

Militarization of the Arctic Ocean

A Monograph

by

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Abstract

Militarization of the Arctic Ocean, by MAJ Nathaniel A. Weander, 52 pages.

The physical conditions in the Arctic are changing. The Arctic ice pack dominated the Arctic Ocean for most of mankind's history. In the last few decades, it has retreated to the point two new sea lines of communication have emerged. Military planners will need to prepare differently whether they expect these sea lines of communication to become militarized or whether they will become zones of cooperation.

This monograph examines what conditions lead new sea lines of communication to competitive militarization. This is a simple question with serious implications. The potential for militarization depends, in part, on whether the key actors view the emerging sea lines of communication as a public, private, or club good. Economic theory offers a lens to examine potential militarization in the Arctic.

This monograph uses a deductive case study approach to apply economic theory to the Arctic. Based on inductive reasoning this work makes recommendations for how to limit militarization, and if this cannot be achieved, how the United States should respond to militarization in the Arctic. This work concludes that when routes are viewed as public goods, they are unlikely to militarize. Militarization is likely to occur when routes are club good with disputed ownership, which is the current trajectory.

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Introduction

The physical conditions in the Arctic are changing. The Arctic ice pack dominated the Arctic Ocean for most of mankind's history. In the last few decades, the Arctic ice pack has reduced in size exposing two, new sea lines of communication that are available to both military and commercial shipping assets, see figure 1. Military planners will need to prepare differently whether they expect these sea lines of communication to become militarized, or whether they will become zones of cooperation. This paper seeks to determine under what conditions do new sea lines of communication lead to competitive militarization. This is a simple question with serious implications. Will competition for these routes lead to militarization in the Arctic? The five Arctic coastal states have agreed to administer the Arctic region, its resources, and its sea routes. They view the Arctic Ocean as their lake devoid of international waters.¹ China defines itself as a near-Arctic nation and identifies the central Arctic Ocean, currently under ice, as international waters.² Russia has increased their military investment in the Arctic.³ Looking to the future, it is important for military planners to understand the dynamics of the sea routes and provide informed military advice as to the militarization near the routes.

The economic theory of club and public goods paired with the concept of disputed or undisputed ownership can help explain under what conditions, sea lines of communication, can

¹ Martin Breum, *Cold Rush: The Astonishing True Story of the New Quest for the Polar North* (Chicago: McGill-Queen's University Press, 2018), 17–22.

² The State Council Information Office of the People's Republic of China, "China's Arctic Policy." last modified January 2018, accessed on September 5, 2019, http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

³ Ellehuus, Rachel, "Russia Is Harassing U.S. Jets in the Arctic as Part of a Putin Power Play," accessed on October 10, 2019, <https://www.nbcnews.com/think/opinion/russia-harassing-u-s-jets-arctic-part-putin-power-play-ncna1010781>; Allan Woods, "Back off and Stay out of Our Airspace," accessed October 10, 2019, https://www.thestar.com/news/canada/2009/02/28/back_off_and_stay_out_of_our_airspace_russia.html; Atle Staalesen, "More than 300 Russian Paratroopers Have Been on North Pole," accessed October 10, 2019, <https://thebarentsobserver.com/en/security/2017/01/more-300-russian-paratroopers-have-been-north-pole>; The Independent Barents Observer, "Russian Paratroopers Trained on North Pole," accessed October 10, 2019, <https://thebarentsobserver.com/en/security/2016/04/russian-paratroopers-trained-north-pole>.

become militarized. This paper will define militarization as an increase of military personnel or resources in the region. The transpolar sea routes emerging today resemble canals. They each have a limited entrance and exit point. By their very nature they canalize traffic. Coastal nations can control maritime traffic near their coastline.

The history of the Suez Canal provides an analogy to evaluate the potential conditions of newly discovered sea lines of communication, and to determine under what conditions, newly discovered sea lines of communication may lead to competitive militarization. Competitive militarization is likely to occur when a sea line of communication is a *club good* with disputed ownership. Economic theory describes a club good as a good, which can be used by many actors, but also, a good that an actor can restrict to a group.

Background

The Arctic Ocean rests at the northern pole astride the roof of the world. Over the last few decades, it has become much more accessible. To understand the current state of international competition in the Arctic Ocean, it is important to understand the physical characteristics of the ocean, how the regional powers viewed the Arctic through history, and how this is changing.

The Arctic Ocean is the smallest ocean on the face of the earth at one sixth the size of the Indian Ocean, roughly the size of the Mediterranean Sea.⁴ Its depth averages nearly a thousand meters, but extends to four thousand meters at the pole.⁵ Five nations possess coast lines on the Arctic Ocean above the Arctic Circle: the Russian Federation, Norway, the Kingdom of Denmark (through its commonwealth Greenland), Canada, and the United States of America, see figure 1.

⁴ Encyclopedia Britannica, "Arctic Ocean Definition, Location, Map, Climate, & Facts," accessed on October 1, 2019, <https://www.britannica.com/place/Arctic-Ocean>.

⁵ Ibid.



Figure 1. The Arctic Ocean, The World Factbook, Central Intelligence Agency.⁶

European sailors first began to search for a northern route to Asia in the decades following Christopher Columbus's voyage to America. Eventually two routes emerged. The Northwest Passage north of North America and the Northern Sea Route north of Eurasia.⁷ The routes are generally independent of each other; however, both routes enter the Pacific Ocean at the narrow fifty-three-mile-wide Bering Strait.⁸ Neither passage was navigable until the 19th century.

In 1875, Nils Adolf Erik, a Swedish explorer, became the first man to cross the Northern Sea Route. He transited the route quickly for the period—only three hundred and sixty-six days.⁹

⁶ Central Intelligence Agency, *The World Factbook: Oceans: Arctic Ocean* (Washington, DC: Central Intelligence Agency, 2019), accessed on October 8, 2019, <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/xq.html>.

⁷ Roger Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources* (New York: Continuum US, 2009), 38–42.

⁸ Encyclopedia Britannica, "Bering Strait, Pacific Ocean," accessed on January 23, 2020, <https://www.britannica.com/place/Bering-Strait>.

⁹ Encyclopedia Britannica, "Adolf Erik, Baron Nordenskiöld Swedish Explorer," accessed on October 3, 2019, <https://www.britannica.com/biography/Adolf-Erik-Baron-Nordenskiold>.

The first crossing of the Northwest Passage did not occur until 1906. Roald Amundson, a Norwegian, and his crew lodged their specialized ship the *Gjøja* in the Arctic ice pack north of Greenland. They spent the next three years locked in ice drifting on the polar currents to Alaska.¹⁰

During the twentieth century, the two sea routes remained locked in ice most of the year. The world viewed the Arctic as a quiet area with little international competition. During the Cold War, Norway, a founding NATO member, and the Soviet Union successfully managed fishery resources even with an unresolved territorial dispute. In 1973, the United States and the Soviet Union were able to cooperate and signed the Agreement for the Conservation of Polar Bears.¹¹

The Arctic Ocean is changing. Over the summer of 2018, over seventy vessels traversed the Northwest Passage.¹² Several cruise lines are currently booking three-week vacations to transit the Northwest Passage.¹³ China anticipates further warming will leave the Arctic Ocean without an ice pack. In this future they believe it will be possible to transit the Arctic Ocean near the North Pole on a third Central Passage.¹⁴ Norway is predicting the Arctic Ocean may experience ice free summers by 2050.¹⁵

¹⁰ Stephen R. Bown, *The Last Viking: The Life of Roald Amundsen* (Philadelphia, PA: Da Capo Press Inc., 2013), 50–90.

¹¹ Stephanie Pezard et al., *Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North* (Santa Monica, CA: RAND Corporation, 2017), 22–23.

¹² “Navigating the Northwest Passage for Climate Science,” Science Friday, accessed on September 5, 2019, https://www.sciencefriday.com/segments/northwest-passage-project-arctic-climate/?fbclid=IwAR2kUaULE9gJWcOaz-CwLCyZBLefUoX_fuPM9PoBFF6JjBgbOulfVrFv8JY.

¹³ “10 Best Northwest Passage Cruises, Tours & Expeditions 2019-2020,” Adventure Life, accessed on September 5, 2019. <https://www.adventure-life.com/northwest-passage>.

¹⁴ The State Council Information Office of the People’s Republic of China, “China’s Arctic Policy,” last modified January 2018, accessed on September 5, 2019, http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm.

¹⁵ Norwegian Ministry of Foreign Affairs, *Norway’s Arctic Policy* (Oslo, NO: Norwegian Ministry of Foreign Affairs, 2014), 6–7, accessed on October 8, 2019. https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/nord/nordkloden_en.pdf.

Viable Arctic sea routes will reduce the time and money required to ship goods between Europe and Asia. An Arctic passage from Tokyo to London cuts about 3,000 nautical miles off the 12,900 nautical mile route via the Suez Canal. An Arctic Passage is about 4,800 nautical miles shorter than the 14,700 nautical mile trip via the Panama Canal.¹⁶ Furthermore, they avoid the fees associated with either of the canals. The Arctic route also avoids the political uncertainty at the Straits of Malacca that lie between the Suez Canal and East Asia. Beluga, a German shipping company, believes Arctic routes will reduce their costs of shipping between Asia and Europe by 50 percent.¹⁷

Suez Canal traffic data, displayed in figure 2, demonstrates European and East Asian Nations are most likely to be the primary users of transpolar routes. Panama Canal traffic, displayed in figure 3, will likely contribute less. This is because America is the primary user. American goods have several routes to cross between the Atlantic and the Pacific Oceans such as the interstate highway system, and the transcontinental railway. The length of the Alaskan and of Canadian coastlines will likely limit American commercial use of the North West Passage. Therefore, the nations of East Asia and Europe are most likely to take a commercial interest in the Arctic sea routes.

¹⁶ “Port of Panama, Panama to Port of Southampton , United Kingdom Sea Route and Distance,” Ports.com, accessed on October 15, 2019, <http://ports.com/sea-route/port-of-panama,panama/port-of-southampton,united-kingdom/#/?a=4669&b=0&c=Port%20of%20Tokyo,%20Japan&d=Port%20of%20Southampton%20,%20United%20Kingdom>.

¹⁷ Howard, *The Arctic Gold Rush: The New Race for Tomorrow’s Natural Resources*, 109–110.

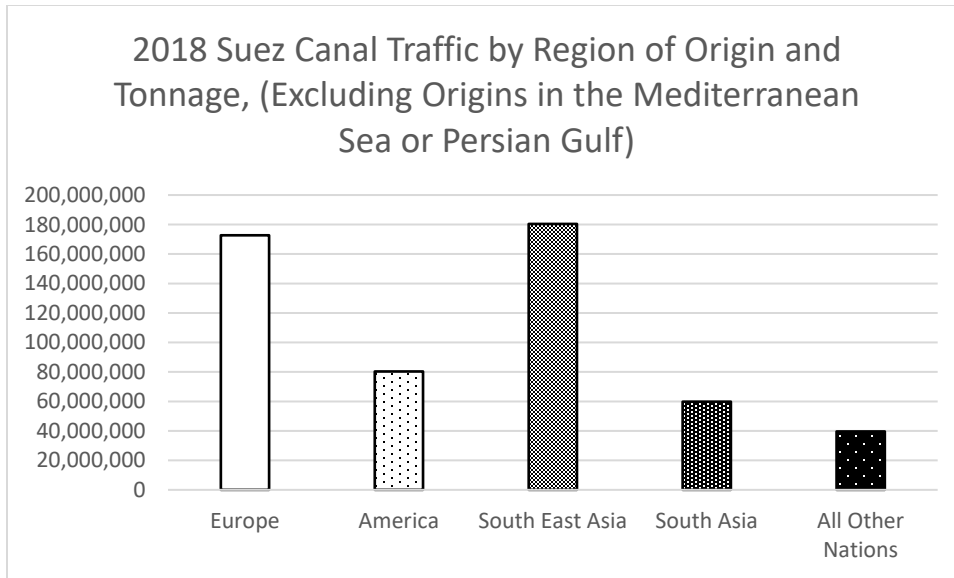


Figure 2. 2018 Suez Canal Traffic by Region of Origin and Tonnage.¹⁸

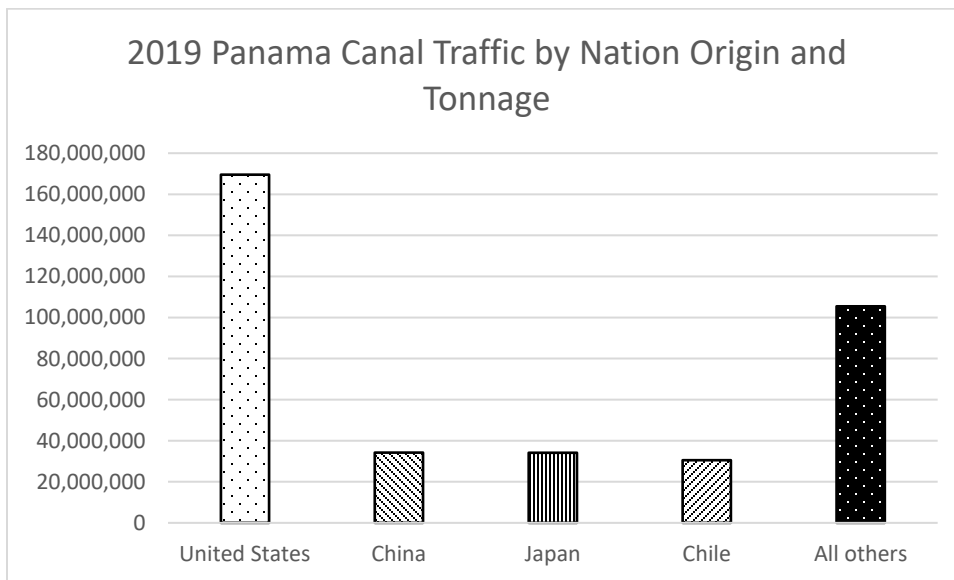


Figure 3. 2019 Panama Canal Traffic by Nation of Origin and Tonnage.¹⁹

To understand the potential for international cooperation and competition, it is important to understand the international agreements governing the Arctic Ocean. The Arctic Ocean falls

¹⁸ “SCA-Navigation Statistics,” The Suez Canal, accessed November 1, 2019, <https://www.suezcanal.gov.eg:443/English/Navigation/Pages/NavigationStatistics.aspx>.

¹⁹ “Maritime Services-PanCanal.Com,” The Panama Canal, accessed on November 1, 2019, <https://www.pancanal.com/eng/op/transit-stats/index.html>. Figure excludes the tonnage of vessels with origins in the Mediterranean Sea or Persian Gulf. These vessels are local traffic and are unlikely to change with the emerging trans-polar routes.

under the United Nations Convention on the Law of the Sea. Completed in 1982, it is a foundational document to global sea commerce and its relation to state sovereignty. Four of the five Arctic Coastal Nations and China have ratified the convention. The United States is the notable exception.²⁰ The United Nations Convention on the Law of the Sea provides coastal states with a territorial sea and economic exclusion zone.

The territorial sea begins at the coastal baseline and can extend up to twelve nautical miles into the sea. In the territorial sea, the coastal state retains full sovereignty from below the seabed, up through the water column, to the overlying airspace.²¹ The ships of all nations enjoy the right of innocent passage through a territorial sea. The convention defines innocent passage as passage that threatens neither the peace nor the good order of the coastal state.²²

Beyond the territorial sea the coastal state possesses an exclusive economic zone. In this zone, the coastal state possesses exclusive economic rights to the natural resources from below the sea bed, up through the water column to the surface of the ocean.²³ This zone extends up to two-hundred nautical miles from the coastal baseline, unless the coastal state can prove its continental shelf extends further.²⁴ If the exclusive economic zone is covered in ice, the coastal state has additional rights. They may adopt and enforce regulations and laws to control maritime pollution on the ice-covered portion of their exclusive economic zone.²⁵

²⁰ United Nations Oceans and Law of the Sea, *The United Nations Convention on the Law of the Sea of 10 December 1982* (New York, NY: UN, July 28, 1994), accessed on October 8, 2019, https://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

²¹ *Ibid.*, 21.

²² *Ibid.*, 30-31.

²³ *Ibid.*, 47.

²⁴ *Ibid.*, 53.

²⁵ *Ibid.*, 115.

The high seas exist beyond the exclusive economic zones. The use of the high seas is subject only to the United Nations Convention on the Law of the Sea. Any states are free to navigate, overfly, lay cables and pipelines, construct artificial islands, and extract resources.²⁶

States may also possess internal waters. These are any waters on the inland side of the territorial sea baseline.²⁷ There is an important distinction between internal waters and all other classifications discussed. Ships conducting an innocent passage through a territorial sea do not have the right to enter internal waters. Article 25 of the convention allows all coastal states to deny entry to interior waterways.²⁸ Beyond this foundational document several nations have entered additional international agreements pertaining to the Arctic Ocean.

In 1996, the eight Arctic States, Canada, The Kingdom of Denmark, Finland, Iceland, the Kingdom of Norway, the Russian Federation, the Kingdom of Sweden, and the United States of America, met in Ottawa, Canada to foster cooperation in the Arctic. At the end of the conference, the Arctic States published the Ottawa Declaration founding the Arctic Council. The Arctic Council aspired to be the premier intergovernmental agency operating in the far north.²⁹ The Arctic Council hoped to protect the interests of the indigenous populations in the Arctic, foster sustainable development of the Arctic, and protect the Arctic ecosystem. At this stage the world generally viewed the Arctic as something akin to a nature park. That is, it was something to agree to protect, but offered little economic or military value worth competing over.

On the morning of August 2, 2007 international competition entered the Arctic Ocean. A nuclear-powered ice breaker battered its way through two meters of ice pack. In its wake, a

²⁶ United Nations Oceans and Law of the Sea, *The United Nations Convention on the Law of the Sea of 10 December 1982*, 57.

²⁷ *Ibid.*, 28.

²⁸ *Ibid.*, 33.

²⁹ “The Ottawa Declaration, 1996,” The Arctic Council, accessed on October 1, 2019, https://oaarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y.

research team lowered two experimental submarines into the Arctic Ocean. The submarines descended for over four hours to reach a depth of 4,000 meters. Cloaked in darkness they planted a Russian flag on the sea bed under the North Pole. This act was not just a scientific achievement. It affected how the Arctic Nations viewed the Arctic Ocean and each other.³⁰

The Kingdom of Denmark was the first nation to react to the dive. Denmark's Foreign Minister Per Stig Møller feared the Arctic would become the next region of global conflict. To avoid a race for control of the Arctic Ocean and resources he organized a meeting of the five Arctic Coastal Nations: The Kingdom of Denmark, Canada, the United States, the Russian Federation, and the Kingdom of Norway. The five Arctic Coastal Nations signed the Ilulissat Declaration of 2008. The declaration affirmed the signers would abide by the United Nations Convention on the Law of the Seas and stated the Arctic Coastal Nations would administer the Arctic Ocean. Furthermore, they agreed there was no need for additional treaties or international agreements to resolve issues in the Arctic. This action excluded Iceland, Finland, Sweden, and the rest of the world from the governance and development of the Arctic.³¹

In the twelve years since the signing of the declaration, the sea ice continues to retreat. This has led to further scientific explorations of the Arctic Seabed. Some Arctic States are seeking evidence their continental shelves extend beyond the two-hundred nautical miles stipulated in the United Nations Convention on the Law of the Sea. Russia, Denmark, and Canada all have submitted competing territorial claims in the Arctic Ocean to the United Nations Commission on the Limits of the Continental Shelf. In this environment the various nations have developed different views of the sea routes and pursued differing national priorities in the Arctic, see table 1.

³⁰ Martin Breum, *Cold Rush: The Astonishing True Story of the New Quest for the Polar North* (Chicago: McGill-Queen's University Press, 2018), 12.

³¹ Breum, *Cold Rush: The Astonishing True Story of the New Quest for the Polar North*, 10–28; “The Ilulissat Declaration, 2008,” Danish Ministry of Foreign Affairs, accessed on September 5, 2019, <https://cil.nus.edu.sg/wp-content/uploads/2017/07/2008-Ilulissat-Declaration.pdf>.

Table 1. Typology Chart of Arctic International Issues and Membership by Nation.

Issue/ Membership	United States	Canada	Denmark	Iceland	Norway	Finland	Sweden	Russia	China
NATO Member	✓	✓	✓	✓	✓				
Arctic Council Member	✓	✓	✓	✓	✓	✓	✓	✓	
Arctic Coastal State (Ilulissat Declaration)	✓	✓	✓		✓			✓	
Ratified United Nations Convention on the Law of the Sea	*	✓	✓	✓	✓	✓	✓	✓	✓
Unresolved Continental Shelf Claim		✓	✓					✓	

Source: Created by the Author. The United States has not ratified the United Nations Convention on the Law of the Sea but accepts the rules of the convention through the Ilulissat Declaration.³²

Norway rests at the Western entrance to the Northern Sea Route. Norway is a founding member of NATO, the Arctic Council, and has ratified the United Nations Convention on the Law of the Sea. Norway believes the Arctic Ice Pack off its north coast has reduced by 50 percent between 1980 and 2014, and expects ice free summers in the Arctic Ocean, as soon as 2050. Eighty percent of the maritime traffic in the Arctic passes through Norwegian waters.³³ Norway acknowledges overlapping territorial claims in the Arctic Ocean but believes the United Nations can resolve the claims legally. Norway believes the Arctic Council is the primary means to conduct cooperation in the Arctic.³⁴ Norway acknowledges increased Russian military activity in the Arctic between 2007 and 2017 but does not “believe Russia is threatening Norway.”³⁵

³² “The Ilulissat Declaration,” Danish Ministry of Foreign Affairs; The United Nations, “United Nation Convention on the Law of the Sea: Table Recapitulation the Status of the Convention and of the Related Agreements,” (June 2019), 1-9, accessed on October 8, 2019. https://www.un.org/Depts/los/reference_files/status2019.pdf.

³³ Norwegian Ministry of Foreign Affairs, *Norway’s Arctic Policy*, 6–7.

³⁴ Norwegian Ministries of Foreign Affairs and Local Government and Modernization, “Norway’s Arctic Strategy—between Geopolitics and Social Development,” (2017), 17.

³⁵ *Ibid.*, 18.

Canada identifies as an Arctic nation. Its policy goals for the Arctic are primarily to improve the quality of life in Canada's remote Arctic settlements and adhere to the rules-based international order in the Arctic.³⁶ Canada is a founding member of NATO and the Arctic Council. Canada ratified the United Nations Convention on the Law of the Sea in 2003.³⁷ Canada views the Northwest Passage as part of their historic waters and as such an internal waterway solely under their control.³⁸ In May 2019, Canada filed a claim with the United Nations Commission on the Limits of the Continental Shelf. This claim extends beyond the North Pole and overlaps with competing Russian and Danish claims.³⁹

The Kingdom of Denmark is a NATO member state and ratified the United Nations Convention on the Law of the Sea in 2004.⁴⁰ However, it is unlikely they will play a major role in transpolar navigation. Greenland lies too far east of North America to have a territorial claim that would impede entrance into the Northwest passage.

Russia views itself as an Arctic Nation and this branding has strong symbolic value to the state.⁴¹ This supports Putin's brand of nationalism and his cult of personality.⁴² It controls half of the world's Arctic coastline, 40 percent of the world's Arctic landmass, and 75 percent of the

³⁶ Government of Canada, Crown-Indigenous Relations and Northern Affairs Canada, "Highlights of Canada's Arctic and Northern Policy Framework," policy, last modified September 5, 2019, accessed on October 8, 2019, <https://www.rcaanc-cirnac.gc.ca/eng/1567697304035/1567697319793>.

³⁷ The United Nations, "United Nation Convention on the Law of the Sea: Table Recapitulation the Status of the Convention and of the Related Agreements," 2.

³⁸ Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*, 23, 50–52.

³⁹ Global Affairs Canada, "Canada's Arctic Ocean Continental Shelf Submission," last modified May 23, 2019, accessed October 8, 2019. <https://www.canada.ca/en/global-affairs/news/2019/05/canadas-arctic-ocean-continental-shelf-submission.html>; The United Nations, "Continental Shelf - Submission to the Commission by Canada," accessed on October 8, 2019, https://www.un.org/Depts/los/clcs_new/submissions_files/submission_can_70_2013.htm.

⁴⁰ The United Nations, "United Nation Convention on the Law of the Sea: Table Recapitulation the Status of the Convention and of the Related Agreements," 3.; North Atlantic Treaty Organization, "Member Countries," accessed on October 15, 2019. http://www.nato.int/cps/en/natohq/topics_52044.htm.

⁴¹ Norwegian Ministries of Foreign Affairs and Local Government and Modernization, "Norway's Arctic Strategy—between Geopolitics and Social Development," 3.

⁴² Marlene Laruelle, *Russia's Arctic Strategies and the Future of the Far North*, 2nd ed. (London: Routledge, 2015), 10.

world's population above the Arctic Circle.⁴³ Russia currently operates eighteen ageing icebreakers, the world's largest fleet, three times the size of the Canadian fleet, and dwarfing America's Arctic fleet of two.⁴⁴ Russia did not participate in the international Arctic security environment after the fall of the Soviet Union. During Vladimir Putin's first two presidential terms, 2000-2008, Russia began to reengage in the Arctic as part of his efforts to recentralize power.⁴⁵ Russian strategy in the Arctic has two lines of effort centered on security and economic growth.⁴⁶ Russia ratified the United Nations Convention on the Law of the Sea in 1997.⁴⁷ Russia, like Canada, identifies the Northern Sea Route as an internal waterway. Following the 2007 expedition to the North Pole, Russia resumed nuclear-capable bomber flights throughout its Arctic airspace.⁴⁸ They fielded at least two Arctic Airborne Brigades. Between 2014 and 2016, over 300 Russian paratroopers have jumped onto the North Pole.⁴⁹

The Chinese define themselves as a near-Arctic nation.⁵⁰ They are an observer state in the Arctic Council.⁵¹ They ratified the United Nations Convention on the Law of the Sea in

⁴³ Laruelle, *Russia's Arctic Strategies and the Future of the Far North*, xxi.

⁴⁴ Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*, 181.

⁴⁵ Laruelle, *Russia's Arctic Strategies and the Future of the Far North*, 4.

⁴⁶ *Ibid.*, 8.

⁴⁷ The United Nations, "United Nation Convention on the Law of the Sea: Table Recapitulation the Status of the Convention and of the Related Agreements," 7.

⁴⁸ Howard, *The Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*, 14; Woods, "Back off and Stay out of Our Airspace.," Ellehuus, "Russia Is Harassing U.S. Jets in the Arctic as Part of a Putin Power Play."

⁴⁹ Staalesen, "More than 300 Russian Paratroopers Have Been on North Pole," accessed on October 10, 2019, <https://thebarentsobserver.com/en/security/2017/01/more-300-russian-paratroopers-have-been-north-pole>; Russian News Agency, "100 Paratroopers from Russia, Belarus, Tajikistan Air Dropped to North Pole," accessed on October 10, 2019, <https://tass.com/russia/787823>.

⁵⁰ The State Council Information Office of the People's Republic of China, "China's Arctic Policy."

⁵¹ Laruelle, *Russia's Arctic Strategies and the Future of the Far North*, xvi.

1996.⁵² China hopes to create a Polar Silk Road as part of the Belt and Road Initiative.⁵³ China has three primary aims in the Arctic Ocean. First, they hope to extend influence to the Arctic to receive global acknowledgement of their great power status. Second, they hope to shorten their sea lines of communication to Europe and avoid the chokepoints at the Straits of Malacca. Finally, they hope to gain access to new fishing grounds.⁵⁴ China published their first Arctic Policy in 2018. China believes the Arctic Ocean will be ice free in the future, and this will make the central portion of the Arctic Ocean a high sea.⁵⁵

The United States does not identify as an Arctic Nation, and has not ratified the United Nations Convention on the Law of the Sea. The United States has historically retained interests in the Arctic. The United States purchased Alaska from Russia in 1867, and has been interested in purchasing Greenland off and on for over a century.⁵⁶ Between 1860 and 1890, the United States made several attempts to purchase the island going so far as to dispatch a State Department survey team in 1886.⁵⁷ The US Army occupied portions of Greenland in 1941 at the invitation of the local Greenland Government, but against the protests of the Danish Government under Nazi occupation.⁵⁸ Following World War II, the United States attempted to purchase the island for \$100 million in gold. Denmark refused.⁵⁹ In 1953 America built Thule Air Base in northern Greenland to serve as a weather station and refueling point for strategic bombers.⁶⁰ Most

⁵² The United Nations, “United Nation Convention on the Law of the Sea: Table Recapitulation the Status of the Convention and of the Related Agreements,” 3.

⁵³ The State Council Information Office of the People’s Republic of China, “China’s Arctic Policy.”

⁵⁴ Laruelle, *Russia’s Arctic Strategies and the Future of the Far North*, xvi.

⁵⁵ The State Council Information Office of the People’s Republic of China, “China’s Arctic Policy.”

⁵⁶ Department of State, “Milestones: 1866–1898 - Office of the Historian,” accessed on October 15, 2019, <https://history.state.gov/milestones/1866-1898/alaska-purchase>.

⁵⁷ Breum, *Cold Rush: The Astonishing True Story of the New Quest for the Polar North*, 67.

⁵⁸ *Ibid.*, 49.

⁵⁹ *Ibid.*, 3.

⁶⁰ Howard, *The Arctic Gold Rush: The New Race for Tomorrow’s Natural Resources*, 164–168.

recently, President Trump proposed to purchase Greenland in August 2019.⁶¹ The Department of Defense published a new Arctic Strategy in June, 2019. The American Arctic Strategy rejects both the Russian and Canadian claims of internal waterways in the Arctic. The strategy views the Arctic as a shared region where international norms such as freedom of navigation are observed. America recognizes Russian defense spending in the Arctic specifically on anti-access area denial systems and refurbishing Soviet era airfields and icebreakers.⁶²

Theory Review

The potential for militarization depends, in part, on whether the key actors view the emerging sea lines of communication as a public, private, or club good. Economic theory offers a lens to examine potential militarization in the Arctic. The current international disagreement in the Arctic Ocean is a discussion of which nations can use the routes, and which nations can control the routes. The routes are not exclusively the private domain of any nation. Both Canada and Russia claim control over portions of the routes through their claims of internal waters. Questions of use and control have a basis in the economic theory of public and club goods, see table 2.

Early economic theory defined private goods as goods that individuals use or consume. Public goods were those that were not.⁶³ James Buchanan was one of the first theorists to examine nonexclusive use. In 1965 he proposed the concept of club goods. He realized previous economic theory did not account for the gap between public or private goods. Buchanan did not see these groups as discrete categories, but rather believed some goods and services contained aspects of both. He visualized goods and services that share traits of public and private goods as a

⁶¹ Salama et al., “President Trump Eyes a New Real-Estate Purchase: Greenland,” accessed on December 17, 2019, <https://www.wsj.com/articles/trump-eyes-a-new-real-estate-purchase-greenland-11565904223>.

⁶² Department of Defense, *Report to Congress Department of Defense Arctic Strategy* (Washington, DC: Government Printing Office, 2019), 4-5.

⁶³ James M. Buchanan, “An Economic Theory of Club Goods,” *Economica* 32, no. 125 (February 1965): 1.

spectrum called club goods. Access to services or goods on this spectrum belonged to a limited group. He theorized that given an understanding of the nature of a good or service, an economist can determine the ideal and maximum sizes of the club group.⁶⁴

Patrick McNutt expanded the concepts of club goods, private goods, and public goods to law in relation to economics. He developed and refined Buchanan's concept of club goods by integrating the concepts of rival and excludable goods. McNutt defined excludable goods as ones that can be withheld from a user. Any form of consumer good that requires purchase for use is an excludable good. Goods and services that cannot be withheld from the user are non-excludable. When a government agency protects fresh air, the air is an example of a non-excludable good. Everyone has access to the clean air even if they do not pay their taxes.⁶⁵

Rival goods can only be used by one individual or group at one time. Non-rival goods can be used by multiple individuals or groups at a time.⁶⁶ McNutt used this typology through the lens of economics and law to refine his definition of club goods. He defines non-rival excludable goods as club goods, and non-rival non-excludable goods as public goods.⁶⁷ Rival but non-excludable goods are common pool resources.⁶⁸

Edward Lucas builds on both Buchanan and McNutt's theoretical works and applied his understanding of economic theory to international relations. Where McNutt saw government provided goods as non-excludable and therefore public, Lucas argued security had been a club good in the past. Lucas observed in the early twentieth century that the British Navy provided security against piracy as a club good in the South China Sea. Lucas uses Buchanan's term of

⁶⁴ Buchanan, "An Economic Theory of Club Goods," 1-14.

⁶⁵ Patrick McNutt, "Public Goods and Club Goods," in *Encyclopedia of Law and Economics* (Ghent, Belgium: Edward Elgar, 1999), 930.

⁶⁶ *Ibid.*, 928.

⁶⁷ *Ibid.*, 931-932.

⁶⁸ Jose Apesteguia and Frank P. Maier-Rigaud, "The Role of Rivalry: Public Goods versus Common-Pool Resources," *The Journal of Conflict Resolution* 50, no. 5 (2006): 646-663.

club goods not as a spectrum to determine the ideal and maximum usage of materials, but rather as a tool to differentiate the haves from the have nots. Those within the club had access to naval punitive actions. This protected private assets and deterred future piracy against club members. Security was an excludable good because non-club members, ship-owners who were not politically powerful members of the British aristocracy, did not benefit from the actions of the Royal Navy.⁶⁹ This is the definition of a club good used throughout this paper.

Table 2. Economic Typology of Excludable and Rival Goods

		Excludable	
		Yes	No
Rival	Yes	Private Goods <i>Personal Automobiles</i>	Common Pool Resources <i>State Owned Timber</i>
	No	Club Goods <i>Toll Roads</i>	Public Goods <i>Fresh Air</i>

Source: Created by the Author. Economic Typology of Excludable and Rival Goods, examples in italics. Adapted from McNutt, “Public Goods and Club Goods,” 930-932.; Buchanan, “An Economic Theory of Club Goods,” 1-14.; Apesteguia and Maier-Rigaud, “The Role of Rivalry: Public Goods versus Common-Pool Resources,” 646-663.

This work will use the concepts of club and public goods paired with the idea of disputed and undisputed ownership to examine the transpolar sea routes. As the sea routes emerge, they present a novel problem to the international community. Previously inaccessible areas of the Arctic Coastal Nations will become accessible to maritime traffic. For the entirety of modern history these areas were the private domains of the coastal nation. Key actors must determine if the new routes will become public or club goods. If the international community views the Arctic passages per the United Nations Convention on the Law of the Sea, they are public goods. Ownership is undisputed. If the international community accepts Canada’s and Russia’s claims of internal waters, then the routes become excludable and they become club goods. Currently the United States disputes both states’ claims of internal waterways. This creates a tension in the

⁶⁹ Edward R. Lucas, “Public Goods, Club Goods, and Private Interests: The Role of Business Elites in British Counter-Piracy in the South China Sea, 1921-1935,” *Security Studies* 28, no. 4 (August 8, 2019): 710–738.

system that may encourage militarization. If the nations of the world accept Russian and Canadian claims of internal waterways their ownership to the routes becomes undisputed, see table 3.

This paper will demonstrate that routes that are public goods are unlikely to militarize. Club goods with undisputed ownership are unlikely to militarize, unless the owner is facing an existential threat. In this case actors on the international stage acknowledge the owning nations control of a route. Actors behave in accordance with accepted norms in exchange for access to the route. When the owning nation faces an existential threat, they will seek to preserve their vital interests through military means. Militarization is likely to occur when a sea line of communication is a club good with disputed ownership. If multiple states claim the ownership of a non-public route, they will tend to militarize to resolve their claims.

Table 3. Transpolar Routes as Club Good or Public Good in Relation to Ownership

	Club Good	Public Good
Disputed Ownership	Unresolved internal waterway claims <i>Competitive Militarization</i>	NA
Undisputed Ownership	Accepted Internal waterway claims <i>Competitive Militarization only in response to an existential threat</i>	Transarctic passages administered as territorial seas. <i>No militarization</i>

Source: Table created by the Author.

Methodology

This monograph uses a deductive case study approach to apply economic theory and international relations theory to the Arctic. Based on the case studies of three periods in the history of the Suez Canal and inductive reasoning, this work makes recommendations for the future. The emergent nature of the Northern Sea Route and Northwest Passages make them like a canal. There are narrow entrances and exits to either the Northwest Passage or the Northern Sea

Route, like a canal. Both sea routes vary in width but canalize the passage to a specific route, like a canal. The entrance to and the passage of both sea routes has the potential for states to exert a high degree of control over their use, like a canal.

This analogy may not always be valid. If the Arctic ice pack continues to retreat, as the Norwegian and Chinese Governments anticipate, the passages will be uncontrolled, and this model is no longer valid. This presents an opportunity for future research. The recommendations section discusses the potential future state.

The economic theory of club goods and public goods paired with the concepts of disputed or undisputed ownership offers a lens to examine the Suez Canal. Over its history, the Suez Canal at one time or another has fallen into each of the three relevant categories from the theoretical framework. From 1869, when the French completed the construction, to 1881 the canal was a public good with undisputed ownership. The British seized the canal during the Anglo-Egyptian War of 1882. This made the canal a club good with undisputed ownership. During the 1956 Suez Crisis, the Government of Egypt nationalized the canal. At this point, the canal became a club good with disputed ownership. A study of militarization during each of these periods can help explain under what conditions new sea lines of communication lead to competitive militarization, see table 4.

Table 4. Suez Canal as a Club Good or Public Good in Relation to Ownership

	Club Good	Public Good
Disputed Ownership	Suez Crisis (1956) <i>Competitive Militarization</i>	NA
Undisputed Ownership	Post Anglo-Egyptian War (1882-1955) <i>Militarization Only During Existential Threats</i>	Early Years of Operation (1869-1881) <i>No Militarization</i>

Source: Table modified by the author, items in italics provide examples of categories.

Case Studies: The Suez Canal

The history of the Suez Canal provides an analog to the emerging sea lines of communication in the Arctic. The canal was an emergent line of communication. It shortened transit times and lowered shipping costs between Europe and Asia and caused the Great Powers to reconsider their national interests and their defense, see figure 4. The Great Powers cooperated and competed, sought to profit, or improve their security at various times and ways at the Suez Canal.

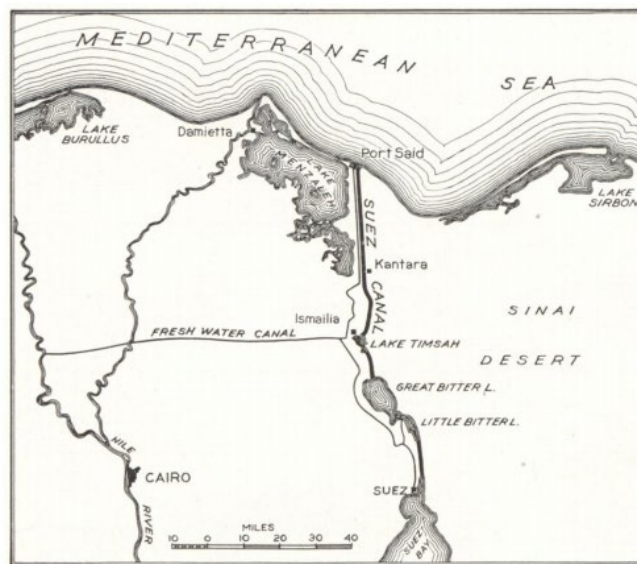


Figure 4. The Suez Canal.

A. D. Starbird, "Strategic Canals," *The Military Engineer* 32, no. 184 (August 1940): 249.

The Isthmus of Suez is a low sandy plain that separates the Mediterranean Sea in the north from the Red Sea in the south. The isthmus joins Africa to Asia. For more than forty centuries men have endeavored to join the Red Sea to the Mediterranean Sea. Classical sources claim the Pharaoh Sesostris first dug a canal across the Suez in 2000 BC.⁷⁰ Thirteen centuries later Pharaoh Nocha purportedly worked 120,000 laborers to death to maintain the canal. Maintenance of the canal fell subsequently to the dominant rulers of the ancient world. Darius I

⁷⁰ Lord Kinross, *Between Two Seas: Creation of the Suez Canal* (New York, NY: William Marrow and Company, Inc., 1969), 5; Hugh Schonfield, *The Suez Canal in Peace and War 1869-1969* (Coral Gables, FL: University of Miami Press, 1969), 3.

of Persia, the Ptolemies, the Emperor Trajan, and the early Arab conquerors all maintained the canal. That is until the second Abbasid Calif Aben-Jafar-Al Mansour destroyed the canal during his war with Mecca in 776 AD.⁷¹ By the eighteenth-century, the Ottomans established a suzerainty over Egypt and the Europeans vied for control of India.⁷²

Case 1: The Early History French and Egyptian Control

The French Court desired to restore the ancient Suez Canal from at least the seventeenth century. Elites believed a canal crossing Suez at would place France in a central position between India and Britain. This would allow the French to project power more rapidly than the British, and threaten British control of India.⁷³ One of Napoleon's stated aims during his 1798 invasion of Egypt was the restoration of a canal at Suez. Napoleon did not pursue the project primarily due to military defeat, but secondarily due to a surveying error that showed the Mediterranean Sea to be thirty feet higher than the Red Sea.⁷⁴

Mohammed Said Pasha, Viceroy of Egypt, was instrumental in the creation of the modern Suez Canal. Said became the Viceroy of Egypt in 1854. He hoped to modernize his nation and gain more autonomy from the Ottoman Empire. Said grew up with the French nobleman and engineer Ferdinand de Lesseps. During his first year as Viceroy, Said granted de Lesseps' *Compagnie Universelle du Canal Maritime de Suez* a concession to restore and administer the Suez Canal. The Viceroy granted the company a lease of the canal for ninety-nine years following the completion of construction. In exchange, the Egyptian government would

⁷¹ John Marlowe, *Anglo-Egyptian Relations 1800-1953* (New York, NY: Praeger, 1954), 61; Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 4–6; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 3–5.

⁷² Bassam Tibi, *Arab Nationalism: A Critical Enquiry* (New York, NY: St. Martin's Press, 1981), 53.

⁷³ Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 8–11.

⁷⁴ *Ibid.*, 17.

receive fifteen percent of the canal's annual net profits. Furthermore, the company would reimburse the Egyptian Government for the cost of any additional defenses of the canal.⁷⁵

De Lesseps envisioned the canal as a neutral water way open to all nations, which is a public good.⁷⁶ Viceroy Said granted the concession without consulting his sovereign the Sultan of the Ottoman Empire. The Crimean War, and subsequently, the rebellions in Greece distracted the Sultan.⁷⁷

The British Government initially opposed the construction of the canal. Following the canal concession in 1854, the British vehemently opposed the construction of the canal. They saw the canal through the lens of the Great Game and viewed its construction as a French threat to India. British ministers understood the potential for financial gain via a line of communication over Suez. However, they preferred a railroad to a canal, because railroads cannot transport French battleships. During the 1850s, the British repeatedly attempted to influence Viceroy Said directly and indirectly through diplomacy in both Cairo and Constantinople.⁷⁸

British attitudes shifted over the next ten years. The British eventually realized their naval hegemony would allow them to control the canal at will. In the 1860s, the British government stopped trying to block the project.⁷⁹ Viceroy Said died in 1862 and was succeeded by Ismail Pasha Said.⁸⁰ Viceroy Pasha was an enthusiastic supporter of the canal, but not a prudent ruler.

Ferdinand de Lesseps' *Compagnie Universelle du Canal Maritime de Suez* completed construction of the canal in 1869. The British mood had shifted so much in the fourteen years

⁷⁵ Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 64–65; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 23–24.

⁷⁶ Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 72, 94–95, 279–281.

⁷⁷ William Miller, *The Ottoman Empire and Its Successors 1801-1927* (London, UK: Cambridge University Press, 1936), 244–357.

⁷⁸ Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 48, 51–52, 60.

⁷⁹ *Ibid.*, 157.

⁸⁰ *Ibid.*, 159–161.

since the canal concession that Queen Victoria's representative in Egypt presented de Lesseps the *Grand Cross of the Order of the Star of India* at the Canal's opening ceremony.⁸¹

The canal was a monument to the glory of France, but it failed to be profitable during its early years of operation. Napoleon III and the French public invested heavily in *Compagnie Universelle* during construction. Construction cost overruns and accumulated debts ensured neither France nor Egypt profited from the canal. Following the Franco-Prussian War, 1870-1871, the French abolished the Monarchy. The new Second French Republic viewed the canal as a national economic interest, yet continued to operate it as a public good.⁸²

Even if the canal was not a financial success it functioned well, and traffic increased rapidly, see figure 5. The annual tonnage passing through the canal increased by 673 percent between its first full year of operation in 1870 and its fifth in 1875. The canal continued to increase in popularity. Tonnage increased by an additional 47 percent between 1875 and 1880. By 1880, 79 percent of the annual tonnage transiting the canal was British.

⁸¹ Schonfield, *The Suez Canal in Peace and War 1869-1969*, 44.

⁸² Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 115-117, 201, 227, 231, 256-257.

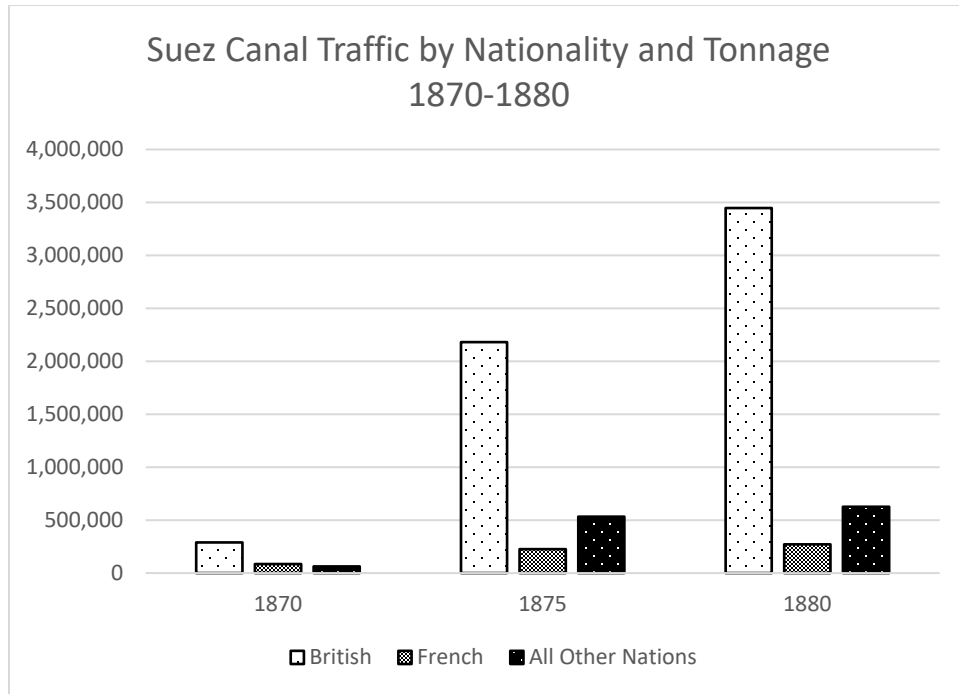


Figure 5. Suez Canal Traffic by Nationality and Tonnage: 1870-1880.⁸³
 Figure adapted by author from, Hugh Schonfield, *The Suez Canal in Peace and War 1869-1969* (Coral Gables, FL: University of Miami Press, 1969), 206-209.

In this financial and political environment Viceroy Pasha increased his holdings by purchasing outstanding shares and subsequent issues of the canal company stock. By 1875, the Egyptian Viceroy had mismanaged his finances and lost most of his wealth. The canal company stock was his last remaining asset. To raise funds, he sold his canal company holdings, nearly half the outstanding company stock, to the British Government.⁸⁴

Viceroy Pasha's financial situation did not improve. In 1876, the British and French appointed counselors to aid the Viceroy. This resulted in the joint French and British rule of Egypt. The Viceroy's financial situation remained tenuous, and he dismissed the Europeans in 1879. By 1880, the canal was vital to the British Economy and their control over India. By this point the canal was no longer just the means, but an end in itself. Three quarters of the tonnage

⁸³ The author selected tonnage and nationality data from Schonfield's Appendix H tables. The data has been graphically depicted as a bar graph comparing British, French and all other nations shipping at a five-year interval from 1870 to 1880.

⁸⁴ Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 188-189.

transiting the canal was British owned. That was more than twelve times greater than the next closest nation.⁸⁵ The Viceroy attempted to stabilize his finances by reducing his army officer's salaries by 50 percent. This cut costs. However, it also led to a military coup in 1881.⁸⁶

Between the opening of the canal in 1869 and the Anglo-Egyptian War of 1882, the Suez Canal was a public good.⁸⁷ Ferdinand de Lesseps intended to profit from the shipping of the world, but not to use the canal as a tool of empire. The Government of Egypt and the *Compagnie Universelle* undisputedly owned the canal. The company was a publicly traded company. The Government of Great Britain owned half the company. Private French citizens owned most of the remaining shares. The original concession of 1854 stipulated that the company would reimburse the Egyptian Government for any additional garrisons or military protection required to maintain the canal. No evidence exists that the Egyptians built any garrisons on the canal. The Egyptians did not militarize the canal during its early history.⁸⁸

Case 2: The British Seize an Opportunity

The next major phase the history of the Suez Canal began in 1882 when Britain intervened in Egypt following the coup of 1881. The British took control of the canal and the country, and established the canal as a club good. Following the crisis and intervention the great powers concluded the Convention of Constantinople in 1888. This established international norms for the administration of the Suez Canal until the mid-1950s, and acknowledged that ownership of the canal was undisputed.

⁸⁵ Hermann Vogt, *The Egyptian War of 1882* (London, UK: Kegan Paul, Trench & Co., 1883), 63.

⁸⁶ Lord Kinross, *Between Two Seas: Creation of the Suez Canal, 277–279*; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 49–52.

⁸⁷ Lucas, "Public Goods, Club Goods, and Private Interests," 710-738.

⁸⁸ The National Archives, "The National Archives - Exhibitions & Learning Online - British Battles," accessed on October 30, 2019, <https://www.nationalarchives.gov.uk/battles/egypt/battle.htm>; Vogt, *The Egyptian War of 1882*, 129–130.

In 1881, rebel Egyptian Army officers executed a coup. The conspirators did not depose the Viceroy, but rather exiled the Minister of War. France and Great Britain were concerned with the instability of the region. The canal company's debt primarily motivated France. The security of India primarily motivated Britain. Both nations engaged in joint diplomacy to Viceroy Pasha and the Ottoman Sultan. The Viceroy saw the appeal to the Sultan as an assault on his de facto sovereignty. Both France and Britain deployed naval vessels. Britain attempted to build a multinational ground coalition to stabilize Egypt. Viceroy Pasha authorized the British to control the entrances to the canal. France was unable to conclude legislation to deploy ground forces quickly. The Ottoman Empire had neither the men nor money to participate.⁸⁹ Britain acted alone.

During the Anglo-Egyptian War of 1882, the British did not face any effective Egyptian defenses near the canal. The Egyptian military consisted of eighteen infantry regiments, eight cavalry regiments, and four artillery regiments, approximately twenty thousand men under arms.⁹⁰ The rebel officers deployed Egyptian forces near population centers far to the west of the canal. The British captured the canal in a single day without incident.⁹¹

The war and British occupation of Egypt further undermined Ottoman claims of suzerainty. Britain claimed it only held Egypt under "temporary" control.⁹² The British established a force of 12,000 soldiers to defend the canal and billed the Egyptian Government £48,000 per month for the service. The British reduced the garrison to 7,000 Soldiers in 1883.⁹³

⁸⁹ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 112–135; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 44–52; Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 276–282.

⁹⁰ Vogt, *The Egyptian War of 1882*, 49–50.

⁹¹ *Ibid.*, 129–131.

⁹² Lord Kinross, *Between Two Seas: Creation of the Suez Canal*, 276–281; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 49–52; Marlowe, *Anglo-Egyptian Relations 1800-1953*, 122–135.

⁹³ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 130, 136.

By the late 1880s, the great powers became concerned over how permanent Britain's temporary occupation appeared. Since the completion of the Suez Canal, it had operated under a principle of neutrality. Nominally, the canal was open to all commercial shipping in accordance with de Lesseps' vision as a public good. Norms for transiting naval vessels were ambiguous. During the Franco-Prussian war of 1870, vessels from both warring nations used the canal. During the Russo-Turkish War of 1877, however, Britain informed Russia that any fleet activity near the canal would be viewed as a menace to India. Russia chose another route.⁹⁴

The Convention of Constantinople of 1888 resolved these issues. Article I of the convention states "the Suez Maritime Canal shall always be free and open in time of war as in time of peace, to every vessel of commerce or war, without distinction to flag."⁹⁵ British control of the canal would be less neutral than corporate and Egyptian Control. By 1888, Egypt was in effect a British colony though legally Egypt was still under the protection of the declining Ottoman Empire.

The neutrality of the canal was variable and subordinate to British interests. The first test of the "free and open passage" of warships occurred during the Spanish-American War of 1898. The United States requested Britain deny the sale of coal to the Spanish Reserve Fleet and block their passage to Manilla. Britain, a neutral, decided Egypt could only sell enough coal to allow the fleet to return to the nearest friendly port. That port was in Spain.⁹⁶ During the Russo-Japanese War, the British permitted Russian warships en route to the Pacific to transit the canal to fight the Japanese even though Britain and Japan were allies.⁹⁷ The British belief in neutrality led

⁹⁴ Raymond Leslie Buell, *The Suez Canal and League Sanctions*, vol. 6, 3 (Geneva: Geneva Research Center, 1935), 2–4.

⁹⁵ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 79; Buell, *The Suez Canal and League Sanctions*, VI:17.

⁹⁶ Buell, *The Suez Canal and League Sanctions*, VI:5.

⁹⁷ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 80; Buell, *The Suez Canal and League Sanctions*, VI:5.

to a bizarre event during the Italian-Turkish war of 1911. Italian warships passed through the nominally Ottoman Suez Canal. About the same time, Egyptian authorities required five Ottoman warships to depart the canal, because Article IV of the convention limits transiting warships to a twenty-four-hour passage.⁹⁸

The façade of neutrality faded with the advent of modern war. World War I led the British to fully militarize the canal. To the British, the canal still represented the key to India, a vital national interest. During World War I, the British ended the nominal suzerainty of the Ottoman Empire over Egypt. On land, Lieutenant General Sir John Maxwell assumed command of the British defense of Egypt in 1914. He declared martial law in November. Soon he received the 10th and 11th Indian divisions in Egypt to defend the canal. By February 1915, Maxwell's forces defeated the Turkish 8th Corps attack to seize the canal.⁹⁹ Egypt became an intermediate staging base for the British war effort in the Mediterranean and Levant. At maximum, there were thirteen Commonwealth divisions in Egypt en route to Gallipoli, Mesopotamia, and the Western Front.¹⁰⁰ At sea the British treated the canal as an inland waterway, seized and searched enemy vessels, and created a three-mile exclusion zone beyond either entrance to the canal.¹⁰¹

Great Britain granted Egypt independence in 1922. The reserve points of the declaration affirmed Great Britain's right to defend the canal.¹⁰² In 1936, Egypt and Britain signed a treaty limiting the British to 10,000 service members in Egypt.¹⁰³ Legally the *Compagnie Universelle*

⁹⁸ Buell, *The Suez Canal and League Sanctions*, VI:5–6.

⁹⁹ William Jackson, *The Pomp of Yesterday: The Defense of India and the Suez Canal* (London, UK: Brassey's, 1995), 128–132.

¹⁰⁰ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 221; Jackson, *The Pomp of Yesterday: The Defense of India and the Suez Canal*, 130–132.

¹⁰¹ Marlowe, *Anglo-Egyptian Relations 1800-1953*, 80–81.

¹⁰² Buell, *The Suez Canal and League Sanctions*, VI:7–8; Marlowe, *Anglo-Egyptian Relations 1800-1953*, 80–81.

¹⁰³ Robert Tingor, "Decolonization and Business: The Case of Egypt," *The Journal of Modern History* 59, no. 3 (September 1987): 485.

du Canal Maritime de Suez still owned the lease on the canal until the ninety-nine years expired in 1968. British shipping remained the dominant user of the canal, see figure 6.

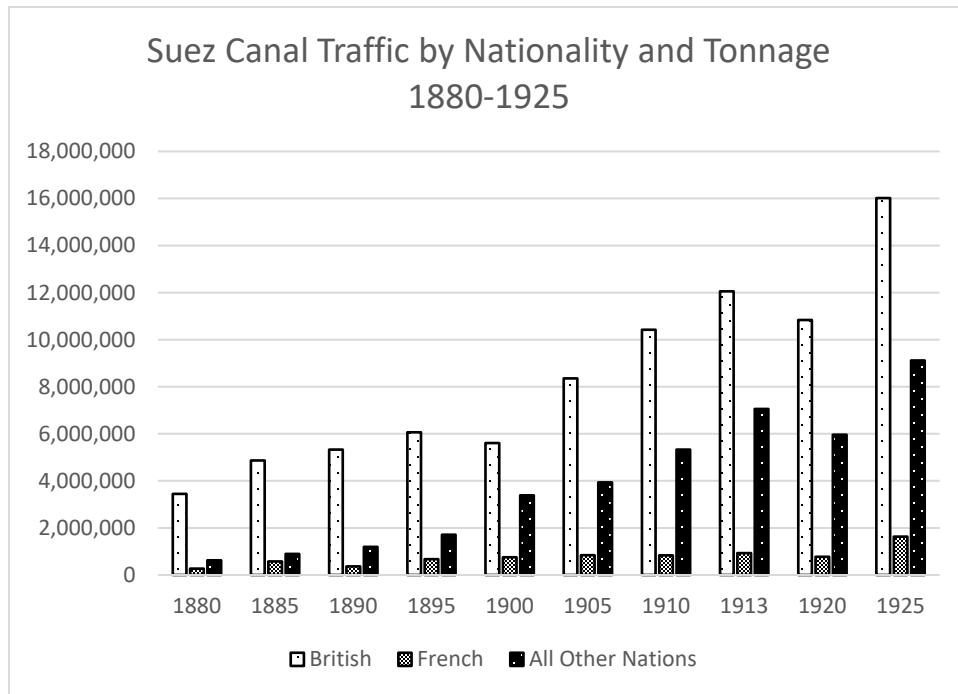


Figure 6. Suez Canal Traffic by Nationality and Tonnage: 1880-1925.¹⁰⁴
 Figure adapted by author from, Hugh Schonfield, *The Suez Canal in Peace and War 1869-1969* (Coral Gables, FL: University of Miami Press, 1969), 206-209.

Following the Anglo-Egyptian War of 1882, the Suez Canal became a club good masquerading as a public good. British-owned shipping still dominated the canal. However, global shipping continued to increase at a faster rate than British shipping. Nascent Egyptian nationalism could not threaten British control of the Canal. Immediately following the Crisis, the British militarized the Canal Zone, but withdrew half the troops the following year. The British maintained forces in Egypt to maintain the colony and the canal. The Convention of Constantinople provided nominal neutrality. Great Britain exercised local control and retained naval hegemony. This allowed the British to close the canal at will to non-club members. By 1888, British ownership of the canal was established due to France and the Ottoman Empire's

¹⁰⁴ The author selected tonnage and nationality data from Schonfield's Appendix H tables. The data has been graphically depicted as a bar graph comparing British, French and all other nations shipping at a five-year interval from 1880 to 1925.

failure to react to the Egyptian coup of 1881. During the First World War, Britain faced an existential threat. In response to this, the canal was completely militarized and all pretense of neutrality disappeared. Therefore, the canal was in effect a club good with undisputed ownership.

Case 3: End of Empire

The post-World War II world was vastly different than the previous hundred years. Great Britain struggled to maintain prestige and power. In 1947, India won her independence from Great Britain, and the canal was no longer an undeniable British national interest. Israel declared independence in 1948, increasing the preexisting racial and religious tensions in the Middle East. At the same time, the Arab States oil exportation increased. Their oil traveled to the western world through the Suez Canal. This made the canal a global interest. France, nominally a great power, was struggling to maintain her overseas holdings in Algeria and Indochina while rebuilding a nation laid bare by war.¹⁰⁵ The canal became a vital asset to the world. After 1946, British shipping no longer accounted for over half of the tonnage transiting the Suez Canal, see figure 7. That same year Winston Churchill delivered his Iron Curtin speech.¹⁰⁶

¹⁰⁵ Andre Beaufre, *The Suez Expedition 1956* (New York, NY: Praeger, 1969), 23–26; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 208–209.

¹⁰⁶ Winston Churchill. “The Sinews of Peace (‘Iron Curtin Speech’),” The International Churchill Society, last modified March 5, 1946, accessed on November 1, 2019, <https://winstonchurchill.org/resources/speeches/1946-1963-elder-statesman/the-sinews-of-peace/>.

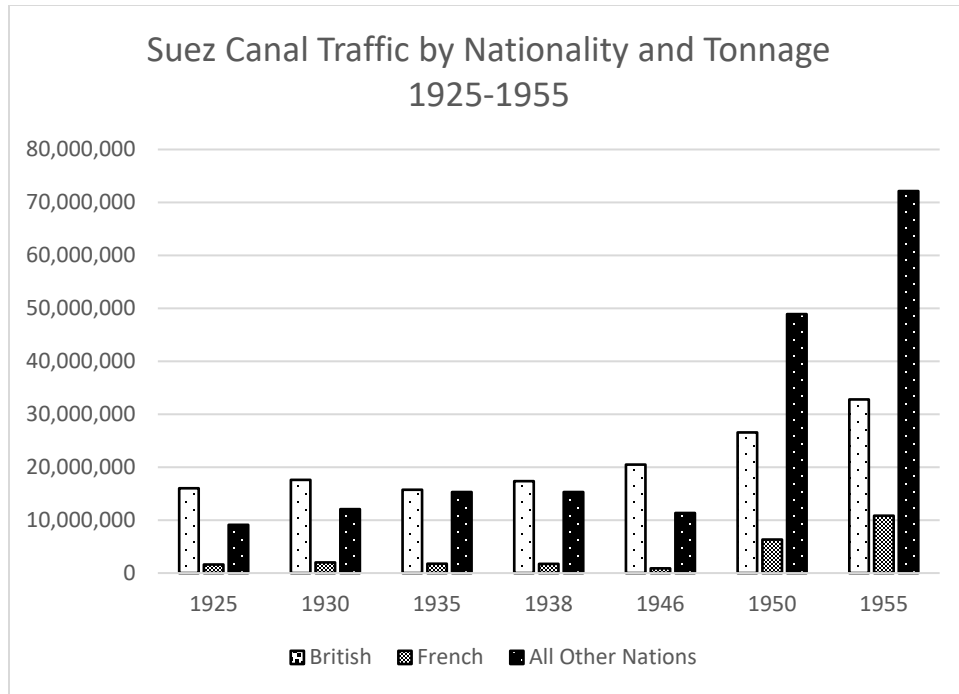


Figure 7. Suez Canal Traffic by Nationality and Tonnage 1925-1955.¹⁰⁷

Figure adapted by author from, Hugh Schonfield, *The Suez Canal in Peace and War 1869-1969* (Coral Gables, FL: University of Miami Press, 1969), 206-209.

Independent Egypt exercised little control over the canal. During the 1950s, France and Great Britain appointed twenty of the twenty-five directors of the *Compagnie Universelle*. Of the remaining four, only two were Egyptian nationals.¹⁰⁸ The Egyptian Army executed a coup in 1952.¹⁰⁹ In this political environment it became apparent the Egyptian government would not renew *Compagnie Universelle's* lease in 1968.¹¹⁰ The British military agreed to leave the day-to-day defense of the canal to the Egyptians, but on condition the Convention of Constantinople was honored. Egyptian forces garrisoned the canal zone following the negotiated departure of the

¹⁰⁷ The author selected tonnage and nationality data from Schonfield's Appendix H tables. The data has been graphically depicted as a bar graph comparing British, French and all other nations shipping at a five-year interval from 1925 to 1955.

¹⁰⁸ Schonfield, *The Suez Canal in Peace and War 1869-1969*, 137.

¹⁰⁹ *Ibid.*, 135-138.

¹¹⁰ *Ibid.*, 135-139.

British in June, 1956. The Egyptian military consisted of four infantry and one armored division, and one-hundred forty modern aircraft.¹¹¹

Colonel Nasser, the leader of Egypt, worked to increase Egypt's place in the world. He played the West against the Soviet Union and China for military supplies, access to markets for Egyptian cotton, and for financing for his vastly expensive Aswan Dam construction project.¹¹² From the Egyptian point of view, the Suez Canal was Egyptian. The corporate ownership was a matter of semantics.

Nasser addressed Egypt on July 26, 1956 attacking Franco-British imperialism and the state of Israel. Invoking pan-Arab nationalism, and the Ancient Egyptian tradition of a canal, he nationalized the Suez Canal.¹¹³ The nationalization played well in domestic politics and Colonel Nasser evoked deep nationalist and racial emotions.¹¹⁴

In October pro-Nasser elements won the Jordanian election. Israel felt surrounded by pan-Arab nationalists and chose to invade Sinai on October 30, 1956. Israel saw this as an opportunity to increase their security by destroying Egyptian positions in the Sinai and gaining tactically valuable terrain near the Red Sea.¹¹⁵

The Egyptian Army deployed at least three divisions in the Sinai Peninsula. Evidence suggests some Egyptian elements including two armored battalions were initially defending on the west bank of the Suez Canal.

¹¹¹ Beaufre, *The Suez Expedition 1956*, 31, 32.

¹¹² Schonfield, *The Suez Canal in Peace and War 1869-1969*, 143–146.

¹¹³ Gamal Nasser, "Egyptian Law Nationalizing the Suez Canal Company 26 July 1956," in *Documents on the Suez Crisis, 26 July to 6 November 1956* (London, UK: Royal Institute of International Affairs, 1957), 39–41; Gamal Nasser, "Extracts from the Speech of Colonel Nasser of 26 July 1956 Announcing the Nationalization of the Suez Canal Company," in *Documents on the Suez Crisis, 26 July to 6 November 1956* (London, UK: Royal Institute of International Affairs, 1957), 44–49; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 147–148.

¹¹⁴ Nasser, "Extracts from the Speech of Colonel Nasser of 26 July 1956 Announcing the Nationalization of the Suez Canal Company"; Schonfield, *The Suez Canal in Peace and War 1869-1969*, 149.

¹¹⁵ Terence Robertson, *Crisis: The Inside Story of the Suez Conspiracy* (New York, NY: Atheneum, 1965), 253–276.

Israeli Forces defeated the lead elements of the Egyptian Army. The remaining mobile Egyptian forces withdrew to the west bank of the canal to prevent being isolated and destroyed.¹¹⁶ During the crisis the Egyptians did not view the canal as a key link in the global commons, but rather as a tactical obstacle. That is the canal became a world class anti-tank ditch.

The French and British governments looked to respond to the crisis, but could not agree to a reconquest of Egypt. As an alternative they decided to capture the canal. Both nations deployed paratroopers to attack Port Said at the Mediterranean entrance to the Canal Zone. They achieved initial success. However, the superpowers made a strategic decision that rendered these tactical gains meaningless.¹¹⁷

The Middle East was another theater in the Cold War. Neither of the superpowers wanted the crisis to escalate into a major war. The Soviet Union communicated to the Americans, British, and French they were willing to send “volunteers” to support the Egyptians. The Soviet Union went as far as to notify Turkey that in November their warships would transverse the Dardanelles en route to the Middle East. President Eisenhower pressured both France and Britain to withdraw. In the end, the superpowers were able to pressure the aging and formerly great powers to stand down.¹¹⁸ By the end of 1956, all European forces withdrew from the Canal Zone. For the first time since 1881, the canal was under Egyptian control.¹¹⁹

Over the next ten years, the Egyptians peacefully administered the canal. Shortly after the crisis the Egyptian government deepened and modernized the canal. Later, the Egyptian government reached a settlement with the shareholders of the now obsolete *Compagnie Universelle*. Initially, shipping through the canal decreased due to the political uncertainty and the construction, but it quickly recovered.

¹¹⁶ Beaufre, *The Suez Expedition 1956*, 84, 88–89, 95–116.

¹¹⁷ *Ibid.*, 95–116.

¹¹⁸ Robertson, *Crisis: The Inside Story of the Suez Conspiracy*, 253–276.

¹¹⁹ Schonfield, *The Suez Canal in Peace and War 1869-1969*, 156–160.

Following the 1956 Suez Crisis, the American, British, and French key concern was that the Egyptians would honor the Convention of Constantinople. In April 1957, Egypt affirmed they would honor the convention.¹²⁰ Nassar honored the convention with one exception. He blocked all Israeli vessels and cargos. Egypt normalized this behavior early in their administration of the canal by blocking the Israel bound vessels *Inge Toft* and *Astypalea* in 1959. The canal continued to provide a vital service for the world at large and by 1960 transiting tonnage was at all-time highs. Internationally, the Suez Canal remained a link in the global commons. Tactically, the canal remained key terrain in the Arab -Israeli wars of the twentieth century.¹²¹

Throughout the crisis, the Suez Canal remained a club good. The disputed ownership of the canal led to a military response. When Britain granted Indian independence in 1947, the canal was no longer a vital British interest. By the late 1940s, the canal was becoming a key link in the global commons. By 1950, British shipping no longer accounted for most of the cargo transiting the canal.¹²² Following the Suez Crisis of 1956, Egyptian militarization near the canal was primarily focused on using the canal as a tactical obstacle on the frontier with Israel.¹²³ In this case, militarization of the canal was not directly tied to its ownership or status as a club or public good.

Summary

When the Suez Canal was a public good, it was not militarized. From 1869 to 1881, it operated peacefully as a public good. The British intervention in 1882 was not in response to a threat on the legitimacy and stability of the Viceroy's regime. It was an opportunity to seize a

¹²⁰ E. Lauterpacht, ed., *The Suez Canal Settlement* (London, UK: The British Institute of International and Comparative Law, 1960), 35.

¹²¹ Schonfield, *The Suez Canal in Peace and War 1869-1969*, 161–166.

¹²² *Ibid.*, 206–209.

¹²³ George W. Gawrych, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*, Leavenworth Papers 21 (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1996), 14–16.

growing national interest. The British believed the canal was the key to India in the 1880s. Nearly 80 percent of the annual shipping tonnage through the Suez Canal was British. The lack of international clarity on de Lesseps vision of a neutral water way exacerbated the situation and the British acted.

Following the Anglo-Egyptian War of 1882, the Suez Canal became a club good with undisputed ownership, masquerading as a public good. The 1888 Convention of Constantinople codified de Lesseps vision. The key differences between Egyptian ownership of the canal and British ownership was the presence of an overarching international agreement that established norms. This reduced the uncertainty and encouraged the growth of commerce through the canal without competitive militarization. The British only militarized the Suez Canal when they faced an existential threat. British naval hegemony was another factor that may have contributed to the stability.

During the 1956 Suez Crisis, the Suez Canal was a club good with disputed ownership. This led to militarization. The canal was initially demilitarized when the British departed in June 1956. The Egyptians garrisoned it. The French and British invaded to regain control of the canal. However, the superpowers stopped the conflict and ensured Egypt gained control of the canal. At this point the canal became a club good with undisputed ownership. Militarization near the canal did occur after this date. This was not directly due to the status of the canal, but rather its value as a tactical obstacle between Egypt and Israel.

Recommendations

The Suez Canal demonstrates militarization is less likely when the international community views sea routes as public goods, or as club goods with undisputed ownership. The emerging Arctic routes are currently club goods with disputed ownership. The Suez Canal case studies demonstrate this is the condition that most likely to lead to competitive militarization.

To limit militarization, the best option is to ensure the Arctic passages become public goods. To achieve this, America should work to ensure all parties in the Arctic comply with the United Nations Convention on the Law of the Sea. The Arctic Coastal Nations affirmed this intent with the Ilulissat Declaration of 2008. During the intervening years, the Arctic Coastal Nations have worked within the United Nations Convention on the Law of the Sea to resolve disputes. Three of the Arctic Coastal Nations claim the sea bed surrounding the North Pole. All three are working through the United Nations Commission on the Limits of the Continental Shelf to resolve their dispute.

To transition the Arctic Ocean to a public good will require a whole of government approach and international cooperation. Diplomatically, the United States should work with partner nations to challenge Canadian and Russian claims of internal waterways in the Arctic Ocean. The United States should shape the global narrative that the Arctic Ocean is, like any other ocean, subject to the United Nations Convention on the Law of the Sea. America can act to foster the exploration of the Arctic and the increased use of the Northwest Passage. The United States should consider freedom of navigation operations through the Arctic. These operations should include a scientific element to reinforce the narrative. The United States should invest in increased Arctic search and rescue capabilities. Search and rescue support will encourage commercial shipping through the Northwest Passage. Increased shipping is likely to increase international resistance to Russian and Canadian claims of internal waterways. This may normalize shipping in the Arctic Ocean. Expansion of the Northwest Passage can place pressure on Russia to allow international shipping in the Northern Sea Route. If they do not, the Northern Sea Route may become a backwater, while the Northwest Passage develops as a key link in the global commons.

Freedom of navigation operations in the Arctic Ocean create risk, and may lead to counterintuitive results. They are likely to increase tensions with Russia. Increased tensions will likely lead to increased militarization. Likewise, freedom of navigation operations in the

Northwest Passage may damage America's relationship with Canada. The key to limiting risk is to encourage international shipping to use the routes. Once this behavior is normalized, shipping is likely to increase exponentially; as it did during the first five years of the operation of the Suez Canal. If the Arctic Routes become a key link in the global commons, the international community is likely to apply pressure on both Russia and Canada to suspend their internal waterway claims. This is similar the pressure the international community applied to the British in the years leading to the Convention of Constantinople.

The next best option to limit militarization is to establish the routes as club goods with undisputed ownership. Canadian and Russian claims of internal waterways are attempts to establish their respective routes as club goods. The Ilulissat Declaration itself tends to envision the Arctic Ocean as a club good by limiting the influence of the non-Arctic Coastal members of the Arctic Council. Militarily, the United States should partner with Canada to increase Arctic search and rescue capabilities and encourage shipping through the Northwest Passage. Canada will likely require some payment for a transit of the Northwest Passage. That is as long as the passage is sufficiently narrow for them to control. The United States should partner with Canada and communicate that transit fees of the Northwest Passage benefit the world at large through scientific investigation, and provide rural Arctic communities financial stability. In this scenario, the Northern Sea Route may continue to militarize. But the route may become irrelevant to global trade. At the same time Canada and America will control a new link in the global commons.

The worst option is the militarization of both routes. The key distinction between the Suez Canal and the Arctic Ocean is there are two independent routes in the Arctic. Militarization of one route does not necessarily lead to the militarization of the second. The fifty-three-mile-wide Bering Strait is the only location where both routes converge. If militarization occurs, this is the only location that can control access to both routes. Even if the summer sea ice disappears, the Bering Strait remains the key choke point between the Arctic and the Pacific Oceans. The Bering

Straits offer the potential to be a 21st Century Gibraltar. America should prepare to patrol and establish infrastructure near the remote strait to control it.

Militarization of the Arctic is the least desirable future, but it does offer some possible advantages. The Russians control half the world's Arctic coastline. Militarizing and maintaining the northern coast of Russia has the potential to be extremely expensive. This can lead the Russians to squander limited resources to control the Northern Sea Route. Militarization of the Northern Sea route will not directly threaten trade on the Northwest Passage.

Conclusion

The historical militarization of the Suez Canal, the theory of club goods, and the concept of disputed or undisputed ownership predicts when sea lines of communication will be militarized. Routes that are public goods are unlikely to be militarized. Club goods with undisputed ownership are unlikely to be militarized, unless the owner faces an existential threat. Militarization is most likely to occur when a sea line of communication is a club good with disputed ownership.

The lack of accepted international norms increases the likelihood of militarization. If a sea line of communication is an exposed vital national interest, the route is more likely to be militarized. If a local population has a strong cultural tie to the route; the route is more likely to be militarized.

For the near future the Arctic is analogous to a canal. Entrance to either of the existent passages requires the permission of the controlling government. The path is sufficiently narrow to, in effect, canalize the ships in transit. If Chinese and Norwegian predictions are correct, the Arctic Ocean will experience ice free summers. If Norway's prediction of 2050 is correct, the world has a window of thirty years that the Arctic Sea Routes will behave as described above, before the routes disappear and the Arctic Ocean becomes a high sea.

During the same time, we can expect a rapid increase in international shipping via the transpolar routes. Annual tonnage transiting the Suez Canal increased nearly 700 percent between

its first full year of operation and its fifth. The less ice that exists in the Arctic Ocean, the more likely international shipping companies are likely to risk a transit. At the same time, the less ice there is the less excludable the routes become. Arctic Coastal Nations will exert less and less control on transits of the Arctic Ocean. The Bering Straits have the potential to control entrance to both the current routes. If the Arctic Ocean experiences ice free summers, the straits still control transits between the Pacific Ocean and the Arctic Ocean. If the Arctic Ocean militarizes, the Bering Straits have the potential to become key terrain in the new global commons.

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