect of human endeavor. It also is pregnant with geopolitical implications for both large and powerful nations, such as the United States, China, and

⁴ This writer himself contributed to this outcome. See Griffith, 1993-94; Griffith, 1997; and Griffith, 2000.

⁵ Johns Hopkins University Coronavirus Resource Center, available at available at <u>COVID-19 Map - Johns Hopkins Coronavirus Resource Center (jhu.edu)</u>. Accessed on June 30, 2021. For a sobering report on pandemics over time, see Epidemics That Didn't Happen | Prevent Epidemics. Accessed on April 30, 2021.



Photo title: The Caribbean is a geographically, demographically, and politically diverse region comprised of 30 independent nations, overseas departments, and dependencies.

Photo credit: Google Maps.

Russia, and small and subordinate states, such as those in the Caribbean.⁶ Not only has COVID-19 come to define the content and context of national actions and international interactions in every part of the global commons, but all indications are that the responses and implications are deep and will be long-lasting. Consequently, in my view, our global society is not just experiencing the pleasures and pains of the post-modern age, but now the traumas and tribulations of a pandemic age; we are living in the Age of COVID-19. It would, therefore, be dereliction of academic duty to probe the geopolitics of the contemporary Caribbean without accounting for COVID-19 and some of the health geopolitics involved. But before we ponder the region's pandemic circumstances, it is necessary to offer an appreciation of its current value-added as a geopolitical pivot.

The Caribbean as Geopolitical Pivot

Theoretical/conceptual analyses on geopolitics (see Legucka, 2013; and Flint, 2017, for example) are replete with contestation about definitions and parameters, while those related to its empirical applica-

⁶ There already is a growing literature on the geopolitical implications of COVID-19 and related vicissitudes of big (and small) power politics. See, for example, Moon, 2020; Ishii, 2020; Nye, 2020; Geipel, 2020; Barr, 2020; and Kissinger, 2020. Henry Kissinger, for instance, has declared that the virus will alter the World Order forever and, in projecting to the year 2030, Joseph Nye postulates five Futures: the end of the globalized liberal order; 1930s-like authoritarian challenges; a China-dominated world order; a green international agenda; and more of the same.

tion (such as Brzezinski, 1997; Ely, 1990; and Maingot, 1990) highlight the complexities involved. This makes it necessary for us to specify its contextual usage. In this respect, I view geopolitics as the relationship between physical and political geography on the one hand, and national power on the other. It provides the context in which national power can be enhanced directly or indirectly, or threats and vulnerabilities may develop or be heightened. In relation to the Caribbean, the region's geopolitical value revolves mainly around its strategic materials, such as oil, bauxite and, nickel; strategic waterways like the Panama Canal and the Mona Passage; and military installations operated by the United States. (Griffith, 1993: 175) These have made the region both the subject and object of geopolitical competition and cooperation.



Photo title: The Covid-19 global pandemic has decimated the economies of many Caribbean nations that depend on tourist industry revenue, such as this empty beach resort in Turks and Caicos.

Photo credit: Beaches Resort

Strategic Materials

Although most Caribbean countries lack mineral wealth, overall the region has a significant endowment of strategic materials, notably bauxite (Dominican Republic, Guyana, Jamaica, Suriname, and Venezuela), nickel (Cuba, the Dominican Republic, and Venezuela), diamonds (French Guiana, Guyana, and Venezuela), manganese (Guyana and Venezuela), silver (Cuba and the Dominican Republic), cobalt (Cuba), gold (Cuba, the Dominican Republic, Guyana, Haiti, French Guiana, Suriname, and Venezuela), and uranium (Guyana and Venezuela). Energy—especially oil and Liquified Natural Gas (LNG)—is a key variable in the geopolitical matrix. Oil is produced in Barbados, Belize, Cuba, Suri-

name, Trinidad and Tobago, and Venezuela, which has the distinction of having the world's largest oil reserves.⁷

Oil exploration is underway in Grenada, the Bahamas, and Jamaica, while expanded operations are planned for Barbados (see Wilkinson, 2019). China also has been aiding Cuba in its expansion efforts. For instance, in April 2019, China's Great Wall Drilling Company, part of China National Petroleum Corporation, began work on an offshore joint venture with the Cuba Petroleum Company, the state oil company. Great Wall Drilling, which began operating in Cuba in 2005, was commissioned to drill most of Cuba's oil wells, using high-tech equipment capable of accessing shallow offshore oil deposits from land. The operations were conducted off the coastal town of Boca de Camarioca, about 120 kilometers east of Havana⁸ (Xinhuanet, 2019). Moreover, according to one geosciences report, "The Caribbean currently offers an unprecedented number of hydrocarbon exploration opportunities, with promising potential in Cuba, the Dominican Republic, Jamaica, Honduras, Nicaragua, and the Bahamas" (GEOExPro, 2019).



Photo title: Caribbean nations are rich in a variety of minerals including bauxite, nickel, manganese, and cobalt. **Photo credit:** Trinidad and Tobago Loop News

⁷ Venezuela's oil reserves are greater than those of the United States, Canada, and Mexico combined. Moreover, Venezuela is a leading exporter of bauxite, coal, gold, and iron ore. It is reputedly also the third-largest producer of coal after Brazil and Colombia and has the eighth-largest reserves of natural gas, accounting for 2.7% of the global supply. They also supposedly have the world's second-largest reserves of gold deposits. See "10 Countries with the Most Natural Resources," available at 10 Countries With The Most Natural Resources (investopedia.com).

⁸ China and Venezuela have been on the frontlines of satisfying Cuba's energy needs, with Petrocaribe being a key instrument of Venezuela's engagement. Understandably, the United States has considered Cuba's energy (and other) partnerships with the two countries to be geopolitical anathema. For a provocative, but politically dubious, proposal for United States to undermine the Cuba-China and Cuba-Venezuela solidarity by modifying its approach to Cuba and fulfil some of its energy needs, see Sanka, 2021.

The region's energy geopolitical value-added increased dramatically with the entrance of Guyana on the world crude oil stage, and with the expansion in Suriname from onshore production to offshore discovery. May 2015 was a milestone for Guyana with the discovery of massive oil deposits by a three-member consortium of ExxonMobil, Hess Corporation, and China's National Offshore Oil Corporation. They made 19 discoveries between then and April of this year. Just recently, on June 9, 2021 the consortium announced its 20th discovery. Total oil reserves are now estimated at close to 10 billion barrels. Production began in December 2019 and now stands at almost 120,000 barrels per day. It is projected to hit 800,000 barrels per day by 2025 and one million barrels per day two years afterwards.

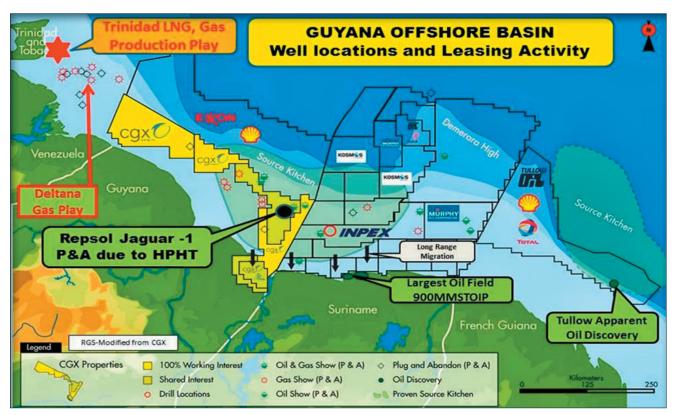


Figure 1: Oil Exploration and Extraction in the Guyana-Suriname Basin

Source: Norman Munroe, "Southern Caribbean Energy Matrix - Regional Push for Renewable Energy," presentation at the FIU/LACC-CPC Webinar on High-Stakes Tension: The Southern Caribbean Energy Matrix and the Regional Push for Renewable Energy, March 4, 2021.

On March 3, 2021, ExxonMobil Senior Vice President of Upstream, Neil Chapman, told investors that the company's acreage in the Guyana-Suriname basin is the largest of all the international oil companies (OilNow, 2021a). Indeed, Hess is so confident about profitability that in March 2021 it sold US\$150 million of its Danish assets intending to use the proceeds "to fund our world class investment opportunity in Guyana" (Yahoo Finance, 2021; OilNow, 2021b; Guyana Petroleum Digest, 2021).

⁹ On April 14, 2021, production was reduced by 75 percent, to 30,000 barrels per day, because of perennial problems with a gas compressor aboard Liza Destiny, the Floating Production Storage and Offloading (FPSO) vessel. Production was increased to 100,000 barrels per day one week later, although the problem was not fully solved.

Noteworthy, too, is that companies from Britain, Canada, France, Israel, and Spain also are pursuing Guyana's black gold bounty. As for Suriname, which had an onshore production of some 16,000 barrels in 2020, January 2020 was the petro power month to remember; it was then that American-owned Apache Corp and French-owned Total SA announced a major offshore discovery. Since then, Apache and its partner Total have announced four discoveries, with others declared by Exxon Mobil and its Malaysian partner, Petronas. Apache owns lease rights to nearly 2.3 million acres, and Exxon and Petronas have leased similar a similar-sized lease (Krauss, 2021). Offshore production is expected to begin in 2025.

Thus, Guyana and Suriname are the world's newest petro-powers-in-making. The Guyana Suriname Basin is abuzz with exploration and extraction activity, as Figure 1 shows. Indeed, one respected expert has declared that "the Guyana Suriname Basin (GSB) is the Holy Grail of new oil province discoveries. Oil energy experts predict that during 2021 there will be a major increase in offshore drilling activity in the Southern Caribbean and northern South America led by Guyana" (Bryan, 2021). Two factors will drive this, he argues: the increased price of crude oil world-wide, and the pursuit by companies of opportunities for quick financial returns. Moreover, the petroleum pursuits in Guyana and Suriname have been having geopolitical ripples beyond the region. As one *New York Times* report noted, "Suriname, Guyana, and Brazil are now attracting more new investment than the Gulf of Mexico and other more established oil fields. And they are helping to keep global oil prices relatively low, undermining efforts by Russia and its allies in the Organization of the Petroleum Exporting Countries, like Saudi Arabia, to manage global supply and push up prices" (Krauss, 2021).

Oil refining operations in Aruba, Curaçao, Cuba, Trinidad and Tobago, Suriname, Puerto Rico, and Jamaica also are an important part of the energy factor. As well, the refinery in the United States Virgin Islands, which had been closed in 2012, was reopened in February 2021. But the reopening met with strong opposition from environmental activists, who succeeded in having the Biden Administration revoke a key pollution permit. The Environmental Protection Agency announced that it will reassess what measures are required at the St. Croix facility to safeguard the health of local communities in the Virgin Islands, while providing regulatory certainty to the company (Tigue, 2021). A combination of major environmental and financial challenges led to the eventful closure of the facility in June 2021 (Eilperin and Fears, 2021). Not to be forgotten as an energy factor is the production of Liquified Natural Gas (LNG), which occurs in Trinidad and Tobago. The twin-island republic exports its LNG to many markets, but the United States is its most important client, although U.S. imports have declined recently: 84,190 Mcf (Millions of cubic feet) in 2016; 70,450 Mcf in 2017; 65,819 Mcf in 2018; 46,872 Mcf in 2019; and 39,233 Mcf in 2020 (USEIA, 2021).

Strategic Waterways and Military Installations

The Caribbean pivot space is endowed with two of the world's major strategic waterways: the Caribbean Sea and the Panama Canal. The former occupies 1,063,000 square miles, and is larger than the

Mediterranean Sea, which comprises 965,255 square miles. It is smaller than the South China Sea, which is 1,400,000 sq miles and has been described as being to China what the Caribbean Sea is to the United States (See Patel, 2021). The 80-kilometer long Panama Canal connects the Atlantic and Pacific Oceans and saves 8,000 miles and up to 30 days of steaming time. It opened for business in August 1914 and has military and civilian value to the United States and strategic partners such as Canada, Chile, Ecuador, Japan, and South Korea. Between 2007 and 2016, the Canal underwent a US\$5.25 billion expansion project that doubled its capacity, and it now facilitates passage of vessels with three times the cargo, significantly impacting global trade into the future.

Once ships enter the Atlantic from the Panama Canal, they must transit one or more of the 14 passages en route to ports of call in the United States, Europe, and Africa, as shown in Figure 2. The Florida Strait (between the United States and Cuba), Mona Passage (between the Dominican Republic and Puerto Rico), the Anegada Passage (between the British Virgin Islands and Anguilla), the Windward Passage (between Cuba and Haiti), the Guadeloupe Passage (between France, as a Département D'Outre-Mer of France, and Montserrat, a British colony), and the Yucatan Channel (between Cuba and Mexico) are the main straits. According to Panama Canal Authority data, the United States, China, Japan, Chile, the Korean Republic, Mexico, Colombia, Peru, Ecuador, Canada, Guatemala, and Trinidad and Tobago were among the top 15 users of the Canal in 2020. The Canal facilitates 144 maritime routes that link more than 1,700 ports in 160 countries and territories globally, around 6.3% of the world's maritime trade of grains, 3.4% of its trade of chemical products, and 3.1% of containers (Sáenz, 2020).



Photo title: Massive oil discoveries off the coast of Guyana have generated intense geopolitical interest by China and the U.S.

Photo credit: News America Now

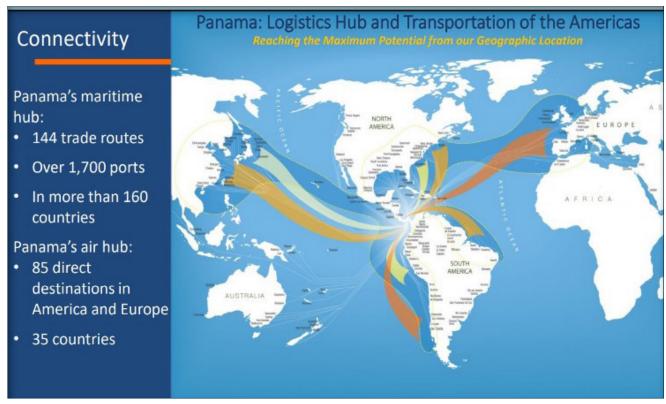
The United States long has considered the Caribbean its "Third Border" or its "Strategic Rear." Thus, during much of the twentieth century, until the late 1990s, it maintained a considerable military presence in the Caribbean Basin, mainly in Puerto Rico at the Atlantic threshold, in Panama at the southern rim, and in Cuba at Guantánamo on the northern perimeter. In 1990, for instance, there were 4,743 military and civilian personnel in Puerto Rico, 20,709 in Panama, and 3,401 in Cuba. Much has changed since 1990, requiring strategic redesign and force redeployment. For example, the Pentagon relocated the U.S. Southern Command's headquarters from Panama to Florida in September 1997, leaving behind only small components. Puerto Rico, too, is now home to fewer forces.

Between the time of the collapse of the Soviet Union in 1989 and the September 11, 2001, terrorist attack on the United States, the 45-square mile Guantánamo Bay base was considered to have little strategic value, serving essentially as a political outpost in the Hemisphere's last remaining communist bastion. However, the view by the United States about Guantánamo, in existence since 1903, was altered dramatically with the 9/11 attack and the housing there of individuals accused of terrorism. The George W. Bush administration, which stationed about 780 prisoners there, sent about 540 of them to other countries. The Obama administration reduced the prison population by another 200 through relocations to other nations, although they were unable to honor a key promise of President Obama's first presidential campaign—to close the prison.

The facility currently is staffed with an undisclosed number of contractors, civilian Pentagon employees, and 1,500 U.S. troops, reduced from about 1,800 during the Trump administration to save on costs, that in 2019 exceeded US\$13 million per prisoner per year. As of April 2021, the prison held 40 inmates. In March 2021, the Biden Administration announced its commitment to finding ways to close it (see Rosenberg, 2021a; and Rosenberg, 2021b). Parallel with assessment to enable closure is further consolidation. On April 4, 2021 the United States Southern Command announced that it had transferred all detainees from Camp VII to Camp V resulting in a reduction in the facility's footprint and elimination of maintenance requirements and costs incurred by Camp VII (United States Southern Command, 2021).

The United States has other base operations in the Caribbean, including the Atlantic Underwater Testing and Evaluation Center (AUTEC) on Andros Island in the Bahamas, which is used to test new types of weaponry and reputedly is the Navy's premier East Coast in-water test facility. Part of the Naval Sea Systems Command, its mission is to provide research, development, test and evaluation, engineering, and assessment, as well as fleet support capabilities for submarines, autonomous underwater systems, and offensive and defensive undersea weapon systems, and to steward emerging technologies in support of undersea warfare. Moreover it is affiliated with the NATO FORACS (Naval Forces Sensor and Weapon Accuracy Check Site) program. ¹⁰ Further, as part of United States counter-narcotics efforts, Aruba and Curaçao host Cooperative Security Locations (CSL), formerly known as Forward Operating

Figure 2: Panama Canal Global Connectivity



Source: Esteban Sáenz, "Panama Canal: Redefining World Trade," 2020.

Locations, which the United States Southern Command explains are strategic, cost-effective locations that allow United States and partner nation aircraft the use of existing airfields to support multinational efforts to combat transnational organized crime (United States Southern Command, 2020). One recent report from the Center for Strategic and International Studies (CSIS) reminds us that the United States continues to be the region's principal security partner (Runde et al, 2021).

As might be expected, except for the Caribbean Sea, the Caribbean pivot space did not always possess all the elements of the geopolitical matrix described above. For instance, commercial oil production in Trinidad did not begin until 1908, the Panama Canal did not exist before 1914, and bauxite mining in Guyana did not begin until 1916. However, the region has been the subject and the object of geopolitical competition and cooperation over the centuries since the misadventure of Christopher Columbus in 1492 resulted in European colonial adventures in this part of the world. Spain's initial hegemony was replaced by competition dynamics that saw Britain, France, and the Netherlands as major actors, and Denmark and Sweden as minor ones. Although European geopolitical competition continued, the year 1823 marked a turning point in the hegemonic trajectory, with the enunciation of the Monroe Doctrine.¹¹

¹¹ In his December 2, 1823 Address to Congress, President James Monroe articulated four basic points in what later became known as the Monroe Doctrine: (1) the United States would not interfere in the internal affairs of or the wars between European powers; (2) the United States recognized and would not interfere with existing colonies and dependencies in the Western Hemisphere; (3) the Western Hemisphere was closed to future colonization; and (4) any attempt by a European power to oppress or control any nation in the Western Hemisphere would be viewed as a hostile act against the United States.

Indeed, Venezuela cited the Doctrine in 1895 in courting United States support against Britain over the disputed Essequibo territory. The United States even threatened Britain with war, eventually getting them to agree to arbitration. In 1897, Britain and Venezuela signed the Treaty of Washington—in the American capital—to facilitate this dispute resolution mechanism, which led to the 1899 Paris Arbitral Award, the validity of which Venezuela has challenged for the last five decades after accepting it for more than six decades. ¹² Before too long, the United States began to exercise hegemony over the area. With the United States in the lead, the area became an important pivot space for the Allies during World War I and World War II, in which Germany was the main adversary and Britain a key ally. As a matter of fact, in 1940, the United States even gave Britain 50 navy destroyers in exchange for naval basing right in Jamaica, then British Guiana, the Bahamas, Bermuda, Antigua and Barbuda, Trinidad and Tobago, St. Lucia, and Newfoundland in Canada. Several Caribbean countries also were crucial to the United States war production, among them Cuba with nickel and cobalt and Jamaica and Guyana with bauxite and alumina. Also, the Caribbean was an important theater for both the Allies and the Axis, including for submarine warfare. ¹³ Change was in the offing, though.

Competitors Changing, China Rising

The end of World War II and the onset of the Cold War witnessed a change in the competitor lineup, with the Soviet Union and countries in its orbit becoming the main United States competitors. Expectedly, the end of the Cold War has led to alteration of the competition landscape, although the United States still views the domestic and foreign policy pursuits of Cuba and Venezuela (and Nicaragua) in quasi-Cold War terms. China and Russia now constitute the principal great power competitors, with Iran being a middle-power geopolitical thorn in the hegemon's side.

During the height of the Cold War in the 1970s, subordinate Caribbean states exercised sovereign agency and diplomatic temerity by establishing diplomatic ties with Communist China. Guyana and Jamaica were first and second, in 1972. Trinidad and Tobago followed in 1974, then Suriname in 1976, and Barbados in 1977. Of course, that was more than a decade after Cuba had done so, in 1960. Ever since then China has maintained important bilateral trade, aid, and other engagements with the Caribbean. However, the end of the Cold War, the emergence of the United States as global hegemon, and China's adoption of a new political-ideological dispensation following Mao Zedong's death in September 1976 contributed to China's development of bold global power ambitions.¹⁴

¹² Venezuela was so enamored with the Monroe Doctrine's espousal of guardianship that President José Andrade nominated Chief Justice Melville Western Fuller as one of his two panelists for the arbitration and he allowed the United States to name the second one: Justice David Josiah Brewer. See Griffith, 2021 for a brief analysis of contemporary developments in the dispute.

¹³ For a fascinating discussion of this subject, see chapter 3 of Maingot, 1994; Kelshall, 1988; and Battle Of The Caribbean – World War II. Link: https://ww2bwi.wordpress.com/battle-of-the-caribbean/

¹⁴ For a provocative TED Talk about China's political adaptations juxtaposed against Western democratic approaches by venture capitalist and political scientist Eric Xun Li, see <u>Eric X. Li: A tale of two political systems | TED Talk</u>. Accessed on April 20, 2021. See also the TED Talk by Graham T. Allison on United States-China competition, available at <u>Graham Allison</u>: Is war between China and the US inevitable? | TED Talk. Accessed on May 6, 2021.

The Caribbean pivot space then assumed new and sharpened strategic importance to China's global geopolitical and geoeconomic pursuits, an important aspect of which is to challenge United States unipolarity. It is worth noting that China is set to displace American supremacy in a key aspect of naval power. In 2015, the Chinese navy had 255 battle force ships in its fleet. As of the end of 2020, it had 360, some 60 more than the U.S. Navy, and it is expected to field 400 ships by 2025. The United States Navy shipbuilding plan envisages a fleet of 355. However, the United States leads in troop strength, with 330,000 active duty Navy personnel compared to China's 250,000 (Lendon, 2021).

China's competition designs have, therefore, accorded the Caribbean pivot space multidimensional geopolitical value, in relation to strategic waterways, strategic materials and investment and market access, and diplomatic presence as part of the rivalry with Taiwan, among other things. As regards strategic waterways, the Panama Canal, and the many passages in the "maritime highway" that are essential for connectivity with the Canal, are crucial for China's expanding global trade reach. For instance, in 2018, China had the second highest usage of the Canal for LNG imports, after South Korea, and for the years 2016 through 2018, it had the second highest usage for total cargo movement after the United States. On the import side, integrated circuits, crude oil, and iron ore constitute a high proportion of what transits the canal, and on the exports side, computers and other electronics, textiles, and metals form a large amount of what passes through that strategic waterway (Sáenz, 2020). Experts at CSIS explain that "China's influence in the Panama Canal has only grown since 2017 when then-president Carlos Varela severed diplomatic ties with Taiwan and recognized China, further opening the door to China's expanded footprint in critical Canal infrastructure and laying the groundwork for alignment with the Belt and Road Initiative (BRI)" (Runde and Doring, 2021). Runde and Doring also highlight China's extensive investment in the enhancement of the Canal's infrastructure, which is intimately connected to its strategic global reach.

As to strategic materials, investment, and market access, China's changing political dynamics have seen pragmatism trump ideology. This was evident even before June 2013, when President Xi Jinping made a first time-ever state visit to the Caribbean as part of a four-nation tour of the Americas. Trinidad and Tobago was the first stop, followed by visits to Mexico, Costa Rica, and the United States. As I noted elsewhere, interestingly also, President Xi skipped Cuba, which suggests a diminution of ideology and an accentuation of pragmatism (Griffith, 2013, 17). The Trinidad and Tobago visit had both bilateral and multilateral aspects. At the bilateral level, President Xi held talks with several Caribbean leaders. Specifically for Trinidad and Tobago, he announced the award of a US\$250 million

¹⁵ For a good discussion on the subject of unipolarity, see Schweller and Pu, 2011; and Tizzard, 2017. David Tizzard (2017: 12) explains: "Unipolarity is said to occur when one state dominates the globe in terms of military might, cultural force, and economic power. This can also be seen as hegemonic position, as it is controlled by a single actor. With the fall of the Soviet Union towards the end of the twentieth century, the global structure became unipolar, with the United States taking the reins. When such a situation occurs, the superpower has the ability to act all around the world – often with impunity and in a way that does not always accord with national interests."

¹⁶ The following year, in July 2014, President Xi visited Cuba and Venezuela as part of a four-country tour of Latin America and the Caribbean. Argentina and Brazil were the other countries.



Photo title: Chinese President Ji Xingping during a state visit to Trinidad and Tobago shakes hands with Kamla Persad-Bissessar, head of the United National Congress.

Photo credit: United National Congress, Trinidad and Tobago

loan to build a children's hospital, and he and Prime Minister Kamla Persad-Bissessar signed a wideranging memorandum of understanding. A major multilateral outcome was an agreement to provide 10 Caribbean countries with US\$ 3 billion in concessionary financing (Griffith, ibid.).

Respected observer of the oriental giant's geopolitical positioning in the Americas, Evan Ellis has explained that China's trade with the Caribbean ballooned from US\$1 billion in 2002 to US\$8 billion in 2019. China also runs a substantial trade surplus with the region, exporting US\$6.1 billion worth goods to it and importing only US\$1.9 billion from it in 2019 (Ellis, 2020). As well, "the number of Chinese investments and loan-financed projects in the Caribbean, relative to its modest population, testifies to the importance given to it by China and its companies. In all, the Chinese have reportedly dedicated \$7 billion in loans and investments in six Caribbean countries since 2005" (Ellis, 2020, 2). Plus, as I noted earlier, China has invested in Guyana's petro power pursuits. It also will be doing the same in Suriname. Figure 3 provides a snapshot of some of their investment in infrastructure, entertainment, and other areas.

Evan Ellis explains further that the Caribbean pivot space has become a center of attraction for technology projects for Chinese companies, with Huawei and ZTE providing stiff competition to British firms, such as Cable and Wireless, that once were dominant. For instance, Huawei provides fiber op-



Figure 3: Snapshot of China's Economic Engagement in the Caribbean

Source: Chris Pleasance, "How China has poured billions into the Caribbean by investing in ports, roads and a five-star resort in a soft power grab – as Beijing is blamed for Barbados's calls to drop the Queen as Head of State," Daily Mail, September 23, 2020, available at

https://www.dailymail.co.uk/news/article-8764715/How-China-poured-billions-Caribbean.html

tic cable connecting Trinidad and Tobago, Guyana, and Suriname, as well as a cable from Georgetown, Guyana to Lethem, a town at the border with Brazil. Moreover, it provided a cable connecting Cuba and Jamaica to its telecommunications network in Venezuela. Beyond this, Huawei and other Chinese companies are central to several "smart cities" initiatives to integrate surveillance cameras with facial recognition software and databases and electronic services in Guyana, Suriname, and elsewhere. It also is public record that Trinidad and Tobago has announced the planned use of Huawei to construct its 5G telecommunication mechanism (Ellis, 2020, 5).

China's Belt and Roads Initiative (BRI) is a vital part of its geopolitical-geoeconomic matrix. The "One Belt, One Road" policy initiative is China's main international cooperation and economic strategy. Also known as the "One Belt One Road" (OBOR), the "Silk Road Economic Belt and the 21st-century Maritime Silk Road" or just the "New Silk Road," it was launched in 2013 and encompasses an estimated US\$1 trillion in a variety of projects across several continents. The "Belt" aims to develop infrastructure, trade, and investment links to connect China globally, while the "Road" focuses on coastal infrastructure and maritime connectivity (Russell and Berger, 2019). As of January 2021, China

has signed BRI agreement with 140 countries, nine of which are in the Caribbean.¹⁷ As in other parts of the world, some BRI projects have experienced contractual, political, and labor challenges. Importantly, Georges Fauriol finds "no obvious ideological affinity, let alone direct alignments, linking China's ambitions to the Caribbean's extensive democratic community. Nor are Caribbean countries being courted for potentially divisive choices such as allowing a Chinese military presence in the region; in fact, for now there appears little desire by Beijing to needlessly alarm Washington in a region it considers its 'backyard'..." (Fauriol, 2021, 14). Pragmatism at work!

One component of BRI, that is not yet extended to insular Caribbean countries, is the Digital Silk Road (DSR), which aims to strengthen Internet infrastructure in other countries; deepen space cooperation and develop joint technology standards; and improve the efficiency of security and police systems of partner nations. DSR was formally introduced in 2015 and extended to South America—not the entire Latin America and the Caribbean region—in 2017. (See Jorge-Ricart, 2021; and Malena, 2021). One analyst explains: "BRI's digital dimensions are far-reaching, as they include fiber optic cables, 5G networks, satellites, data centers, smart city projects, and devices that connect to these systems, all of which in turn can support the information and communications technology business. Through DSR, Chinese enterprises have the chance to speed up their growth plans, taking advantage of state support as they expand globally" (Malena, 2021: 2).

On the diplomatic front, the Caribbean pivot space also has been the arena for China's increased competition with Taiwan, which it is winning, and its broader rivalry with the United States. China's latest victory was won in February 2021 when they were able to convince Guyana to reverse its decision to allow Taiwan to open a trade office in the capital, Georgetown, within hours of the announcement being made (Tiezzi, 2021). Incidentally, China has the distinction of having the world's largest diplomatic footprint, with 276 diplomatic posts world-wide compared with 273 maintained by the United States. Their aggressive yet tactful maneuvers have resulted in several Caribbean nations switching their allegiances over time, as attractive, albeit often relatively small, aid, trade, and other incentives were made by the competing parties. As of June 2021, the diplomatic line-up in the region was as follows:

- People's Republic of China (PRC): Antigua and Barbuda; Bahamas (switched from Taiwan in 1997); Barbados; Cuba; Dominica (switched in 2004); Dominican Republic (switched from Taiwan in 2018); Grenada (switched in 2005); Guyana; Jamaica (switched in 1972); Suriname; and Trinidad and Tobago.
- Taiwan: Belize; Haiti; St. Kitts and Nevis; St. Lucia (switched from PRC in 2007); and St. Vincent and the Grenadines.¹⁸

Working in tandem with the mechanisms outlined above are the Confucius Institutes (CIs), the

¹⁷ Antigua and Barbuda, Barbados, Cuba, Dominica, Grenada, Guyana, Jamaica, Suriname, and Trinidad and Tobago. See Green Belt and Road Initiative Center, available at https://green-bri.org/. Accessed March 28, 2021.

¹⁸ See "Dates of establishment of diplomatic relations with the People's Republic of China," available at https://en.wikipedia.org/wiki/Dates_of_establishment_of_diplomatic_relations_with_the_People%27s_Republic_of_China#1970s. Accessed on March 28, 2021.

first of which was opened in 2004 in Uzbekistan. They are ostensibly non-profit public institutions affiliated with China's Ministry of Education, aiming to promote Chinese language and culture, support local Chinese teaching internationally, and facilitate cultural exchanges. China maintains 548 Institutes world-wide, including in the United States where there are 88 across the country. There are eight in the Caribbean—in the BRI countries noted above, except that there is one in the Bahamas and none in Dominica and Grenada. My intimate familiarity with CI operations while serving as Vice Chancellor of the University of Guyana, especially attendance in China at several of the annual meetings of heads of institutions with CIs, convinces me that the CIs have morphed beyond language and culture pursuits to become an integral part of China's global strategic design; they are part of China's soft power pursuits. On the control of the CI in the CI

Although space constraints limit the scope of the China engagement portrait that can be provided here, it is important to mention a few other aspects of the presence and pursuit of the emerging superpower. In this respect, Evan Ellis explains that China has deployed "a disproportionate amount of its Latin American security engagement to the Caribbean. Each of the three missions of the Chinese military's hospital ship, Peace Arc, has included Caribbean destinations. The only participation by People's Liberation Army troops in a United Nations peacekeeping mission in Latin America was in Haiti, where China deployed military police from 2004-2012" (Ellis, 2020, 6). In addition, defense forces in the region recently have been beneficiaries of Chinese security assistance, examples being: one Y-12 transport aircraft and military construction equipment to the Guyana Defense Force; US\$1.1 million in non-lethal supplies to the Jamaica Defense Force in 2019; Motorcycles to the Trinidad and Tobago Police Service; Vehicles valued at US\$2.6 million in 2017 to the Guyana Police Force; and Professional military education courses for security personnel in China's National Defense University (Ellis, ibid.).

Russian Engagement

As noted above, both China and Russia are uneasy with American unipolar hegemony and are adopting proactive and reactive measures around the world to meet the moment.²¹ But, unlike China, Russia has not placed a high premium on the Caribbean pivot space as part of its strategic design to deal with its discomfort. In the insular Caribbean, its diplomatic presence is limited to Cuba and Jamaica, although in the Greater Caribbean it maintains diplomatic missions in Venezuela, Colombia, Panama, Nicaragua,

¹⁹ See "Confucius Institutes Around the World – 2021", as of February 22, available at https://www.digmandarin.com/confucius-institutes-around-the-world.html. Accessed on March 28, 2021.

²⁰ The term "soft power," originated by Joseph Nye in 1990, refers to the ability of a nation to get what it wants through attraction rather than coercion or payments. It derives from the attractiveness of a country's culture, political ideals, and domestic and foreign policies. See Nye, 2017. Some analysts have proposed the term "sharp power" as an alternative to "soft power," persuaded that it more reflects the pursuits of authoritarian rulership. For them, "sharp power" practitioners seek to "manage their target audiences by manipulating or poisoning the information that reaches them." They use strategies where top-down control, censorship, and coerced or purchased loyalty are projected outward, and those affected are not so much audiences as victims. (See Walker and Ludwig, 2017) My thanks to CPC and CSIS colleague George Fauriol for bringing this study to my attention.

²¹ China and Russia have been forging strategic partnerships to deal with the hegemony. Most recently they began joining forces to build a lunar space station, aiming to surpass the United States in that area (Yeung, 2021).

Costa Rico, Guyana, and Guatemala.²² Except with Cuba (and Venezuela), trade and investment are miniscule. The Russian-owned United Company Russian Aluminum (RUSAL) has been a major player in Guyana's bauxite industry, but they ran afoul of the government and the labor unions over industrial practices, with the result that operations there have been suspended since February 2020. Nevertheless, RUSAL maintains a major stake in the same industry in Jamaica.

Cuba apart, Venezuela is a key locus of engagement. American military sensibilities were offended, and alarm bells sounded in March 2019, when two Russian aircraft landed in Caracas carrying 100 Russian military personnel, the chief of staff of the ground forces, General Vasily Tonkoshkurov, and an estimated 35 tons of military equipment. Analysts at the CSIS offer that "Between 2004 and 2020, the Russian Embassy in Caracas grew five-fold. For Vladimir Putin, this partnership is part of a geostrategic effort to counter what he has described as a unipolar world order" (Rendon and Fernandez, 2020). They share the widely held view that the energy sector is the centerpiece of the Russian-Venezuelan relationship.

Beginning in the early 2000s, major Russian energy companies, including the partially government owned Rosneft, Lukoil, and Gazprom, established ties with Petróleos de Venezuela, S.A. (PD-VSA), the Venezuelan state oil company. They eventually formed a joint venture company to extract heavy crude in the Orinoco River basin. Most of these companies sold their shares to Rosneft, which, despite increasing financial risk, continued to sink billions of dollars into Venezuela. Estimates are that "Rosneft invested US\$9 billion into Venezuelan oil and gas projects between 2010 and 2015 and has yet to break even" (Rendon and Fernandez, 2020). The projects reputedly underperformed due to chronic equipment shortages, technical staff shortages, and corruption. Later, Rosneft served as the primary vehicle through which PDVSA could circumvent U.S. sanctions. The Russian government now controls multiple oil fields and holds a lien on 49.9 precent of PDVSA's U.S.-based subsidiary, Citgo.

Venezuela and Russia also have maintained a strong military partnership. Hugo Chávez had offered Russia use of the Venezuelan military base on La Orchila island in the Caribbean Sea. Over the years, Russia sold Venezuela billions of dollars' worth of tanks, fighter jets, and small arms. While many of the purchases involved advance payments in oil, as of 2019, Venezuela is said to owe Russia at least US\$10 billion for fighter jets it purchased between 2009 and 2014. Furthermore, the two countries reportedly founded a factory in Venezuela to produce Kalashnikov rifles, and a facility to train Venezuelan pilots to fly Russian-made helicopters (Rendon and Fernandez, 2020).

In testifying before the Senate Armed Services Committee in March 2021, SOUTHCOM Commander Admiral Craig Faller addressed the posture of Russia in Latin America and the Caribbean, noting that they are asserting themselves with a view to growing their influence and undermining United States leadership in the area over the long term. He cited expanding air and sea access to project military power, agreements with Venezuela and Nicaragua that allow Russian warships to visit on short notice,

²² See "List of Diplomatic Missions in Russia & Russian Diplomatic Missions abroad," available at https://www.embassyworldwide.com/country/russia/. Accessed on March 29, 2021.

three strategic bomber deployments to the region since 2008, and more than 40 port calls since 2010. Moreover, the Senate was told that Russia doubled the number of naval deployments, from five in 2008-2014 to 11 in 2015-2020, is providing security training, and has sold countries in the hemisphere US\$2.3 billion in weapons and military equipment in the last decade. In addition, they have been conducting disinformation campaigns, and more than doubled their social media followers—from 7 million to over 18 million—in Russian Spanish-language media outlets last year (Faller, 2021).

Iranian Engagement

At first blush, the Iran factor in the geopolitical dynamics of the Caribbean pivot space seems simply to reflect the ancient proverb "the enemy of my enemy is my friend." Still, closer analysis reveals the existence of two sets of dynamics: that the main actors involved are Iran, Venezuela, and Russia; and that the three states are acting rationally, although some policymakers and analysts think differently, in relation to their national interests. Further, the geopolitical matrix involves four factors: (1) the presence of uranium in Venezuela (and in Guyana) and Iran's interest in accessing that nuclear fissionable material; (2) Venezuela's interest in pursuing partnerships to develop nuclear power; (3) global-level competition and enmity involving the United States and Iran, on the one hand, and the United States and Russia, on the other; and (4) the vicissitudes of sanctions management by Iran and Venezuela, where sanctions have been imposed for differing sets of reasons and both bilaterally and multilaterally.²³

We cannot examine all the factors here. However, some attention must at least be paid to the uranium factor. As regards Venezuela's uranium endowment, reputable international agencies acknowledge the existence of that strategic material there (See Nuclear Energy Agency et al, 2020). Scholarly research conducted a decade ago found that the quantum of the reserves was unknown but that the Venezuelan government felt it was substantial, based on initial evaluations conducted with Iranian assistance. The researchers were inclined to accept the government's claim since the Roraima Basin in Guyana, which has extensive uranium reserves, extends into Venezuela, as Figure 4 shows. Beginning in 2005, overtures to Argentina and Brazil to obtain nuclear technology were futile. Consequently, in 2008, Venezuela signed a cooperation agreement with Russia for the development of a nuclear infrastructure. Iran offered technical assistance in the area of nuclear energy, and France made a similar offer. Venezuela and Russia also signed an agreement about exploration and development of uranium and thorium, development of nuclear infrastructure, safety of nuclear facilities and radioactive sources, and the industrial production of components and materials for use in nuclear reactors (CTC et al, 2010).

One expert suggested that Venezuela would have been in a legal safe zone if they had attempted the uranium mining on their own. However, acknowledgment by the administration of then-president

²³ In some ways, sanctions have served as "ties that bind" China, Cuba, Russia, Iran, and Venezuela. Most of the sanctions have been imposed unilaterally by the United States, but the United Nations has acted multilaterally against Iran. China, Russia, Iran, and Venezuela also have had sanctions imposed on them by the European Union. Noteworthy, too, is that United States sanctions against Venezuela have impacted insular Caribbean countries. For example, in February 2020, Trinidad and Tobago was forced to cancel an agreement with Venezuela for the joint development of a natural gas field straddling their maritime border. See Hutchinson-Jafar and Cohen, 2020.

The Roraima Basin is geologically similar in age, composition and basement composition to Canada's prolific Athabasca Basin - that contains the world's largest uranium resource.

Figure 4: Uranium in the Roraima Basin

Source: U308 Corp, available at Mining Uranium. Link: http://www.nafinance.com/images/Listed_Co/U3082.jpg

Chavez that Iran had been assisting them posed a major problem. In addition to Iran's role in the Bolivarian Republic's pursuits, Venezuela was in violation of Security Council Resolution 1929, which prohibits Iranian involvement in, "uranium mining, production, or use of nuclear materials and technology" (Lautenschlage, 2011). One appraisal also indicated that although Brazil and Argentina had some of Latin America's largest uranium deposits, nations throughout the area were investing in the discovery and development of indigenous uranium sources. Mexico, Bolivia, Chile, Colombia, Ecuador, Guatemala, Guyana, Paraguay, Peru, and Uruguay were the countries involved. It also was estimated that "a deposit in Guyana along the border with Venezuela may be one of the most promising locations in Latin America for the discovery of uranium reserves and future uranium production" (CTC et al, 2010: 11). As well, it was felt that the "availability of uranium in Latin America does not seem to provide a serious concern in the short term. In the medium and longer term, security concerns could depend primarily on the development of the uranium industry in Guyana and Venezuela" (CTC, 2010, 29-30).

The two sets of multi-state engagements—involving Iran, Russia, and the United States, on the one hand, and Venezuela, Iran, Russian, and the United States, on the other—witnessed myriad cooperation and conflict dynamics over time. For instance, in 2019, the Russian government-owned Rosneft company handled over a third of Venezuelan crude, selling it to India and China at deeply discounted rates. Plus, when Rosneft itself was sanctioned in February and March of 2020, it transferred its Ven-

ezuela operations to a separate Russian state-owned entity. Also, on August 14, 2020, the United States seized two tankers bound for Venezuela carrying 1.12 million barrels of gasoline. As regards the Iran-Venezuela alliance, the CSIS experts affirm that: "The crux of this partnership consists of evading U.S. sanctions, primarily through shipments of fuel and refining materials to Venezuela, where an acute gasoline shortage has paralyzed food distribution and internal transportation" (Rendon and Fernandez, 2020, 9). They add, "Iran shipped 1.53 million barrels of gasoline to Venezuela in June. A second shipment was confiscated by the United States Department of Justice on August 14. In early October, three more Iranian tankers docked at Venezuelan ports, and another vessel reportedly loaded 1.9 million barrels of Venezuelan crude for the National Iranian Oil Company" (Rendon and Fernandez, ibid.).

We noted earlier that Guyana also is endowed with uranium. The Canadian uranium exploration firm, U3O8 Corporation, pursued the prospects there, and in late 2008 it commissioned a major study of the Kurupung section of the Essequibo territory. The company was excited with the results, reporting that:

Guyana's Roraima basin may one day play a significant role in feeding the world's growing appetite for clean nuclear power. U3O8 Corp. describes the basin as a geological look-alike in terms of size, age, composition, and nature of basement rocks, to Canada's Athabasca basin, which contains the world's largest uranium resource. An initial resource estimate for the Toronto-based company's Aricheng North and Aricheng South basement-hosted structures, about 5 km from the Roraima basin, has yielded an indicated resource at a cutoff grade of 0.05% U $_3$ O $_8$ of 2.7 million tonnes averaging 0.1% U $_3$ O $_8$ for 5.8 million lbs. uranium oxide. The inferred resource contains 645,000 tonnes grading 0.09% U $_3$ O $_8$ for 1.3 million lbs. uranium oxide (*The Northern Miner*, 2009).

According to U308 Corp. Vice-President for Investor Relations Nancy Chan-Palmateer, the company had found seven million pounds of uranium in Kurupung between 2007 and 2010. She reported that the company had been able to raise \$30M (Canadian dollars or CDN) at the start of its operations and since then had invested an additional \$20M CDN, noting "The investment is worth it because seven million pounds is the tip of the iceberg...we are at the beginning of a potential 50 million find." U308 Corp. even formed a local company, Prometheus Resources (Guyana) Inc., to pursue the project (*Guyana Chronicle*, 2010).

Unsurprisingly, this endowment attracted the attention of Iranian officials. Thus began a rapid-fire cultivation of Guyana's President, Bharrat Jagdeo, who was invited to Tehran by President Mahmoud Ahmadinejad for a three-day state visit in January 2010, with shorter-duration visits to Kuwait and the United Arab Emirates (UAE). While in Tehran, Presidents Jagdeo and Ahmadinejad signed two agreements: one for a US\$1.5 million grant to Guyana to develop its health sector, and the other for the removal of visa restrictions for diplomatic travel between the two countries. In addition, President Ahmadinejad promised to send a team of specialists to Guyana to assess Guyana's mineral deposits

(See Chickrie, 2010). Incidentally, the promised visit by a team of experts never materialized, and relations between the two countries soon fizzled. It is reasonable to assume that the United States was not a disinterested bystander as developments unfolded.

Clearly, then, while geography has been a fixed element in the region's geopolitical matrix, as a pivot space the region has witnessed both competition and cooperation over time. It is essential to note that while the role and engagement of Britain, the EU, Canada, Brazil, and other powerful entities are not discussed here, those entities have geopolitical interests and pursuits in the region. Continuity and change continue to define the lived reality of the area. Some of this lived reality is age-defining. COVID-19 demonstrates this. Between the dusk of the year 2019 and the dawn of the following year, the world began to experience the makings of what has become age-defining change ushered in by the pandemic, which has health geopolitical implications, among others. We turn next to some of those implications.

Continuity, Change, And Health Geopolitics

It is reasonable to expect some continuity dynamics given the permanence of the region's "maritime highways," to use Maingot's term. The region will continue to produce strategic materials, which will continue to be of interest to great and not-so great powers. The Panama Canal and the various sea lanes in the Caribbean Sea will retain their high commercial and military value, and the United States is unlikely to retrench militarily from the region. Still, there already is evidence of change, in that some of the lives and livelihoods related to the Caribbean Sea have been altered; lives and livelihood related to cruise tourism, maritime trade, and fishing, among other things, for example. Appreciation of some of the change experienced requires a discussion of health geopolitics and of COVID-19 in the region.

Health Geopolitics

Whether the discourse on geopolitics as an aspect of international relations focuses on its theoretical or its empirical facets, the primacy of geography and of the state as actor are common denominators. This is not entirely so with health geopolitics. Geography does feature, but the actor matrix is broader, especially in relation to pandemics; non-state actors such as pharmaceutical companies, and multilateral organizations, such as the WHO and the World Bank; non-state actors exercise vital agency. As Suerie Moon stresses, "the strategic maneuverings of a wide cast of players highlights how science, industrial capacity, and non-state actors are shaping the global order" (Moon, 2020). Also, Moon is correct in purporting that "Europe, developing countries, the WHO, and the pharmaceutical industry are also key players in this complex, multilevel game. Normative authority, reputation and scientific knowledge have become strategic sources of power" (Moon, ibid.). Besides, there is credence to the contention that geopolitical determinants also shape health; "determinants related to governments, geographies, policies, and the interests of countries and the relationship between them" (Persaud et al, 2021).

The virus's mode of transmission and its inherent globalization feature make it necessary for

Caribbean states to seek international support. Indeed, COVID-19 evokes memories of former United Nations Secretary General Kofi Annan's proposition about globalization: that it facilitates "problems without passports." Thus, there is the need for action within states and in the international arena, both regionally and globally, and by both state and non-state actors. In this respect, Henry Kissinger was pellucid: "No country, not even the U.S., can in a purely national effort overcome the virus. Addressing the necessities of the moment must ultimately be coupled with a global collaborative vision and program. If we cannot do both in tandem, we will face the worst of each" (Kissinger, 2020).

More than a decade before the current pandemic, noted British geographer Alan Ingram asserted that geographers long have engaged with questions of health, disease, and war, but global health had not been the subject of any meaningful discourse in political geography or geopolitics. In pondering the increased resonance of global health issues, he explained the four factors involved. Two of the factors are the growing salience of health in the context of globalization and the potential for diseases to disrupt sovereignty as interconnections increase. As well, diseases have the potential to disrupt state stability and undermine international security. Finally, there has been increased interest in health, foreign policy, and security in health interventions as ways of achieving geopolitical stability (Ingram, 2005, 523-24). Hence, the interconnections involving geography, disease, and power were being made manifest.²⁴

What, then, are some of the manifestations of interconnections in the Caribbean pivot space?

COVID-19 Manifestations in the Caribbean

Coronaviruses are a large family of viruses that cause illnesses ranging from the common cold to more serious ones, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). A novel coronavirus is a new strain that had not been previously identified in humans. COVID-19 causes pneumonia-like symptoms, including coughs, fever, and breathing difficulties, and organ failure in serious cases.

The name COVID-19 (COrona VIrus Disease of 2019) was revealed in February 2020 by the WHO. The Director-General revealed: "We had to find a name that did not refer to a geographical location, an animal, an individual or group of people, and which is also pronounceable and related to the disease. Having a name matters to prevent the use of names that can be inaccurate or stigmatizing" (Boseley et al, 2020). Speaking in July 2020 as outgoing Chair of CARICOM, Barbados Prime Minister Mia Motley noted that: "COVID-19 has literally scarred 2020 in ways that will forever be remembered throughout the annals of history. We did not expect to shut down our borders to ourselves as a family, [and] to the rest of the world" (Motley, 2020). As will be seen below, the scarring continues, in some cases worsening since July 3, 2020, when the distinguished Caribbean leader spoke.

The first COVID-19 cases in the Caribbean region were reported on March 1, 2020 in St Martin in a couple who returned from France and in the Dominican Republic in a 61-year-old man visiting from Italy. In Latin America, the first case was reported in São Paolo, Brazil, on February 25, 2020, in

²⁴ In addition to Ingram, 2005, see Fidler, 2020; and Seyfi et al, 2020 for a discussion of health geopolitics at the global level.

a 61-year old man who had recently returned from the Lombardy region in Italy (Andrus et al, 2020, 593). Tables 1, 2, and 3 provide valuable portraits of the virus's global and regional "presence." Table 1 offers a global snapshot, showing that with 614,921 cases as of April 1, 2021, the Caribbean represents a "mere" 0.48 percent of the global cases that number 128.5 million. The region's 8,453 deaths as of the same date amounts to "just" 0.30 percent of the global figure of 2.8 million. The really is little consolation; when viewed in regional context, the number of infections and fatalities are not always minuscule, and they point to some troubling manifestations and consequences of the disease.

For instance, Table 2, which captures the most comprehensive portrait of cases, recoveries, and deaths available, points to some troubling as well as reassuring realities. For one thing, it is remarkable that places with comparatively large populations, such as Cuba and Haiti, have had comparatively "low" case counts, while places with comparatively small populations, such as Aruba and Curaçao, have had relatively "high" ones. Second, the Table suggests that Cuba, with a population of 11.3 million that experienced "only" 77,353 cases and 429 deaths, was able to make remarkable strides in dealing with the virus. This is attributed to several factors, including their free universal healthcare, having the world's highest ratio of doctors to population, and positive health indicators, such as high life expectancy and low infant mortality. It also helps that Cuba has a well-educated population and advanced medical and pharmaceutical ventures, including three laboratories with equipment and staff trained to conduct virus tests. Moreover, with a state-controlled society the government can mobilize resources relatively quickly. This plus Cuba's robust disaster-preparedness mechanism, with mandatory evacuations, also are assets (Morris and Kelman, 2021).

As well, it is evident from Table 2 that the Bahamas, Barbados, Cuba, Dominica, St. Lucia, Suriname, and Trinidad and Tobago all managed to secure recovery rates upwards of 90 percent. Finally, it is clear that Jamaica owns the dubious distinction of having the lowest recovery rate—44.6 percent—while Grenada has the highest—98 percent. Initially, Jamaica's response to the pandemic, including closure of its borders, won high praise nationally and internationally, including commendations from the WHO as well as the United States ambassador there. That was in March 2020, shortly after the outbreak on the island (Davidson, 2020). However, several factors combined to overwhelm them. These included an already overwhelmed public health system, lackluster response from citizens to the government's pandemic control measures, and transmission from tourists after the borders were reopened in July 2020 to facilitate tourist arrival.

²⁵ Although Table 1 is from CARPHA (Caribbean Public Health Agency), the organization reports on non-CARPHA member countries. CARPHA itself is a regional public health agency that was established in July 2011. It became operational in January 2013 and has the following members: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, BES Islands (Bonaire, St. Eustatius, Saba), British Virgin Islands, Cayman Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, Sint Maarten, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Turks and Caicos Islands. See The Caribbean Public Health Agency (CARPHA). Link: https://www.carpha.org/

Table 1: COVID-19: The Caribbean in Global Context as of April 1, 2021

	Cases	Recoveries	Deaths	
Globally	128,542,101 (1,649,827)	73,252,878 (1,039,541)	2,808,312 (29,677)	
Caribbean Region including CMS 35 countries/areas/territories	614,921 (7,703)	404,476 (6,916)	8,453 (67)	
CARPHA Member States 26 countries/areas/territories	138,082 (2,777)	105,969 (2,513)	2,236 (32)	
Rest of the World 187 countries/areas/territories and international conveyances	127,927,180 (1,642,124)	72,848,402 (1,032,625)	2,799,859 (29,610)	

^{*} Figures reported by WHO supplemented with additional data from local country reports for the Caribbean.

Source: "CARPHA Situation Report No 145, April 1, 2021, Coronavirus Disease (COVID-19) Pandemic," available at link: https://carpha.org/Portals

Table 2: COVID-19 Cases, Recoveries, and Deaths in the Caribbean as of April 2, 2021

Country/Territory With Population (2020)	Cases	Recoveries	Percentage Recovered	Deaths
Anguilla* 15,003	25	NA NA	NA	0
Antigua and Barbuda 97,929	1,152	858	74.4	28
Aruba* 106,766	9,443	NA	NA	86
Bahamas 393,244	9,171	8,676	94.6	188
Barbados 287,375	3,659	3,506	95.8	42
Belize 403,134	12,456	12,090	97	317
Bermuda* 63,918	1,217	NA	NA	12
British Virgin Islands* 30,231	154	NA	NA	1
Caman Islands 65,722	500	NA	NA	2
Cuba 11,326,616	77,353	72,351	93.5	429
Curaçao* 164,093	8,404	NA	NA	35
Dominica 71,986	164	157	95.7	0
Dominican Republic 10,847,910	253,781	213,339	84	3,334
French Guiana* 298,682	17,132	NA	NA	93
Grenada 112,523	155	152	98	1
Guadeloupe* 400,124	11,512	NA	NA	5
Guyana 786,552	10,446	9,211	88.1	235

Haiti 11,402,528	12,788	11,126	87	252
Jamaica 2,961,167	39,967	17,861	44.6	607
Martinique* 375,265	7,549	NA	NA	50
Montserrat* 4,992	20	NA	NA	1
Puerto Rico* 2,860,853	107,470	NA	NA	2,118
Saba* 1,933	6	NA	NA	0
St. Barthélemy 9,877	857	NA	NA	1
St. Kitts and Nevis 53,199	44	44	100	0
St. Lucia 183,627	4,265	4,142	97.1	61
St. Maarten (Dutch)* 42,876	2147	NA	NA	27
St. Martin (French)* 38,666	1,657	NA	NA	12
St. Vincent & Grenadines 110,940	1,754	1,614	92	10
Suriname 586,632	9,122	8,598	94.2	177
Trinidad and Tobago 1,399,488	8,116	7,624	93.9	145
Turks and Caicos* 38,717	2.331	NA	NA	17
US Virgin Islands* 104,425	2,907	NA	NA	26

Sources: Johns Hopkins University Coronavirus Resource Center, available at https://coronavirus.jhu.edu/; WHO Coronavirus (COVID-19) Dashboard, available at https://covid19.who.int/table; Caribbean Population, available at https://www.worldometers.info/world-population/caribbean-population/; South American countries by population, available at https://statisticstimes.com/demographics/south-american-countries-by-population.php; and Central American Countries 2021, available at https://worldpopulationreview.com/country-rankings/central-american-countries.

Notes

*=COVID-19 data from WHO

NA=Not Available

Table 3: COVID-19 Cases & Deaths in the Caribbean: January-March 2021 Comparisons

Countries/Territories	Cases Jan. 25	Cases March 25	Percent Change	Deaths Jan 25	Deaths March 25	Percent Change
Dominican Republic	203,037	250,579	23.4	2,531	3,289	29.9
Puerto Rico	150,318	197,041	31	1,703	2,096	23
Cuba	21,261	68,986	224.4	194	405	108.7
Jamaica	15,012	36,670	144.2	338	545	61.2
French Guiana	15,664	16,922	8	76	89	17.1
Haiti	11,181	12,732	13.8	243	251	3.2
Guadeloupe	8,980	11,298	25.8	154	165	7.1
Guyana	7,298	9,820	34.5	172	220	27.9

Suriname	8,057	9,077	12.6	149	177	18.7
Bahamas	8,101	8,935	10.2	175	188	7.4
Trinidad & Tobago	7,443	7,903	6.1	134	141	5.2
Martinique	6,327	7,710	21.8	44	49	11.3
Saint Lucia	810	4,161	413.7	11	58	427.2
Barbados	1,387	3,582	158.2	9	40	344.4
Saint Maarten	1,753	2,114	20.5	27	27	0
St. Vincent Grenadines	738	1,715	132.3	2	10	400
Saint Martin	1,146	1,619	41.2	12	12	0
Antigua & Barbuda	198	1,100	455.5	6	28	366.6
Saint Barthélemy	300	775	158.3	1	1	0
Grenada	147	154	4.7	1	1	0
Dominica	113	160	41.5	0	0	0
Saint Kitts & Nevis	35	44	25.7	0	0	0
Montserrat	13	20	53.8	1	1	0

Source: Modified from CAREST, "Covid-19 in the Caribbean: Situation update, as of 25th March 2021," available at https://carest-network.org/?p=4197&lang=en

It should be noted that the number of recoveries and deaths do not total the number of cases because some infected individuals are still hospitalized, and others are recovering either at home or elsewhere. It also is remarkable that Haiti, with a population of 11.4 million and 12,788 cases, "only" lost 252 people to the disease. In addition, people in the British Virgin Islands, the Cayman Islands, Grenada, Montserrat, St. Barts, Anguilla, Dominica, Saba, and St. Kitts and Nevis must be offering special prayers having been unscathed so far, while those in the Dominican Republic and Puerto Rico, with cases exceeding 100,000 and deaths north of 2,000, must be desperate to see the pandemic end without inflicting further harm on their societies.

The January-March 2021 point-in-time comparison offered in Table 3 also is a mixed portrait with some troubling indications. For instance, the infection spread rapidly in some places, with Antigua and Barbuda and St. Lucia suffering over 400 percent more cases in March than in January, Cuba experiencing 224.4 percent more infections over the two months, and Jamaica, Barbados, St. Vincent and the Grenadines, and St. Barts having to contend with more than 130 percent increase. CAREST (CAribbean network of REsearchers on Sickle cell disease and Thalassemia) comparative March-May 2021 data also provide a mixed portrait, but also troubling situations in most places. For instance, in relation to infections, the number grew from 250,579 to 280,994 in the Dominican Republic; from 197,041 to 260, 566 in Puerto Rico; from 68,986 to 129,346 in Cuba; from 36,670 to 47,672 in Jamaica; from 7,903 to 18,227 in Trinidad and Tobago; from 9,820 to 19,743 in Guyana, from 9,077 to 12,571 in Su-

²⁶ It is reasonable to question the accuracy of the recovery and death figures given the poor condition of the public health system and the jaded response of the population to the government's pandemic control measures. Their situation is likely to worsen with no vaccinations as of April 2021. Haiti was scheduled to receive 756,000 doses of the AstraZeneca vaccine through the UN-backed COVAX (COVID-19 Vaccines Global Access) effort. However, officials in Port-au-Prince missed several documentation deadlines. Therefore, the vaccines will not be delivered in May 2021 as initially planned. (See *The Guardian*, 2021).

riname; from 8,935 to 11,396 in the Bahamas; and from 4,161 to 4,995 in St. Lucia. As regards deaths, the number grew from 3,289 to 3,600 in the Dominican Republic; from 2,096 to 2,438 in Puerto Rico; from 405 to 840 in Cuba; from 545 to 902 in Jamaica; from 141 to 341 in Trinidad and Tobago; from 220 to 349 in Guyana; from 177 to 240 in Suriname; from 188 to 222 in the Bahamas; and from 58 to 77 in St. Lucia (CAREST, 2021b).

Caribbean leaders have had to perform delicate balancing acts: mitigation against economic collapse because of the high tourism dependency on the one hand, and public health over-precaution, on the other. As such, the small, subordinate states in the Caribbean pivot space have been on survival roller coasters trying desperately to cope with the pandemic. Jamaica is a case in point. It recorded its first virus case on March 10, 2020. That same month they closed their borders to control the number of infections and deaths. The drastic move successfully limited the spread of the virus across the island. However, it was crippling the economy. So, the borders were reopened to tourists on June 15, 2020. After the arrival of more than 35,000 tourists and confirmation of more than 100 new cases of the virus, the Minister of Tourism announced plans for a "resilience corridor" to run from west to east, along Jamaica's northern coast, where all travelers would remain. Later, a corridor on the south coast was established. By the end of July 2020, the government was contending with a backlog of 10,000 coronavirus tests. As part of control efforts, they also released an app named JamCOVID to track the movements of visitors, that also can be used for contact tracing (Meade, 2020). The app itself later turned out to have serious security breaches.

The Jamaican government had contracted with the Amber Group, a local Information Technology company, to develop a border entry system to facilitate reentry of residents and arrival of tourists. The system, named JamCOVID, was rolled out as an app and a website to allow visitors to get screened before they arrive. In order to enter Jamaica, travelers were required to upload a negative COVID-19 test result to JamCOVID before boarding flights from high-risk countries, including the United States. The company's CEO bragged that his firm had developed JamCOVID in three days and that they had practically donated the system to the government, with the understanding that the government would purchase additional features and customizations. Following the successful rollout, the Amber Group secured contracts for similar products in the British Virgin Islands, St Lucia, the Turks Caicos Islands, and Grenada. However, in February 2021 it was discovered that JamCOVID had exposed immigration documents, passport numbers, and COVID-19 lab test results for almost half-a-million travelers who visited the island over the past year. This occurred because technicians had inadvertently set the access to the JamCOVID cloud server to public, allowing anyone to access its data from their web browser. The system was, therefore, taken offline (Graham, 2020; Whittaker, 2021).

Table 2 does have a positive side, though. Puerto Rico, French Guiana, Martinique, St. Maarten, and Grenada are among places that succeeded in controlling the increase in cases between January and March. The table also paints a troubling picture in relation to deaths, showing that fatalities in St. Lucia and St. Vincent and the Grenadines grew upward of 400 percent, those in Barbados and Antigua and



Photo title: The Pan American Health Organization (PAHO) has led regional efforts to equip Caribbean nations with badly needed medical supplies to combat Covid-19. In this photo, PAHO representatives meet with medical officials from the Jamaican Ministry of Health and Wellness (MOHW) while delivering medical equipment to the Jamaican government. **Photo credit:** PAHO

Barbuda increased by more than 300 percent, and those in Cuba grew by just over 100 percent. Notable, too, is that Haiti, Guadeloupe, the Bahamas, and Trinidad and Tobago suffered death increases of less than 10 percent, while St. Martin, Grenada, and St Kitts and Nevis are among seven countries that recorded no deaths over the two months.

The number of infections and recoveries, and especially the death counts, are dramatic manifestations of the pandemic in the region. But they only reveal the tip of the iceberg. Other factors and realities point to its dramatic and devastating scope and impact. Although it is beyond our purview to examine scope and impact factors comprehensively, it is important to underscore a few of them in addition to the quantitative indicators provided above.

COVID-19 Scope and Impact

The evidence about the wide scope and multidimensional impact of COVID-19 is incontrovertible. Political leaders, scholars, policy wonks, journalists, and average citizens are all of one voice on this. One recent United Nations study highlights the two sets of factors manifesting themselves as consequences of COVID-19: the region's high indebtedness, economic fragility, social vulnerability and exposure to climatic shocks, and the cascading effects of the health crisis elsewhere in the world on areas such as global trade, tourism, and transportation. Consequently, the social and economic impacts of the pandemic are exacerbating the existing vulnerabilities of Caribbean countries, as well as the underlying risk factors, such as poverty, inequality, and informality (ECLAC-UNDRR, 2021, 15). Figure 5 highlights some of the factors and complexities involved.



Figure 5: COVID-19 in a systemic risk scenario in the Caribbean

- Continuous disruption of basic services

ECLAC-UNDRR (Economic Commission for Latin America and the Caribbean- United Nations Office for Disaster Risk Reduction), "The coronavirus disease (COVID-19) pandemic: an opportunity for a systemic approach to disaster risk for the Caribbean," March, 2021, available at https://www.cepal.org/sites/default/files/publication/files/46732/S2000944_en.pdf

 Strong dependence on remittance flows

Writing during the early stages of the emerging multiple crises, respected Trinidadian economist Marla Dukharan observed presciently that, "the socio-economic effects of COVID-19's sudden-stop represent the most significant shock we have experienced in about 100 years, with global implications that we can't yet imagine. In the last two weeks, global financial markets have gyrated unbelievably, international travel and shipping have all but collapsed, supply chains have buckled, and the global safe-haven - the US Dollar - has strengthened to the highest level in three years" (Dukharan, 2020, 2). Furthermore, she noted, correctly, that "the current crisis created multiple challenges simultaneously: a health crisis, sudden-stop of economic activity, volatile financial markets, weak investor confidence, capital flight, exchange rate volatility, tighter financial conditions, price shocks, lower remittance inflows, and reduced availability of traded goods" (Dukharan, ibid.). Also, there is no disputing her contention later that the pandemic has made tradeoffs more expensive, amplified the benefits of being prudent and prepared, highlighted the risks inherent in business models and economic structures, and spotlighted the dangers of "obscene inequality." Accordingly, she argues, the pandemic has "created a natural experiment, laying bare the evidence that in general, our overdependence on the traditional tourism product in the Caribbean is a major source of socio-economic vulnerability. As such, the pandemic has also amplified the imperative of economic diversification away from traditional tourism" (Dukharan, 2021).

In relation to tourism, the lives and livelihoods of a considerable segment of the Caribbean re-

volve around the tourism product, even for countries with mineral endowments, such as Cuba and the Dominican Republic. According to Nina Burleigh of the *The New York Times*, "last year [2019], more than 31 million people visited the Caribbean, more than half of them from the United States. I was one of them. Together, we contributed \$59 billion to the region's 2019 gross domestic product — accounting for a whopping 50 to 90 percent of the G.D.P. for most of the countries, according to the International Monetary Fund" (Burleigh, 2020). Moreover, one report by CSIS cites a December 2020 study by the Economic Commission for Latin America and the Caribbean (ECLAC) that found the COVID-19 impact on tourism to have resulted in a decline in total employment by seven percent in 2020. This contributed to GDP losses across the region, with St. Lucia, Antigua and Barbuda, and Barbados suffering the steepest losses: 26 percent, 18 percent, and 16 percent, respectively (Runde et al, 2021).

In opening Jamaica's 2021/2022 parliamentary budget debate on March 9, 2021, Finance Minister Nigel Clarke reminded fellow legislators that tourism and remittances are the country's two largest sources of foreign exchange. He reported: "COVID-19 has decimated Jamaica's foreign exchange inflows from tourism. And again, there is no parallel in Jamaica's history for what has occurred. During the 9-11 terrorist attacks tourism earnings declined by 14 percent. In the global financial crisis, tourism earnings declined by 5 percent" (Clarke, 2021). The Minister then provided a sobering factoid: "Madam Speaker, as a result of the COVID-19 pandemic, Jamaica's foreign exchange inflows from tourism are projected to fall by 74 percent or US\$2.5 billion in 2020/21. In 2019/20 we earned US\$3.4 billion from tourism but in 2020/21 we are expected to earn only US\$874 million or approximately one quarter of 2019/20 earnings" (Clarke, ibid.). (author's emphasis) Thankfully, projections for 2021 from Jamaica, the Dominican Republic, Puerto Rico, and the U.S. Virgin Islands offer hope about the beginnings of a turnaround for the industry (Jessop, 2021).

Needless to say, remittances are vital not just to Jamaica's economic buoyancy; it is so across the region. We learn from Marla Dukharan that the region receives some US\$15.8 billion in remittances annually, 84% of which goes to the Dominican Republic, Haiti, and Jamaica. Remittances serve a variety of functions: as a buffer to economic shocks, for private consumption, provide FDI for micro and small enterprises, and reduce income inequality and volatility. Importantly, "data from the World Bank show that the majority of remittances come from the US, UK and Canada. As with any global economic crisis, remittances are likely to suffer, thereby amplifying the economic pressures on the most vulnerable in the Caribbean" (Dukharan, 2020, 3). Overall, then, the region is almost at the edge of a social-economic precipice. Economist Scott MacDonald was spot-on in July 2020 when he wrote, "The Caribbean faces a radically different world since January 2020" (MacDonald, 2020).

As we have observed earlier, the pandemic's impact is multidimensional, going beyond the economic and social spheres. The excellent study by Jessica Byron and colleagues of the Institute of International Relations at the University of the West Indies shows this clearly (Byron et al, 2021). Although Byron and her colleagues focus on the Commonwealth Caribbean, the relevance and applicability of most of their analysis extend to the entire region. They are correct in contending that "the pandemic elevated the portfolios of health, education, and social protection, challenging the CC [Commonwealth

Caribbean] state to focus more on human security, and on transparent communication that engenders citizens' trust. Many states adjusted their practices in the areas of communication, law enforcement and to the extent possible, social protection" (Byron et al, 2021, 109). The pandemic also accentuates the need for improved food and nutrition security and public health systems, as one recent food security survey makes evident.²⁷

COVID-19 dramatizes the importance of health geopolitics. It also reminds us of the region's multiple vulnerabilities, some of which derive from the region's physical geography. Notable here are hurricanes and volcanoes. As distinguished scholar Andy Knight has reminded us, the region has had a long history of natural disasters, including from hurricanes, floods, earthquakes, and volcanic eruptions. Hurricanes lead the way in death and destruction. Knight cites a 2017 IMF study that indicates that over six-and-half decades, hurricanes have cost Caribbean nations about 5.7% of their annual gross domestic product. The vicissitudes of climate change, especially the continual warming of temperatures, most likely will boost the intensity of hurricanes, thereby increasing the amount of human destruction and physical damage to countries in the region (Knight, 2019, 411).²⁸ Hurricanes and vulnerability to them clearly are permanent features of the dynamics of the region's geography. It is hoped that Mother Earth will offer the region a reprieve from severe hurricanes this year and the next few seasons, to enable it to recover from the pandemic economically, socially, and psychologically without extra stresses related to hurricanes.²⁹

The hope for hurricane reprieve assumes greater significance in light of contemporary developments in the Eastern Caribbean. The La Soufrière volcano in St. Vincent and the Grenadines, which had begun to show signs of renewed activity in late December 2020, erupted three times on April 9, 2021, and had explosions and lava flows several times afterwards. The last eruption was in 1979. Then, debris was hurled thousands of feet into the air, with ash reaching Barbados, 110 miles east of St. Vincent. Thankfully, there were no fatalities, due to the swift evacuation of residents close to the volcano to other parts of the island. The same was done this time. St. Lucia, Barbados, and Grenada also offered to host individuals and families, although the offer was not taken up (Cooke and Lopez, 2021). Florida International University geologist Grenville Draper is quoted in *The New York Times* as voicing the concern that "the greatest peril from the St. Vincent eruption is not from lava, which is generally slow moving in Caribbean volcanoes, but from pyroclastic flows — fast-moving avalanches of searing hot gas and volcanic debris" (Cooke and Lopez, 2021). La Soufrière has exploded five times previously: 1718, 1812, 1814, 1902, and 1979. The 1902 eruption was the deadliest, claiming 1,600 lives of mostly Carib Indigenous people. In 1979 over 20,000 people were evacuated (Luhnow, 2021).

²⁷ For a discussion of the recent food security survey, see Chappell, 2021. Among other things regarding public health, there is increasing concern about neglect of other health issues by already severely challenged public health systems in most places. For the last two years, dengue fever is one of the communicable diseases posing serious concern to the region. See Favaro et al, 2020; and *The Jamaica Gleaner*, 2020b.

²⁸ For a good discussion of hurricanes and other environmental challenges, see Collymore and Riley, 2004.

²⁹ Sadly, this hope stands to be dashed if the 2021 hurricane forecast—that the season will be above average, with 17 named storms, eight being hurricanes & four becoming major (Cat 3 of higher) storms—holds. See Harris, 2021.



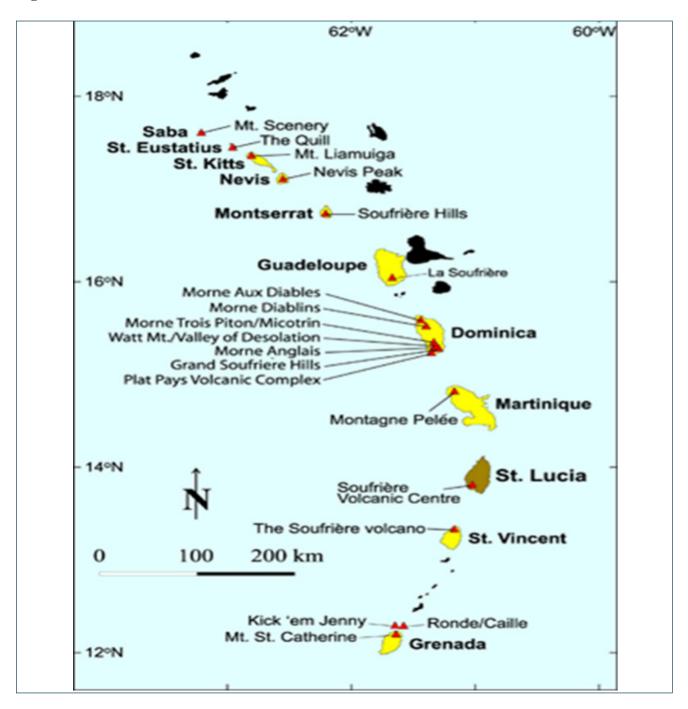
Photo title: La Soufrière volcano on Saint Vincent and the Grenadines erupts in April 2021.

Photo credit: United Nations

The La Soufrière eruption is as a reminder that the Caribbean Sea is dotted with volcanoes, as Figures 6 shows. The Eastern Caribbean alone has 19 active (likely to erupt again) volcanoes, 17 of them on 11 of the islands, with the remaining two being underwater near Grenada. One of the two, called Kick 'Em Jenny, has been active in recent years (Associated Press, 2020). As well, the Dominican Republic has three volcanoes and Haiti two. Islands such as Anguilla, Antigua, Barbuda, Barbados, British Virgin Islands, most of the Grenadines and Trinidad and Tobago, which are not volcanic, are close to volcanic islands. Therefore, they are subject to volcanic hazards, such as severe ashfall and volcanically-generated tsunamis. Keep in mind that the region is considered one of the most disaster-prone regions in the world. According to the Long-Term Climate Risk Index, three out of the ten countries most affected by extreme weather events in the last two decades are in the Caribbean (ECLAC-UNDRR, 2021, 15). Reflective of global environmental connectivity, ash from La Soufrière floated not just to Barbados about 120 miles off, but fully across the Atlantic Ocean, reaching Spain 3,930 miles away within a week, with sulphur dioxide emissions reaching India on April 16 (Lillo, 2021; Sangomla, 2021).

As might be expected, geopolitical dynamics inhere not just in the scope and impact of the pandemic. They also are manifested in responses to it. We turn our attention to this aspect next.

Figure 6: Volcanoes in the Eastern Caribbean



Source: University of the West Indies Seismic Research Center, available at http://uwiseismic.com/General.aspx?id=46

Geopolitics and Pandemic Diplomacy

It should surprise no one that health geopolitics related to COVID-19 manifests—and will continue to manifest—both competition and cooperation moves, in relation to medical supplies, testing, research, vaccines, technical personnel, and financial stabilization funds, among other things. Response support, perhaps, allows the greatest manifestation of geopolitical competition and leveraging of pandemic support for non-pandemic geopolitical benefits. It is reasonable to question whether pandemic assistance

provided by global-level actors, such as the United States, Russia, China, India, the EU, and Britain, is essentially humanitarian aid. Or is it reflective of soft power—geopolitical—considerations? Reliance on the public narratives of donor states might lead to the conclusion that humanitarianism is the sole or primary consideration. However, my analysis suggests that the two are not mutually exclusive; both generally are involved, even by small but influential actors, such as Cuba.



Photo title: In July 2021, the U.S. government delivered 500,000 doses of Covid-19 vaccines to Haiti. **Photo credit:** UNICEF and Voice of America (VOA)

Besides, the Caribbean pivot space is an arena for great power geopolitical positioning, aiming to solidify friendships or win new ones, win the hearts and minds of people there, and garner diplomatic support as donor states pursue national interests unrelated to the region. For instance, less than six months into the pandemic, Russia had given pandemic aid to 46 countries around the world, including the United States (see Zykov, 2020; Troianovski, 2020). Within the same timeframe, China had offered Latin American and Caribbean countries US\$1 billion in loans to enable them to battle the pandemic, and since then China has extended bilateral assistance to several countries in the region, sometimes diplomatically acknowledging the competition with its global rivals (see Suarez, 2020; Song, 2020; Dube and Magalhaes, 2021; Maynes, 2020; and News Americas, 2021).

Health geopolitics has been at work with China, Russia, and India selectively donating their CO-VID-19 vaccines in order to bolster their influence. One *Sky News* analysis found 47 countries plus the African Union, which represents 55 countries, have made or have been offered vaccine deals with India,

China, and Russia. In 21 of the countries, the sole vaccine supplies up until February 2021 were from Russia, China, and India (*Sky News*, 2021. Also, see Charles, 2021a, 2021b; *Guyana Chronicle*, 2021a; and Choudhury, 2021). The United States also has been accused of selectivity with COVID-19 vaccines (see Weiland and Robbins, 2021). China also seems to have sacrificed vaccine quality for production speed and volume, the director the China Centers for Disease Control even acknowledging in April 2021 that their vaccines "don't have very high protection rates" (Associated Press, 2021).

India has made bold pandemic diplomacy moves.³⁰ It established a "Vaccine Friendship" program intending to distribute vaccines free of cost and on a discount basis to 49 countries in Africa, Latin America and the Caribbean, and Asia. Up to February 2021, it had distributed 22.9 million doses under the program. The Asian middle power donated 500,000 doses of AstraZeneca vaccine to the Caribbean Community, calling it "a tangible expression of goodwill in this challenging time." Barbados received 100,000 of the vaccines, 1,500 of which it gave to Guyana, 2,000 to Trinidad and Tobago, 1,000 to St Lucia, 500 to Grenada, and 1,000 to Belize. As well, India has given 70,000 vaccines to Dominica, which, in turn, extend its generosity to other Eastern Caribbean countries by giving 2,000 to St Lucia, 5,000 to Antigua and Barbuda, 5,000 to St Vincent and the Grenadines, 2,000 to St Kitts and Nevis, and 500 to Grenada. The Dominican Republic also benefited from India's pandemic diplomacy with 30,000 doses, and Guyana received 80,000 doses, which were delivered in March³¹ (Wyss, 2021; Fraser, 2021; and *Stabroek News*, 2021).

The United States has provided the region a wide range of pandemic support, both bilaterally and multilaterally, through the World Health Organization (WHO), Pan American Health Organization (PAHO), and other agencies. For instance, the United States is the single largest contributor to CO-VAX.³² Yet, there was a sense that the United States was lagging behind China and India in its vaccine donations to the region, losing its hegemonic edge in this aspect of health geopolitical competition. This prompted calls—both from within the Caribbean and the United States—for the United States to exercise bold leadership in this area, especially in light of the loan deal struck with Mexico and Canada

³⁰ They have been forced to halt their pandemic diplomacy pursuits because of a crisis at home. On April 21, they eclipsed the previous world single-day recorded 300,669 cases, set by the United States on January 8, registering 312,731 new infections in a 24-hour period. They also are facing drugs and oxygen shortages. See Bengali, 2021.

³¹ Guyana also received a delivery of 25,000 Sputnik vaccines in early April, the first batch of 200,000 doses arranged through the United Arab Emirates, at a cost of US\$4 million (see *Guyana Chronicle*, 2021b). The Atlantic Council provides useful interactive maps that track the percentage of the populations of Latin American and Caribbean countries covered by vaccine agreements, and the number of doses acquired by countries, with indication of the suppliers involved, among other things. The maps are updated on a biweekly basis. Hopefully, the data for more Caribbean countries will be provided soon. See COVID-19 vaccine tracker: Latin America and the Caribbean - Atlantic Council, link: https://www.atlanticcouncil.org/in-depth-research-reports/covid-19-vaccine-tracker-latin-america-and-the-caribbean/ Accessed on April 19, 2021.

³² For details of U.S. assistance, see ShareAmerica, "U.S. helps Caribbean countries fight COVID-19," link: https://share.america.gov/u-s-helps-caribbean-countries-fight-covid-19/; SOUTHCOM COVID-19 Humanitarian Assistance Projects, link: https://www.southcom.mil/Media/Special-Coverage/SOUTHCOM-COVID-19-Humanitarian-Assistance-Projects/; Congressional Research Service, "Latin America and the Caribbean: Impact of COVID-19," link: https://fas.org/sgp/crs/row/IF11581.pdf.

For the list of state and non-state donors to COVAX, see link: https://www.gavi.org/sites/default/files/covid/covax/COVAX-AMC-Donors-Table.pdf

in March 2021, to send them 4 million doses of AstraZeneca vaccines (see Mason, 2021; *St. Kitts Nevis Observer*, 2021; Farnsworth, 2021; Mowla, 2021). Nevertheless, the virtual meeting on April 21, 2021, of United States Secretary of State Antony Blinken and the Foreign Ministers of CARICOM set the stage for enhanced vaccine and other pandemic assistance, among other things (News Source, 2021; Courtenay, 2021). Unsurprisingly, then, Caribbean nations were included in the beneficiaries list on June 3, 2021, when the United States pledged six million COVID-19 vaccines for Latin America and the Caribbean through the COVAX Facility (Diamond, Rauhala, and McGinley, 2021; Brewster and Mowla, 2021). Even so, up to the end of June 2021 none of the vaccines had actually reached the region, contributing to a combination of anxiety and disappointment.

The public health, economic, and other capability limitations of Caribbean states necessitate reliance on external assistance—from state actors; international governmental institutions, such as the WHO, the World Bank, PAHO, and the Inter-American Development Bank (IDB); and international non-governmental organizations, such as the International Red Cross, Direct Relief, and Doctors Without Borders. As might be expected, Britain, France, Canada, and the European Union have been donors to the region, both bilaterally and through multilateral agencies such as WHO and PAHO, with humanitarianism and geopolitics featuring (The Star, 2021; European Commission, 2020a, 2020b; The Jamaican Gleaner, 2020a; IDB, 2020; World Bank, 2020; PAHO, 2020). Up to early April 2021, Caribbean countries also had received 350,000 vaccines through the COVAX facility, the distribution being as follows: Jamaica, 14,400 doses; Barbados, 33,600 doses; Trinidad and Tobago, 33,600 doses; the Bahamas, 33,600 doses; Guyana, 24,000 doses; the Dominican Republic, 91,200 doses; Dominica, 28,800 doses; Belize, 33,600 doses; Suriname, 24,000; St. Vincent/Grenadines, 24,000 doses; and Bermuda, 9,600 doses (Palma, 2021). In early May 2021, Jamaica's minister of health and wellness Christopher Tufton observed that COVAX has only been able to deliver one-fifth of what was promised and expected to some 100 countries, and he lamented that "Jamaica's allotment from COVAX so far is approximately 69,000 doses, well below the two hundred and fifty doses promised by now. COVAX has been unable to fulfil its commitments as a direct result of wealthier countries' actions, including export bans on vaccines and raw materials, which have effectively undermined the facility" (Tufton, 2021).

Caribbean states are not only recipients of pandemic aid and objects of geopolitical positioning, though. A few of them also have been donors within the Caribbean family. Furthermore, one of them—Cuba—has practiced pandemic diplomacy at the global level. Earlier, we noted Cuba's comparative advantage in relation to education, medical and pharmaceutical research and output, and state structure, among other areas. These factors have enabled Cuba not only to weather the pandemic storm better than many other nations in the region, but also to punch above its weight on the global pandemic stage. It is the only Caribbean nation able to produce vaccines, one of only two in the entire Latin America and the Caribbean to do so, the other being Brazil. They are developing five vaccines: Soberana 1, Soberana 2, and Soberana Plus, produced by the Finlay Vaccine Institute, and Mambisa and Abdala, produced by the Center for Genetic Engineering and Biotechnology (see Marsh and Zodzi, 2020; Hosek, 2021; Ballard, 2020; Grant, 2021; Faiola and Herrero, 2021; Saney, 2021; Yaffe, 2021).



Photo title: Hospitals in Caribbean island nations have struggled to manage the number of Covid-19 patients that have been admitted for treatment. In this photo, Covid-19 patients are treated in the Intensive Care Unit (ICU) of Couva Hospital in Trinidad and Tobago.

Photo credit: Wired868

Additionally, in October 2020, Cuba's Henry Reeve International Medical Brigade against Disasters and Serious Epidemics was nominated for the 2021 Nobel Peace Prize, first by British Parliamentarian Grahame Morris. Since the pandemic was declared, Cuba has deployed almost 4,000 medical personnel in at least 39 countries in the Americas, Africa, Asia, Europe, and the Middle East, despite sanctions measures by the United States complicating life for both Cuba and some recipient countries.³³ Jamaica, Barbados, Belize, Antigua and Barbuda, St. Vincent and the Grenadines, Haiti, St. Lucia, Suriname, Grenada, Dominica, and St. Kitts and Nevis are the beneficiary countries in the Caribbean. The others in the Americas are Mexico, Venezuela, and Nicaragua (TeleSUR, 2020; Whitney, 2020; Saney, 2021).

Moreover, Cuba is enabling Venezuela to enter the world pandemic diplomacy stage by permitting them to produce its vaccines. On April 8, 2021, Venezuelan Vice President Delcy Rodriguez confirmed that the vaccine named Abadala will be produced by the state agency called the Socialist Enterprise for the Production of Biological Medicines (ESPROMED Bio) for use within and beyond Venezuela. She explained, "Cuba will hand over the patent to Venezuela. We will produce the vaccine for our people and the countries of the Bolivarian Alliance for the Peoples of Our America (ALBA)"³⁴ (TeleSUR,

³³ For one discussion of the negative impact of sanctions, see Weissenstein, 2020; and Whitney, 2020.

³⁴ ALBA, an initiative of the late President Hugo Chávez, was established in 2004 with Venezuela and Cuba as founding members. The other members are Bolivia, Nicaragua, Dominica, Ecuador, Antigua and Barbuda, St. Vincent and the Grenadines, St. Lucia, Grenada, and St. Kitts and Nevis.

2021). In late April 2021 Argentina and Cuba also began talks to produce the Soberana vaccine. (Merco Press, 2021) Further, the quotient of respect for Cuba's medical prowess increased appreciably in June 2021 when *The New York Times* reported that, with 92 percent effectiveness, Abdala was "among the most effective Covid vaccines in the world ... on a par with Pfizer-BioNTech's 95 percent rate, Moderna's 94.1 percent, and Russia's Sputnik V at 91.6 percent" (Augustin, 2021).

Conclusion

The Caribbean was not even remotely in Zbigniew Brzezinski's zone of analysis in his influential *The Grand Chessboard*. Yet, his proposition that "geopolitical pivots are determined by their geography, which in some cases, gives them a special role either in defining access to important areas or in denying resources to a significant player" (Brzezinski, 1997, 41) clearly applies to it.

The forgoing analysis permits us to draw several conclusions. First, it suggests that the area's "maritime highways," to use Anthony Maingot's phrase in his masterful *The United States and the Caribbean*, along with its territorial byways, continue to be a crucial pivot space for the United States as the unipolar hegemon, for great powers such as China and Russia, and for countries, such as Iran and India, that aim to enhance their global heft. Second, the dawn of the Age of COVID-19 has added to the region's geopolitical complexity, accentuating the importance of health geopolitics.

Third, undoubtedly, COVID-19 has been testing the political and diplomatic adroitness of leaders in navigating the turbulent geopolitical high seas where the United States, China, Russia, and India have been navigating to enhance their geopolitical market share using COVID-19 vaccine and other pandemic aid both for humanitarianism and for geopolitical gains. A fourth conclusion is that continuity and change along with competition and cooperation have been part of the region's geopolitical landscape. Fifth, as regards health geopolitics, I share the thinking of Jessica Byron and her colleagues, "The CC (Commonwealth Caribbean) is part of a larger Caribbean space, strongly attached to the geopolitical and geo-economic poles of the Americas. Its experience of the pandemic has been influenced by its location and developments in the surrounding geopolitical space. COVID-19 has highlighted the risks inherent in the region's manner of integration into the global economy ..." (Byron et al, 2021, 100).

Finally, Caribbean leaders have been lauded for their skillful vaccine diplomacy (see Hoffman, 2021). Yet, we can anticipate delicate horizons ahead, in relation to conventional as well as health geopolitics. For example, the petro power pursuits in the Guyana Suriname Basin will provide the basis for enhanced geopolitical positioning by the countries represented there: The United, States, China, Britain, Israel, Canada, and Spain, in particular. Moreover, Guyana and Venezuela likely will become objects of enhanced geopolitical competition and cooperation, with the territorial controversy witnessing interesting dynamics because of the great power geopolitical and geoeconomic interests in both nations. For instance, there are U.S., Chinese, and Spanish investments in oil and minerals in both countries.

Unquestionably, then, the Caribbean pivot space continues to live in some interesting times, coping with the vagaries of conventional geopolitics and sharing the vicissitudes of health geopolitics in

this Age of COVID-19 with the rest of the global commons. Surely, too, it is destined to experience more interesting times in the future.

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Ivelaw Lloyd Griffith is a Fellow with the Washington, DC-based Caribbean Policy Consortium. A long-standing expert on Caribbean security, drugs, and crime, he has published numerous scholarly articles and several books, including *Drugs and Security in the Caribbean, The Political Economy of Drugs in the Caribbean*, and *Caribbean Security in the Age of Terror*. The University of Illinois Press will publish his next book, *Challenged Sovereignty: The Impact of Drugs, Crime, Terrorism and Cyber Challenges on Security and Sovereignty in the Caribbean*. Recipient of the Dr. William J. Perry Award for Excellence in Security and Defense Education, Ivelaw has testified before the U.S. Congress on Caribbean security issues. He also has served in several academic leadership roles, including as Vice Chancellor of the University of Guyana, President of Fort Valley State University in Georgia, Provost of universities in Virginia and New York and as a Dean at Florida International University. As well, he has been a consultant to the Commonwealth Secretariat, Canada's Ministry of Foreign Affairs and International Trade, and other agencies, and a visiting scholar at the William J. Perry for Hemispheric Defense Studies, the Royal Military College of Canada, and the George Marshall European Center for Security Studies in Germany.

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