



PALGRAVE STUDIES IN  
MARITIME POLITICS AND SECURITY

# The Suez Canal: Past Lessons and Future Challenges

*Edited by*

CARMELA LUTMAR

ZIV RUBINOVITZ

OPEN ACCESS

palgrave  
macmillan

# Palgrave Studies in Maritime Politics and Security

Series Editor

Geoffrey F. Gresh, Springfield, VA, USA

The world's oceans cover over 70% of the planet's surface area. Global shipping carries at least 80% of the world's traded goods. Offshore oil and gas account for more than one-third of world energy production. With the maritime domain so important and influential to the world's history, politics, security, and the global political economy, this series endeavors to examine this essential and distinct saltwater perspective through an interdisciplinary lens, with a focus on understanding the ocean historically, politically, and from a security lens. Through a spectrum of engaging and unique topics, it will contribute to our understanding of the ocean, both historically and in a contemporary light, as source, avenue, and arena: a source of food and energy; an avenue for the flow of goods, people, and ideas; and an arena for struggle and warfare. The series will use an interdisciplinary approach—integrating diplomatic, environmental, geographic, and strategic perspectives—to explore the challenges presented by history and the contemporary maritime issues around the world.

Carmela Lutmar · Ziv Rubinovitz  
Editors

# The Suez Canal: Past Lessons and Future Challenges



קתדרת חייקין לגאואסטרטגיה  
The Chaikin Chair for Geostrategy



המרכז לחקר מדיניות ואסטרטגיה ימית  
Maritime Policy & Strategy Research Center

palgrave  
macmillan

*Editors*

Carmela Lutmar  
University of Haifa  
Haifa, Israel

Ziv Rubinovitz  
University of Haifa  
Haifa, Israel



ISSN 2730-7972

ISSN 2730-7980 (electronic)

Palgrave Studies in Maritime Politics and Security

ISBN 978-3-031-15669-4

ISBN 978-3-031-15670-0 (eBook)

<https://doi.org/10.1007/978-3-031-15670-0>

© The Editor(s) (if applicable) and The Author(s) 2023. This book is an open access publication.

**Open Access** This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover illustration: Nino Marcutti/Alamy Stock Photo

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

## ACKNOWLEDGMENTS

This project began in November 2019 with a conference held at the University of Haifa marking 150 years of the Suez Canal. We are tremendously happy with the outcome despite its long labor. We would like to thank all the researchers who have contributed to this volume, and in particular for their patience and friendship.

We were very fortunate to be able to draw on many support personnel at the University of Haifa at the Maritime Policy and Strategy Research Center, especially the invaluable duo Zehavit Salman-Meir and Noga Yoselevich. There is no doubt in our minds that this volume could not have reached its successful fruition without their continuous support. They were not only efficient but also cheerful and encouraging when most needed. The Palgrave Macmillan team—Anca Pusca, Geetha Chockalingam, and Gopalakrishna Lakshmi Narasimha—were a delight to work with, and we thank them for their patience and guidance. Finally we thank Ilana Brown for the meticulous editing which makes this book much more coherent.

# INTRODUCTION

The Suez Canal is one of the most important artificial waterways in the world. Since its opening in November 1869, it had proven to be vital for both trade and military affairs and for great and regional actors. It is one of the most significant and sensitive chokepoints in the world, and the latest events in March 2021 served as a token to this fact, when a huge cargo tanker, the *Ever Given* got stranded on the Canal's bank and blocked the waterway for six days, causing a "traffic jam" for hundreds of boats in the Mediterranean and Red seas. Nearly ten percent of global shipping passes in the Suez Canal,<sup>1</sup> hence its blocking was a serious problem. Global prices of oil started rising and there was concern over delivery times of goods around the world. This was a reminder of how significant the Suez Canal is for international trade. This recent incident makes it relevant to present-day readers and most likely, future ones too.<sup>2</sup>

<sup>1</sup> Ishaan Tharoor, "The Suez Canal, a chokepoint of history," *Washington Post*. March 26, 2021, [https://www.washingtonpost.com/world/2021/03/26/suez-canal-history/?utm\\_campaign=wp\\_todays\\_worldview&utm\\_medium=email&utm\\_source=newsletter&wp\\_src=nl\\_todayworld&carta-url=https%3A%2F%2Fs2.washingtonpost.com%2Fcar-ln-tr%2F314138e%2F605d5b4a9d2fda4c881cefab%2F596b76b1ac7e8a44e7d7fa6f%2F13%2F72%2F605d5b4a9d2fda4c881cefab](https://www.washingtonpost.com/world/2021/03/26/suez-canal-history/?utm_campaign=wp_todays_worldview&utm_medium=email&utm_source=newsletter&wp_src=nl_todayworld&carta-url=https%3A%2F%2Fs2.washingtonpost.com%2Fcar-ln-tr%2F314138e%2F605d5b4a9d2fda4c881cefab%2F596b76b1ac7e8a44e7d7fa6f%2F13%2F72%2F605d5b4a9d2fda4c881cefab) (April 2, 2021).

<sup>2</sup> Ehud Gonen, "The *Ever Given* Suez Canal Blockage Incident: the Implications—Regional and for Israel", in Shaul Chorev and Ziv Rubinovitz (eds.), *Maritime Strategic Evaluation for Israel 2021/22* (Haifa, Israel: Maritime Policy and Strategy Research Center, University of Haifa, 2022), 201–220.

This book includes twelve studies on various aspects of the Suez Canal. Some of them were presented at a conference marking 150 years since the Suez Canal was opened that was organized by the Chaikin Chair for Geostrategy at the University of Haifa, Israel, in November 2019, while others are original contributions for this volume. The introduction briefly reviews the Suez Canal's history, its significance for the superpowers, and finally overviews the structure of the book.

Together, this collection of studies provides a broad view of this unique waterway. This volume addresses a few gaps in the literature—the first is a lack of a systematic examination of historical aspects of the development of the Canal in 150 years. The second is a careful study of the Canal's geostrategic importance with emphasis on the significant role that superpowers and regional actors played throughout the years. The third is a combination of several disciplines that examine the centrality of the Suez Canal, and while some of these case studies have been addressed in previous scholarship, others have hardly been explored in the context of the Suez Canal, such as the anthropogenic activity. The fourth is a comprehensive survey of various factors surrounding one of the major shipping routes in the world.

### A BRIEF HISTORY OF THE CANAL

The Sinai Peninsula connects Asia and Africa while separating the Mediterranean Sea from the Red Sea, and for thousands of years was making it hard to trade goods between South and Southeast Asia and Europe, forcing ships to circle around the Cape of Good Hope in Southern Africa. Already in ancient times, Egypt built a canal but it was disused and lost after a while. In the late eighteenth century, Napoleon Bonaparte conquered Egypt and wanted to build a canal to shorten the way to the East, but his engineers mistakenly calculated that there was a gap in sea levels between the Mediterranean and Red seas that would have flooded the Nile's delta from the Red Sea. Thus, the idea was dropped.<sup>3</sup> But in the middle of the nineteenth century, an accurate calculation of the sea levels sparked a new discussion. The canal was now feasible and

<sup>3</sup> Zachary Karabell, *Parting the Desert: The Creation of the Suez Canal* (New York: Vintage Books, 2003), 7–8.



would make naval transportation between West and East much faster, thus making trade cheaper.

In the mid-1850s, a French diplomat, Ferdinand de Lesseps, obtained permission from the Ottoman ruler of Egypt to start a company to build a canal that would serve ships of all nations. The plan was that the company would operate the canal for 99 years, after which the Egyptian government would take over. By the end of 1858, the Suez Canal Company was established. The United Kingdom objected to the whole project because it controlled the Cape of Good Hope, thus it was concerned that the canal would cut its income. Despite the British opposition, the company built the Suez Canal within ten years, and it was inaugurated on November 17, 1869.<sup>4</sup>

However, financial difficulties forced the company to seek additional investments, and the Ottoman governor of Egypt bought 44% of the company. Yet, when Egypt was in a dire economic situation, the United Kingdom—now the chief beneficiary of the Suez Canal—bought the Ottoman share in the Canal and took over, not just the Canal but also Egypt as a whole, which came under British protectorate from 1882 until 1922 (while formally remaining part of the Ottoman Empire). Nevertheless, the British and French continued to control the Suez Canal by keeping military bases near the Canal in agreement with Egypt's king Farouk but he was ousted in 1952 by the Free Officers' coup, led by Gamal Abdel Nasser.

In 1954, after securing his leadership, Nasser signed an agreement with the United Kingdom and France to withdraw their forces from the Canal. But on July 26, 1956, Nasser abruptly nationalized the Canal, ordered the British and French to withdraw their forces, and with that, ignited the Suez Crisis that led to the October–November 1956 Sinai War. The reason for the nationalization was that Egypt needed the income from the Canal to fund the Aswan Dam that was experiencing financial difficulties because the United States withdrew from the project.<sup>5</sup> Nasser's act enraged the United Kingdom and France. France aligned with Israel which was concerned with Egypt's most recent purchase of arms from Czechoslovakia in 1955, and found a shared cause with

<sup>4</sup> Karabell, *Parting the Desert*.

<sup>5</sup> Michael Doran, *Ike's Gamble: America's Rise to Dominance in the Middle East* (New York: Free Press, 2016), 169.

France in striking Egypt with hopes that this would take Nasser off the stage. The United Kingdom joined at the last moment and on October 29, 1956, the Sinai War began. Israeli forces reached the Suez Canal within days and fully occupied the Sinai Peninsula until they were withdrawn in March 1957 due to immense American pressure. The French and British forces parachuted into the Canal's region with the intent of regaining control, but under immense pressure from the United States and the Soviet Union, withdrew quickly, handing a propaganda victory to Nasser.<sup>6</sup> And most importantly and significantly for our matter, the Canal was recognized as Egypt's.

Israel's forces reached the Canal again in June 1967, and with Israel and Egypt deploying forces on both of its banks, with mines and sunken ships in it, the Canal was closed for eight years, forcing all vessels to ship around Africa. During this time, the 1969–1970 War of Attrition was fought mostly across the Canal, and in October 1973, Egypt managed to cross the Canal at the beginning of the war, and Israel also managed to cross it in its counterattack. Following the war, a long peace process began, during which Israel withdrew from the eastern bank of the Canal in the 1974 Separation of Forces agreement, and in June 1975 withdrew further to allow Egypt to reopen the Canal.<sup>7</sup> This reopening also marked the Canal's modernization, as it was rebuilt to suit modern shipping which anyway could not cross the narrow Canal in its earlier version. Finally, the 1979 Israel–Egypt peace treaty included Israel's complete withdrawal from the Sinai Peninsula and an agreement on Israel's navigation through the Suez Canal.

## THE SUEZ CANAL AND THE SUPERPOWERS

The Suez Canal is unique in several aspects. It connects the Mediterranean Sea with the Red Sea, and then the Indian Ocean. It is also at the crossroads of three continents—Asia, Europe, and Africa. It was one of the key engineering projects of the nineteenth century, and is an imperial legacy, initiated by the French, then controlled mostly by the British, but

<sup>6</sup> Keith Kyle, *Suez: Britain's End of Empire in the Middle East* (London: I.B. Tauris, 2011); Yagil Henkin, *The 1956 Suez War and the New World Order in the Middle East: Exodus in Reverse* (Lanham, MD: Lexington Books, 2015).

<sup>7</sup> Kenneth W. Stein, *Heroic Diplomacy: Sadat, Kissinger, Carter, Begin, and the Quest for Arab-Israeli Peace* (New York: Routledge, 1999).

eventually is owned entirely by Egypt. As mentioned earlier, it is one of the most important chokepoints of international trade, particularly of oil that is shipped from the Arabian Peninsula and the Persian Gulf through the Canal to Europe and America. Other goods are also shipped through the canal to destinations around the globe.

Sparing commercial shipping the weeks-long route around Africa made the trade between South and East Asia and Europe more efficient and cheaper. But the Canal also has a strategic role, as it shortened not only commercial shipping routes but also for navies, making it a valuable asset for the United Kingdom for nearly a century. The canal was the reason that the British took over Egypt in the early 1880s and remained a crucial consideration until the late 1940s when the United Kingdom lost most of its Middle Eastern territories. The loss of India in 1947 devalued the Suez Canal for the United Kingdom, although it—and France—maintained forces around the Canal even after Egypt became independent. But then the Suez Crisis occurred, as mentioned earlier. It ended with the United Kingdom and France withdrawing and since then, playing a minor role in the Middle East.

The Suez Canal's location in the Middle East raises the importance of the region in commercial and military terms, whereas the numerous tensions in the region make the Canal vulnerable. It is a key chokepoint in the Middle East and in international trade.<sup>8</sup> The Canal adds to Egypt's strategic importance in the Middle East but it is also a sensitive target, therefore Egypt invests considerably in its defense. But keeping the Canal safe for commercial navigation is not only Egypt's burden but it is also on the United States' mind in its role as a major sea power.

In this respect, it is interesting to recall how the closed Canal (1967–1975) assisted the United States in the Vietnam War, as Soviet aid to North Vietnam had to be shipped around Africa, delaying it for weeks. For this reason, there was some pressure from Washington on Jerusalem not to allow the reopening of the Canal because keeping it closed was in the United States' interest. In other words, Israel was assisting the United States by not withdrawing its forces from the Suez Canal, which would have been considered a peacebuilding measure. This is not to say that during these years Israel was eager to withdraw its forces, but rather

<sup>8</sup> Before the COVID-19 epidemic, 13% of global trade passed through the Suez Canal, and financially speaking, 2021 appears to have been the most successful year on record. Gonen, "The *Ever Given* Suez Canal Blockage Incident".

that the United States supported an Israeli hawkish position for its own interest in Southeast Asia.

This man-made canal had been instrumental for empires and trading nations across the globe, and simultaneously it was also a target for global and regional powers. Its operation was interrupted several times due to regional warfare between Israel and Egypt (1956, 1967). The canal saw both warfare and peaceful cooperation once Israel and Egypt began their reconciliation following the 1973 war. The post-1973 arrangements that ended in the 1979 peace treaty were sponsored by the United States. The United States is not only the mutual patron of Egypt and Israel (Egypt after 1973) but it is also the major player in the international trade system that benefits from the Canal's peaceful operation and suffers from its wartime closure. In other words, when the Canal came under exclusive Egyptian control, Egypt's unsettled conflict with Israel caused serious problems for the Canal's operation. Therefore, commercial navigation was unsafe at the time. This ended only when Egypt began signing agreements with Israel—and eventually the peace treaty—but this could happen only with the United States' intervention that facilitated the end of the state of war. Thus, it is implied that the incentives to end warfare that impacts the Canal are mostly provided by the great powers, not necessarily the regional ones.

## THE BOOK'S STRUCTURE

Most of the chapters in this volume emphasize the relations between great and regional powers in the context of the Suez Canal. Clearly, the Canal would never have been built without the great powers. But once Egypt became independent and later took full control over the Canal, the great powers became clients of the Egyptian authorities, subject to Egypt's foreign policy considerations. This is despite the fact that the Canal is an international waterway where navigation should be free and protected for all under international conventions.

The book is organized into four Parts: Part I discusses political, geopolitical, and geostrategic issues. Shaul Chorev discusses strategic and geopolitical challenges concerning the Canal, focusing on Egypt's challenges in the coming decades as well as how the Canal may impact both the East Mediterranean and the Red Sea. The key challenges have to do with the physical capability of the Canal to serve the larger ships that have problems passing through the current canal, the growing trade between

China and Europe due to the Belt and Road Initiative, the regional instability that prevents the construction of alternatives to the Canal, and China's investment in the Canal's region, suggesting it may become a major trading center. The threats include the fact that as a major choke-point, the Canal is a target for terrorism, the political instability in Egypt that might make the Canal less attractive, and the possibility that a North Sea path opens, thus offering a shorter route between Europe and the Far East.

Ehud Gonen writes about the Canal in the context of China's Belt and Road Initiative. His chapter sheds light on the Chinese efforts to bolster their economic investments in the Middle East, and how the Suez Canal is used for that purpose. Yehuda Blanga discusses the connection between the Suez Canal and the Vietnam War, focusing on the tension between the strategic need to open the Canal as part of an effort to start a peace process between Egypt and Israel and the strategic need to keep the Canal closed because it delayed Soviet supplies to North Vietnam, thus assisting the United States in the war. This chapter focuses on the US decision-making in 1971 around Egyptian President Anwar Sadat's peace initiative.

Part II explores energy aspects. Christopher Dietrich discusses the United States' strategic thinking about oil and the international politics of the Suez Canal during the Cold War's first half, until the oil crises of the 1970s. He argues that the oil consideration in the US policy was growing during the Cold War and that it affected the US policy during the 1956, 1967, and 1973 Arab-Israeli Wars. Dietrich analyzes the US strategy and perceptions during the Cold War regarding the importance of the Suez Canal as a major economic artery, and the passage of oil, crucial for international commerce. Yossi Mann discusses the economic impact of the Suez Canal on the global economy, specifically on the oil market and how regional conflicts and Egypt's instability influence the Canal's position as a major oil route.

Part III deals with legal aspects. Benjamin Spanier discusses the various characteristics that distinguish between a canal and a strait. This distinction is important in determining the right to navigate through either a canal or a strait, as defined in maritime conventions and by the International Court of Justice. Robbie Sabel discusses Israel's right of passage through the Canal, focusing on Egypt's claim that because of the state of war between itself and Israel, Egypt had the right to prevent Israeli shipping in the Canal, as well as search and seize goods, whereas Israel's

counter-argument was that the 1888 Constantinople Convention obligated Egypt to allow Israeli free navigation. In 1951, the UN Security Council adopted a resolution that backed Israel's position, and in 1975 and later on in the 1979 peace treaty, Israel's right of free passage was put in writing, thus committing Egypt to comply with it. Eitan Barak discusses Israel's struggle to get the freedom of passage in the Suez Canal between the 1956 Sinai War and the 1967 Six Day War, and how tacit understandings about cargo to Israel were reached and violated, then reframed at the United Nations but rejected by Egypt. Barak argues that Israel did not respond forcefully because it was unwilling to jeopardize the only interest it shared with Egypt at the time, which was to avoid war.

Part IV examines the Suez Canal's impact on human affairs and the environment. Arnon Sofer analyzes the Canal's impact on Egypt's geography and economy since its opening in 1869, demonstrating Egypt's benefits from the Canal alongside the failures it experienced. He refers to the Canal's long-term impact on urbanization and demographic policy of Egypt, its effect on agriculture in its vicinity, the indirect impact on Egypt's economy, and Israel's connection to the Canal. Bella Galil discusses the Canal's environmental print between the Mediterranean and the Red Sea, arguing that the Canal has altered the Mediterranean biota negatively, specifically in ecological, economic, and human health aspects. Semion Polinov discusses anthropogenic activity in the Mediterranean, arguing that the Suez Canal had had a significant impact on the Mediterranean Sea since its opening in 1869. Aleksander Gerson writes about the blockage of the canal by the Ever Given United Nations Convention on the Law of the Sea Ever Given container ship in March 2021. The incident demonstrated many problems that the Suez Canal has with serving such ships and how costly this incident was in the shipping sector and its impact on global trade. The article raises several important operational and regulatory implications of this incident that must be addressed.

Not all articles touch directly on the Suez Canal itself, but rather discuss issues that provide important context surrounding it. There is quite a significant emphasis on Egypt—Israel relations and eventual peace-making because this dyad had crucial impact on the Canal and its operation (and lack of) since 1948. Israel is also an excellent case study of the international navigation through the Canal. While it should be free and protected by international law and treaties, Israel was denied this right for many years while it was in a state of war with Egypt. Hence this

volume provides insights on a more theoretical level in terms of conditions for cooperation in intractable conflicts between belligerents as well as incentives for intervention by external actors (superpowers) in regional conflicts. By doing that it adds another piece in the burgeoning scholarship on intractable conflicts and the various conditions under which they develop, endure, and eventually are resolved.

Ziv Rubinovitz  
Carmela Lutmar

# PRAISE FOR *THE SUEZ CANAL: PAST LESSONS AND FUTURE CHALLENGES*

“Most gave little thought to the Suez Canal until that vital maritime and economic artery became blocked in March of 2021. Presciently and fortunately, Ziv Rubinovitz and Carmela Lutmar were not in that camp. They have assembled a superb collection of studies that contribute greatly to understanding the Canal’s consequential history, its essentiality in today’s geopolitical and geoeconomic environment, and the waterway’s continued centrality in future regional and global affairs. Beyond being a must read for historians, economists, and security professionals; this book should be at the top of all reading lists as maritime commerce, global supply chains, and the Suez Canal will continue to profoundly affect our daily lives.”

—Admiral Gary Roughead, *U.S. Navy (Retired), Former U.S. Navy Chief of Naval Operations*

“The authors have filled a gap in the academic literature with this superb edited volume. Maritime trade is changing, the importance of sea resources is growing, and power rivalries are increasingly being expressed at sea. In an ever-changing Middle East, understanding the role and importance of the Suez Canal is required to understand the 21st century geopolitics.”

—Bruno Tertrais, *Deputy Director, Fondation pour la recherche stratégique, France*



# CONTENTS

## Politics, Geopolitics, and Geostrategy

**The Suez Canal: Forthcoming Strategic and Geopolitical Challenges** 3

Shaul Chorev

**China and the Suez Canal—Politics, Economy, and Logistics** 27

Ehud Gonen

**The Butterfly Effect: The Influence of the Nixon Administration’s Preoccupation with Vietnam on Sadat’s February 1971 Proposal to Reopen the Suez Canal** 43

Yehuda Blanga

## Energy Aspects

**Suez and the United States: Oil, Lifelines, and “All of Mankind” in the Cold War** 71

Christopher R. W. Dietrich

**The Global Oil Market and the Status of the Suez Canal** 95

Yossi Mann

## Legal Aspects

<b>Freedom of Navigation in the Suez Canal and the Channels: Law of the Sea</b>	117
Benny Spanier	

<b>International Law and Freedom of Navigation Through the Suez Canal</b>	135
Robbie Sabel	

<b>Israel's Freedom of Passage in the Suez Canal, 1957–1967</b>	147
Eitan Barak	

## Environmental and Human Impacts

<b>The Impact of the Suez Canal on Egypt's Geography and Economy, 1867–2019 (150 Years Since Its Opening)</b>	181
Arnon Soffer	

<b>A Sea, a Canal, a Disaster: The Suez Canal and the Transformation of the Mediterranean Biota</b>	199
Bella S. Galil	

<b>Increased Anthropogenic Activity in the Mediterranean Since the Opening of the Suez Canal</b>	217
Semion Polinov	

<b>Stranding of the Mega-Ship <i>Ever Given</i> in the Suez Canal: Causes, Consequences, and Lessons to Be Learned</b>	231
Aleksander Gerson	

<b>Conclusion</b>	253
-------------------	-----

<b>Index</b>	259
--------------	-----

## NOTES ON CONTRIBUTORS

**Dr. Barak Eitan** is a faculty member in the Program in Strategy, Diplomacy, and Security (SDS), the Shalem College. Prior to joining the Program, Dr. Barak was a long-time member of the faculty of the Department of International Relations and a senior researcher at the Hebrew University, Jerusalem. Dr. Barak was a Fulbright postdoctoral grantee in the International Security Program at Harvard and a visiting scholar at the Travers Department of Political Science, UC Berkeley. He has published numerous articles, on, *inter alia*, the possibility of implementing the Chemical Weapons Convention (CWC) in the Middle East, Israel's policy towards the CWC, the feasibility of peacekeeping forces in the Israeli-Palestinian conflict and Israel's freedom of navigation and overflight over the Straits of Tiran. As a jurist, Dr. Barak has published a monograph on the legality of flechette weapons and articles on the legality of cluster munitions.

**Dr. Blanga Yehuda** is a senior lecturer with tenure in the department of Middle Eastern studies at Bar Ilan University, Ramat-Gan, Israel. Dr. Blanga's area of specialization is the Egyptian and Syrian policies (regime, military, and society) that make a decisive contribution to the shape of the Middle East. He also studies the military and political involvement of the superpowers, the United States and the Soviet Union, in the Middle East (including in the Arab-Israeli conflict). In 2020, Dr. Blanga published his first book: *US, Israel, and Egypt Diplomacy in the Shadow of Attrition, 1969–1970* (Routledge).

**Chorev Shaul** Rear Admiral and Professor, the former Head of the Israel Atomic Energy Commission and former Deputy Chief of Naval Operations is the Director of the Maritime Policy and Strategy Research Center, the Ezri Center for Iran and Gulf States Research the Wydra division for Shipping and Ports, and the Reuven Chaikin Chair for Geostrategy.

As a professor in the International Relations division of the School of Political Science, he is also head of the M.A. program in National Security and Maritime Strategy at the University of Haifa.

Retired Israeli Navy Rear Admiral Chorev has also held numerous senior positions in the Israeli defense establishment, including Assistant to the Minister of Defense for Nuclear, Biological, and Chemical Defense; Commanding Officer of the Haifa Naval Base; and Commanding Officer of an Israeli Naval Flotilla (missile boats and submarines). He was also the Head of the Dolphin Submarines Project in the German Shipyards (HDW and TNSW) between 1989 and 1992.

Chorev holds a B.A. in Economics and Political Sciences from Bar Ilan University (1985), M.Sc. from the United States Naval Postgraduate School (1989), and a Ph.D. from Bar Ilan University in Science Technology and Society (2005).

Prof Chorev lectures on maritime strategy and Israel defense policy, international security, arms control technology transfer, and innovation system in the defense laboratories.

**Dietrich Christopher R. W.** is an associate professor of History and director of the O'Connell Initiative for the History of Global Capitalism at Fordham University in the Bronx. A graduate of Grinnell College and the University of Texas at Austin, he is the author of *Oil Revolution* (2017), and editor of *Diplomacy and Capitalism* (2022).

**Dr. Galil Bella S.** Curator (emerita) of Crustaceans—Steinhardt Museum of Natural History, ISRAEL.

Bella Galil's research interests are marine biology with emphasis on anthropogenic changes of macrobenthos in coastal and deep waters, dynamics/conservation of marine biodiversity, and marine bioinvasions. She has handled benthic surveys and monitoring in nationally important projects. Dr. Galil has authored 340 peer-reviewed scientific papers and four books.

Her professional responsibilities are extensive:

- From 1993 to 1997 she served as a Chairperson of the Executive Committee of the Zoological Society of Israel, and from 1992 to 1998 she was the Managing Editor of the Israel Journal of Zoology (1992–1998). In both cases, she was the first woman to hold these positions.
- A founding member of the Israeli Association for Aquatic Sciences (IAAS) and was co-organizer and co-chair of the interdisciplinary workshop on the continental margins of the Mediterranean coast of Israel from 1989 to 2003.
- Co-chair of the scientific committee “Living Resources and Marine Ecosystems” for the Mediterranean Science Commission (CIESM) from 2001 to 2007 (the first woman to serve in that position).
- Member of the Directorate and chairperson of the Scientific Committee of Israel’s Nature and Parks Authority from 2007 to 2012.
- Member of the Editorial Board of *Biological Invasions* and a Member of the Advisory Board of *Aquatic Invasions*.
- Member of the Invasive Species Scientific Committee, IUCN, and Coordinating Lead Author of the IPBES Assessment on Invasive Alien Species.

**Gerson Aleksander** Graduate of Naval College in Acre, Israel, 1968.

Military combat service, Israeli Navy, 1969–1972.

Captain Merchant Marine Unlimited since 1979 worldwide.

1998–2016 Chief Shipping Inspector and later Deputy Director General, Israeli Administration of Shipping and Ports.

Israel representative to the IMO in London.

M.Sc. from Southampton-Solent University.

As of 2016 active Captain on Cape size bulk carriers and Senior Research Fellow Policy and Maritime Strategy at the University of Haifa.

**Gonen Ehud** is a Ph.D. candidate at the Department of Asian Studies at the University of Haifa and a Researcher at the Maritime Policy and Strategy Research Center. Ehud’s area of research is OFDI (Outgoing Foreign Direct Investment) from China into the Sea-Port sector under China Belt and Road Initiative (BRI). Ehud held the position of Senior Fellow Researcher at the Harold Hartog School of Government and

Policy, Tel Aviv University (2015–2016). He received an M.A. in International Relations from the Hebrew University (2000) and a B.A. in Economics and Psychology from the University of Haifa (1996). Ehud served as a Diplomat (Israel Trade Commissioner) to Singapore (2000–2004) and to Australia (2008–2012) as well as the chief economist of the foreign trade administration, Israeli Ministry of Economy (2012–2016).

**Dr. Mann Yossi** is a senior lecturer at Bar Ilan University and Reichman University. He served as the Head of the Middle Eastern Studies Program in Reichman University and the Head of Israel and the Arab Gulf program at the Abba Eban Institute. He also served as the Head of the Department of Middle Eastern Studies at Bar Ilan and as an advisor to the Israeli government in various fields of his expertise. Dr. Mann earned his Ph.D. at Bar Ilan University in Israel and published research on the oil market and the Middle East economy. He was a research fellow in several leading energy and alternative energy institutions at Oxford, Gdansk University in Poland, and Renmin University.

**Polinov Semion** Geoinformation scientist at the University of Haifa with expertise in remote sensing, GIS, machine learning algorithms, and big data analysis. A demonstrated skill in the application of remote sensing and geospatial data science to the analysis of data related to marine environments. Extensive experience with geostatistics, environmental modeling, and project management. More than 15 years of experience working with local and national governments, the private sector, academia, and multilateral organizations, including Horizons (2020) and the EU. Proven track record of peer-reviewed publications and reports.

**Professor Sabel Robbie, Ph.D.** Professor of International Law, Faculty of Law Hebrew University, Jerusalem. Visiting professor Tel Aviv University. Member of the Permanent Court of Arbitration, The Hague. Former, Legal Adviser Israel Ministry of Foreign Affairs; Foreign Ministry's Deputy Director General for Arms Control and Disarmament; Head of Israel Delegation, Taba arbitration with Egypt; Member of delegation, peace talks with Egypt, Jordan, and Palestinians. Personal rank of Ambassador. Publications include *Procedure in International Conferences* (Cambridge University Press, 3rd edition January 2018); *International Law (with Yael Ronen)* (Faculty of Law, The Hebrew University Jerusalem, 3rd edition 2016); and *International Law and the Arab-Israeli Conflict* (Cambridge University Press 2022).

**Soffer Arnon** is an Israeli geographer and a professor (emeritus) of Geography and environmental sciences, specializing in water issues and demography. Soffer is one of the founders of the University of Haifa. He is known for his research into demographic, water, environmental, political, and strategy issues of the state of Israel.

**Dr. (Adv.) Spanier Benny** is a Senior Research Fellow at the Maritime Policy and Strategy Research Center (HMS) at the University of Haifa. He holds a Ph.D. in law from the University of Haifa. Dr. Spanier is interested in researching international public law and maritime law, emphasizing international tribunals. Within the framework of HMS, he has published several articles and conducted research relating to Israel's maritime boundaries in terms of the law of the sea. Benny lectures as part of the HMS master's degree program in National Security and Maritime Strategy on matters pertaining to the Law of the Sea and was a visiting lecturer at Syracuse University School of Law in the United States.

# LIST OF FIGURES

## **The Suez Canal: Forthcoming Strategic and Geopolitical Challenges**

Fig. 1	Seven types of ships passed through the Suez Canal, November 2019	7
Fig. 2	Traffic by ship type (Number) ( <i>Source</i> SRM on SCA)	9
Fig. 3	Ships and cargo through the Suez Canal, trend 2011–2017 ( <i>Source</i> SRM on Suez Canal Authority [SCA])	9
Fig. 4	“Oil and Products” traffic through the Suez Canal (000 tons), trend 2013–2017 ( <i>Source</i> SRM on SCA, 2018)	10
Fig. 5	The northeastern Arctic route and the route through the Suez Canal	19

## **China and the Suez Canal—Politics, Economy, and Logistics**

Fig. 1	Top 15 countries of origin in crude oil imports to China	35
--------	--	----

## **Increased Anthropogenic Activity in the Mediterranean Since the Opening of the Suez Canal**

Fig. 1	Population density in the Mediterranean Sea basin, 2008	219
Fig. 2	Spatial distribution of cumulative human pressures to marine ecosystems of the Mediterranean Sea	219
Fig. 3	Average impact scores for each stressor in 2013 by ecoregions of the Mediterranean Sea	221



Fig. 4	Map of the overall shipping traffic density in the vicinity of Suez Canal in 2020	223
Fig. 5	The number of ships that passed through the Suez Canal in a year	224
Fig. 6	The distribution of 385 Regional Marine Pollution Emergency Center (REMPEC) spills in the Mediterranean Sea for the period 1977–2000	225
Fig. 7	The distribution of 2066 European Maritime Safety Agency (EMSA) oil spills in the Mediterranean Sea for the period 2015–2017	225
Fig. 8	Nighttime light pollution in the Mediterranean region. Each color represents domination of artificial lights in specific years over others: Blue = 1992, Green = 2003, Red = 2013, White = no significant changes, Black = no artificial lights	226

### **Stranding of the Mega-Ship *Ever Given* in the Suez Canal: Causes, Consequences, and Lessons to Be Learned**

Fig. 1	Location of the grounding of the <i>Ever Given</i>	233
Fig. 2	Alternative shipping routes ( <i>Source</i> Vessels Value)	234
Fig. 3	The Suez Canal, mid-twentieth century	235
Fig. 4	Map of Suez Canal after August 2015	236
Fig. 5	Width and cross-sectional area of Suez Canal expanded with time	238
Fig. 6	Illustration showing the Suez Canal's cross section vs. <i>Ever Given</i> ( <i>Source</i> fleetmon.com, Suez Canal authorities, Vessel finder)	239
Fig. 7	<i>Ever Given</i> grounding in Suez Canal. AIS-based Dynamic Reconstruction from Maritime Casualty Specialists on Vimeo	241
Fig. 8	Salvage attempts of the <i>Ever Given</i> ( <i>Source</i> B5M, media reports)	243
Fig. 9	Cargo stacked 14 stories high on the “ <i>Ever Given</i> ”	244
Fig. 10	Potential route via Northwest Passage	247

### **The Impact of the Suez Canal on Egypt's Geography and Economy, 1867–2019 (150 Years Since Its Opening)**

Map 1	Egypt—Administrative division, with emphasis on the Suez Canal area	183
-------	---	-----

Map 2	Plans for the expansion of the agricultural areas and the new cities in Egypt 1902–2017 (From Soffer and Borkowski 2014)	190
Map 3	The Peace Canal for the development of North Sinai with emphasis on the Western section near the Suez Canal—a suspended enterprise (Soffer and Borkowski 2014)	191
Map 4	Green areas in the Suez Canal area in 1973 (Mapping by the author, 1973)	192
Map 5	Location of the city of Suez in the oil and gas transportation system in Egypt (Soffer and Borkowski 2014)	194

# LIST OF TABLES

## **The Suez Canal: Forthcoming Strategic and Geopolitical Challenges**

Table 1	Sailing distances between Asia and Europe through the NEP (in nautical miles)	20
---------	---	----

## **The Impact of the Suez Canal on Egypt's Geography and Economy, 1867–2019 (150 Years Since Its Opening)**

Table 1	Passage of ships, goods, and the income from the Suez Canal, 1961–2018	185
Table 2	Population of the Canal Area (2018)	186
Table 3	The contribution of agriculture to the Canal area	188

PART I

---

Politics, Geopolitics, and Geostrategy



# The Suez Canal: Forthcoming Strategic and Geopolitical Challenges

*Shaul Chorev*

**Abstract** The Suez Canal is a strategic narrow route (chokepoint), and a geostrategic link between the Mediterranean and the Red Sea, en route to the Indian Ocean more broadly. The chapter examines the general strategic and geopolitical characteristics of the Suez Canal; the challenges, opportunities, and threats that Egypt, the country that owns, controls, and operates the canal, is likely to face over the coming decades; and how it might also influence the entire Eastern Mediterranean, the Red Sea, and the global supply chains. The stability of the Egyptian regime is the most important factor for any economic benefit provided by the Suez Canal, as well as for any efforts to secure it and make it more accessible to two-way traffic. Egypt's efforts to secure shipping should not be limited to the Suez Canal alone. The Gulf of Aden and the Red Sea are afflicted with many security threats, most notably piracy, which decrease the attractiveness of shipping through the Canal. In economic terms, Egypt should continue to develop the economic zone around the Canal, by investment and creation of jobs. Given its strategic and economic importance, Egypt should strive to turn this region from a periphery to a center.

---

S. Chorev (✉)  
HMS Center, University of Haifa, Haifa, Israel  
e-mail: [schorev@univ.haifa.ac.il](mailto:schorev@univ.haifa.ac.il)

**Keywords** Bab el-Mandeb · Red Sea · Geopolitics · Strategy · Belt and Road Initiative · Maritime security

The Suez Canal is a central geostrategic link between the Mediterranean and the Red Sea, as well as the Indian Ocean more broadly. In geopolitical terms, it is located at the crossroads of three continents: Africa, Asia, and Europe, and serves a crucial function for trade. It is also the longest canal in the world without locks. The Suez Canal could also be viewed as a “test case,” representing the various geographical chokepoints that serve as political, economic, and military pivots of the world. The canal is owned completely by the Egyptian government. No shares are available in the stock market.

Along its history, the canal was closed six times; the shortest period was three days and the longest was eight years (following the 1967 war).<sup>1</sup>

The canal is extensively used by modern merchant vessels (bulk carriers, container ships, tankers, and passenger ships), as it is the fastest crossing from the Atlantic Ocean to the Indian Ocean. Tolls paid by the vessels represent an important source of income for the Egyptian government. In recent decades, the Suez Canal has also strengthened Egypt as one of the geopolitical cornerstones of the Middle East. The Suez Canal is one of the eight narrow chokepoints critical to the world’s oil trade.<sup>2</sup> The Suez Canal is also a strategic passageway for navies deploying their forces in the arena of the Arabian Sea and the Persian Gulf.

Since the signing of a peace treaty between Israel and Egypt in 1979 and the evacuation of the Israeli Navy naval bases in Sharm el-Sheikh and the Gulf of Suez, the Israeli Navy has also been moving through the Suez Canal on its way to secure its sea lines of communication (SLOC) in the Red Sea.<sup>3</sup>

This chapter examines the general strategic and geopolitical characteristics of the Suez Canal; the challenges (opportunities and threats) that Egypt, as the country that owns, controls, and operates the canal, is likely to face over the coming decades; and how it might also influence the entire Eastern Mediterranean and the Red Sea.

In general, the Suez Canal opportunities consist of the physical capability to expand and deepen the canal, which would allow the Canal Authority to increase maritime traffic and accommodate it to the bigger types of ships constructed these days; the contribution of China’s Belt

and Road Initiative (BRI), which increases the trade between China and Europe through the maritime route; the regional instability in the Middle East, which prevents the development of alternative terrestrial routes that can be used as a cheaper alternative to the canal; and the Chinese government's investment in the Suez Canal region, which could transform the Suez Canal region into a major trading center.

Alongside these opportunities, some emerging threats should be recognized and mentioned. The canal's continued prominence raises its attractiveness to security challenges, such as terrorist attacks on the canal as one of the world's most important chokepoints; the stability of the El-Sisi government in Egypt remains at risk, which reduces the canal's attractiveness as well; and last but not least—the possibility of opening the polar northeastern path in the Arctic Ocean, which would provide a shorter route from Western Europe to the Far East.

## THE SUEZ CANAL IN EGYPT'S ECONOMY: GENERAL CHARACTERISTICS

Egypt's economy faces significant structural challenges. It is the fourteenth most populous country in the world; in 2019, its population was estimated to have crossed 100 million people, and its annual population growth stands at 2%. One of the major challenges resulting from this is the need to keep its population supplied with affordable food; despite Egypt's rising agricultural yields, as population grows, the amount of land needed for housing and businesses rises, and the amount of land for agriculture falls. Egypt has a total land area of approximately 1 million square kilometers. Most of it is desert and only 5.5% is inhabited. Settlements are concentrated in and around the Nile Delta and its valley, which narrows considerably in Upper Egypt. The total cultivated land area is about 3% of the total land area—and consists mostly of old and newly reclaimed areas. Egypt has reached a state where the quantity of water available is imposing limits on its national economy. Thus, as time goes on, Egypt can produce less of its own food.<sup>4</sup> In 2010, Egypt imported 40% of its food and 60% of its wheat. In recent years, it has become the largest importer of wheat worldwide.

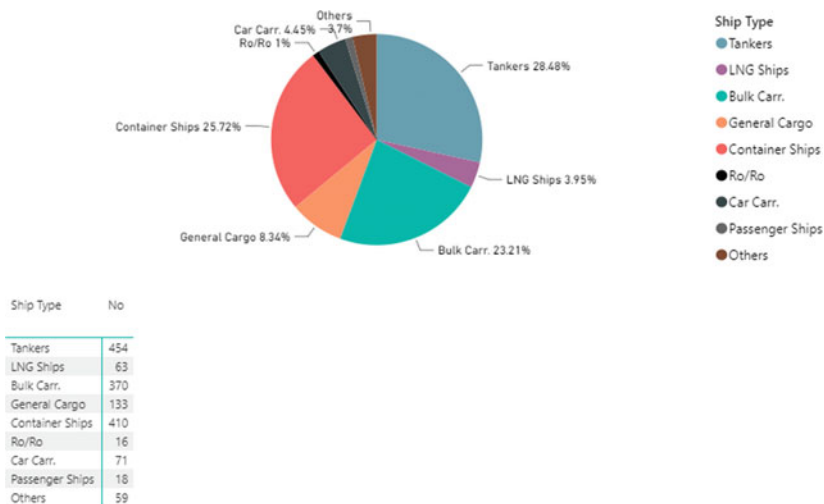
Egypt's GDP took a significant plunge in 2017, falling from \$332.9 billion to \$235.4 billion, though some recovery has been made since; in 2020, its GDP was \$361 billion. Egypt's unemployment rate, while

decreasing in recent years, remains well over 10%, and the average inflation rate (2017) amounted to about 20.86%.<sup>5</sup> In 2017, it had a negative trade balance of \$37.3 billion. A large-scale plan launched in 2016 to revive the Egyptian economy has had some significant achievements, turning Egypt into an emerging market that is popular among investors in government bonds; but the plan also pushed more people under the poverty line and attracted popular criticism against the government. In November 2019, President El-Sisi announced his intention to privatize the Egyptian Army's huge holdings in the economy, the National Service Products Organization (NSPO). This organization was established in 1979 under a presidential decree to achieve "the relative self-sufficiency of the Armed Forces requirements as well as locally and internationally marketing the surplus."<sup>6</sup> With a budget that is independent of the Ministry of Defense, the NSPO has established a wide range of companies in sectors as diverse as mining, food production, chemicals, farming, plastic, household appliances, and hospitality.<sup>7</sup>

The Suez Canal, serving as the shortest shipping route between Europe and South East and East Asia, is a major source of hard currency for the Egyptian economy—especially since the uprisings in 2011 and resultant instability led to a decrease in investment and tourism. In 2017, the passage of goods through the canal netted the government of Egypt \$5.3 billion—13.9% of its overall income and 25% of its income from export (overall \$23.2 billion). Egypt's income from the Suez Canal is more than its revenues from tourism, though dwarfed by the monetary transfers from Egyptian workers abroad, which amounted to \$17 billion in 2017. The annual revenues of the canal reached \$6.3 billion in 2021, the highest in its history. The Suez Canal Authority reported that 20,649 vessels passed through the waterway last year, a 10% increase compared to 18,830 vessels in 2020 (Fig. 1).<sup>8</sup>

Over the past two decades, there has been a decrease in the number of ships passing through the canal but an increase in their capacity, and therefore in Egypt's revenues. In 2005, 12,000 ships passed through the Suez Canal, with an overall capacity of 702 million tons, yielding Egypt a revenue of \$2.5 billion. In 2010, there were 18,050 ships with a capacity of 897 million tons and a revenue of \$3.4 billion. In 2016, the number decreased to 17,200 ships, but the capacity increased to 987 million tons, yielding a revenue of \$4.2 billion. Since 2010, there was a decrease in the number of oil tankers and passenger ships passing through the canal and an increase in the number of gas and container ships.





**Fig. 1** Seven types of ships passed through the Suez Canal, November 2019

Between 2008 and 2010, it is estimated that the canal lost 10% of traffic due to the threat of piracy, and another 10% due to the financial crisis. This demonstrates the sensitivity of the canal to geo-economics and security crises.<sup>9</sup> The Suez Canal Authority has completed its planned phase to deepen the canal, which allows passage of ships up to 20 meters (66 feet) draft or 240,000 deadweight tons and up to a height of 68 meters (223 feet) above water level and a maximum beam of 77.5 meters (254 feet). This enables the canal to accommodate the following percentages of the fully loaded vessels: 61% of the Tanker Fleet, 92% of the Bulk Carrier Fleet, and 100% of the Container Ships and Other Ships.<sup>10</sup>

## EXPANSION OF THE SUEZ CANAL AND CHINA'S BELT AND ROAD INITIATIVE

Realizing the necessity to increase the canal's efficiency and boost the hard currency earnings for the Egyptian national income, Egypt has decided to construct a new canal from 60 km to 95 km, in addition to deepening and widening the Great Bitter Lakes bypasses and Ballah bypass, with a total length of 37 km (total length of the project is 72 km). This project will

create a new canal, parallel to the existing one, to maximize the benefit from the present canal and its bypasses, and double the longest parts of the waterway to facilitate traffic in both directions and minimize the waiting time for transiting ships. This will reduce the time needed for the trip from one end of the Canal to the other, and increase the numerical capacity of the waterway, in anticipation of the expected growth in world trade. The project goes side by side with the Suez Canal Area Development Project, described in more detail below. The two projects will increase the importance of the Suez Canal and will make it the route of choice for ship owners the world over, surpassing alternative, competing routes. The project will also have a positive impact on Egypt's national economy as it will boost its hard currency earnings, provide much-needed job opportunities, and create new urban communities. According to the Suez Canal Authority, at the end of the project (2023), it will increase the daily average of transiting vessels to 97 ships (from 49 ships at present), allow direct unstopped transit for 45 ships in both directions, and step up the permissible draft to 66 feet (approximately 20 meters) throughout the entire Suez Canal. It will also increase the Suez Canal's revenues from \$5.3 billion at present to \$13.226 billion in 2023: an increase equal to 259%, which would positively contribute to Egypt's national income of hard currencies, create job opportunities for young people living in the Canal Zone, Sinai, and neighboring governorates; and creating new urban societies as well.<sup>11</sup>

In August 2015, Egypt inaugurated an expansion project of the Suez Canal, as described above. Approximately 400 companies and 25,000 workers were involved in the project, which lasted 12 months and required an overall investment of \$6.64 billion (Fig. 2).

The current global trend in shipping is toward an increase in the size of ships. Shipping companies are striving to utilize economies of scale by concentrating larger numbers of containers on “mega-ships” that would visit relatively few ports. Maersk shipping company—which switched its Asia–US East Coast shipping from Panama to the Suez Canal in 2013—is currently employing 20 new Triple-E type ships able to carry up to 20,000 standard container units (Twenty-foot Equivalent Unit, TEU).<sup>12</sup> Similar ships have also been purchased by Compagnie Générale Maritime (CGM) and Compagnie Maritime d’Affrètement (CMA) shipping companies. Following its 2015 expansion, the Suez Canal is currently able to handle ships up to 23,000 TEU. The 23,756-TEU MSC *Gulsun*, the

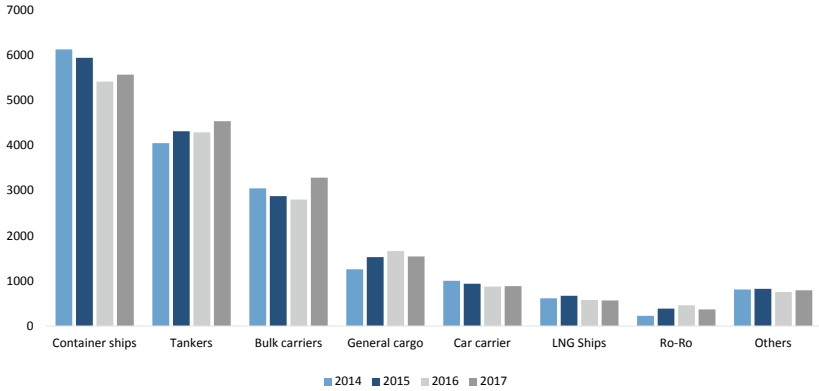


Fig. 2 Traffic by ship type (Number) (Source SRM on SCA)

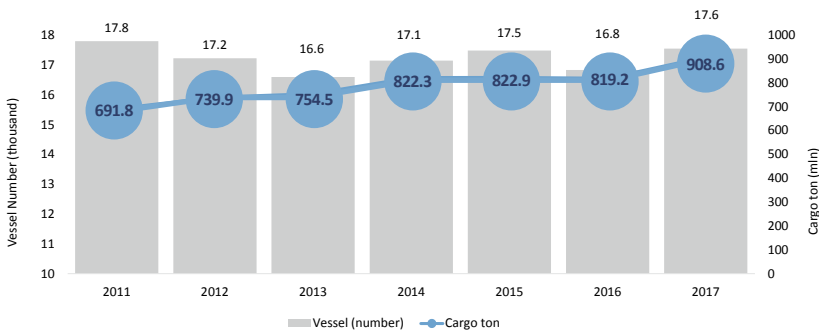
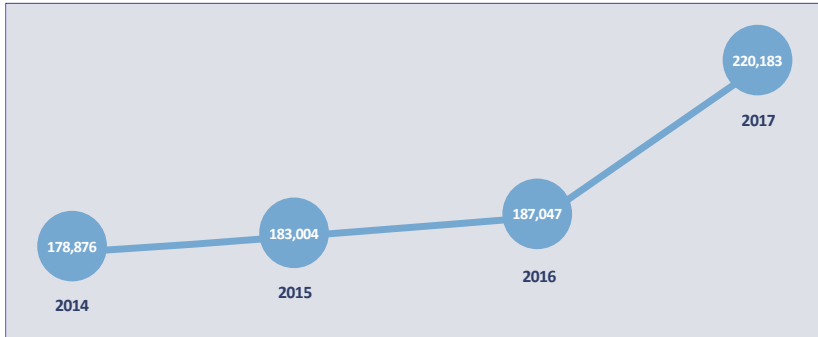


Fig. 3 Ships and cargo through the Suez Canal, trend 2011–2017 (Source SRM on Suez Canal Authority [SCA])

world’s largest container ship, transited the Suez Canal for the first time on August 9, 2019 (Figs. 3 and 4).<sup>13</sup>

On March 23, 2021, the Suez Canal was blocked for six days after the grounding of *Ever Given*, a 20,000 TEU container ship. The blockage of the Suez Canal created a severe global fest. However, far beyond the incident making headlines, the more disturbing aspect was the increase of the ongoing supply chain crisis that left global shippers and products fighting price increases and a shortage of goods, following the onset of the COVID-19 pandemic. Over 300 vessels at both ends of the



**Fig. 4** “Oil and Products” traffic through the Suez Canal (000 tons), trend 2013–2017 (*Source* SRM on SCA, 2018)

canal were congested by *Ever Given*. The container ship was refloated following a six-day salvage operation that involved a fleet of tugboats and dredging vessels. According to a study by Allianz, one of the world’s largest insurers, between 23 and 29 March, each single day the Suez stayed blocked could decrease global annual trade growth by 0.2–0.4% and cost \$6–10 billion, that is, the equivalent of \$400 million per hour.<sup>14</sup> On April 13, the ship was seized by a court in Ismailia after a request by the Suez Canal Authority (SCA). On July 7, 2021, Egyptian authorities released the ship after an unspecified settlement was reached. The incident emphasized the fragility of the global supply chain by triggering tangible damage to businesses across the globe. Rising political tensions raise worries that ill-intentioned actors could eventually disrupt a tightly interconnected economy by weaponizing its chokepoints in the future, or that keeping chokepoints open is “essential for global trade.”<sup>15</sup>

Another important contribution of the Suez Canal to Egypt’s economy is in terms of the energy sector. The city of Suez is the source of 23% of Egypt’s energy production. In addition, it houses several large oil and gas refineries that process oil and gas from the Sinai Peninsula and the Red Sea, from which both resources are transported to Cairo and the rest of Egypt. Despite having the largest refining capacity on the African continent, Egypt’s downstream infrastructure is aging, and the country currently has to resort to imports in order to meet its growing domestic demand for petroleum products. Upgrades and energy efficiency investments in its refineries are critical for Egypt to optimize utilization

rates, improve operational performance, reduce environmental impacts and achieve a sustainable balance in the energy sector.<sup>16</sup> The area around the Canal also has a contribution to agriculture, producing 1.8% of Egypt's rice and about 1% of its wheat.

Despite its economic importance and development efforts by the Egyptian government, the region surrounding the Suez Canal remains very much in Egypt's periphery. In 2017, the three Canal provinces were home to 2,832,000 residents—less than 3% of Egypt's population: 749,000 in Port Said Province (737,000 of them living in the city itself), 1,325,000 in Ismailia Province (56% city dwellers and 44% villagers), and 728,000 in Suez Province. The number of people employed in the Canal region is 857,000—approximately 2.8% of Egypt's working population—and unemployment in the region is a little bit lower than the national average, which was 7.8% in the third quarter of 2019.<sup>17</sup>

Another major upgrade undertaken in recent years concerns ports along the Suez Canal. The new port at Port Said, established in 2004 to serve as a hub for intercontinental trade, encompasses a territory of 35 square kilometers. The Egyptian Port Authority plans to expand the port, building 12-km docks and an industrial area that would spread over 85 square kilometers. El Sokhna Port, at the southern entrance to the Suez Canal, encompasses approximately 25 square kilometers; its largest docking area is 7 km long and 5.5 km wide. The El Sokhna Port serves the oil and gas fields in the area and is used to export petrochemical products, refined oil and gas, ceramics, ammonia, and sugar. In 2008, the port was bought by Amirti company, who announced its plan to build a new dock that will be able to handle an additional one million containers a year.

When the New Canal was opened (2015), Egypt proclaimed the formation of 42 auxiliary projects in its economic region aimed at maximizing its profit potential. Indeed, in accordance with the plans, Egypt needed to create growth engines in the Canal and to afford it with added economic value by turning it into a world hub of ports, logistics, cargo loading and unloading, repair and refueling of ships, and industrial and trade zones. The projects that were planned were supposed to provide some two million additional jobs for citizens of the cities along the canal and in the nearby area. More broadly, Egypt seeks to develop the Suez Canal Corridor as an economic zone whose economic activity it hopes will amount to a third of the country's entire GDP. To increase the Corridor's appeal to investors, Egypt reduced the corporate tax in the region by

two-thirds in comparison with the rest of the country. In 2014, the Egyptian Suez Canal Authority announced that a company listed in Bahrain planned to open a huge industry and logistics center around the Canal.<sup>18</sup> The Egyptian Army, a significant stakeholder in the Egyptian economy, is a local partner in this project through the Armed Forces Engineering Authority.

The largest investor in the Suez Canal Corridor, however, is China. According to *China Daily*, the planned economic zone will span 9.12 square kilometers with an investment of approximately \$2 billion in manufacturing, logistics, and direct funding.<sup>19</sup> During President El-Sisi's visit to China in December 2014, the two countries signed a memorandum of understanding for \$10 billion of Chinese investment in Egypt. In President Xi Jinping's visit to Egypt in January 2017, China committed itself to provide \$1.7 billion in funding to Egyptian banks and signed further deals for cooperation in electricity, space, infrastructure, trade, energy, finance, culture, media, technology, and environmental protection—with an overall worth of \$15 billion.

China's investments are driven by strategic considerations. Unlike its investment in the Gulf States, which has mostly to do with the supply of energy necessary for Chinese industry, China's investment in the Suez Canal is driven by the canal's geostrategic importance as part of the Belt and Road Initiative. The BRI, which includes massive overseas investment for the creation of new trade routes, has turned China into one of the main destinations and points of origin for cargo shipped through the Suez Canal. A report by the Italian Research Center for Economic Studies (SRM) has shown that the shipment of goods through the canal had reached record levels and is likely to increase further as a result of the BRI. Chinese shipping and investments are a mixed blessing: while they support Egypt's economy, they also provide China with significant political sway over the country. Beijing's so-called dynamic infrastructure and investment-dominant BRI initiative has a strategic component to it, one that a wary international community is mindful and concerned about. It is inherently dual-use and is capable of furthering both legitimate business activities and military operations. According to research done by the Center for Advanced Defense Studies (C4ADS):

The characteristics of China-funded commercial ports throughout the Indo-Pacific and the behavior of Chinese companies indicate that these

investments are not principally driven by the concept of win-win development as Beijing claims. Rather, the investments appear to generate political influence, stealthily expand China's military presence, and create an advantageous strategic environment in the region. The framework consists of the following six dimensions: the strategic characteristics of six analytical dimensions that are exhibited across China's Indo-Pacific investments-having: Strategic location, dual-use development model, notable communist party presence, significant financial control, limited transparency and unequal benefits.<sup>20</sup>

These strategic characteristics and behaviors fall along dimensions that, together, constitute a useful analytical framework through which to assess Chinese infrastructure investments globally. Egypt, for whom some of the components mentioned above can certainly be relevant, must take into account the strategic implications of the Chinese investment in the canal region, including possible control of the canal itself in extreme scenarios.

## MARITIME SECURITY AND THE SUEZ CANAL

The Suez Canal has been a lifeline for global commerce and for military power-projection since its inauguration in 1869. For nearly a century, it was the Royal Navy's vital link to most of the British Empire. Even today, the safe and secure passage of the Suez Canal serves many naval fleets and allows them to reach the areas of operation in the Arabian Sea, the Persian Gulf, and the Indian Ocean. The canal serves as a critical enabler of naval power, increasing the on-station time and its reaction to emerging crises. For obvious reasons, it is challenging to obtain data on naval movements in recent years through the Suez Canal, but a careful evaluation of their maritime strategies reflects the importance of the Suez Canal in this regard.

For decades, the US Navy has enjoyed the luxury of being able to transit the Suez Canal without interference, uninterrupted by turmoil in Egypt and wider regional instabilities.<sup>21</sup> Ships transiting from the United States East Coast to the Strait of Hormuz save over 3000 nautical miles, or about eight days in a journey, relative to traveling around Africa. In a round-trip 180-day deployment, a ship can save 16 transit days, increasing its on-station time while saving fuel. By transiting the Mediterranean, a ship can achieve presence near other key "hot spots" and provide the crew with morale-boosting visits to European ports.

Moreover, the Suez Canal facilitates the rapid movement of ships between the European and Central Commands. The ability to readily shift ships between the Mediterranean and Red Sea provides commanders with operational flexibility at a time of extensive regional threats in Libya, Ukraine, Syria, Iraq, Yemen, and Iran.

Just as the USS *Kearsarge* and USS *Ashland* came under rocket attack while docked in the port of Aqaba in 2005, a warship unable to make evasive maneuvers could come under attack from a variety of shore-based projectile weapons. While warships are built to withstand attack, a series of limited-scale strikes could inflict personnel casualties or damage the ship while it was confined to a predictable route in a narrow body of water. Shooting back would be difficult, both because the attackers could be concealed by urban terrain and because rules of engagement could preclude firing at Egyptian territory. Likewise, in the confined waters of the canal, suicide boats could also be used for attacks like the one against the USS *Cole* in 2000.

The Canal is no stranger to violence, some of which have even led to its extended closure in the past. In the unstable Middle East situation, there is also a possibility that a future Egyptian government could close the canal to US Navy traffic. While Egypt's current government is pro-American, from June 30, 2012, to July 3, 2013, it was governed by a popularly elected government of the Muslim Brotherhood, which was less aligned with the US aims. From an operational standpoint, the worst-case scenario would be if the canal were suddenly and unexpectedly closed to US warships (whether by terrorist threats or Egyptian policy) in the midst of a crisis.

There are two ways this risk could be addressed. One is to reduce the probability of losing access by working with national and local authorities in Egypt to improve internal security in the canal's vicinity. The other is to develop operational plans and even structure the fleet with the risk of losing Suez in mind: if forces cannot be rapidly re-tasked from one theater to another, or if on-station times are reduced, then changes in the employment of a mix of air and naval forces could be needed to achieve the same impact. Both approaches could enable the US Navy to achieve effective power-projection under all conditions.

Consequently, many have recommended that the United States should nevertheless retain its annual foreign military support (FMS) of \$1.5 billion to Egypt because of the US Navy reliance on the Suez Canal. Although the US Navy is divided between two arenas of action—the



Indo-Pacific command and the Atlantic command—it transports forces to the Arabian Sea and the Persian Gulf from the Atlantic as it travels through the Suez Canal.<sup>22</sup> One should bear in mind that China’s involvement in the development of the Canal Zone might give it control over communications infrastructure and more, that could be utilized when needed against US naval operations in the region.

The Russian Navy also considers the Suez Canal a strategic passageway for the deployment of its fleet, despite a bleak historical legacy that the Suez Canal evokes following the role that the Suez Canal played in Russia’s defeat in the Russia-Japan War of 1904–1905. At that time, the canal was a neutral zone under the protection of the British. The British prevented the Russian Baltic Fleet from using the canal on its way to the war in the Far East, which was one of the reasons for Russia’s defeat in that war.

In the twenty-first century, circumstances have dramatically changed, as did the Russian navy’s areas of operation. The complex geopolitics of the Indian Ocean has recently attracted a fair amount of attention. The sea lines of communication (SLOCs) crossing the Indian Ocean and linking Asia to the Persian Gulf and Europe have become critical components of world trade, and vital to the energy security of many countries in Europe and Asia. However, these shipping lines have been exposed to various transnational threats ranging from terrorism to piracy and their security has become a matter of concern. In response to these challenges, a growing number of European states have deployed their navies in the Northwest Indian Ocean to conduct anti-piracy operations. On June 2, 2011, the Russian Navy’s task unit consisting of Northern Fleet (NF) large ASW ship *Severomorsk*, Baltic Fleet (BF) tanker *Yelnya*, and Black Sea Fleet (BSF) sea-going tug *MB-304* passed through the Suez Canal and set a course for the Gulf of Aden. The task unit had begun to conduct a commercial shipping security mission in the Gulf of Aden and near the Horn of Africa and the Russian Navy command affirmed their plan for a regular presence in piracy-hazardous regions and considers the security of commercial shipping there a high priority and vital mission.<sup>23</sup>

The French Navy has increased its operations in the northeastern Indian Ocean and is in fact the second navy to hold a permanent presence in this area. The French national strategy for the security of maritime areas mentions that “[i]n the current security context, the latter route is by far the most sensitive (Suez Canal, Red Sea, Straits of Bab el-Mandeb

and Hormuz) in terms of accessibility and offers few alternatives, especially for our forces based in Djibouti or the United Arab Emirates.”<sup>24</sup> The strategy document emphasizes the Canal’s importance to France’s trade, by connecting the Mediterranean to East Asia, making it the main route used by containerized freight (70% of containers going to France come from the Far East) and concludes that “the widening of the Suez Canal will have little impact and the use of Arctic routes for intercontinental trade still remains a far-off prospect, given the difficulties and risks for reliable and sustainable operation.”<sup>25</sup> For France, the Malacca-Suez route remains important for containerized trade with East Asia, while the routes connecting the Gulf of Guinea and the Arabian/Persian Gulf remain strategic for energy transport.

To ensure and secure France’s trade with the Far East and the Persian Gulf states, France deployed two major interservice bases located in Abu Dhabi and Djibouti. Through these bases, France maintains a permanent military presence in the Persian Gulf and the Gulf of Aden. While the base in Djibouti is linked to the French colonial presence in the Horn of Africa, the one in Abu Dhabi is recent and was opened in 2009. These two bases reflect France’s ambition to maintain an operational capability near the crucial Straits of Hormuz and Bab el-Mandeb and along the sea lines between the Persian Gulf and the Mediterranean Sea through the Suez Canal, which are vital in terms of energy imports and global trade.<sup>26</sup> Therefore, secure and safe transit of naval forces through the Suez Canal is vital for the French Navy.

In January 1968, British Prime Minister Harold Wilson and his Defense Secretary, Denis Healey, announced that British troops would be withdrawn in 1971 from major military bases in South East Asia, east of Aden, as well as the Persian Gulf.

In 2014, the Foreign and Commonwealth Office announced that the UK would expand its naval facilities in Bahrain to support larger Royal Navy ships deployed to the Persian Gulf. The Strategic Defense and Security Review 2015 stated that new British Defense Staffs will be established in the Middle East, Asia Pacific, and Africa in 2016.<sup>27</sup> In the UK National Strategy for Maritime Security, presented to Parliament by the Secretary of State for defense in May 2014, Objective 4 is to assure the security of vital maritime trade and energy transportation routes within the UK Marine Area, regionally and internationally.<sup>28</sup> In late August 2017, the then-British Defense Secretary, Sir Michael Fallon, and his Omani counterpart signed a Memorandum of Understanding and

Services Agreement. According to the Ministry of Defense (MoD), this agreement will secure the use of facilities at the Duqm Port by the British Armed Forces, especially the Royal Navy, which is also strengthening and intensifying its operations in the Arabian Sea and the Gulf of Oman for the first time since its total evacuation of this area at the beginning of 1970s. As declared by the UK MoD, with Duqm as a base for HMS *Queen Elizabeth*, the newly built carrier will be able to project influence throughout the region, providing air power to support British and allied operations or delivering aid to areas in need.<sup>29</sup> Yet, the Royal Navy would also rely on its home facilities in Great Britain, increasing its dependence on a safe and secure passage through the Suez Canal.

China's primary interests, which drive the missions of the People's Liberation Army Navy, are national security and economic stability. Its maritime security concern is homeland defense. A secondary PLAN strategic maritime goal is protecting China's global economic interests. PLAN counterpiracy deployments to the Gulf of Aden began in December 2008 and are part of that second mission. Ultimately, China aspires to tie together the dynamic economies of the two extremities of the Silk Road, namely East Asia and Western Europe. The expansion of the Suez Canal in 2015 has doubled the traffic flow between the Red Sea and the Mediterranean Sea, allowing for the transit of larger vessels and reducing transit time between Asia and Europe, and raising the competitiveness and visibility of Mediterranean ports. Consequently, China is gradually sailing west, increasing offers to European partners under its grand strategy of the Belt and Road Initiative. This goal includes subsidiary objectives of enhancing capabilities to protect SLOCs and strategic chokepoints, countering piracy threats, and protecting commercial interests, which also necessitates safe and secure passage through the Suez Canal.<sup>30</sup>

China has continuously pushed for State-Owned Enterprises (SOEs) to operate in countries with less stable political environments. This strategy, while economically beneficial, has forced China to create contingency plans in order to properly protect its citizens working in these potentially dangerous and unstable political climates. In February 2011, China activated an emergency plan to evacuate its citizens from conflict-torn Libya by air, road, and sea. The first two ships, which together carried about 3800 people, evacuated China citizens from the Benghazi port in eastern Libya.<sup>31</sup> Such an event also demonstrates the PLAN's need to have a safe and secure passage through the Suez Canal. In July 2012, a Chinese

destroyer entered the Mediterranean Sea via Suez en route to the Syrian coast for naval maneuvers.

And last but not least—the Israeli Navy’s dependence on the Suez Canal. Since Israel’s withdrawal from the Sinai Peninsula in the wake of the peace treaty with Egypt, Israel also evacuated its naval base in Sharm el-Sheikh from which the Israeli Navy had in the 1970s deployed its patrols to the Red Sea and the straits of Bab el-Mandeb. Conducting such missions these days requires the Israeli naval forces to cross the Suez Canal. It was recently demonstrated that while Israel had covertly been attacking ships carrying Iranian oil and weapons through the Red Sea, opening a new maritime front in a regional shadow war. Israel has never publicly accepted responsibility for these attacks against Iranian ships bound for Syria, but media reports and informal disclosures had essentially confirmed its role, and Iran’s hand in recent attacks against Israeli ships is clear as well.<sup>32</sup> Most of the ships were carrying fuel from Iran to its ally Syria, and two carried military equipment.<sup>33</sup> The Israeli Navy’s free passage in the Suez Canal is essential for carrying out such operations as well as for protecting the freedom of navigation in the Red Sea and the Gulf of Aden.

Although the peace treaty between Israel and Egypt guarantees free passage for the Israeli Navy through the canal, one cannot ignore volatility scenarios in Egypt, analogous to what happened during President Morsi’s regime, when the Egyptian authorities would deny passage to Israeli Navy ships in the Suez Canal.<sup>34</sup> As one-third of Israel’s trade with the Far East is conducted through the Red Sea, a situation of this kind must be planned for, even if the probability of it happening today is low.

## ALTERNATIVE TRADE ROUTES: AN EMERGING CHALLENGE

Melting Arctic ice caps are likely to increase traffic and the commercial viability of the Northern Sea Route. One study, for instance, projects “remarkable shifts in trade flows between Asia and Europe, diversion of trade within Europe, heavy shipping traffic in the Arctic and a substantial drop in Suez traffic.”<sup>35</sup>

Russia and China announced their intention to build the critical infrastructure needed to support the Northern Sea Route, which connects northeastern Asia with northern Europe via Siberia. Attempted for the first time in 1773 by HMS *Racehorse* and HMS *Carcass*, the Northwest

Passage was first navigated in 1878–1879 by Nils Adolf Erik Nordenskiöld. However, the difficulty of the passage made it unfeasible to ship until recently. In 2013, a peak year for the route, only 71 ships navigated it, the majority of them (46) of Russian origin. Compared with 49 ships navigating daily through the Suez Canal, this is insignificant in terms of shipping (Fig. 5).

This trend may now be changing due to the effects of climate change. In August 2017, the first ship traversed the Northern Sea Route without the use of an icebreaker. In 2018, Maersk Line sent the new “ice-class” container ship *Venta Maersk* through the route to gather data on its

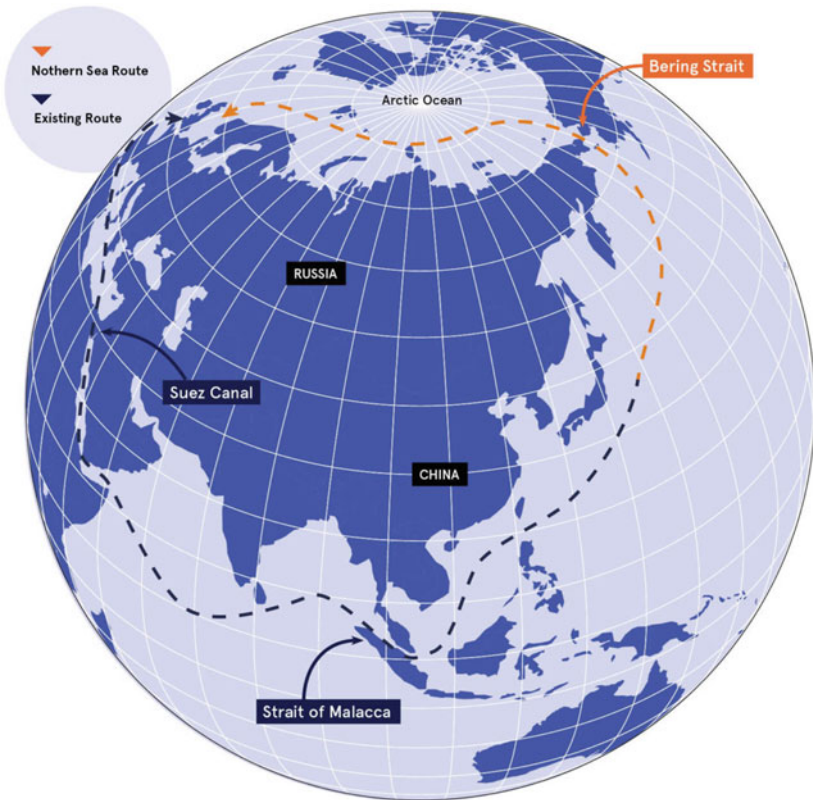


Fig. 5 The northeastern Arctic route and the route through the Suez Canal

operational feasibility, though the company does not currently view it as commercially attractive.<sup>36</sup>

If commercial shipping through the Northeastern Passage becomes a viable option, it would make maritime navigation from Europe to Asia significantly shorter than what is currently provided by the Suez Canal (Table 1). The average benefit assessment—considering the lower expenditure due to distance and time—is around 30–45% in bulk carrier comparison. The development of the Northeastern Passage is therefore likely to present a major challenge for the Suez Canal and its revenues.

In their study, Eddy Bekkers, Joseph Francois, and Hugo Rojas-Romagosa developed a model that attempts to predict the outcomes of the commercial use of the Northern Sea Route. They conclude that “if ultimately made possible by further melting of the Arctic icecap—[the Northern Route] will represent a major development for the international shipping industry. Roughly 8% of world trade is transported through the Suez Canal and we estimate that two-thirds of this volume will be re-routed over the shorter Arctic route.”<sup>37</sup>

Russia makes a territorial claim to a significant part of the Northeastern Passage and is investing significantly in its development. China and Russia have jointly agreed to develop a Northeastern Passage plan referred to as the Ice Silk Road. Chinese and Russian companies are collaborating on infrastructure development, oil and gas exploration, and tourism in the arctic region. The Chinese Shipping Company COSCO has concluded several experimental navigations in the arctic waterways, and the Ministries of Transportation of both countries are updating their policies and legislation concerning the development of the Arctic region.

**Table 1** Sailing distances between Asia and Europe through the NEP (in nautical miles)

<i>From</i>	<i>To Rotterdam, via:</i>			<i>Difference between Suez and NEP (%)</i>
	<i>Cape of Good Hope</i>	<i>Suez Canal</i>	<i>NEP</i>	
Yokohama, Japan	14,448	11,133	7010	37
Busan, South Korea	14,084	10,744	7667	29
Shanghai, China	13,796	10,557	8046	24
Hong Kong, China	13,014	9701	8594	11
HoChiMinhCity, Vietnam	12,258	8887	9428	-6

The issue has also been raised in the International Conference for the Development of Russia's and the Russian Commonwealth's Continental Shelf held in Moscow in 2019. These developments should be a cause of concern for Egypt with regard to the continued operation of the Suez Canal as the main shipping route between Europe and Asia.

### EGYPT'S APPROACH TO SECURING THE SUEZ CANAL

The Suez Canal is a strategic international waterway, connecting the Red Sea and the Mediterranean. It transports 8% of the world's oil (approximately 4.6 million barrels a day) and 12% of global Liquefied Natural Gas (LNG), making it crucial for the global energy market. The prospect of a terrorist attack against ships passing through the Canal, which would create a disruption of trade and shipping, is therefore both a realistic and severe threat. This is especially true given internal instability in Egypt following the 2011 ousting of Housni Mubarak and the 2013 counter-coup orchestrated by the military, led by President El-Sisi. The Sinai Peninsula especially provides a safe haven to many dangerous terrorist groups, some with links to global Jihad, and all openly hostile to the Egyptian government and its Western allies. An attack on any large transport vessel that results in its sinking would probably close the canal to all traffic for days, possibly even weeks. Even if militants failed to sink a major vessel, a waterborne suicide bomb attack on an LNG, oil tanker, cruise or container ship transiting the Suez Canal—a tactic used against the USS *Cole* in 2000 and the M/V *M. Star* in 2010—would have immediate effects on the use of the Suez Canal as a major shipping route.<sup>38</sup>

On November 12, 2014, four boats ambushed an Egyptian Navy patrol boat near the Suez Canal, which raised concerns about the prospects of a terrorist attack against container ships along the 120-km waterway. Since its inauguration in August 2015, many ships from around the world navigated the expanded canal under heavy security escort, both by sea and air.

The challenge for the Egyptian Navy is ensuring safe and secure passage through the Suez Canal. This includes securing ships and preventing terrorist infiltration, but also doing so in a way that does not hamper or delay regular shipping. The expansion of the Suez Canal has made this task more challenging by increasing both the overall size of the area to be defended and the number of ships passing through it. While the Egyptian military is aware of this threat, it has not done enough to mitigate

it, focusing instead on ad hoc responses against militant groups and individuals operating from the Sinai Peninsula. In April 2019, the German Parliament approved a 2.3 billion euro guarantee for the sale of 6 Meko A200 frigates to the Egyptian Navy, which can be used to strengthen the Canal's defenses.<sup>39</sup>

## CONCLUSIONS: EGYPT'S CHALLENGES AND OPPORTUNITIES IN THE SUEZ CANAL

The stability of the Egyptian regime is the most important factor for any economic benefit provided by the Suez Canal, as well as for any efforts to secure it. Stability is the basis for investor confidence in any infrastructure projects along the Canal, as well as for maintaining the regular flow of shipping. Instability also serves as fertile soil for terrorism, piracy, and other phenomena that threaten the security and the safety of the Suez Canal.

In the security aspect, it is crucial for the Egyptian Navy to ensure a "sterile" environment around the Canal, preventing any physical risk to shipping and navigation. This in turn requires accurate intelligence, sufficient ships and weaponry, and the development of an adequate doctrine to deal with the unique security characteristics of the Suez Canal.

In economic terms, Egypt should continue to develop the economic zone around the Canal, creating investment and employment; given its strategic and economic importance, Egypt should strive to turn this region from periphery to center. At the same time, Egypt should be aware of the possible results of Chinese investment in the Canal Zone and ensure that these investments do not result in a situation where the Chinese will have control over the Canal's operation. More broadly, a larger part of Egypt's revenues from the Suez Canal and its surrounding economic zone should be directed toward improving the economic situation in the rest of the country. The expected competition from the Northeastern Passage in the Arctic requires Egypt to be able to demonstrate greater efficiency and profitability to retain shipping.

Egypt's efforts to secure shipping should not be limited to the Suez Canal alone. The Gulf of Aden and the Red Sea are afflicted with many security threats, most notably piracy, which decrease the attractiveness of shipping through the Canal. Egypt would benefit from acting to deal with this threat, both unilaterally and as part of a coalition of like-minded nations. Finally, while Chinese investment in the Suez Canal and



in Egypt's economy more broadly is definitely profitable, it is important to remember that such investment is not free and includes significant political and strategic dimensions.

## NOTES

1. Suez Canal Authority, "Navigation Statistics," <https://www.suezcanal.gov.eg/English/Navigation/Pages/NavigationStatistics.aspx> (accessed March 12, 2022).
2. US Energy Information Administration (EIA), "International," *EIA*, <https://www.eia.gov/beta/international/?fips=wotc&trk=p3> (accessed March 12, 2022).
3. Roe Nahmias, "Arab Media: 2 Israeli Navy Ships Passed through Suez Canal," *Ynet News*, June 2, 2010, <https://www.ynetnews.com/articles/0,7340,L-3845182,00.html>.
4. Thoraya Seada, Ramy Mohamed, Tobias Fletscher, Helmy Abouleish, and Maximilian Abouleish-Boes, *The Future of Agriculture in Egypt Comparative Full Cost Accounting Study of Organic and Conventional Food Production Systems in Egypt* (Cairo: Heliopolis University for Sustainable Development, 2016), 6, <https://www.sekem.com/wp-content/uploads/2016/09/the-future-of-agriculture-in-egypt.pdf>.
5. Statista, "Egypt: Inflation Rate from 1986 to 2026," *Statista*, <https://www.statista.com/statistics/377354/inflation-rate-in-egypt/> (accessed March 12, 2022).
6. National Service Projects Organization: Since 1979 Serving Egypt, Homepage, [www.nspo.com.eg/nspo/index.html](http://www.nspo.com.eg/nspo/index.html) (accessed March 12, 2022).
7. "The Officers' Republic of Egypt," *Egyptian Institute for Studies*, March 31, 2018, <https://en.eipss-eg.org/the-officers-republic-of-egypt/>.
8. AP, Cairo, "Egypt's Suez Canal Chief Says April Revenues Hit All-time Record at \$629 mn," *Business Standard*, May 1, 2022, [https://www.business-standard.com/article/international/egypt-s-suez-canal-chief-says-april-revenues-hit-all-time-record-at-629-mn-122050100559\\_1.html](https://www.business-standard.com/article/international/egypt-s-suez-canal-chief-says-april-revenues-hit-all-time-record-at-629-mn-122050100559_1.html).
9. Louis Wasser, "Somali Piracy Costs Suez Canal Business," *San Francisco Chronicle*, April 29, 2009.
10. Suez Canal Authority, "Canal Characteristics," <https://www.suezcanal.gov.eg/English/About/SuezCanal/Pages/CanalCharacteristics.aspx>.
11. The Suez Canal Authority, "New Suez Canal," <https://www.suezcanal.gov.eg/English/About/SuezCanal/Pages/NewSuezCanal.aspx>.

12. Kyunghhee Park, “Maersk Line to Dump Panama Canal for Suez as Ships Get Bigger,” *Bloomberg*, March 11, 2013, <https://www.bloomberg.com/news/articles/2013-03-11/maersk-line-to-dump-panama-canal-for-suez-as-ships-get-bigger>. The canal is also essential for US Navy vessels. See “US Naval Convoy Crosses Egypt’s Suez Canal,” *al-Jazeera*, November 8, 2013, <https://www.aljazeera.com/news/2013/11/8/us-naval-convoy-crosses-egypts-suez-canal>.
13. “World’s Largest Container Ship Transits Suez Canal,” *The Maritime Executive*, December 8, 2019, <https://maritime-executive.com/article/world-s-largest-container-ship-transits-suez-canal>.
14. Khanna Rahul, The Suez Canal Blockage—Lessons to be Learned, Allianz Global Corporate & Specialty, March 31, 2021, <https://www.agcs.allianz.com/news-and-insights/expert-risk-articles/suez-canal-lessons-learned.html> (accessed March 19, 2022).
15. Medunic Filip, A Glimpse of the Future: The Ever Given and the Weaponisation of Chokepoints, European Council on Foreign Affairs, April 21, 2021, <https://ecf.eu/article/a-glimpse-of-the-future-the-ever-given-and-the-weaponisation-of-choke-points/> (accessed March 19, 2022).
16. Nibal Zgheib, “EBRD Finances Upgrade of Egypt’s Suez Refinery,” European Bank, May 23, 2018, <https://www.ebrd.com/news/2018/ebrd-finances-upgrade-of-egypts-suez-refinery.html>.
17. Trading Economics, “Egypt Unemployment Rate,” <https://tradingeconomics.com/egypt/unemployment-rate>.
18. Reuters Staff, “Egypt Awards Suez Hub Project to Consortium of Army, Gulf Engineering Firm”, *Reuters*, August 19, 2014, <https://www.reuters.com/article/egypt-suezcanal-idINL5N0QP28F20140819>.
19. Xinhua, “China, Egypt Join Hands to Write New Chapter of Suez Canal Development,” *China Daily*, November 18, 2019, <http://www.chinadaily.com.cn/a/201911/18/WS5dd23667a310cf3e355781bf.html>.
20. Devin Thorne and Ben Spevack, *Harbored Ambitions: How China’s Port Investments Are Strategically Reshaping the Indo-Pacific* (Washington, DC: Center for Advanced Defense Studies [C4ADS], 2017), 4, <https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/5ad5e20ef950b777a94b55c3/1523966489456/Harbored+Ambitions.pdf>.
21. Scott Savitz and Deluca Paul, “Egypt’s Suez Canal: An Attenuated Lifeline,” *The National Interest*, September 13, 2016, <https://nationalinterest.org/blog/the-buzz/egypts-suez-canal-attenuated-lifeline-17692>.
22. Michael O’Hanlon, “Access to Suez Is Convenient but Not Essential for U.S.,” *The Washington Post*, Opinion, August 22, 2013, [https://www.washingtonpost.com/opinions/access-to-suez-is-convenient-but-not-essential-for-us/2013/08/22/224a001c-09d9-11e3-9941-6711ed662e71\\_story.html](https://www.washingtonpost.com/opinions/access-to-suez-is-convenient-but-not-essential-for-us/2013/08/22/224a001c-09d9-11e3-9941-6711ed662e71_story.html).

23. “Counter-Piracy Operations (2008–2016),” [https://www.nato.int/cps/ru/natohq/topics\\_48815.htm?selectedLocale=sv](https://www.nato.int/cps/ru/natohq/topics_48815.htm?selectedLocale=sv).
24. “French National Strategy for the Security of Maritime Areas, Defend Our Economic Interests,” October 22, 2015, Premier Minstre Office, 32–33.
25. *Ibid.*, 33.
26. Isabelle Saint-Mézard, *The French Strategy in the Indian Ocean and the Potential for Indo–French Cooperation*. A Policy Report, The S. Rajaratnam School of International Studies—RSIS, March 2015, 4, [https://www.rsis.edu.sg/wp-content/uploads/2015/03/PR150312\\_French-Strategy.pdf](https://www.rsis.edu.sg/wp-content/uploads/2015/03/PR150312_French-Strategy.pdf).
27. “Britain Considers Stronger Military Co-operation with Gulf,” *Financial Times*, November 8, 2015, <https://www.ft.com/content/ac154eb6-863a-11e5-9f8c-a8d619fa707c#axzz3sM8shycX>.
28. “The UK National Strategy for Maritime Security, Delivering Our Objectives,” May 2014, 33, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/322813/20140623-40221\\_national-maritime-strat-Cm\\_8829\\_accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/322813/20140623-40221_national-maritime-strat-Cm_8829_accessible.pdf).
29. Tossini J. Vitor, “The UK in Oman – A New Support Facility for the British Armed Forces,” *UKDJ*, February 20, 2018, <https://ukdefencejournal.org.uk/the-uk-in-oman-a-new-support-facility-for-the-british-armed-forces/>.
30. Christopher Sharman, *China Moves Out: Stepping Stones Toward a New Maritime Strategy*, Center for the Study of Chinese Military Affairs Institute for National Strategic Studies China Strategic Perspectives, No. 9, National Defense University Press Washington, DC, April 2015, 8.
31. Qin Jize and Ai Yang, “Chinese Nationals Leave Libya by Air, Sea and Land,” *China Daily*, February 24, 2011, [http://www.chinadaily.com.cn/china/2011-02/24/content\\_12068504.htm](http://www.chinadaily.com.cn/china/2011-02/24/content_12068504.htm).
32. Farzin Nadini, Iran and Israel’s Undeclared War at Sea (Part 2): The Potential for Military Escalation, *The Washington Institute for the Near East Policy*, April 13, 2021. <https://www.washingtoninstitute.org/policy-analysis/iran-and-israels-undeclared-war-sea-part-2-potential-military-escalation> (accessed March 19, 2022).
33. Patrick Kingsley, Ronen Bergman, Farnaz Fassihi and Eric Schmitt, “Israel’s Shadow War With Iran Moves Out to Sea”, *The New York Times*, March 26, 2021. <https://www.nytimes.com/2021/03/26/world/middleeast/israel-iran-shadow-war.html> (accessed March 19, 2022).
34. On September 9, 2011, several thousand protesters forcibly entered the Israeli embassy in Cairo, after breaking down a constructed wall built to protect the compound. The protesters later broke into a police station and stole weapons. The embassy was evacuated by Egyptian commandos following the personal intervention of the US President Barack Obama.

35. Bekkers, Eddy, Francois, Joseph F., and Rojas-Romagosa, Hugo, “Melting Ice Caps and the Economic Impact of Opening the Northern Sea Route,” *The Economic Journal*, *Economic Journal* 128, no. 610 (2016): 1095–1127, <https://boris.unibe.ch/89212/1/Melting%20Ice%20Caps.pdf>.
36. Martin Breum, “First Containership Goes North of Russia from Asia to Europe,” *EU Observer*, September 17, 2018, <https://euobserver.com/news/142837>.
37. Bekkers, Francois, and Rojas-Romagosa, “Melting Ice Caps,” 30.
38. Christian Le-Miere, “Suez Attack Highlights Risks to Shipping,” *International Institute for Strategic Studies*, September 6, 2013.
39. Robert Jensen, “Germany Approves Sale of MEKO A200 Frigates to Egypt,” *Daily News, Defense, Germany*, April 8, 2019, <https://defence.pk/pdf/threads/germany-approves-sale-of-meko-a200-frigates-to-egypt.615539/>.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# China and the Suez Canal—Politics, Economy, and Logistics

*Ehud Gonen*

**Abstract** The relations between China and Egypt are good and open, based on common economic and political interests as well as a deep mutual cultural appreciation since both China and Egypt are part of the four great river civilizations of the ancient world (The four civilizations are China and the Yangtze River, Egypt and the Nile River, the north-western region of the Indian subcontinent and the Ganges River, and Mesopotamia and the Euphrates and Tigris rivers.). Egypt, even during Mao Zedong's rule in China (1949–1976), enjoyed Chinese support as part of China's support for the bloc of non-identifying countries, including East African countries such as Sudan, and benefited from the development of China–Africa relations.

**Keywords** China-Egypt relations · Belt and Road Initiative · Egypt-US relations · Suez Canal 2015 renewal · Egypt's economic development · China's foreign policy

---

E. Gonen (✉)

Department of Asian Studies, University of Haifa, Haifa, Israel

e-mail: [egonen@campus.haifa.ac.il](mailto:egonen@campus.haifa.ac.il)

Maritime Policy and Strategy Research Center, University of Haifa, Haifa, Israel

© The Author(s) 2023

C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons and Future Challenges*, Palgrave Studies in Maritime Politics and Security, [https://doi.org/10.1007/978-3-031-15670-0\\_2](https://doi.org/10.1007/978-3-031-15670-0_2)

27

The relations between China and Egypt are good and open, based on common economic and political interests as well as a deep mutual cultural appreciation since both China and Egypt are part of the four great river civilizations of the ancient world.<sup>1</sup> Egypt, even during Mao Zedong's rule in China (1949–1976), enjoyed Chinese support as part of China's support for the bloc of non-identifying countries, including East African countries such as Sudan, and benefited from the development of China–Africa relations. Egypt recognized mainland China in 1956 (as opposed to recognizing Taiwan) and was the first Arab country to do so. In 1971, Egypt supported a permanent seat for China on the UN Security Council. On the other hand, China supported Egypt's nationalization of the Suez Canal prior to the Kadesh War (The Suez War 1956) and assisted by supplying food and weapons after the Yom Kippur War (October War 1973). According to media reports, there were also a number of arms deals in naval fields,<sup>2</sup> airspace,<sup>3</sup> and in the development of missile arrays.

Relations over the past decade between China and Egypt have been fed by political and economic developments in both countries. Egypt, after the rise of President Abdel Fattah El-Sisi in 2014, is seeking national economic growth and employment engines to cope with huge challenges in the economy and society. The Suez Canal and the extensive activity around it—including logistics, industrial and manufacturing services, large investments in infrastructure, and, of course, ships passing through—were marked by El-Sisi as such growth engines. China's Belt and Road Initiative (BRI) is developing those areas and fields as well, which leads to a natural synergy between the Egyptian and Chinese policies in general and in activities related to the Suez Canal in particular.

## DEVELOPMENTS IN EGYPT

The beginning of the decade was characterized in Egypt by the upheaval in the Arab world (The Arab Spring) of 2011 that led to the fall of President Hosni Mubarak's regime and the elections that were followed by a military coup. In 2014, former Defense Minister Abdul Fatah El-Sisi was elected president in Egypt. These events of the years 2011–2014 left a deep mark on Egyptian domestic politics and diplomacy. Internationally, President Obama's support for protesters calling for the dismantling of Mubarak's regime was conceived by Egypt's elites as President Obama's

“betrayal” of a legitimate regime,<sup>4</sup> pushing President El-Sisi to diversify Egypt’s international relations and develop relations with Russia and China in addition to those with the United States.

Internally social unrest demonstrated the fragility of the Egyptian economy resulting from historical structural factors alongside a large and young population. From demographic and geographical perspectives, Egypt is a large country. Its population is about 100 million and its area covers more than a million square kilometers, but due to the desert climate, 95% of its population concentrates along a very narrow belt of the Nile Valley. Egypt’s population is very young—about 50% of the population is under the age of 30. This combination of a young and very dense population requires planning suitable physical and economic infrastructures both in the large population centers and in the development of new areas.

Therefore, Egyptian President El-Sisi has announced a number of economic initiatives aimed at developing Egypt’s economy with an emphasis on job creation.

### *Suez Canal Doubling Initiative*

In 2014, Egyptian President El-Sisi announced an Egyptian national project to expand the canal. The initiative ended after a year. The project, carried out and funded entirely from Egyptian sources while expressing and emphasizing strong national feelings, doubled the northern section of the canal by about 70 km (out of about a total of 200 km). The project had two main objectives, the first is to increase royalties from the canal by increasing the volume of traffic in the canal and reducing the waiting times of ships at the entrances of the canal. The Suez Canal is a very significant component of the Egyptian economy. Egypt’s revenues from the canal are very significant, and in the 2020–21 financial year, it accumulates to about \$5.84 billion, representing about 10% of the total Egyptian government’s revenues and about 2% of Egypt’s total GDP.<sup>5</sup> These are steady and stable incomes in foreign currency (export of services) that are of the utmost importance to the Egyptian economy, which suffers from many structural difficulties. In all its 150 years of operation, the canal was closed only for about eight years between 1967 and 1975 due to wars between Israel and Egypt.<sup>6</sup> The second time the canal was closed for navigating was for six days in March 2021 when the ship *Ever Given* became stuck on the edge of the canal and blocked traffic.

The second goal is to create economic activity around the Canal by combining the construction of industrial parks that take advantage of Egypt's existing workforce on the one hand and logistical access to the world's main commercial lines (the canal) on the other.<sup>7</sup> Such industrial parks have created jobs in new areas outside the Nile Valley and their products will be marketed to global markets conveniently and immediately as the factories are on a global maritime traffic artery.

### *Egypt Vision 2030*

In February 2016, Egypt's Vision 2030 Strategy was announced, consisting of eight Egyptian national goals in the fields of economy, society, and the environment, respectively with similar UN goals and programs such as the United Nations Sustainable Development Goals (SDGs). Under this vision encompassing many fields and development plans, two mega-projects are particularly relevant to this chapter.

#### *The New Administrative Capital Initiative*

Part of Egypt's Vision 2030 is the construction of Egypt's new administrative capital. The new capital will be located between Cairo and the Suez Canal. This is a mega-project of building a new administrative city from scratch including large infrastructure and construction projects for both the institutional and residential sectors.

#### *The Golden Triangle Project in Southern Egypt*

This is a mineral-rich area of about 155 square kilometers between the cities of al-Qusayr and Safaga on the Red Sea coast and the city of Qena west of those on the banks of the Nile River. The Egyptian government announced the opening of this area for mineral extraction investments.

## CHINA

In 2013, Chinese President Xi Jinping announced the BRI: Belt & Road Initiative. This initiative is a diplomatic, economic, and financial framework for Outward Direct Investments (ODI) that began to flow from China a decade earlier. The initiative appears to be another phase of China's transition from a growth model based on exports to the world and incoming Foreign Direct Investments (FDI) to a growth model



based on domestic consumption and ODI. The flow of investments from China, including under the BRI, has increased over the years to a significant phenomenon in financial and geographical scope and has attracted vast academic research<sup>8</sup> as well as broad media coverage. The initiative includes both the execution of work by Chinese companies (export of services) mainly in the areas of infrastructure, and ODI from China, and is particularly focused on the Eurasian and East African geographical areas. The initiative's goals are to synchronize development efforts and promote joint activities between the participating countries of the initiative by building common logistical infrastructures such as ports, railways, gas and oil pipelines, and more. The initiative includes a land component—the Silk Road Economic Belt and a marine component—the twenty-first-century Maritime Silk Road.<sup>9</sup>

The continental route (the Road) is a logistics network that exits China and passes through central and western Asian countries toward Europe. This network revives the historical and romantic narrative of the Silk Road and includes six logistical corridors from China to the north (Russia), south (Southeast Asia), southwest (Bangladesh), and west (Pakistan and Central Asian countries).

The Maritime Route (the Belt) is a network of seaports and cargo terminals in dozens of ports in the Indian Ocean, the Red Sea, and the Mediterranean Sea. This network connects eastern Chinese ports in the Greater Bay Area, which includes the Pearl River Delta ports, through the China Sea, Southeast Asia countries, through the Indian Ocean to the Persian Gulf, these connect to the eastern shores of Africa north through the Red Sea and the Suez Canal to the ports of southern European countries.

As part of BRI, the Chinese government established new financial entities such as the Asian Infrastructure Investment Bank (AIIB), the China-Southeast Asia Investment Fund (CAF), the China-Africa Investment Fund (CADF), and other financial frameworks. At the same time, China works to create cooperation with existing international bodies such as the World Bank, the Asian Development Bank, and more. Total Chinese investments and commitments under this initiative are cumulatively estimated at approximately \$2–4 trillion since 2013.<sup>10</sup>

## CHINESE FOREIGN POLICY

The BRI has since been announced as one of China's foreign policy pillars, and has been actively promoted by the Chinese leadership. The reasons for the launch of the initiative are many and are driven by players at different levels of analysis: from the personal level of the policy line led by President Xi, to continue at the intrastate level in China in the division of power between the provinces and the central government and the physical and logistical connectivity of western provinces (and less economically developed) in China, both to the developed eastern provinces, and to their neighboring countries in central and west Asia, and all the way to the international level in geostrategic considerations of securing China's energy and mineral import sources and sea lines of communication (SLOC's) alongside maintaining open trade routes for exports and tying economies in Asia to the Chinese one.

It is common to argue that economy is part of politics, and economic power is an international political force. China's economic rise from poverty and struggle to become the world's largest growing economy lasted only one generation and was accompanied by trade and investment as well as extensive political and military activity. This includes "soft power" whose stated goals are, among other things, a "National Rejuvenation," namely, restoring China's status to the historical one as the primary central east Asian country and erasing "the century of humiliation."<sup>11</sup> In order to maintain the status of a regional and possibly future world power, and in order to support and protect its investments around the world, especially those included in the BRI, China is working to acquire all the means and "status symbols" of world power. This includes nuclear weapons, a comprehensive space program, a blue water fleet building program, including at least four aircraft carrier battle groups, the construction of fighter jets and strategic bombers, and more.

In the context of this discussion, we should mention the Chinese naval force in the war against pirates in the western Indian Ocean. This force operates independently and parallels the international force CTF 151 (CTF—Combined Task Force). China's maritime power base is in the Port of Djibouti in the Horn of Africa and is China's first (and so far, the only) official military/naval base outside its borders.<sup>12</sup> In this action, China protects the shipping routes entering the Red Sea and farther to the Suez Canal, thus becoming a supplier of global public goods: The Defender of Freedom of Navigation. Researchers dealing with the rise of

nations and empires sometimes emphasize the maritime aspects of such a rise (Theory of Navalism). There are certainly significant maritime aspects of China's rise to world power.<sup>13</sup> Aspects that its expressions include securing the shipping lanes entering the Suez Canal. China's activity creates changes in the world power center of gravity and as a result the importance of the Indian Ocean increases. These strategic changes have led to the formation of a new conceptual area in international political literature: the Indo Pacific Region,<sup>14</sup> which also projects the rise of the Red Sea that is part of it. Following this trend, Egypt established its Southern Naval Command and strengthened its forces in the Red Sea.<sup>15</sup>

In the Chinese conception, there are no conclusive boundaries between private and public economic activity and between civilian and military activity. The roots of this concept lie further in the military conceptions of imperial China, to be continued with Mao Zedong's doctrine that subordinates all means in favor of the goal, to its expression today in a policy of "Strategy of Military-Civilian Integration" as formulated in the Declaration of the President of China during the 13th Congress of the People's Party on the need for integration.<sup>16</sup>

This means that all Chinese infrastructure is built in advance and under the guidance of the government in such a way that it will enable operation as infrastructure for military/naval use when necessary.<sup>17</sup>

## EGYPT AND CHINA

As we saw, the economic and geostrategic interests of Egypt and China overlap considerably and there is a great deal of economic synergy between Egypt's internal development needs and the BRI vision. Moreover, in view of the great importance of the Suez Canal to the Egyptian economy and the enormous importance of the canal in international trade as well as the international navigation and trade routes developed by China under BRI, the Suez Canal, its security, and the surrounding projects constitute a clear meeting of interests between internal Egyptian interests and China's international interests.

In December 2014, Egyptian President El-Sisi visited China, his first visit as head of state outside the Arab world. During this visit, a joint declaration of a "comprehensive strategic partnership" was signed. It should be noted that under Chinese diplomacy protocol such a partnership is a high level of diplomatic relations between China and another country.<sup>18</sup> About a year later in January 2016, Chinese President Xi

visited Egypt. Egypt is also one of the founding members of the Asian Infrastructure Investment Bank (AIIB) founded in 2016.<sup>19</sup>

Therefore, a number of mutual interests can be mapped starting with Chinese interest in Egyptian *logistics*: In view of the economic and environmental efficiency of maritime trade (with the exception of objectives that are clearly inland),<sup>20</sup> maritime transport will continue to lead the majority of trade on the long routes between Europe and Asia even with the development of intra-Asian land trade routes initiated by China under the BRI. About 13% of world trade passes through the Suez Canal<sup>21</sup> and it links trade between Asia, Europe, and the Middle East. The Suez Canal is a bottleneck in trade between the Mediterranean Sea and the Red Sea and the Indian Ocean. As an exclusive, narrow path in an area with a history of conflicts (including the events of 1956 around the Canal itself) and of fear of terrorism (between 2012 and 2013, Egypt reported thwarting attempts to harm ships crossing the canal).<sup>22</sup> The canal region poses some risk to the flow of trade, hence a risk to the effectiveness of the entire trade chain. Therefore, in the Chinese view, the continued flow of trade in the Suez Canal in a safe and uninterrupted manner (politically and logistically) is in the primary interest. This is also, of course, an Egyptian supreme interest as well in light of the economic importance of the Suez Canal to Egypt.

The importance of the Suez Canal to China is mainly the flow of goods westward from China to Europe. Fewer goods flow in the opposite direction (from the west to China). Of further but less importance is transporting energy eastward toward China. According to official Chinese data, there is probably some Chinese use of energy passing through the Suez Canal. While the lion's share of crude oil imported to China is from Gulf states and not through the Canal, China imported about 15.3% of its crude oil in 2019 from Russia. Some Russian oil passes to China through land pipes such as the Siberia–Daqing pipe, but some passes through the canal on a north–south route.

Figure 1 shows crude oil imports to China by the top 15 source countries. All oil imports to China totaled \$238.7 billion in 2019.

*Egyptian market*: which is close to \$400 billion. The Egyptian market is the second largest market in Africa (after Nigeria) and the fourth largest in the Middle East (after Saudi Arabia, Turkey, and Iran). This is a market with great potential both as a market for Chinese products (manufactured in China or by manufacturers owned by Chinese companies elsewhere) and as a market for infrastructure projects (construction, water, energy, etc.).

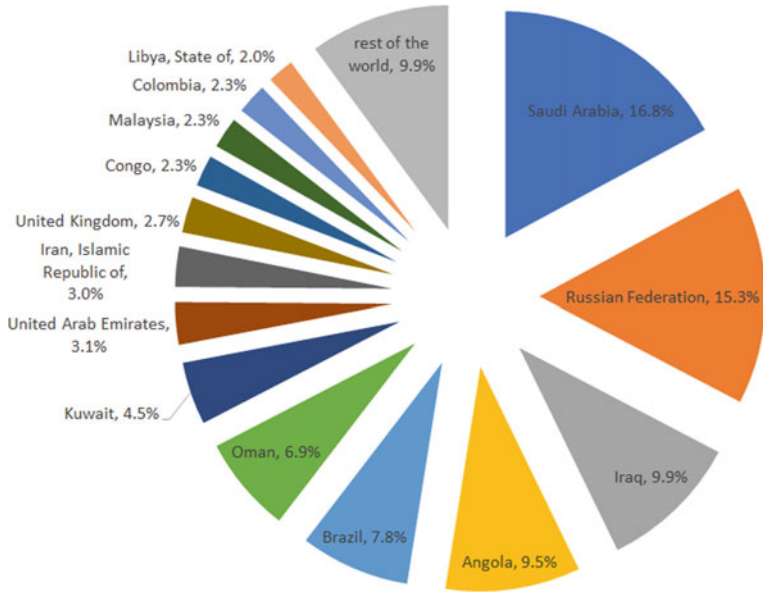


Fig. 1 Top 15 countries of origin in crude oil imports to China<sup>23</sup>

*Egypt's regional position:* This status has several aspects. The first is Egypt's political status as an important country on the main axis in the Middle East, which is the traditional Sunni axis with other members to be Saudi Arabia and the United Arab Emirates. It is a relatively moderate axis. Another side of Egypt's regional status is its economic status as a regional gateway to East Africa. Egypt is a member of three regional trade agreements: Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), and the Economic Community of East African States (ECEAS) in Africa.

*Access to Egypt labor force,* is usually cheaper and more accessible than in China. Egypt's GDP per capita is about \$3500 compared with just over \$10,000 per capita in China. Products produced in Egypt in industrial parks are on the main route of the BRI. The population in Egypt is relatively young and unemployment is high. This very socially problematic situation in Egypt makes the country a destination for investments in labor-intensive manufacturing plants.

On the other hand, Egypt has interests in joining China.

*Diversifying Egypt's Foreign Relations Beyond the United States to Ties with China and Russia*

As mentioned above, President Obama's support of protesters who called against Mubarak's rule in 2011 was perceived by Egypt's elites as a "betrayal" by the United States. This led President El-Sisi to diversify Egypt's international patrons. Since the end of the 1970s, with the signing of the peace treaty between Egypt and Israel, brokered by the United States, moreover, since the 1990s, when the Soviet Union collapsed, the United States has been Egypt's patron. But President El-Sisi's first visit outside the Middle East was to China. In addition, an investment agreement for Russian participation in an industrial zone east of Port Said (at the northern entrance to the canal) was signed in 2018, amounting to \$190 million.<sup>24</sup>

*Chinese Shipping as a Significant (Albeit Perhaps "Captive") Customer of the Suez Canal*

China is the second country in the world (after Greece) to own a fleet of ships. Chinese-owned shipping accounts for about 14.5% of the world's shipping in tons.<sup>25</sup> Although this is a "captive customer" in many ways, since today as surveyed above there is no real alternative to cruising the canal, there is still an Egyptian interest in maintaining as much traffic as possible through the Canal in order to reduce the search for future alternative routes.

*China as a Provider of Infrastructure Services*

Building infrastructures such as residential construction, water and energy infrastructure and utilities, transportation and more are the cornerstones of BRI. Chinese suppliers in that field are mainly state-owned enterprises (SOE) and have excellent engineering capabilities alongside impressive performance and financing solutions. All of this makes Chinese infrastructure construction suppliers preferred suppliers.

*Chinese Investments Entering Egypt as Source for Foreign Capital  
and New Technology*

Liberal literature indicates many advantages for a country that receives FDI, including capital availability, development of an international client network for export, transfer of technologies, knowledge and management methods, and know-how.<sup>26</sup> Encouraging Chinese FDI into Egypt is a source of these advantages.

### CHINESE PROJECTS IN EGYPT

Synergy in the economic and geopolitical interests between China and Egypt is physically realized on the ground in a series of Chinese projects, investments and activities in Egypt.

A number of large construction projects are being built in the new administrative capital including the Parliament building, a National Exhibition Center, and buildings for about 12 government ministries. In addition, an agreement was signed with China State Construction Engineering Corporation (CSCEC), for the construction of a central business district (CBD). In the energy sector, a contract has been signed for the construction of refining facilities for oil and petrochemical industry (The Suez Refining and Petrochemical Plant).

The highlight is the relationship around projects related to the Suez Canal. The Suez Economic and Trade Cooperation Zone (SETC) park was established in 2008 and expanded in 2016 in a ceremony attended by President Xi. This industrial park was built by Tianjin Economic-Technological Development Area (TEDA). It is a prototype for industrial economic development zones in Egypt. The Park is on the Red Sea's shores near the city of Ain-Sokhna about 40 km from the southern entrance to the canal. In the same area (north of the Suez Bay) construction of a port began in the city of Sohna, by a Chinese company.

In addition, Chinese companies operate three terminals at Egyptian ports: the Hutchinson Company operates the two terminals in the port of Alexandria—Alexandria Terminal and El Dekheiliah Terminal—and will operate a third terminal east of the city in Abu Qir. COSCO operates a central terminal in Port Said Port, the largest transshipment port in the Suez Canal and one of the largest in the Mediterranean Sea. These ports can be used, according to the Strategy of Military-Civilian Integration,

as PLAN (People Liberation Army Navy) supply and technical support ports.

There are also Chinese investments in an industrial area specializing in textiles that are not on the canal. China-Egypt Mankai Textile Industrial Park in The City of Sadat is one of Africa's largest specialized industrial parks and is expected to operate over 255 textile companies, most of them Chinese owned.

## CONCLUSION

Synergy in the economic and geostrategic interests between China and Egypt causes significant cooperation between the countries, mainly on the economic side. The partnership between the countries anchored in mutual agreements and visits from presidents and was realized in the construction of large infrastructure projects and Chinese investments in Egypt. Many investments are related to the Suez Canal, either directly such as port management or in industrial parks developed by Egypt along the canal.

However, Egypt retains its assets around the Canal. Egypt has funded the canal expansion project by self-measures and is concerned about the diversity of its relations with the superpowers.

## NOTES

1. The four civilizations are China and the Yang Cha River, Egypt and the Nile River, the northwestern region of the Indian subcontinent and the Ganges River, and Mesopotamia and the Euphrates and Tigres rivers.
2. "PLA Navy 70th Anniversary: A Look at China-Egypt Cooperation," *CGTN*, April 24, 2019, <https://news.cgtn.com/news/794d444f33494464776c6d636a4e6e62684a4856/index.html>; Eyal Pinko, "A Threat to Israel: The Egyptian Navy Upgrades Its Submarine Warfare Capabilities," *Israel Defense*, October 30, 2019, <https://www.israeldefense.co.il/en/node/40697>.
3. Thomas W. Lippman, "China Will Sell Arms to Egypt, Sadat Announces," *The Washington Post*, June 6, 1979, <https://www.washingtonpost.com/archive/politics/1979/06/06/china-will-sell-arms-to-egypt-sadat-announces/3c70f99a-2fa6-4dea-a92e-b8fbd8d0a97c/>; Gary Mortimer, "Egypt: Nation Produces UAV in Cooperation with China," *sUAS News*, May 18, 2012, <https://www.suasnews.com/2012/05/egypt-nation-produces-uav-in-cooperation-with-china/>.



4. Office of the Press Secretary, “Remarks by the President on the Situation in Egypt,” *The White House, President Barack Obama*, February 1, 2011, <https://obamawhitehouse.archives.gov/the-press-office/2011/02/01/remarks-president-situation-egypt>; John Hudson, “Mubarak Leaves Cairo and Confuses the White House,” *The Atlantic*, February 11, 2011, <https://www.theatlantic.com/politics/archive/2011/02/mubarak-leaves-cairo-and-confuses-the-white-house/342275/>.
5. AFP, “Egypt’s Suez Canal Reports Record Revenue despite Blockage Crisis,” *AlJazeera*, July 11, 2021, <https://www.aljazeera.com/news/2021/7/11/record-revenues-flow-from-suez-despite-megaship-blockage>.
6. The Six-Days War (June 1967), The War of Attrition (June 1967 to August 1970), and the Yom Kippur War (October War) (October 1973).
7. Suez Canal Area Development Project, “Great Egyptian Dream,” <https://www.suezcanal.gov.eg/English/MediaCenter/Presentations/Great%20Egyptioan%20Dream.pptx>.
8. For an overview on the academic research, see Mingchun Cao and Ilan Alon, “Intellectual Structure of the Belt and Road Initiative Research: A Scientometric Analysis and Suggestions for a Future Research Agenda,” *Sustainability* 12, no. 17 (2020): 6901, <https://doi.org/10.3390/SU12176901>.
9. National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People’s Republic of China, with State Council Authorization, “Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road,” *Belt and Road Forum for International Cooperation*, March 2015, <http://2017.beltrandroadforum.org/english/n100/2017/0410/c22-45.html>.
10. Jonathan E. Hillman, (2018). “How Big Is China’s Belt and Road?” *Center for Strategic and International Studies (CSIS)*, April 3, 2018, <https://www.csis.org/analysis/how-big-chinas-belt-and-road>.
11. The term used in China to describe the period of intervention and subjugation of the Qing dynasty and the Republic of China by Western powers and Japan from 1839 to 1949.
12. Peter A. Dutton, Isaac B. Kardon, and Conor M. Kennedy, “China Maritime Report No. 6: Djibouti: China’s First Overseas Strategic Strongpoint” *CMSI China Maritime Reports*, <https://digital-commons.usnwc.edu/cmsi-maritime-reports/6>.
13. H. J. Dooley, “The Great Leap Outward: China’s Maritime Renaissance,” *The Journal of East Asian Affairs* 26, no. 1 (2012): 53–76; J. L. Suárez de Vivero and J. C. Rodríguez Mateos, “Ocean Governance in a Competitive World: The BRIC Countries as Emerging Maritime Powers—Building New Geopolitical Scenarios,” *Marine Policy* 34, no. 5 (2010): 967–78.

14. Benni Ben Ari, "The Indo-Pacific Region," in *Maritime Strategic Evaluation for Israel 2019/20*, ed. Shaul Chorev and Ehud Gonen (Haifa: Maritime Policy and Strategy Research Center, 2020).
15. Shlomo Gueta, "The Egyptian Navy: Its Origins and Its Future," in *Maritime Strategic Evaluation for Israel 2019/20*, ed. Shaul Chorev and Ehud Gonen (Haifa: Maritime Policy and Strategy Research Center, 2020).
16. Original CSET translation of "The '13th Five-Year' Special Plan for S&T Military-Civil Fusion Development" [十三五"科技军民融合发展专项规划], *PRC Ministry of Science and Technology*, August 24, 2017, <https://cset.georgetown.edu/publication/the-13th-five-year-special-plan-for-st-military-civil-fusion-development>.
17. Y. Evron, "China's Military-Civil Fusion and Military Procurement," *Asia Policy* 16, no. 1 (2021): 25–44.
18. Li Quan and Ye Min, "China's Emerging Partnership Network: What, Who, Where, When And Why," *International Trade, Politics and Development* 3, no. 2 (2019): 66–81.
19. "Members and Prospective Members of the Bank," *Asian Infrastructure Investment Bank*, <https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html> (accessed March 11, 2022).
20. Maritime transport is considerably cheaper than any other transport (air, trains, or trucks) in terms of cost per ton per km. Another key parameter in the logistics of the trade is the transshipment of cargo from one means of transportation to another and transshipment of cargo between means of transportation of the same type (for example, transshipment of a container from one ship to another ship). In general, it can be said that any transshipment of cargo adds a significant cost to transportation.
21. "SCZone Head: 13% of World Trade Passes through Suez Canal," *Hellenic Shipping News*, June 24, 2019, <https://www.hellenicshippingnews.com/sczone-head-13-of-world-trade-passes-through-suez-canal>.
22. "Egypt Attack on Suez Canal Ship 'Foiled,'" *BBC*, 1 September 2013, <https://www.bbc.com/news/world-middle-east-23918642>.
23. Data Source: ITC (International Trade Centre) processed by author, <https://www.trademap.org/Index.aspx>.
24. "Egypt and Russia Sign 50-Year Industrial Zone Agreement," *Reuters*, May 23, 2018, <https://www.reuters.com/article/egypt-russia-industry-idUSL5N1SU5SI>.
25. "China Has Become the World's Second-Largest Ship-Owning Nation," Institute of Shipping Economics and Logistics, September 17, 2018, <https://www.isl.org/en/news/china-become-the-worlds-second-largest-ship-owning-nation#:~:text=ship%2D Downing%20nation-,China%20has%20become%20the%20world's%20second%2Dlargest%20ship%2D Downing%20nation,capacity%20of%20270%20million%20dwt>.

26. For a comprehensive review of this topic, see Magnus Blomstrom and Ari Kokko, *How Foreign Investment Affects Host Countries*, Policy, Research Working Paper; no. WPS 1745 Washington, DC: World Bank Group. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/992201468765633696/how-foreign-investment-affects-host-countries>.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# The Butterfly Effect: The Influence of the Nixon Administration's Preoccupation with Vietnam on Sadat's February 1971 Proposal to Reopen the Suez Canal

*Yehuda Blanga*

**Abstract** The purpose of the present chapter is to investigate Sadat's February 1971 political initiative and the United States' and Israel's response to it. Its main objective is to examine how processes within the inner American arena have influenced the formation of the Israeli policy toward Sadat's diplomatic initiative. In other words, how the two-headed nature of the American foreign policy—the State Department versus the White House—regarding the Middle East and the Vietnam War influenced the decision-making process in Israel.

**Keywords** 1971 peace initiative · White House-State Department disagreement · Anwar Sadat · Vietnam War · Suez Canal opening/closure · The U.S and the USSR involvement in the Middle East

---

Y. Blanga (✉)  
Department of Middle Eastern Studies, Bar Ilan University, Ramat-Gan, Israel  
e-mail: [yehuda-udi.blanga@biu.ac.il](mailto:yehuda-udi.blanga@biu.ac.il)

In late 1970, a new wind of cautious optimism could be sensed in the conflict between Egypt and Israel. The fragile cease-fire agreement that had ended the War of Attrition in August 1970 was being observed; new voices were heard in both Cairo and Jerusalem about a renewal of negotiations, if certain conditions were met. Accordingly, both Secretary of State William P. Rogers and the newly installed president of Egypt, Anwar Sadat, designated 1971 “the year of decision.” In the early months of 1971, there were several diplomatic openings that might have led to an agreement between Egypt and Israel, of which the most far-reaching was to reopen the Suez Canal to navigation.

One of these opportunities was the initiative that Sadat floated on February 4, 1971, in a speech to the Egyptian National Assembly. Later, he said that it was “a diplomatic offensive – the only alternative to a military one which I was, at the time, unable to undertake.” In any event, 1971 concluded with no decision, and many viewed this a missed opportunity that could have averted the October 1973 war. This chapter takes a close look at this diplomatic initiative, its motives, and Israel’s response to it. I will place special emphasis on an issue that has received very little attention in the scholarship about Sadat’s proposal—the divergent positions within the United States administration about an Israeli-Egyptian agreement that would lead to the reopening of the Suez Canal and its ramifications for U.S. interests in Vietnam. To put it another way, did the United States’ preoccupation with the Vietnam conflict influence decisions about the Middle East arena that year? Did the Nixon administration bear some of the responsibility for the failure of the 1971 diplomatic initiative?<sup>1</sup>

## NEW PRESIDENT, NEW OPPORTUNITIES

Sadat, not burdened by responsibility for the debacle of June 1967, was elected to succeed Nasser on October 15, 1970, which provided an opportunity for Egypt, the United States, and UN special envoy Gunnar Jarring to restart the diplomatic efforts to achieve a settlement between Israel and the Arabs. At the recommendation of National Security Advisor Henry Kissinger, President Richard Nixon moved to develop good ties with Sadat, to promote the diplomatic process in the Middle East, and to improve relations between Washington and Cairo. For his part, Sadat expressed his hope on several occasions that the United States would

respond to Egypt's needs and evince understanding of its motives in its fight against Israeli aggression.<sup>2</sup>

At the same time, Secretary of State Rogers opened his own channel of communications with his Egyptian counterpart with the goal of building trust between the two countries. The US objective was to advance the peace talks and realize the United States' basic interests in the Middle East: an Israeli–Arab accord and a halt to Soviet penetration of the region. The State Department feared that if the Arabs and Israel could not be set on a genuine negotiating track, the diplomatic process would languish and ultimately lead to a new outbreak of hostilities between the sides.<sup>3</sup>

In general, State Department officials identified an Egyptian willingness to make use of the United States in the diplomatic process, and especially of Jarring's mediation efforts, as well as "a greater willingness for peace." They also felt that Cairo was not interested in relying on the Soviets as their exclusive advocates and the Soviet Union itself was encouraging the Egyptians to "continue on the path of negotiations."<sup>4</sup> In addition, Secretary Rogers saw that the Egyptian and Soviet bargaining position had become weaker following Nasser's death and that major psychological and political obstacles had been removed, especially on the Israeli side. He asserted, moreover, that Cairo had released hints of its desire to continue along the path leading to a diplomatic settlement.<sup>5</sup>

On December 23, 1970, Rogers' cautious optimism led him to announce that 1971 was going to be a "year of decisions." The first step, as far as the United States was concerned, was to get the two sides to start talking under Jarring's auspices.<sup>6</sup> Sadat shared Rogers' outlook; a few days later, in an interview with the *New York Times*, he said that the first six months of 1971 would be decisive. But he did not express great optimism about the prospects for a diplomatic solution. With regard to the negotiations through Jarring, he stated that when the Swede began his mission Egypt would propose free passage through the Gulf of Aqaba, but free passage through the Suez Canal would depend on a just solution of the refugee problem. Sadat also hinted at his willingness to recognize Israel and live in peace alongside it, but insisted that as long as he was alive there would not be diplomatic relations between the two countries. The *New York Times* interview was the opening shot in a series of public statements by Sadat that became more focused as the months progressed and referred to recognition of Israel, the opening of the Suez Canal, and his interest in reaching an overall settlement of the conflict.<sup>7</sup>

On the Israeli side, too, there had been some movement in the diplomatic process. On December 29, 1970, after an exchange of letters between Prime Minister Golda Meir and President Nixon, which included an Israeli request for security guarantees in the event of an outright war, promises of U.S. economic and military assistance to Israel, as well as meetings between Defense Minister Moshe Dayan and senior administration officials,<sup>8</sup> Meir stated officially that “the present diplomatic and military situations permit and justify an end to the suspension of our participation in the [Jarring] talks.”<sup>9</sup> Ten days later, Jarring met with Meir and Foreign Minister Abba Eban in Jerusalem. The two Israelis handed him a position paper with Israel’s conditions for peace with Egypt (along with parallel documents about peace with Jordan and Lebanon), chiefly the need for an explicit and binding commitment to peace; mutual and explicit respect for and recognition of each country’s sovereignty, territorial integrity, and political independence; the institution of appropriate security arrangements; and an end to the state of war between the two countries. Israel now accepted the principle of withdrawal and no longer insisted on direct talks as a prior condition for beginning negotiations. The State Department and Ambassador Jarring responded positively to Meir and Eban’s proposal.<sup>10</sup>

### A DRESS REHEARSAL FOR FEBRUARY: GENERAL AMIN’S MISSION

Shortly before Jarring renewed his mission, Egypt secretly advanced a proposal for a partial settlement with Israel. It was the first time Sadat offered a diplomatic plan for a settlement, and its content served as the basis for his later initiatives as well, especially that of February 1971. In mid-January, Assistant Secretary of State Joseph Sisco met with Israel’s ambassador in Washington, Yitzhak Rabin. Sisco told him that on January 11, a senior figure who was very close to the Egyptian president had called on the American Interests Section in Cairo and transmitted a proposal, unquestionably with Sadat’s knowledge. He did not identify the senior official, but it later became known that it was Gen. Abdel Moneim Amin.<sup>11</sup>

At this meeting, Amin told his hosts that he wanted to pass on, unofficially, a diplomatic proposal to the Americans and the Israelis. Evidently, Sisco said, Sadat wanted to develop a diplomatic back channel by means of General Amin, whose proposal was quite similar to that made by Defense

Minister Dayan in November 1970: mutual withdrawal from the Suez Canal.<sup>12</sup> It was proposed that Israel withdraw its forces 40 km from the eastern bank of the canal as far as Mitla Pass. Despite the withdrawal, the Egyptian representative asserted, Israel would still control most of the Sinai Peninsula and still command natural defensive positions. After Israel took the first step, Egypt would secretly thin out its ground forces for 40 km west of the canal, but leave its air defense units and other military installations in place. If the proposal was implemented, the general added, his country would agree to a prisoner exchange with Israel, to extend the ceasefire, to conduct negotiations through Jarring, to bar flights by Egyptian and Israeli planes in a strip extending 10 km on either side of the canal, and to open it for free passage by all vessels (whether this included Israeli shipping was not stated).<sup>13</sup>

The Egyptian proposal did not make a particularly strong impression on Israel or the United States. In the end, for reasons to be surveyed below, neither of them delivered a clear answer to Egypt. Sadat did not abandon his idea and made it public on February 4, 1971. However, in his conversations with Donald Bergus, the senior US diplomat in Cairo, his disappointment with the lack of a US response was unmistakable. Bergus reported this to his superiors and recommended that the secret direct channel with the Egyptian president be maintained, because that was how Sadat preferred to conduct negotiations with the Americans and even more so with the Israelis.<sup>14</sup>

Despite Sadat's preference for off-the-record contacts with the Americans, on January 15, 1971, Egypt handed Jarring its response to the Israeli document the Swede had received from Meir and Eban at the start of the month. The Egyptians reiterated their willingness to accept Security Council Resolution 242, which Israel rejected. They emphasized the imperative nature of an Israeli withdrawal to the lines of June 4, 1967, and a just solution to the refugee problem on the basis of United Nations resolutions. They also called for setting up a UN force to safeguard the peace and for including the four Great Powers and the Security Council as a third party to the agreement, contrary to the Israeli position that only the two countries should be involved.<sup>15</sup>

Why was General Amin's proposal of January 11, which amounted to a sort of compromise between the two countries, not included in the Egyptian document, especially since its incorporation into the Egyptian position paper would have caused great embarrassment to Jerusalem and subjected it to diplomatic pressure? There are two possible answers:



the first relates to the international arena, and the second to domestic power struggles in Egypt. First, because Cairo had never thought that the Jarring talks could lead to a settlement with Israel, most of its energies were directed toward Washington in the hope that the administration would put pressure on Israel to be more flexible. Second, we may conjecture that the January proposal remained confidential and hidden from the Egyptian Foreign Ministry. This idea is supported by how Sadat handled his February initiative; none of the members of his government, including Foreign Minister Mahmoud Riad, were privy to it: “None of my [domestic] opponents had foreknowledge of my initiative,” he wrote in his memoirs.<sup>16</sup> What is more, the disagreements with Riad about the conduct of foreign policy and the latter’s objection to the interim agreement with Israel posed a threat to the proposal. Perhaps Sadat knew that if the rival centers of power were aware of his desire to reach a compromise with Israel, at such an early stage of his tenure and without a military conflict, it might trigger a domestic uprising against him—especially in light of the power struggles that were already raging at the highest levels of the Egyptian government.<sup>17</sup>

The impasse in all the diplomatic channels produced stronger threats and signs from Cairo that the hostilities across the canal would be resumed in February. The tone became sharper in the exchange of notes and messages between Rogers and Riad in January 1971. When the former called for continuation of the diplomatic efforts and even hinted at the possibility that the U.S. administration would pressure the Israeli leadership to make compromises,<sup>18</sup> the Egyptian Foreign Minister asserted that the ceasefire served Israel’s interests only. He asked the Americans to pressure Israel to withdraw from the occupied territories and made it clear that “[the] UAR would not accept [the] thesis that it was [a] defeated country which had to make territorial concessions.” As we shall see later, Riad belonged to the camp that opposed Sadat’s attempts to conclude a settlement with Israel. His opposition stemmed from his realization, as early as January, after the stalemate in the Jarring mission, about who set the tone in Washington. “Rogers and the State Department had little say in defining US foreign policy,” he told Bergus. “The right [of] decision on foreign affairs matters had been delegated almost completely to Henry Kissinger.”<sup>19</sup>

A discussion of the State Department’s inability to set the Israeli–Egyptian diplomatic process in motion in early 1971 cannot ignore Riad’s statement. Its implication is that the senior echelons in Egypt

had correctly read the balance of power in the Nixon administration and understood that without strong support from Nixon and Kissinger, there was little chance that the State Department would pressure Israel to make progress toward a political or diplomatic solution. So the State Department's shaky credibility was to its disadvantage: the promises by Rogers and his people that the United States could get Israel to take a more flexible position if Egypt did so as well were taken in Cairo with a large grain of salt.

### SADAT'S INITIATIVE TO REOPEN THE SUEZ CANAL

After Sadat transmitted, via General Amin, his proposal for a thinning of the forces along the canal and its reopening, Israel waited for the U.S. response. For three weeks, Israel made it clear that it would not act contrary to the views of the administration; if the White House did not reject the Egyptian idea, Israel would be willing to cooperate with the United States to study it in depth. Here it is important to note that when Nixon entered the White House the United States was deeply mired in Vietnam and assigned priority to resolving that problem. In addition to Vietnam, Nixon and Kissinger wanted to reshape relations with the Soviet Union, chiefly with regard to nuclear weapons, as well as develop an opening to China. It remained mainly for the State Department to deal with the Middle East, which, even though it was defined as "a powder keg," was relegated to secondary priority. In January and February 1971, Nixon and Kissinger were preoccupied with the invasion of Cambodia and the planned operation in Laos (Lam Son 719), and Rabin could rarely find a place on their crowded schedules.<sup>20</sup>

The U.S. position was important to Israel chiefly because of the statements by the Egyptian leadership that the ceasefire would not be extended after February 5. Jerusalem informed Washington that in the event of a resumption of hostilities Israel would respond with full force in order to hold the canal line and defend its positions. In the absence of a U.S. response, however, should fighting break out across the canal, no one in the administration would be able to blame Israel for not responding to an Egyptian proposal it had received through the Americans. As we shall see, this is precisely why the United States preferred not to offer Israel any advice.<sup>21</sup> Kissinger managed to find time in his schedule to meet with Rabin on February 3, but he could not offer a U.S. response to the Israeli query or the Egyptian proposal. Rabin recommended to Jerusalem

that Israel continue to wait for an answer from Nixon and Kissinger and make no answer to Sisco.<sup>22</sup>

For Sadat, the thunderous silence from Jerusalem and Washington inspired him to go public with his secret proposal on January 15. On February 4, he addressed the Egyptian National Assembly and reaffirmed his country's interest in a diplomatic settlement. Nevertheless, he emphasized, it was "our sacred duty" to recover all of the Arab land occupied in 1967; accordingly, "all our political, military, economic, and diplomatic action should be geared towards this end." Sadat stated that in the absence of serious progress on the diplomatic front, Egypt would not consent to an automatic extension of the ceasefire, but added that he could not ignore the requests by the UN secretary-general and members of the Security Council who were showing sympathy for Egypt and asking it to hold its fire to create a more relaxed atmosphere that could promote the implementation of Resolution 242. Sadat announced that the quiet on the canal front would be extended for another 30 days, until March 7, and then presented his new diplomatic initiative:

We demand that during this period of withholding fire a partial withdrawal of the Israeli troops on the western bank of the Suez Canal will be realized as a first step in a timetable to be laid down with a view to implementing the rest of the provisions of the Security Council Resolution. If this is realized during this period, we are ready to start at once in clearing the course of the Suez Canal in order to reopen it for international navigation and to serve world economy.<sup>23</sup>

Both Washington and Jerusalem were curious about the motives that lay behind Sadat's proposal to reopen the Suez Canal. Among the Americans, it seems, after a study of all of the various arguments and opinions, that there was a lack of unanimity within the administration, especially at the State Department, about the Egyptians' motives, but chiefly no great desire to study the proposal and its details. Kissinger's explanation for the absence of a response from the White House was the escalation in the fighting in Southeast Asia, which was Nixon's top priority and would prove fateful. Kissinger told Rabin that "the future of the war and the president's own future were hanging in the balance."<sup>24</sup> On the other hand, U.S. conduct was problematic for Israel, which did not want to act without the consent and coordination with the United States. Hence,

Israel could not formulate a response as long as Washington did not convey its opinion on the matter.

The U.S. attempts to fathom Egypt's motives for reopening the canal generated several hypotheses. Sisco thought it was possible that Sadat was trying to arouse sympathy in Europe and thereby exert pressure on Israel and the United States. He also suggested that the Egyptian step was the product of Russian intervention, because reopening the canal would serve Soviet interests more than US interests. Still, Sisco believed, the economic motive was paramount: reopening the canal would benefit Egypt's economy and help it escape the difficulties of recent years, especially given its growing dependence on the Soviet Union.<sup>25</sup>

Other officials at the State Department and especially in the Bureau of Intelligence and Research (INR) thought that the political side was more important for Sadat. As they saw the matter, he had an acute need for a political achievement to bolster his political status, deter threats, and stifle the pressure by senior military officers who wanted to go back into action against Israel. They also identified four Soviet interests behind the initiative: negotiations between Israel and Egypt about reopening the Suez Canal for navigation would reduce the danger of war; opening the canal would contribute to stability in the Middle East and permit fruitful negotiations toward an overall settlement of the Arab–Israeli conflict; it would simplify transport to Vietnam; and make it easier to supply the Soviet naval force in the Indian Ocean, which could then be enlarged.<sup>26</sup>

Israel, too, was wondering about Sadat's motives. In an analysis that the director general of the Foreign Ministry, Gideon Rafael, sent to Eban, he highlighted the hidden dimensions of Sadat's plan, especially the question of who would control the territory evacuated by Israel; whether the Egyptian Army would cross to the east bank of the canal; and whether the canal would be open to Israeli ships as well. Rafael also emphasized the element of Soviet involvement in the Egyptian proposal and noted that as early as the autumn of 1968 the Soviet Union had proposed an Israeli withdrawal from the canal as a first step toward its full evacuation of the Sinai Peninsula. Consequently, Rafael insisted on the need to study how Sadat's proposal would influence the "global strategic system" of the United States and the Soviet Union and what diplomatic and security implications it would have for Israel. That is, was Egypt making a first step toward true peace or seeking to improve its position in advance of renewed fighting? Nevertheless, Rafael, like Mordechai Gazit, the director general of the Prime Minister's Office, perceived a difference between

Sadat's current position and Nasser's. The former was now willing to open the canal without a full Israeli withdrawal from the occupied territories as a precondition; to set a timetable for implementation of Resolution 242 after a partial Israeli withdrawal; and to extend the ceasefire.<sup>27</sup>

Without access to the Egyptian archives, of course, the testimony of those involved in this issue can only be in hindsight; still, we cannot ignore the grounds that Egyptian memoirists have attributed to Sadat's initiative. It will be recalled that Sadat himself wrote that in the absence of a feasible military alternative he elected to embark on a "diplomatic offensive." Another person who was deeply involved behind the scenes in the diplomatic efforts in those days was Mohamed Hassanein Heikal, the editor of *al-Abram*. He reported that "the Russians approved this gesture." What is more, during his first visit to the Soviet Union as president, on March 1, 1971, Sadat told his hosts, "I have made my peace initiative, including an offer to open the Suez Canal ... but this would have to be part of an overall settlement. On your advice I have gone further in my efforts for peace than any other Arab leader."<sup>28</sup> So it seems that U.S. fears of Soviet involvement in Sadat's proposal were real, in that it was made with full coordination between Cairo and Moscow. Heikal added that the Soviet Union would be one of the main beneficiaries of the reopening of the canal, because it would permit communication between its Mediterranean and Indian Ocean fleets.<sup>29</sup>

A third witness is Riad, who throughout his tenure as foreign minister was adamantly opposed to an arrangement with Israel that would require any political compromises by Egypt. He wrote that when he told Sadat that his plan would perplex the countries that supported the Egyptian position and be represented as a retreat from the Arab demand for a full Israeli withdrawal on all fronts, Sadat replied that his plan would, in fact, increase international support for Egypt, especially by countries for whom the canal was an important passageway. What is more, should Israel turn down his diplomatic proposal, the entire world would be against Israel, thus finding itself isolated internationally.<sup>30</sup>

The day after Sadat's speech, Washington sent a note to Jerusalem calling on Israel to give serious consideration to the Egyptian proposal.<sup>31</sup> The initial and unofficial response to it was included in Prime Minister Meir's speech to the Labor Party on February 5:

We hope that he will lead his people to peace and life. There are situations in which greater courage is required to decide on peace than to start a war.

Our desire is for peace because we do not see war as an ideal to which we aspire. ... We must try every opening through which it is possible to arrive at a solution. This is what the Government wants and this is what the people want. We will continue on this path. We can achieve peace when the other side recognizes that war has never solved any problem.<sup>32</sup>

Three days later, Bergus met with Heikal, who asked him to explain the reason for the US silence. Heikal said that the Egyptian proposal went very far; Sadat was confident that it could neutralize the danger of a perpetuation of the status quo in the region. He made it plain that the proposal did not serve Cold War interests in any shape or form and insisted that there had been no pressure from Moscow. He added that Egypt did not intend to reject Jarring's mission, but there was room to act via other channels (that is, vis-à-vis the United States); if positive signs were received from Israel, Bergus would have "unrestricted access to him [Sadat]." In addition, should the demarche be accepted, including a partial Israeli withdrawal, Egypt would renew diplomatic relations with the United States.<sup>33</sup>

Heikal's message found its way to the State Department; that same evening Sisco spoke with Ambassador Rabin and made him aware of its tenor. He noted that the administration had not taken a position with regard to the Egyptian proposals of January and February, nor would it make any recommendations on the matter to Israel. Sisco asked Rabin for Israel to consider the issue thoroughly, and added that the swift transmission of the message from Cairo, so soon after Sadat's speech, could not be ignored.<sup>34</sup> Rabin was pleased with the Egyptian message and the US interpretation of it. "Clearly Sadat was eager. There were reasons for it; his tail was burning for one reason or another, be it political or economic or military. This was good." But he did not have any response from the Israeli government to Sadat's proposals.<sup>35</sup>

In another conversation Sisco agreed to share his own ideas about a reopening of the canal. Even though this was not Washington's official position, it can tell us something about the US attitude. Sisco said that opening the Suez Canal to shipping without a comprehensive peace agreement between Israel and Egypt would not serve US interests; on the contrary, it might harm them, and he even referred to it as "strategic damage." However, if an agreement to reopen the canal was accompanied by one about separation of forces and the ceasefire was extended for

a long period, it would contribute to the Jarring mission and the diplomatic process in general, with no time limit. This would diminish the threat of war in the Middle East, and with it a confrontation between the United States and the Soviet Union.<sup>36</sup>

Sisco went on to say that he did not believe that the United States would advise Israel on how it should respond to the Egyptians, because it was loath to take a stand. He referred to both the State Department and the White House: the United States saw taking a position and presenting it to Israel as a commitment that went beyond an abstract opinion. Nixon could not come out against the proposal, Sisco said, because then he would be exposed to criticism by Israel and a demand for military aid if the recommendation proved to have serious diplomatic and military consequences. Along with this, a recommendation in favor of the Sadat initiative would run counter to US interests with regard to reopening the canal.<sup>37</sup>

After a series of consultations on the Israeli side, Foreign Minister Eban conveyed to Rabin and to Yosef Tekoa, the Israel ambassador to the United Nations, the main points of the government's position on Sadat's proposal and the diplomatic process vis-à-vis Egypt in general. First of all, Israel would not withdraw from the cease-fire lines of June 10, 1967, until there was peace between Israel and Egypt with agreed and recognized borders. With regard to the canal, Israel had already agreed in the summer of 1967 to its reopening for international shipping, including Israeli vessels. Second, Israel had cooperated with Jarring and made him aware of its diplomatic position, so now it was Egypt's turn to respond to the proposals. Third, Israel attached "great importance to any step that would take the wind out of Sadat's sails" by means of U.S. domestic criticism (newspaper articles or remarks by senators).<sup>38</sup> Even though this was not an official Israeli response to Sadat's speech, it is clear that the inclination was to reject his proposal.

Israel's wish to hear some reaction from the United States increased as February 9 approached; Prime Minister Meir was to speak in the Knesset to present Israel's position on Sadat's public statement. Accordingly, Meir asked Rabin "to ask Cardinal [Kissinger] for an answer about Flint [Nixon]'s position."<sup>39</sup> But Nixon and Kissinger continued to drag their feet; the latter even recommended that Israel leave Sadat's proposal open for any option—unless it believed that the proposal was totally out of the question. Rabin, who correctly understood this message as a "no,"

commented that in his opinion “there is absolutely no possibility that Israel will accept Sadat’s proposal.”<sup>40</sup>

### THE SOUNDS OF SILENCE FROM THE WHITE HOUSE

While Sadat was releasing his proposals about opening the Suez Canal, Jarring put together a new idea based on the memoranda exchanged by the sides during January. There were two major disagreements between Jerusalem and Cairo: Egypt demanded a withdrawal of the Israeli armed forces from Sinai to the international boundary between Egypt and mandatory Palestine; Israel demanded that Egypt explicitly commit itself to peace. On February 8, Jarring submitted his plan to the Israeli and Egyptian ambassadors at the United Nations and requested that their governments provide parallel and simultaneous commitments about several fundamental issues. Israel was asked to withdraw to the international boundary between mandatory Palestine and Egypt, subject to practical security provisions, such as demilitarization of territory and the establishment of effective security arrangements at Sharm el-Sheikh to guarantee navigation through the Straits of Tiran and Suez Canal. Jarring asked Egypt “to enter into a peace agreement with Israel” and commit itself to the following principles: an end to the state of war; respect for and recognition of each side’s sovereignty, territorial integrity, and political independence; recognition of the right of each side to live in peace in secure and recognized borders; to make every effort to prevent hostile acts from being launched or perpetrated from the territory of each side against the civilian population or property of the other side; and mutual nonintervention in domestic affairs.<sup>41</sup>

The next day, February 9, the US ambassador in Israel, Walworth Barbour, met with Foreign Minister Eban and was briefed on Israel’s initial response to Jarring’s request and Sadat’s initiative, which would be made public in the Prime Minister’s speech in the Knesset later that day. To Barbour’s distress, Israel rejected both proposals. Eban said that Israel had not accepted Sadat’s idea as stated, but was still willing to discuss the question of the reopening of the Suez Canal. It opposed any change in the cease-fire lines in particular and in borders in general before negotiations were held and a peace agreement was signed.<sup>42</sup>

Meanwhile, after much pressure, Rabin was able to have a meeting with Kissinger at the White House. Pursuant to Meir’s instructions, he said that Israel would agree to a reopening of the canal on condition that



it was open to Israeli vessels as well; but this must not be connected with the issue of a withdrawal, because that was linked to peace. He added that Meir did not reject studying “options associated with the opening of the canal as part of a partial settlement.” Rabin referred to the “strange situation” in which Israel found itself, that is, the two-way track of US mediation efforts and Israel’s dependence on the White House’s position, and not the State Department’s, with regard to the opening of the canal. He told Kissinger that Sisco was waiting for Israel’s answer, but “we are waiting for a decision by Flint. It was natural that we could not give Sisco an answer without receiving his [Nixon’s] answer.”<sup>43</sup> Here he was basing the answer on an urgent and “top-secret” cable from Meir, in which she wrote that it was “perfectly clear” that Sisco and Nixon “were not on the same wavelength.” Her speech in the Knesset was meant for Sisco and the State Department, but from what Kissinger had said the day before she understood that Nixon “would not want us to act to open the canal, at the very least not now.” Meir made it plain that Israel had no intention of acting contrary to the White House’s position; as proof, she noted that she had not done anything “despite Sisco’s requests.”<sup>44</sup>

Rabin stressed the need to learn Nixon’s position on the reopening of the canal and for close coordination with the White House. Kissinger replied that he had not had time to work through the issue with the president, and added that the question was not whether U.S. interest was the opening or closure of the canal. So far as the overall U.S. interest was concerned, it was better for the canal to stay closed. What is astonishing is that the National Security Advisor did not propose any diplomatic alternative and merely prophesied doom. The Israeli and Egyptian process positions were very far apart, he said, and could not be bridged. The Jarring talks would lead to Israel’s increasing isolation, and the whole thing would blow up some time in the summer. As he saw the matter, the question was not what the US position was on the opening of the canal, but how the United States could avoid being drawn into military involvement in the event of war in the Middle East and how it could best stand by Israel’s side. Kissinger said that Israel must first and foremost avoid putting itself in a diplomatic corner where it was isolated from its friends and attacked by its enemies. Because these were deep issues it took time to study them seriously with Nixon and to come up with a comprehensive and serious stand, and not just about Sadat’s proposal.<sup>45</sup>

Finally, two days later, on February 11, Kissinger told Rabin that Nixon would not object if Israel began discussions aimed at opening the canal.

But, Kissinger emphasized, this was the U.S. answer to a question raised by Israel and not a U.S. request of Israel. Accordingly, Meir informed Ambassador Barbour that Israel was willing to open the canal as per Sadat's proposal, but had questions about the nature of the process.<sup>46</sup> In fact, this Israeli answer merely repeated what Meir had said in the Knesset on February 9. Israel had evinced a willingness "to discuss in [a] positive spirit the opening of the Suez Canal to international shipping, including Israeli ships, and also to discuss in a similar spirit proposals designed to bring about a normalization of civilian life in that locality and the mutual de-escalation of the military dispositions." Along with this, Meir stressed that there was more left unsaid in Sadat's proposal than was said, so she welcomed the U.S. readiness to help clarify the unclear points.<sup>47</sup>

Despite the lack of movement on Sadat's proposal, on February 15 Egypt delivered its response to Jarring's idea, which the latter transmitted to Tekoa two days later. The Egyptians, Jarring told him, agreed to all the points in his document and were even willing "to conclude [a] peace agreement with Israel" if it withdrew from Sinai and the Gaza District. Even though this was the first time an Arab country had ever declared, in an official document, a willingness to sign a peace accord with Israel, and not just a non-belligerency agreement, Egypt placed less emphasis on peace and more on the conditions for achieving it: an Israeli withdrawal to the lines of June 4, 1967, on all fronts, mutual demilitarization of equal territories by Israel and Egypt, and an Israeli agreement to resolve the refugee issue in keeping with UN Security Council resolutions.<sup>48</sup>

If we focus on the Egyptian document and the extent to which it represents a concession, we see that Cairo divided its answer in two. The first part dealt with an agreement between Israel and Egypt, which would include all of the commitments noted by Jarring in his proposal, as stated in Security Council Resolution 242. The second part referred to the Arab-Israeli conflict in general and was phrased as if it stood on its own; that is, Egypt wanted to make it clear that a just and lasting peace could not be achieved without full and absolute implementation of Resolution 242 and an Israeli withdrawal from all the Arab lands occupied in June 1967. This second part of the Egyptian response had not been part of Jarring's memorandum and the parties had not been asked to relate to it. The special envoy wanted to achieve an agreement between Israel and Egypt first, and not a comprehensive settlement of the Arab-Israeli conflict; but Cairo stressed the need for an overall solution. This

raised many questions on the Israeli side and is what ultimately led to its rejection of the proposal.<sup>49</sup>

Sisco was impressed by the Egyptian answer to Jarring, and especially the categorical commitment to a peace agreement with Israel. Rabin, who could not deny that there had been a change in the Egyptian stance, sought to direct the assistant secretary's attention to the conditions that Sadat had set for peace. First, Egypt demanded a total withdrawal from all the territories occupied in 1967; second, Sadat did not explain what he saw as a just solution of the Palestinian refugee problem and whether that solution might endanger Israel's security; third, there was no reference to the location of the final borders between the two countries and Israel's right to free navigation through the Suez Canal. On February 21, the government of Israel announced that it took a favorable view of the positive change in the Egyptian position and its willingness "to enter into a peace agreement with Israel." However, the Egyptian statement reflected the major disagreements that still existed between the positions of the two countries, especially with regard to borders and refugees. Against this background, Israel repeated its position that it was willing to withdraw, but not to the lines of June 4, 1967.<sup>50</sup>

Sisco sent Rogers a memo with a full analysis of the Israeli answer and its implications for the diplomatic process and the region. He wrote that if Israel did not show flexibility, the special envoy's mission would reach a dead end. What is more, United States was liable to find itself facing an Arab diplomatic offensive at the Security Council and the loss of all the diplomatic capital it had gained from the ceasefire. Sisco saw this as the moment of truth when the United States would have to exert its full force on Israel if it wanted the efforts toward a peace settlement to continue to move forward.<sup>51</sup>

On February 24, Secretary of State Rogers met with Rabin. According to the latter, this was the most difficult conversation the two had during all his years as ambassador in Washington. "His eyes flashed, his face reddened," Rabin wrote, and he savagely assailed the Israeli position. Nevertheless, the ambassador did not give leave him the impression that Israel would modify its response.<sup>52</sup> Indeed, on February 26 Rabin transmitted Israel's response to the Jarring document to Sisco. As expected, it did not include any new initiatives or ideas for a settlement or evince any flexibility in Jerusalem's position, as Washington wished to see.<sup>53</sup> What the State Department feared was that if the diplomatic process ran aground, the ceasefire would collapse and the hostilities be renewed.

What is more, the radical elements in the Arab world would be strengthened and the Soviet Union would deepen its penetration of the Middle East. "For twenty years you have known no peace, and if you continue in this fashion, Israel will never experience peace," Sisco said. According to Rabin's record of the conversation, Sisco added that the Arab-Israeli conflict was a history of missed opportunities and now was a fateful opportunity.<sup>54</sup>

On March 5, two days before the official end of the ceasefire, Sadat summoned Bergus and gave him a letter for Nixon. He asked his U.S. counterpart to make "concentrated efforts" on behalf of peace, and in particular to push Israel to be more flexible in its position regarding a settlement.<sup>55</sup> Sadat said that during his visit to Moscow on March 1–2, he had learned that the Soviet leadership was seriously interested in peace, even more so than President Nixon. Sadat focused the conversation on the issue of the ceasefire and efforts to achieve a settlement. He explained to Bergus that his speech on March 7 would not include an official announcement of another extension of the ceasefire; the question of "when [the] firing would be resumed would be left to [the] military."<sup>56</sup> However, he did not give it all up for lost; when Bergus asked whether the February proposal was still on the table Sadat answered in the affirmative. On the other hand, he attacked Israel and asserted that its response to Jarring and refusal to withdraw to the June 4 lines were a direct challenge to him. "Israel apparently thought he had no guts. He would show the world that he had guts."<sup>57</sup>

While the Egyptian president was expecting the Nixon administration to wield its influence with the Israeli leadership more forcefully, in a March 13 interview with the *Times* of London, Meir reviewed Israel's position on a final settlement with Egypt in great detail. She admitted that an agreement that complied with the Israeli conditions would be "a painful solution for Egypt, ... but people had to pay for their deeds."

Meir argued that Israel had to have access to Sharm el-Sheikh and control of the strategic region because it controlled the Straits of Tiran. She called for the demilitarization of the Sinai Peninsula and also insisted that an international force, composed of Israeli and Egyptian troops, guarantee this. She added that it would be necessary to negotiate the location of the border near Eilat, rejected the return of Gaza to Egypt, and added that Israel would see to the needs of the refugees there.<sup>58</sup>

This public disclosure of the Israeli position did not promote the diplomatic maneuver that Washington wanted to see. During March, Rogers,

Kissinger, and Sisco had several meetings with Eban and Rabin, which revealed serious disagreements about the interpretation of Resolution 242, and especially the Israeli position on an agreement and withdrawal from the occupied territories. The Secretary of State and National Security Advisor were not satisfied with Israel's answer to the Jarring document and pushed it to offer its own constructive proposals for an agreement with Egypt. What is more, especially after Sadat had spoken several times about his intention to reach a diplomatic resolution, Rogers and Kissinger demanded, sometimes in rather brutal language, to know what the Israeli position was.<sup>59</sup>

Rogers and Sisco cited a promise that, they said, Meir had made to Barbour; namely, that if Egypt agreed to commit itself to the principle of peace, Israel would commit itself to withdrawal. The Secretary of State expressed his anger that the Israeli government had not yet officially conveyed its detailed position to Jarring or the Americans, but the *Times* of London had heard, from Meir herself, the main points of Israeli policy with regard to a settlement with Egypt and Jordan. It was out of the question, he said, for Israel to undermine the resumption of Jarring's mission. If it did not clarify its position there would be no escaping the conclusion that Israel was not interested in making progress toward peace.<sup>60</sup>

Now, according to Rogers, everything was on the shoulders of the Israeli government, but it was refusing, in his eyes almost arbitrarily, to cooperate with the diplomatic effort, despite the Egyptian demonstrations of willingness. Of course, this refusal did not help his attempts to get the diplomatic wagon out of the mud, but only sank it deeper in the mire. This is why, at a press conference on March 16, Rogers made an effort to break the logjam and bring some order to the welter of diplomatic initiatives, but more than anything else to emphasize the main lines of U.S. policy and the United States' commitment to a diplomatic settlement.<sup>61</sup>

"The climate has never been better for a settlement in the Middle East, and if we don't make a settlement now, we are going to plant seeds that will lead to future war," he said. "If a peaceful settlement is not worked out in the foreseeable future there is a very dangerous situation that will develop and possibly lead to World War III." Rogers said that Israel and Egypt must reach a compromise on territory and security. He added that the United States had never called for an Israeli withdrawal from all the territories, but had stated only that "it should not acquire territory, except insubstantial amounts for security purposes." He said further that the border between Israel and Egypt should be that which existed

before the 1967 war, except for the Gaza District, on condition that appropriate arrangements were made for the demilitarization of Sinai and Sharm el-Sheikh after the issues had been discussed by the two sides.<sup>62</sup>

With the goal of showing support for Rogers' efforts, on March 31 Nixon sent Sadat a note in which he acknowledged that the latter's recent steps on the diplomatic front had enhanced Egypt's international status and "moved your people closer to peace."<sup>63</sup> The Egyptian president welcomed Nixon's letter and told Bergus that if Israel was interested in peace "they should drop all this trash about strategic considerations" and pull back from the Bar Lev Line. According to him, there could be no progress in the diplomatic process without significant pressure by the US administration on Israel. Sadat continued that "if Israelis didn't go along with his initiative, it meant they wanted war."<sup>64</sup> He stressed that after the Israeli withdrawal Egyptian forces would cross the canal and a no-man's land would separate the two armies during the ceasefire. If no settlement had been signed before the ceasefire expired, "then [the] UAR [Egypt] would be at liberty to take appropriate action." He totally ruled out an Israeli presence at Sharm el-Sheikh or full demilitarization of the Sinai, and would agree to demilitarization only if it was on both sides of the border. For himself, he would welcome "with open mind and open heart, until the last hour," any proposal with the potential to lead to peace. But he had to show his people that he was prepared to defend their land, whatever the cost and damage.<sup>65</sup>

## CONCLUSION

Sadat's February 1971 proposal has not been left out of the history of the conflict between Israel and Egypt. Israel has usually been blamed for its failure, chiefly because of the appearance that it was Egypt that launched a diplomatic process aimed at achieving a settlement, to which Israel replied in the negative. Even though Israel certainly was not delighted by the idea of following a path that would lead to concessions and an agreement, it knew how to present compromise positions on the diplomatic front. Still, we cannot ignore the Israeli need to coordinate its position with the White House. Even had Meir wanted to respond favorably to the proposals from Cairo, she never considered doing so without first consulting Nixon and Kissinger and learning what US needs were and whether the diplomatic initiative served Washington's interests and not only Israel's. In fact, even though the Middle East worried the

United States, and especially the State Department, the administration was focused on Vietnam. When the reopening of the Suez Canal was viewed through the prism of the United States' interests in Southeast Asia, both Washington and Jerusalem knew that it was preferable to the United States that the canal remains shut.

Ultimately, the two-headed nature of U.S. foreign policy—the State Department versus the White House—served the political line of the Meir government, which, except for Moshe Dayan, was not noted for its dovishness. Accordingly, it followed a tactic that was intended “to eliminate Rogers as a factor with whom and through whom we conduct negotiations ... and to try to transfer the attention to our region’s affairs the White House.”<sup>66</sup> This was also Kissinger’s line, because he was not eager to support Rogers’ efforts or promote proposals by Sadat, viewed as the Soviets’ ally. Years later he expressed his regrets about this:

In 1971 Secretary Rogers tried for interim agreements along the Suez Canal. I did not oppose it, but neither did I support it. I am speaking very frankly now. The effort broke down over whether or not 1,000 Egyptian soldiers would be permitted across the Canal. That agreement would have prevented the 1973 war. I must say now that I am sorry that I did not support the Rogers’ effort more than I did.<sup>67</sup>

## NOTES

1. Anwar Sadat, *In Search of Identity: An Autobiography* (New York: Harper & Row, 1979), 221–22.
2. “Memorandum for the President, Letter to New UAR President,” October 13, 1971, Nixon Presidential Materials Project (hereafter: NPMP), Presidential Correspondence, Box 763: UAR: President Anwar Sadat, vol. 1, 1970, File 6, National Archives (hereafter, NA); “Letter from President Sadat to President Nixon,” December 15, 1970, Box 2641 Pol, 15-1 UAR, NA; “Letter from President Sadat to President Nixon,” December 21, 1970, RG 59, Box 2641 Pol, 15-1 UAR, NA.
3. “State 013921,” January 26, 1971, RG 59, Box 2072 Pol, 27-14 Arab-ISR (hereafter A/I), NA.
4. “No. 25,” February 2, 1971, Israel State Archives (hereafter: ISA), Ministry of Foreign Affairs (hereafter: MFA) -7053/1A.
5. “Memorandum for the President, Proposal for Pursuing Middle East Peace Settlement, from William P. Rogers,” October 10, 1970, Box 2069 Pol, 27-14 A/I, NA.

6. "State 208802," December 22, 1970, RG 59, Box 2071 Pol, 27-14 A/I, NA; "State 208807," December 23, 1970, RG 59, Box 2071 Pol, 27-14 A/I, NA.
7. "Confidential Cairo 2793," December 23, 1970, RG 59, Box 2641 Pol, 15-1 UAR, NA; James Reston, "Egyptian Leader Gives Conditions for Peace Accord," *The New York Times*, December 28, 1970. <https://www.nytimes.com/1970/12/28/archives/egyptian-leader-gives-conditions-for-peace-accord-sadat-in.html>.
8. For Meir's letter, see "State 195884," December 1, 1970, RG 59, Box 2070 Pol, 27-14 A/I, NA; for Nixon's replay, see "Suggested Reply to Prime Minister Meir's Letter of December 1 to the President," December 3, 1970, RG 59, Box 2389 Pol, ISR-US, NA.
9. "State 202628," December 12, 1970, RG 59, Box 2057 Pol, 27 A/I, NA; *Knesset Gazette*, Vol. 59, Seventh Knesset, Second Term, 134th Session, 29 December 1970, 723–725.
10. "Summary of NEA Events, January 6–11—Information Memorandum, NEA," January 12, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA; "Jarring Talks on ME," January 13, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA; "UAR Assessment of Israeli Position on Settlement," January 19, 1971, RG 59, Box 2071 Pol 27-14 A/I, NA.
11. "State 007936," January 15, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA; Kirk J. Beattie, *Egypt during the Sadat Years* (New York: Palgrave, 2000), 53; for a transcript of the meeting between Bergus and Amin, see Mohamed Hassanein Heikal, *Oktober 73: al-Salah wal-siyasa* (Cairo: Mirkaz al-Ahram Liltargema wal-Nashar), 136–49.
12. "State 007936," January 15, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA; Beattie, *Egypt during the Sadat Years*, 53. Dayan proposed a gradual withdrawal from the canal, to be accompanied by demilitarization of a strip on both sides of the canal .... to a depth of 16 to 32 kilometers." See *Davar*, November 4, 1970; Yehoshua Raviv, "Early Attempts for an Interim Agreement between Israel and Egypt (in 1971–1972)," *Ma'arkhot* 243–244 (April–May 1975): 6 [In Hebrew].
13. "Anwar Sadat's Proposal to Open the Suez Canal," February 8, 1971, ISA, MFA -7053/13A; "State 007936," January 15, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA.
14. "Meeting with UAR President Sadat," January 23, 1971, RG 59, Box 2641 Pol, 15-1 UAR, NA.
15. "State 008134," January 16, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA; "UAR January 15 Reply to Jarring," January 20, 1971, RG 59, Box 2071 Pol, 27-14 A/I, NA.
16. Sadat, *In Search of Identity*, 219.
17. "Cairo 1231," May 20, 1971, RG 59, Box 2075 Pol, 27-14 A/I, NA; "State 088242," May 20, 1971, RG 59, Box 2075 Pol, 27-14 A/I,



- NA; Yoram Meital, *Egypt's Struggle for Peace: Continuity and Change, 1967–1977* (Gainesville: University of Florida Press, 1977), 96; Steven L. Spiegel, *The Other Arab-Israeli Conflict* (Chicago: The University of Chicago Press, 1985), 207.
18. When Kissinger learned of this, he claimed the Rogers had given these promises without receiving the required support from the president. See Henry Kissinger, *The White House Years* (Boston: Little, Brown, 1979), 1279.
  19. “State 007099,” January 15, 1971, RG 59, Box 2057 Pol, 27 A/I, NA; “State 013921,” January 26, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; “Cairo 174,” January 27, 1971, RG 59, Box 2075 Pol, 27-14 A/I, NA; Mahmud Riad, *The Struggle for Peace in the Middle East* (New York: Quartet Books, 1981), 186–89.
  20. “114/*yud-het*,” January 24, 1971, ISA, MFA 7053/1-A; “001/*yud-het*,” January 25, 1971, ISA, MFA 7053/1-A; “10/*yud-het*,” February 2, 1971, ISA, MFA 7053/1-A; *The American Presidency Project*, “Richard Nixon (1969–1974), The President’s News Conference,” January 27, 1969, <http://www.presidency.ucsb.edu/ws/index.php?pid=1942> (accessed March 11, 2022).
  21. “No. 332,” January 26, 1971, ISA, MFA 7053/1-A; “10/*yud-het*,” February 2, 1971, ISA, MFA 7053/1-A.
  22. “130/*yud-het*,” February 4, 1971, ISA, MFA 7053/1-A.
  23. “Weekly Summary,” February 5, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; Abdel Moneim Sabḥi, “al-Sadat batal lil-salaam min mit abu al-kum ala jaayaza nobel” (Cairo: al-Hiyah al-masriya al-‘amad lil-kitab, 1979), 111: *al-Abraham*, February 5, 1971. Sadat had kept his proposal secret. Bergus learned that he inserted the paragraph that included his proposal right before he entered the hall at the Egyptian Parliament, which delayed the start of his speech by four minutes. See “Cairo 0247,” February 5, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; “Cairo 0228,” February 3, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA.
  24. “133/*yud-het*,” February 4, 1971, ISA, MFA 7053/1-A.
  25. “State 021661,” February 8, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA.
  26. Note that the INR attached only secondary importance to the last two points; “No. 116,” February 10, 1971, ISA, MFA 7053/1-A; “6/*yud*,” February 10, 1971, ISA, MFA 7053/1-A. Note too that there were some in the State Department who saw no importance in General Amin’s proposal, in mid-January, for a mutual thinning of forces along the canal, because it had no weight from a military perspective. They also emphasized that the “current Egyptian proposal does not close off any options

- for Sadat, including the military option, and allows him to escape the problem of the March 7 deadline." See "6/*yud*," February 10, 1971, ISA, MFA 7053/1-A.
27. "Anwar Sadat's Proposal to Open the Suez Canal," February 8, 1971, ISA, MFA 7053/13. For Mordechai Gazit's report, see "No. 214," February 7, 1971, ISA, MFA 7053/1-A.
  28. Mohamed H. Heikal, *Sphinx and Commissar* (London: Collins, 1978), 222.
  29. Mohamed Heikal, *Secret Channels* (London: HarperCollins, 1996), 166–67.
  30. Riad, *The Struggle for Peace*, 187–88.
  31. "State 021661," February 8, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA.
  32. "Telegram to Missions 945," February 5, 1971, ISA, MFA 7053/1-A.
  33. "Cairo 263," February 8, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA.
  34. "State 021661," February 8, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA.
  35. *Ibid.*
  36. "No. 104," February 9, 1971, ISA, MFA 7053/1-A; "Conversation with Cardinal, 137/*yud-het*," February 10, 1971, ISA, MFA 7053/1-A.
  37. *Ibid.*
  38. "Telegram to Missions 990," February 8, 1971, ISA, MFA 7053/1-A.
  39. "16/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A.
  40. "132/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A; "133/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A.
  41. "Tel Aviv 792," February 9, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; "Memorandum for Mr. Henry A. Kissinger, Follow-Up to February 8 SGR Meeting/Jarring Aide-Memoiré to UAR and GOI," February 17, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; Heikal, *Oktober* 73, 155–54.
  42. "Israeli Position Re Sadat Proposal on Suez Canal," February 9, 1971, RG 59, Box 2057 Pol, 27 A/I, NA; "Tel Aviv 792," February 9, 1971, RG 59, Box 2072 Pol, 27-14 A/I, NA; *Knesset Gazette*, vol. 59, Seventh Knesset, Second Term, 152th Session, February 9, 1971, 1303–6.
  43. "137/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A.
  44. See Rabin's cable to Meir, "133/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A; "18/*yud-het*," February 9, 1971, ISA, MFA 7053/1-A.
  45. "137/*yud-het*," February 8, 1971, ISA, MFA 7053/1-A.
  46. "No. 162," February 12, 1971, ISA, MFA 7053/1-A; "142/*yud-het*," February 11, 1971, ISA, MFA 7053/1-A.
  47. "State 025524," February 13, 1971, RG 59, Box 2073 Pol, 27–14 A/I, NA.

48. "UAR Minister Ghorbal's Courtesy Call on you March 12—Briefing Memorandum," March 12, 1971, RG 59, Box 2642 Pol, UAR-US, NA; Riad, *The Struggle for Peace*, 188.
49. "UAR Minister Ghorbal's Courtesy Call on you March 12—Briefing Memorandum," March 12, 1971, RG 59, Box 2642 Pol, UAR-US, NA; Riad, *The Struggle for Peace*, 188; Mordechai Gazit, "Egypt and Israel—Was There a Peace Opportunity Missed in 1971?," *Journal of Contemporary History* 32, no. 1 (January 1997): 100–101.
50. "Tel-Aviv 1036," February 21, 1971, RG 59, Box 2368 Pol, 15-1 ISR, NA; "Israel Cabinet Communiqué on UAR Initiative," February 22, 1971, RG 59, Box 2368 Pol, 15-1 ISR, NA; Mordechai Gazit, *The Peace Process 1969–1973: Efforts and Contacts* (Jerusalem: The Magnes Press, 1983), 66.
51. "Your Meeting with Ambassador Rabin," February 24, 1971, RG 59, Box 2073 Pol, 27-14 A/I, NA.
52. *Ibid.*; Yitzhak Rabin, *The Rabin Memoirs* (Berkeley: University of California Press, 1996), 194.
53. "State 033689," February 26, 1971, RG 59, Box 2073 Pol, 27-14 A/I, NA; Gazit, *The Peace Process*, 66.
54. Rabin, *The Rabin Memoirs*, 195; "Preliminary US Comment on Israeli Reply to Jarring," February 26, 1971, RG 59, Box 2073 Pol, 27-14 A/I, NA.
55. For Sadat's March 5 letter, see the summary of the correspondence between Sadat and Nixon in "Summary of Sadat-Bergus Talk, March 17," March 18, 1971, RG 59, UAR President Anwar Sadat, vol. 2, 1971, File 7, NA.
56. In his speech Sadat said that Egypt would not extend the cease-fire officially and would determine the [appropriate] time and place to take action. See March 7, 1971 "Statement to the Nation," <https://sadat.umd.edu/sites/sadat.umd.edu/files/Statement%20to%20the%20Nation.pdf>.
57. "Cairo 477," March 5, 1971, RG 59, Box 2642 Pol, UAR-US, NA. The United States also received support for Sadat's serious intentions from President Tito of Yugoslavia, who wrote to Nixon in late January 1971 about Egypt's sincere desire to resolve the conflict with Israel, to establish a lasting peace with it, and to open the Suez Canal to international shipping. For Tito's letter to Nixon, see "Letter to the President from President Tito," March 4, 1971, RG 59, Box 2057 Pol, 27 A/I, NA.
58. For Louis Heren's interview of Prime Minister Meir, see *The Times*, March 13, 1971. For a US analysis of the interview, see "Times Interview with Mrs. Meir," March 15, 1971, RG 59, Box 2386 Pol, 15-1 ISR, NA.

59. "Secret," March 21, 1971, ISA, FM 4549/7; "State 049077," March 23, 1971, RG 59, Box 2642 Pol, UAR-US, NA; Rabin, *The Rabin Memoirs*, 196.
60. Yitzhak Rabin, *Service Diary* (Tel-Aviv: Maariv, 1979), 340–42 [Hebrew]; "Secret," March 21, 1971, ISA, MFA 4549/7.
61. "No. 171," March 16, 1971, ISA, MFA 4548/7; Riad, *The Struggle for Peace*, 193.
62. "No. 171," March 16, 1971, ISA, MFA 4548/7. Sadat welcomed Rogers' stand, but insisted on reiterating two important points: first, his opposition to demilitarization of the entire Sinai Peninsula; second, the status of Gaza. Egypt, Sadat said, was not interested in Gaza, but wanted the city's residents to decide their fate for themselves. For Sadat's message, see "Cairo 0588," March 17, 1971, RG 59, Box 2074 Pol, 27-14 A/I, NA; On March 18, Foreign Minister Riad sent a personal message to his US counterpart to thank him for the positions Rogers had presented at his press conference. For the Egyptian note and US reply, see "Cairo 0601," March 19, 1971, RG 59, Box 2641 Pol, 7 UAR, NA; "State 51576," March 26, 1971, RG 59, Box 2641 Pol, 7 UAR, NA; "Cairo 674," March 27, 1971, RG 59, Box 2074 Pol, 27-14 A/I, NA.
63. "State 054323," March 9, 1971, RG 59, Box 2642 Pol, UAR-US, NA.
64. "Cairo 0712," April 1, 1971, RG 59, Box 2642 Pol, UAR-US, NA.
65. Ibid.
66. "No. 394," November 28, 1971, ISA, MFA -7053/12A.
67. Henry Kissinger, "Conversation with Kissinger," *Journal of Palestine Studies* 10, no. 3 (Spring 1981): 186–87.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



PART II

---

## Energy Aspects



# Suez and the United States: Oil, Lifelines, and “All of Mankind” in the Cold War

*Christopher R. W. Dietrich*

**Abstract** This chapter analyzes the rhetoric and policy of U.S. officials regarding oil and the Suez Canal during the early Cold War. When William J. Casey warned experts that the 1970s energy crisis was “a strategy of progressive strangulation” and that American military power was the best response, he drew on a decades-long set of beliefs that identified the Suez Canal as an artery for the economic health of “the West.” According to that perspective—which took root after World War II and drew on earlier strategic discourses of the British Empire—the supply of cheap oil was crucial to the political-economic health and national security of the capitalist world. Beginning with the threat of economic nationalism and the creation of the concepts of a “world oil market” and interdependence, that powerfully ingrained perception is critical to our understanding of twentieth century international history.

**Keyword** The United States · Cold War · National Security · Political Economy · Arab–Israeli conflict · Energy crisis · OPEC

---

C. R. W. Dietrich (✉)  
Fordham University, Bronx, NY, USA  
e-mail: [cdietrich2@fordham.edu](mailto:cdietrich2@fordham.edu)

© The Author(s) 2023  
C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons  
and Future Challenges*, Palgrave Studies in Maritime Politics and  
Security, [https://doi.org/10.1007/978-3-031-15670-0\\_4](https://doi.org/10.1007/978-3-031-15670-0_4)

Former State Department appointee and Export Import Bank chairman William J. Casey scolded the group Scientists and Engineers for Secure Energy at Stanford University's Hoover Institute in June 1980. Their main problem, he said, was the shared assumption that the international market for oil was a pure market. Such a statement may have seemed strange to the group, coming as it did from a man who commonly called for small government and market freedom. But when Casey turned to strategy, such ideology meant little to him. Oil prices were not "as imperious to human intervention as, for the example, the activity of the Mount St. Helen's [or] the will of Allah," he continued. Prices were not the result of natural economic actions, in other words, but contingent political ones. They were related, in short, to geopolitics and, in the case of the United States for Casey, the willingness to use military power.

Casey's interpretation of twentieth-century history followed a well-trodden path and was shared by many U.S. strategists at the end of a decade shaped by the energy crisis and the Iranian Revolution. He believed, for example, that history had taken a wrong turn with the "liquidation of the British Empire" in the Middle East beginning in the 1950s. Before, when Great Britain was predominant in the region "bounded by the Suez Canal, the Red Sea, the Tigris and the Euphrates," what Casey identified as broader Western interests in the Persian Gulf and the Indian Ocean had remained unchallenged. But the British decision to leave the Middle East, beginning after the 1956 Suez Crisis and culminating in the 1971 British scuttle from its East of Suez stations, had left a vacuum. And if "geopolitical nature abhors a vacuum in any region," he continued, it did so most emphatically in the Middle East. For Casey, the British vacuum left the region open to threats from the Soviet Union, East Germany, and Cuba. And while some of the Stanford scientists' and engineers' misguided countrymen saw the decline of the British Empire as "a triumph of the principle of national self-determination over the dark forces of colonialism," the conferees should know better than to engage in such naïve morality tales themselves. Blind acceptance of economic sovereignty had culminated in an "anarchical situation ... sparked by the contrived scarcity of oil and the mounting perils to the West's physical access to the Middle East's sites of oil production."

The energy crisis was "a strategy of progressive strangulation," Casey warned. And without a purposeful show of strength, it would continue. Oil-rich Arab states, whether Cold War allies or enemies, would keep



"squeezing the West for the last ounce of economic and political concession that they can wring from an increasingly demoralized West." Casey identified other problems he saw with the region: "vengeful hatred and growing contempt" for liberal values and the "warlike" nature of Islam chief among them. Even worse, many in the United States had fallen into the trap of "revulsion from its own historical achievements," which led to a sort of "self-immolation" and the "abdication of Western power" in the region. Such popular tropes, woefully misguided from his perspective, elevated his strategic concern. "The Islamic people of the Middle East will concede the West's legitimate and vital interests in their lands and their resources when they are forced to do so," he said. But there was a glimmer of hope. If the Arab oil producers could play politics with the economics of oil prices, so could the United States: "The doctrine of necessity in international law sanctions the use of force against a threat to a nation's very survival."<sup>1</sup>

Hope came in the form of Ronald Reagan. That year, Casey had begun to direct the former California governor's presidential campaign. He would press Reagan to emphasize President Jimmy Carter's weakness—in his 1980, speech he called that a "paralysis of will"—regarding both oil and the Middle East. One year later, he would be named the director of the Central Intelligence Agency and would form part of a planning team that put into action policies that the Reagan administration depicted as a major shift toward a more assertive position for the United States in the region.<sup>2</sup>

But continuity was just as important as change in that moment. When Casey identified the oil that flowed in part through the Suez Canal as an artery for the economic health of "the West," he tapped into a deeper history of U.S.–Middle East relations and beliefs about the international political economy that linked the canal to global and U.S. economic stability. That rhetoric, which became supercharged during and immediately after the 1956 and 1967 crises in the region, remained influential even as the importance of the Suez Canal declined, especially upon the renewal of a state-subsidized program of oil "supertanker" construction in the late 1960s and early 1970s. The staying power of that threat perception makes sense, though, in part because it was so powerfully ingrained; after all, for much of the twentieth century British imperial forces had even used the canal as the border that divided its global forces into two zones: "East of Suez" and "West of Suez." That geostrategic division

itself arose from a basic understanding that the Suez Canal was a necessary pathway for healthy international commerce. That belief itself became more powerful in the United States in the second half of the twentieth century, as oil became a crucial natural resource for the well-being of the domestic economy, the power of the national military sector, and the strength of the nation in the Cold War.<sup>3</sup>

### SUEZ, OIL, AND THE EARLY COLD WAR

The artist Boris Artzybasheff depicted the threat of nationalism to the Middle East in his 1951 Man of the Year cover for *Time* magazine, which featured Iranian Prime Minister Mohammed Mossadeq. Looming behind an immaculately detailed color-pencil drawing of Mossadeq in a dark suit and tie was a globe that depicted the region. Over the prime minister's left shoulder was the Persian Gulf, with several oil derricks. Over his right shoulder, two oil tankers had just plied the Suez Canal, one traveling northward in the Mediterranean and the other traveling southward in the Gulf of Suez. Clenched fists burst through the ground in each area. In case the image was too subtle for readers, the magazine's editors left no doubt in their title: "MAN OF THE YEAR: He oiled the wheels of chaos." The cover was less about the man himself and more about the threat he posed.

Such popular fear in the United States arose in part out of an uptick in nationalist self-assertion in the decade after World War II. In the Middle East, notably in Iran and Egypt, nationalists emphasized the economic predations of formal and informal imperialism. The focus on economic imperialism and economic nationalism led to a sense of common struggle shared by those two nations. When he traveled to New York to present Iranian arguments in support of oil nationalization in 1951, Mossadeq emphasized the broader notions of economic sovereignty and its links to decolonization.<sup>4</sup> For doing so, he was welcomed in Cairo "as a victorious leader who fearlessly faced Britain." Newspapers and the growing urban political class in Egypt drew a sharp connection between British control over the Abadan refinery complex and the Suez Canal. The prime minister, who was deposed in a United States- and British-supported coup in 1953, tapped into a more widely felt popular criticism of the Anglo-Iranian Oil Company across the region. Examples abound. In one, the poet Sayyid Qutb, a member of the Muslim Brotherhood, published a

poem in the popular newspaper *Al-Abram* on the day of Mossadeq’s visit, which read in part:

Mossadeq, son of life, nobleman  
 Hero of the Muslim East  
 Trustworthy and alerted guard  
 Withstanding the criminal thief’s power  
 You are the torch of triumph that you have lit  
 With the oil and your own inspired heart  
 You lived and brought to their pirates  
 The fire of the East of our burning oil.<sup>5</sup>

Demonstrators that lined the streets from the Cairo airport to his hotel received Mossadeq with a sign that hailed him as “the foe of imperialism.”<sup>6</sup> In another example, a woman orator at Abadan described oil as “the Jewel of Iran” and accused the British of spending more on dog food than on workers’ wages.<sup>7</sup> When Chinese foreign minister Chou En-Lai addressed delegates at the First Afro-Asian Conference in Bandung in April 1955, he highlighted the struggle of Egypt and Iran over the “restoration of sovereignty over the Suez Canal Zone ... and over their petroleum resources.” Those political-economic battles had “won the support of all the righteous people in the Asian-African region.”<sup>8</sup>

At the same time as both Suez and Adaban became symbols of economic nationalism, the concept of the “world oil market”—both a political-economic construction and useful shorthand—became commonly used among U.S. oil experts, government officials, and the general public. Such a global perspective further linked nationalism in Iran to the question of trade through the Suez Canal. Iran supplied more petroleum to the “world market” than any other country in the Middle East when the last tanker sailed from Abadan in June 1951, the American oil expert and government consultant C. Stribling Snodgrass told the U.S. Secretary of the Interior. Iran accounted for more than one-third of all Middle Eastern production, about 7% of non-communist petroleum supplies, and more than one-fourth of all refined products supplied from outside the Western Hemisphere. Its production amounted to 660,000 barrels per day, of which most was processed at Abadan to make 46% of the aviation gasoline produced in the “free world,” as well as substantial amounts of residual fuel oil, kerosene, diesel, and motor gasoline that went to continental Europe, South Africa, and Asia. Such supplies

had become even more important because of the Korean War (1950–1953). The Foreign Petroleum Supply Committee reported that Abadan’s strategic value was magnified because it furnished “the preponderant part of total requirements” for India and the Red Sea area, including most of the bunker oil for military and merchant ships “operating in the vast ocean areas from Suez to Sumatra.” When oil companies worked to compensate that loss, the increased production from other areas “threatened to wipe out the existing thin margin” between supplies and requirements in the United States and “other parts of the free world.” The stakes were tremendous. Such an event in turn threw into jeopardy “the entire mobilization of the United States.”<sup>9</sup>

The constancy of such statements reminds historians that what one contemporary political scientist described as the “rise of self-assertion” occurred alongside a noted increase in the visibility of oil as a national security requirement for the United States in the Cold War.<sup>10</sup> The historian David Painter has described this turn of events in an influential series of articles.<sup>11</sup> The United States directed massive amounts of oil to the rehabilitation and rearmament of non-communist Europe from the Middle East as part of the Marshall Plan. Between April 1948 and December 1951, the Marshall Plan provided more than \$1.2 billion for the purchase of petroleum and refined products, more than 10% of the aid extended as part of the plan. The percentage of Middle Eastern oil that comprised Western European oil imports increased from around 20% before World War II to 85% by 1950.<sup>12</sup> Increased oil use was central to the recovery of other key industries, including ground and air transportation and agriculture. By 1952, almost all the oil imports to the Marshall Plan countries were supplied by the Middle East. Petroleum was “the most important single commodity entering into international trade measured whether by volume or by value,” U.S. officials consistently reasoned, both in public and in confidential correspondence.<sup>13</sup> Oil had great strategic value because it was “the one economic richness” that could save European society by rebuilding its economy, the CIA’s Kermit Roosevelt wrote in a popular 1947 book.<sup>14</sup>

Officials in the United States thus painted the potential loss of oil in alarmist terms, and almost always connected oil supply with the nation’s success or failure in the Cold War. Such concerns were intimately bound to both the fear of nationalism and the growing traffic of the “world market” through the Suez Canal. When the U.S. multinationals

temporarily abandoned pipeline construction owing to the 1948 Arab–Israeli war, for example, the canal became the beneficiary of what the US ambassador in Cairo, Stanton Griffis, called “the great fairyland of Near East oil.” Griffis described the canal in a 1948 letter to U.S. Secretary of Defense James Forrestal: “Through the Canal daily go a long line of merchant ships and tankers, and you may realize something of its tremendous current prosperity if you read the Canal tariffs and know that the Canal tolls for a loaded tanker amount to approximately \$15,000 and the tolls for the return of the empty tanker amount to about \$7,500.”<sup>15</sup>

That profitable trade was within spitting distance of the Soviet Union. “Here is the danger spot, here the possibility – a lightning dash by the Russian armies to cut off the Western world from the oil fields and possibly even attempt [to take] the canal itself,” Griffis worried. That view, which seems so alarmist in retrospect, was widely shared among oil and regional experts. “The Middle East lies within easy grasp of its neighbor to the north – the Soviet Union,” the German émigré and State Department oil consultant Walter Levy said in one speech in 1951, which was reprinted in the journals *World Petroleum* and *Oil Forum*. “In one bold, swift move Russia might not only realize its age-old desire of gaining access to warm-water ports but it could use the area as a springboard for thrusts either toward India in the east or toward Europe in the West, at the same time cutting off the free world from Suez and the entire Asian continent.”<sup>16</sup> The United States and the rest of the free world could ill afford to do without the oil that flowed from the region’s prolific wells.

### “THE LOSS OF SUEZ,” 1956

Such drastic fears did not come to pass. Today’s diplomatic histories of the political economy of the Suez Canal instead focus on the numerous twists and turns of policymakers as they confronted a simmering crisis in the early 1950s.<sup>17</sup> Historians have duly noted the complicated road by which the Eisenhower administration arrived at the decision to use its own oil power coercively in order to raise the costs of the British–French–Israeli actions.<sup>18</sup> In this chapter’s brief overview, it is sufficient to say that the Suez Canal became an emblem of the national security threat of losing oil that culminated in the economic diplomacy of the 1956 crisis.

To put it more plainly, the Eisenhower administration conducted diplomacy amid a rising clamor of domestic concern about the effects of Arab nationalism on the international oil trade. Oil experts who worked closely

with the U.S. government helped perpetuate the consensus. Industry in the United States, Western Europe, and Asia was increasingly vulnerable to interferences with the flow of oil, Levy held in a 1957 speech. The speech used statistics that he would forward to the State Department in his role as their expert consultant. The crisis blocked 1.35 million barrels daily from the Middle East. When Syria blew up the pumping stations of the Iraq Petroleum Company, it blocked about 550,000 barrels more. All that remained of Europe's normal deliveries from the Middle East were 200,000 barrels moving from Saudi Arabia to the Mediterranean via the Trans-Arabian Pipeline. Supertankers, a new concept at the time, were not a feasible option, because they could not long-haul the same volume of oil to Europe around the Cape of Good Hope. The continent thus had to turn to the Western Hemisphere, and tanker priorities were given to the movement of supply from the Gulf of Mexico and Venezuela. By the end of the year, the United States was providing about 500,000 barrels per day of crude oil and products to Western Europe.

The problem with the supply of oil was linked to other concerns. Great Britain, for example, depended on Suez-route imports for much of its industrial raw material base. Almost all of Britain's jute, rubber, and wool moved to the nation through the Suez Canal. The interruption of the route also caused their currency position to badly deteriorate. The problem of the sterling area's holdings of gold and dollars became exacerbated, causing the British to request waivers on the interest payments it owed on postwar loans to the United States.<sup>19</sup> Whitehall also requested, and was granted, the right to draw on its full IMF quota and a new line of credit from the Export-Import Bank for the purchase of oil and other goods. If the canal remained closed for any considerable length of time, Levy predicted, "the economic repercussions on Europe will multiply rapidly." The effects of fuel and raw material shortages and the deterioration of capital holdings would begin to accumulate. Instability in production, employment, and income would begin to rebound upon each other. "It would not be hard to visualize an economic crisis of appreciable dimensions," he argued.

The problem was made worse by the "stern reality" of continued Western European dependence on Middle Eastern oil, as well as the fact such dependence left the noncommunist powers in a "seriously compromised position" in the region. To explain this, Levy returned to a concept

he had written about previously: interdependence.<sup>20</sup> In his discussions of the capitalist economy after World War II, interdependence among the many parties that partook in global oil had allowed for opposing considerations to be accommodated and stability achieved. But interdependence had been decisively weakened by nationalism. "In the Middle East," Levy said, "interdependence is now of decidedly unequal urgency." By this, he meant that Europe's dependence on the Middle East for 80% of its crude imports, with no real alternative, had provided what he considered to be immoderate nationalists, like Nasser or Mossadeq, with an effective weapon:

The very dynamics of that nationalism – anti-colonialism, anti-exploitation – make existing oil arrangements an inevitable target for attack. Nor can the West rely on the importance of uninterrupted oil operations and oil revenues to Middle East governments as a deterrent to hostile actions. Economic considerations, important as they are to the relatively impoverished countries of the area, become insignificant when confronted with political necessities of political pretensions.<sup>21</sup>

In this way, the question of canal traffic was linked to nationalism, nationalism to oil, and oil to the stability of the Sterling area. All of that then became connected to the question of global economic health writ large. Lest one think that Levy was a lone boy crying wolf—and some discounted him as the next iteration of a long line of prophets of doom when it came to oil—it is clear that his concerns were echoed even in the driest official correspondence. When Great Britain, the United States, and France issued a Tripartite Statement from London at the beginning of the Suez Canal crisis in August 1956, for example, they hit a similar note. The decision by Nasser to take control of the canal "involves far more than a simple act of nationalization," they said. It was an "arbitrary and unilateral seizure" of an international waterway "upon which the economy, commerce, and security of much of the world depends."<sup>22</sup>

"The world was precariously off-balance," Levy said. Along with the Iran crisis, the Suez Canal crisis and the Iraq Revolution of 1958 were thus perceived as a general threat to the United States because instability in the oil industry unearthed a potentially disastrous fault line in the capitalist success story that was a crucial weapon in the Cold War. An expansive vision of national security guided both perception and policy. "At the present time our allies in Western Europe are dependent upon

Middle East oil resources,” the National Security Council concluded at the end of the Iran crisis. “Unless adequate petroleum products are available for its essential requirements, Western Europe is not defensible, and it will be lost and become a liability for the free world.”<sup>23</sup>

### THE SUEZ THREAT IN 1967

The fear of imminent economic crisis passed relatively quickly in 1956 and 1957. “The events of the last few months have demonstrated, perhaps more conclusively than ever before in our history, the fundamental strength and soundness of our present petroleum position in the United States,” Herbert Hoover, Jr., who had just left the State Department to return to his private consulting business, told the American Association of Petroleum Geologists in 1957. “We found that notwithstanding a major disruption in the flow of oil elsewhere in the world, our economy and our daily lives continued to move forward with no apparent ill effect whatever.”<sup>24</sup> But it was clear to all who had eyes to see that the closure of Suez raised concerns of calamity. The stakes regarding the canal were greater than the abstract principles of uninterrupted shipping or international commerce. What mattered most was the availability of Middle East oil through what *Time* magazine called Europe’s “lifeline to the East,” echoing more than half a century of British imperial economic rhetoric, and *Newsweek* called more generally “the lifelines of the West.”<sup>25</sup>

The United States also began to look for alternative sources of “non-political” energy in the wake of the Suez Crisis, including closer collaboration with allies regarding “nuclear economics” and atomic power.<sup>26</sup> At the same time, U.S. officials and oil executives became encouraged that Libya’s “short haul” production, just across the Mediterranean from Western European markets, was a safer source than more politicized Persian Gulf oil that had to travel through Suez or Mediterranean-bound pipelines that traversed Syrian territory.<sup>27</sup> In the United States itself, politicians from oil-producing states used the Suez Crisis to emphasize the threat of instability in the Middle East and to call for federal support for domestic production. The Texas Independent Producers and Royalty Owners Association, among the loudest and most influential domestic production groups, criticized what they called the “one-world resource viewpoint” of the Kennedy and Johnson administrations. The



United States had good reason to press instead for "U.S. relative self-sufficiency of this number one munition of war," the Texas independents wrote in 1965. "Any one of our major import sources could be cut off in short order, as was the case no later than 1957 when the Suez Canal was closed and the Middle East supply denied to us and our free world allies."<sup>28</sup>

Fear remained influential in the realm of domestic politics. The sense of confidence that Hoover, Jr., embodied was nonetheless emboldened just two years later during the 1967 Arab-Israeli war and Arab oil embargo. When U.S. officials confronted the embargo and the closure of the Suez Canal and the Trans-Arabian Pipeline, they were concerned at first. The four biggest crude importing nations in Europe (Italy, Great Britain, Germany, and France) and the three biggest in Asia (Japan, Australia, and India) relied on the Arab world for more than 60% of their imports. Officials were also concerned about oil for the Vietnam War. Like the Texan oil men, defense intellectuals and military strategists from Alfred T. Mahan to Chester W. Nimitz had held that fuel was "the number one munition of war," and the embargo became an explicit threat to the supply of 90% of the aviation gasoline used for the war's bombing campaigns.<sup>29</sup> Finally, U.S. officials became concerned about the domestic effects of the embargo, including sharp price increases and, if domestic production shifted from consumer use at home to military use in Vietnam, rationing in the United States.

But the nation again weathered the crisis. The U.S. Justice Department lifted antitrust regulations and the Oil Committee of the Organization for Economic Cooperation and Development, operating out of Paris, put in place market-sharing contingency arrangements to allow the major oil companies to shift supply and offset the disruption caused by the embargo.<sup>30</sup> Supply from the United States, Venezuela, and Iran was enough to offset the Arab loss. Moreover, strong evidence exists that the U.S.-allied Arab monarchies of Saudi Arabia, Kuwait, and Libya all broke the embargo. By the end of the summer, despite some handwringing in New England about home heating oil prices, there was a general sense that the United States had coped well with the problem.<sup>31</sup> The American Petroleum Institute, another important domestic interest group, celebrated the ability of domestic production to meet national requirements and send a substantial volume of oil to Europe despite "the shutdown of the Suez Canal and an Arab States' embargo."<sup>32</sup> Richard Nixon echoed

the most common dismissal of oil nationalism soon after: "The Arab oil producers cannot drink their oil."<sup>33</sup>

## THE ENERGY CRISIS

The new president might have been technically and gastronomically right. But the sentiment was increasingly wrong-minded. The 1967 Arab oil embargo marked an important transformation in the international political economy of oil. For one, the related Arab withdrawal of money from British banks exacerbated a national financial crisis that pressed the United Kingdom to reconsider its military commitment to the Persian Gulf. British Defense Minister Dennis Healey warned the elite Fabian Society that "a disorderly British departure ... could lead to a prolonged conflict interrupting oil supplies," but such a massive shift could only be marked by instability.<sup>34</sup> Making matters more difficult, the British withdrawal from its East-of-Suez stations, including the Persian Gulf, occurred right when U.S. leaders realized how overstretched they were in Vietnam. The United States "could not side-slip and take over British commitments," Secretary of State Dean Rusk complained. The British risked "flushing away what had been done since the Second World War in bringing stability to the world."<sup>35</sup> The concern with regional stability also led to another policy decision of far-ranging consequence. The so-called British vacuum, and the inability of the United States to fill it, convinced the Johnson and then the Nixon administration to turn to Iran, and to a lesser extent Saudi Arabia, to provide Persian Gulf security. Iran, in turn, used its new position and need for advanced weaponry to pressure the oil companies of the Iran Consortium to increase its profits. The rising oil nationalism of Iran became an effective floor on which more assertive oil-producing nations like Iraq, Algeria, and Libya could press for greater control over production and prices.<sup>36</sup>

The canal continued to be a reference point for geopolitical analysis, sometimes creatively so. The Soviet Union sought to "dominate the Mediterranean by establishing control over a triangle with its points at Suez, Aden, and Djibouti," the Shah of Iran argued to Henry Kissinger at one point, when calling for increased arms sales. If Moscow gained control of the canal, it would allow Soviet leaders "to consolidate their control in the Red Sea and to ease their access to the Indian Ocean and ultimately to the Persian Gulf."<sup>37</sup> The Shah made those arguments in the context of intense pressure for greater production from the Iran

Consortium, which would pay for his nation's ballooning arms sales demands. Iran's policies would increasingly dovetail with its more radical counterparts within OPEC, especially Libya.

An interagency analysis led by the State Department in December 1967 noted that the danger of recurring embargoes "and the continued closure of the Suez Canal" required consistent appraisal of the place of Arab oil in U.S. national security planning. Because of its geographical position and high production, Libya was "uniquely important for Europe today." But that nation and its place in the world would also be transformed by the 1967 war and embargo. Importantly, the war led the oil-producing nations to speed up the changes they had discussed within OPEC and at Arab Petroleum Congresses for over a decade: new deals with the oil concessionaires, development of state companies, direct contracts with consuming countries, and the ultimate goal, the use of collective power to control production and increase prices.<sup>38</sup> In a merger of pan-Arabism and economic anticolonialism, the charge that the oil companies were neocolonial instruments of Western control gathered force after the Six-Day War. "The war will mean a turning point in our thinking," one Arab leader confidently predicted to the influential oil journalist Wanda Joblanski in June 1967.<sup>39</sup>

Nowhere was this assessment more significant than in monarchical Libya, which had been an important Cold War ally to the United States since its United Nations-induced inception in 1951. Ambassador David Newsom joined a long line of officials who warned that criticism of U.S. oil shipments and the occupation of the Wheelus Air Base threatened the viability of "this friendly, hard-pressed government."<sup>40</sup> "The Libyan government is the most fragile of all regimes," the president of Standard Oil New Jersey told the Johnson administration in June 1967.<sup>41</sup> A more detailed sociological analysis prepared by the U.S. Embassy in Tripoli noted that a 25-year old in Libya in 1969 was 7 years old at independence, 12 during the Suez Crisis, 17 when the nation's oil boom began, and 23 during the Six-Day War. The concurrent growth of income, educational opportunity, and Nasserist propaganda efforts had made young people in the nation "socially restive."<sup>42</sup>

A nation that had been a Cold War asset for the United States and the free world political economy became a liability upon the Libyan Revolution of September 1969. The same year, the international oil market changed from a buyers' to a sellers' market. American society had become more and more premised on high energy consumption, and oil

provided an increasingly large share of the nation's mounting needs. In the period after 1946, when coal yielded its fuel leadership to oil and gas, petroleum increased its share of the domestic energy market to the point, by the late 1960s, that it supplied almost three-quarters of the nation's total energy needs. More and more of that oil came from abroad; between 1950 and 1966, the share of imported oil of total supply in the United States increased from 12.6 to 21.2%. Cheap oil also continued to support the development of the industrial and commercial sectors of the United States' most important allies in Europe and Asia. Moreover, nations like Brazil, Mexico, Turkey, and Indonesia were all modernizing to different degrees with a reliance on oil for economic growth. And even if the United States still consumed only a small percentage of foreign oil compared to Western Europe or Japan, consumption rose at a precipitous pace each year. In 1968, the Department of the Interior projected "enormous" demand increases for the following fifteen years and the American Association of Petroleum Geologists noted a marked decline in proven reserves, raising the specter of "peak oil" or, as the Department of the Interior had it, "the law of diminishing returns – an inevitable concomitant of the extractative process."<sup>43</sup>

The appetite for oil grew unabated in the industrialized nations and, increasingly, in the developing world. The fact that the production of oil in the United States seemingly had reached a peak had important diplomatic consequences because the nation could no longer provide the spare capacity to offset supply stoppages elsewhere, despite the aggressive public-private programs for offshore and shale development after 1967. State Department oil expert James Akins explained the ramifications of the dry market for the international political economy in an influential 1973 article for *Foreign Affairs* called "This Time the Wolf Is Here": a production loss from any major producer could cause a "temporary but significant world oil shortage." OPEC members now held what Akins called "economic leverage," which he predicted would make it more likely that they would "hold together, to raise prices and conceivably to limit output."<sup>44</sup>

This was a self-aware example—"the wolf is here"—of what political scientist Joseph Nye later described as a new "rhetoric of energy security" in the United States, which for him confirmed a collective anxiety about oil supply and prices.<sup>45</sup> The rhetoric itself was not new, and extended at

least as far back to the early Cold War. But the situation had changed; Akins and other U.S. experts were less concerned about supply or the Suez route and more concerned about prices. Supported by the other OPEC nations in their quest to "safeguard their legitimate interest," the new Libyan government of Muammar Qaddafi pressed the weakest independent oil company, Occidental Oil, for new terms in its contract.<sup>46</sup> In September 1970, the major oil companies agreed to the new Libyan terms. Afterward, aided by a hands-off policy from the Nixon administration toward Libya and Iran, as well as support from Saudi Arabia, OPEC pressed to apply the terms to the concessions of the other member nations. "It would be a mistake to expect a return to the situation which existed prior to the Libyan oil settlement of September 1970," a State Department task force reported.<sup>47</sup>

The OPEC nations used their superior market position and unassailable position regarding economic sovereignty to press for production control and greater profits, and in February 1971, the international oil companies signed a new oil tax and price agreements in Tehran and Tripoli. Officials in the Nixon administration began to discuss what they called "the developing international oil crisis."<sup>48</sup> That crisis would pale in comparison to what came next. The shortcomings of the postwar political economy of global oil—the dependence on cheap Middle Eastern sources, the high levels of consumption, the inability to accommodate nationalism—became more and more obvious. "If the Libyans succeed again, they could well trigger even higher demands from the other OPEC members," Henry Kissinger and NSC economic adviser Fred Bergsten warned Nixon. The United States had little control over its energy future. Given the strong market position of OPEC, the fact that US allies, including Saudi Arabia and Iran, were coordinating oil policy with Libya, the tight world market, and the association of high levels of energy consumption with US standards of living and global economic health, the United States would need to be "tactical and reactive."<sup>49</sup>

American oil fortunes spiraled downward between 1971 and 1973. The devaluation of the U.S. dollar led OPEC to increase prices again in September 1971. When the British left their East-of-Suez stations and the Shah of Iran took disputed islands in the Persian Gulf that December, Libya responded by nationalizing the BP-owned Sarir Oil Field. *Al-Thawra*, the official daily of the Ba'ath in Iraq, connected the Libyan nationalization to the Iraqi refusal to settle on the long-disputed Rumaila oil field. In April 1972, Iraq also nationalized production. Unlike in the

early 1950s, the multinational corporations and their governments were unable to successfully boycott nationalized oil. The Beirut-based *Arab Oil & Gas* noted that the continued closure of the Suez Canal gave Iraqi oil an advantage in Asian markets. Barter agreements with India and Ceylon, for example, helped Iraq beat the campaign against nationalized “black oil.”<sup>50</sup>

## CONCLUSION

The context for “oleaginous diplomacy,” as the historian Edward Mead Earle called it in the 1920s, was in the midst of transformation.<sup>51</sup> The nationalization of French interests in Algeria and the Reversion Law adopted in Venezuela further portended new rules for the oil industry. Saudi Oil Minister Ahmed Zaki Yamani led the more conservative Arab oil producers to press for “participation,” achieving an agreement in January 1973 by which the governments would take up to 25% control of their concessions with clauses giving them 51% by 1982. In competition with Saudi Arabia, Iran forced a new sales contract onto its concessionaires. Companies then yielded 51% of their concessions to the state in Libya.

In each of these cases, the companies acted under the threat of immediate nationalization, and US officials encouraged the oil companies to compromise with the oil producers, especially their allies in Saudi Arabia and Iran, to maintain “an atmosphere assuring the stability of the international oil market rather than precipitous unilateral action by the producer governments.”<sup>52</sup> Kissinger and NSC economic adviser Peter Flanigan described the problem to Nixon in planetary terms. Acceptance of the new rules was better than “immediate confiscation” with no negotiation and with compensation based on depreciated book value, which “would set a precedent not only in the oil industry, but in the entire extractive industry.”<sup>53</sup>

All the while, the OPEC ministers emphasized that it was their sovereign right to control production and the price of oil. Nationalism continued to be a useful rhetorical tool for oil radicals and moderates alike. “Our battle,” Iraqi Vice President Saddam Hussein told Abdullah al-Tariki, the editor of the influential Beirut magazine *Arab Oil & Gas*, “is with the foreign monopolies.”<sup>54</sup> The Shah of Iran wrote to Nixon that time was running out for the oil companies “to meet our legitimate rights and reasonable demands.”<sup>55</sup> The oil and finance ministers of these

and other producing nations consistently cited international law, established through the UN Economic and Social Council and the General Assembly, that protected their sovereign right to control their most fundamental natural resource. "The tide of nationalism is so strong that their days are numbered unless they rise with it," NSC Middle East expert Harold Saunders wrote of the companies.<sup>56</sup>

There seemed to be little the United States could do. Kissinger ordered a National Security Study Memorandum in 1973, which concluded that the continued growth in world demand would be met largely in the Middle East, where experts expected production to double by 1980. Moreover, the United States had accepted "as a fundamental principle of international law that a host country has the right to expropriate." That right intertwined with "recent and growing awareness of producer governments that oil is ... a commodity that can command a premium price." The United States needed to expect that the OPEC members would "sell oil in the future for as much as the market will bear."<sup>57</sup>

The question had become less one of oil supply for international economic well-being and national security, as it had been since the beginning of the Cold War, and more about what prices the capitalist world economy could bear. Since OPEC's founding in 1960, the group's members had pushed for greater control so that they could increase prices. They finally found success. In February and June 1971, Persian Gulf posted prices were increased by about 27%, in January 1972 by another 8.5% because of the Smithsonian Agreement. In January 1973, they increased a further 4.5% and, with the dollar devaluation of February 1973, prices rose again in April by 6% and in June by another 6%. The price of Persian Gulf oil had tripled in just under three years by October 1973. Early that month, the OPEC nations extracted another 70% increase.<sup>58</sup> Then the third Arab-Israeli war broke out and, on October 16, Nixon ordered an airlift to Israel. The Persian Gulf producers announced an immediate, unilateral price increase of 70%, and the price per barrel rose from \$3.01 to \$5.11. All of the Arab oil producers cut off their supplies of oil to the United States by the next week, a total of about 2 million barrels per day. Saudi Arabia also announced an overall 10% production cut and, under the aegis of OPEC, Iran and Venezuela joined the Arab producers to announce further price increases. By February 1974, the price of Persian Gulf oil had nearly quadrupled.

No one had imagined that prices could ever rise so swiftly, so totally. Speculation on the consequences was rife, even though the supply situation was not so bleak as originally feared. “This could be a true disaster,” said William Clements, the Deputy Secretary of Defense, echoing Eisenhower administration officials in the 1950s. The influential chairman of Exxon, Ken Jamieson, agreed: “What we are talking about is the possible breakdown of the economy.”<sup>59</sup> The problem was a global one, IMF chief Johannes Witteveen wrote to the world’s finance ministers. High prices would cause “a staggering disequilibrium in the global balance of payments” that would impose strains on the international financial system “far in excess of those experienced at any previous time in the post-war period.”<sup>60</sup> Others linked the new concern with prices to the long-running fear of losing supply. The world was “passing from the illusion of unlimited abundance to the cold reality of the existence of scarcities,” UN Secretary-General Kurt Waldheim said.<sup>61</sup>

Such a global view of energy security, the discussion of what Nixon called “a rational structure of prices,” built on earlier Cold War arguments about national security and oil supply. The emphasis on oil and worldwide economic stability almost directly echoed discussions about Iranian oil and the Suez nationalization in the 1950s. It also showed marked continuity in the sense that it was wrapped up in older arguments about cheap oil as a universal good. Kissinger revealed the power of identifying Arab oil with global economic health in his important Pilgrim’s Dinner speech in December 1973. The Arab–Israeli war had made acute the deeper problem of rising prices, he said, which was “the inevitable consequence of the explosive growth of worldwide demand.” The United States thus needed to work with its allies in “the assurance of required energy supplies at reasonable cost.” To do so, he continued, constituted the “economic equivalent” of the Sputnik challenge of the late 1950s. “Only this time the giant step for mankind will be one that America and its closest partners take together for the benefit of all mankind.”<sup>62</sup>

## NOTES

1. William Casey, “Military Problems of the Middle East,” June 16, 1980, Box 291, William J. Casey Papers, Hoover Institution Archives.
2. There is actually a great deal of continuity between Carter’s policies in 1979 and 1980 and those followed by Reagan afterward.



3. For examples from early realists: Bernard Brodie, *Foreign Oil and American Security* (New Haven, CT: Yale Institute of International Studies, 1947); James Schlesinger, *The Political Economy of National Security: A Study of the Economic Aspects of the Contemporary Power Struggle* (New York: Praeger, 1963), 137–49.
4. Christopher R. W. Dietrich, *Oil Revolution: Anticolonial Elites, Sovereign Rights, and the Economic Culture of Decolonization* (New York: Cambridge University Press, 2017), 26–60.
5. Lior Sternfeld, “Iran Days in Egypt: Mossaddeq’s Visit to Cairo in 1951,” *British Journal of Middle East Studies* 43, no. 1 (2016): 12.
6. Sternfeld, “Iran Days in Egypt,” 5, 11–12. For an analysis of the US response to Mossaddeq’s nationalism: Mary Anne Heiss, *Empire and Nationhood: The United States, Great Britain, and Iranian Oil, 1950–1954* (New York: Columbia University Press, 1997).
7. Ervand Abrahamian, *Iran between Two Revolutions* (Princeton, NJ: Princeton University Press, 2021), 361.
8. Mohamed Abdel Khalek Hassouna, *The First Asian-African Conference Held at Bandung Indonesia* (Cairo: League of Arab States, 1955), 84.
9. “Report to the Secretary of the Interior and Petroleum Administrator of Defense on the Foreign Voluntary Aid Program, from the Assistant Deputy Administrator, Foreign Petroleum Operations,” 1951, C. Stribling Snodgrass Papers, Box 53, American Heritage Center, University of Wyoming (hereafter AHC).
10. Rupert Emerson, *From Empire to Nation: The Rise of Self-Assertion of Asian and African Peoples* (Cambridge, MA: Harvard University Press, 1960).
11. Recently, see David S. Painter, “Oil and the American Century,” *The Journal of American History* 99, no. 1 (2012): 24–39.
12. David S. Painter, “The Marshall Plan and Oil,” *Cold War History* 9, no. 2 (2009): 164, 168.
13. Cornelius J. Dwyer and Oscar E. Bransky, “Success of European Refinery Expansion Program,” *The Oil Forum* (November 1952), Walter Levy Papers, Box 25, Folder 2, AHC.
14. Kermit Roosevelt, *Arabs, Oil and History* (New York: Harper and Brothers, 1947), 7. The book had gone through three printings by the time Roosevelt and CIA Director Allen Dulles successfully pressed the Eisenhower administration to greenlight their participation in the 1953 Iran coup. On the coup, see Mark J. Gasiorowski and Malcolm Byrne, eds. *Mohammad Mossaddeq and the 1953 Coup in Iran* (Syracuse, NY: Syracuse University Press, 2004).
15. “Stanton Griffis to James Forrestal,” October 30, 1948, James V. Forrestal Papers, Series 4, Box 129, Seeley G. Mudd Manuscript Library, Princeton University.

16. Speech, "Middle East Oil in the Free World," October 1951, Walter J. Levy Papers, Box 1, AHC.
17. Diane B. Kunz, *The Economic Diplomacy of the Suez Crisis* (Chapel Hill: University of North Carolina Press, 1991); Nathan J. Citino, *From Arab Nationalism to OPEC: Eisenhower, King Sa'ud, and the Making of U.S.-Saudi Relations*, 2nd ed. (Bloomington: Indiana University Press, 2010); Robert Divine, *Eisenhower and the Cold War* (New York: Oxford University Press, 1981), 79–92.
18. Salim Yaqub, *Containing Arab Nationalism: The Eisenhower Doctrine and the Middle East* (Chapel Hill: University of North Carolina Press, 2004); Douglas Little, *American Orientalism: The United States and the Middle East since 1945*, 3rd ed. (Chapel Hill: University of North Carolina Press, 2008), 157–92.
19. On the sterling and monetary diplomacy in this period, see Steven G. Galpern, *Money, Oil, and Empire in the Middle East: Sterling and Postwar Imperialism, 1944–1971* (Cambridge: Cambridge University Press, 2009).
20. This concept is commonly discussed by historians with reference to the 1970s, and it is interesting to see its application by Levy a generation earlier. For a thoughtful reflection, see Victor S. McFarland, "The New International Economic Order, Interdependence, and Globalization," *Humanity* 6, no. 1 (Spring 2015): 217–33.
21. Walter J. Levy, "The Suez Oil Crisis: Its Impact on the European Economy and Its Effects on International Oil Policy," January 1957, Walter J. Levy Papers, Box 4, AHC.
22. Tripartite Statement Issued at London, August 2, 1956, *FRUS, 1955–1957*, vol. XVI, doc. 53.
23. Statement of Policy by the National Security Council, January 2, 1954, *FRUS*, doc. 355. On the global implications and context, see George C. Peden, "Suez and Britain's Decline as a World Power," *The Historical Journal* 55, no. 4 (2012): 1073–96; Wm. Roger Louis, *The British Empire in the Middle East, 1945–1951: Arab Nationalism, the United States, and Postwar Imperialism* (New York: Oxford University Press, 1984).
24. Herbert Hoover, Jr., "Petroleum and Our National Security" *AAPG Bulletin* 41, no. 7 (July 1957): 1416–21.
25. "Angry Challenge and Response," *Time Magazine* (August 13, 1956); "Lifelines of the West," *Newsweek* (July 28, 1958), 24. Emphasis added.
26. Ethan Kapstein, *The Insecure Alliance: Energy Crises and Western Politics since 1944* (New York: Oxford University Press, 1989), 127. On atomic power, see Audra J. Wolfe, *Freedom's Laboratory: The Cold War Struggle for the Soul of Science* (Baltimore, MD: Johns Hopkins University Press, 2018), 91–112; Paul Rubinson, "For Our Soviet Colleagues': Scientific Internationalism, Human Rights, and the Cold War," in *The Human Rights Revolution: An International History*, ed. Akira Iriye, Petra

- Goedde, and William I. Hitchcock (New York: Oxford University Press, 2012), 245–64.
27. On Libyan-US relations, see Gretchen Heefner, "A Slice of their Sovereignty: Negotiating the U.S. Empire of Bases, Wheelus Field, Libya, 1950–1954," *Diplomatic History* 41, no. 1 (January 2017): 50–77.
  28. Texas Independent Producers and Royalty Owners Association, Information Service, "Statement of M.D. Abel Concerning Interior Department's Office of Oil and Gas Report," February 7, 1965, White House Central Files, Gen CM/Oil, Box 11, Lyndon B. Johnson Presidential Library (hereafter LBJL).
  29. Alfred Thayer Mahan, *Naval Strategy: Compared and Contrasted with the Principles and Practice of Military Operations on Land* (Boston: Little, Brown and Company, 1911); Chester W. Nimitz, "The Navy's Secret Weapon," *Petroleum Today* (1961): 27–29.
  30. Department of the Interior, Emergency Petroleum Actions, July 11, 1967, White House Central Files, EX NR 6, Box 13, Folder 2, LBJL.
  31. New York Senator Jacob Javits complained to Secretary of Defense Robert McNamara that the repurposing of oil tankers to Europe from the Gulf of Mexico-Atlantic Seaboard route caused a "critical supply situation" in New England. See Jacob Javits to Robert McNamara, September 20, 1967, in "No. 2 Fuel Situation," Congressional Record, Senate (Washington: GPO, 1967). For the broader question of political-economy in the United States at this time that notes the urgency of debate, see Dara Orenstein, *Out of Stock: The Warehouse in the History of Capitalism* (Chicago: University of Chicago Press, 2019), 199–205.
  32. "Letter, Frank Ikard, American Petroleum Institute to President Johnson," November 7, 1968, EX TA 6/Oil, White House Central Files, Box 19, LBJL.
  33. Memorandum of Conversation, June 5, 1970, *FRUS, 1969–1976*, vol. XXIV, doc. 23.
  34. Airgram, AmEmbassy London to SecState, "Healey on British Forces in the Persian Gulf," October 4, 1967, RG 59: Records of the State Department, Central Files 1967–1969, POL 23 ADEN, National Archives and Records Administration II, College Park, Maryland (hereafter NARA II).
  35. "Record of Meeting between the Foreign Secretary and the U.S. Secretary of State," January 11, 1968, PREM 13/3326, National Archives of the United Kingdom, Kew. For sharp reviews of British decision-making, see Simon C. Smith, "Britain's Decision to Withdraw from the Persian Gulf: A Pattern Not a Puzzle," *The Journal of Imperial and Commonwealth History* 44: 2 (2016): 328–51; Gernot Klantschnig, "Oil, the Suez Canal, and Sterling Reserves: Economic Factors Determining British Decision-making during the 1967 Arab–Israeli Crisis," *Diplomacy and Statecraft* 14, no. 3 (2003): 131–50.

36. See Dietrich, *Oil Revolution*, 158–90.
37. Memcon, “Status of Arab-Israeli Negotiations,” April 11, 1969, National Security File, Country Files—Middle East, Box 601, Folder 4, Richard Nixon Presidential Library (hereafter RNL).
38. See Giuliano Garavini, *The Rise and Fall of OPEC in the Twentieth Century* (New York: Oxford University Press, 2019), 135–215.
39. “Arabs, Too, Talk of Reappraising Oil Policies,” *Petroleum Intelligence Weekly* (June 19, 1967): 6.
40. Telegram, Amembassy Tripoli to SecState, June 26, 1967, Box 93, Folder 1, National Security File, Country File, Africa, LBJL.
41. McGeorge Bundy, “Memorandum for the President,” June 27, 1967, White House Central Files, EX CM/O, Box 6, LBJL.
42. “Airgram A-177, Amembassy Tripoli to Department of State, “The Youth of Libya: A Bridge Between Poverty and Affluence,”” July 11, 1969. RG 59, Central Foreign Policy Files, 1967–1969, Box 2313.
43. “U.S. Department of the Interior, United States Petroleum Through 1980,” July 1968, pp. 2–4, 40, 67, EX CM/O, Box 6. LBJL, White House Central Files. On peak oil, see Tyler Priest, “Hubbert’s Peak: The Great Debate over the End of Oil,” *Historical Studies in the Natural Sciences* 44, no. 1 (2014): 37–79.
44. James E. Akins, “The Oil Crisis: This Time the Wolf is Here,” *Foreign Affairs* 51, no. 3 (1973): 469.
45. Joseph S. Nye, Jr., “Energy Nightmares,” *Foreign Policy* (1980): 132–54.
46. “Text of Resolutions of XXI OPEC Conference,” *Middle East Economic Survey* 14, no. 10 (January 1, 1971): 1–6.
47. Interagency Oil Task Force, NSSM 114, “World Oil Situation,” January 24, 1971, National Security Institutional Files, Box H-180, RNL.
48. Bergsten and Saunders to Kissinger, “The Developing International Oil Crisis,” January 14, 1971. National Security Institutional Files, Box H-180, RNL.
49. Kissinger to Nixon, “International Oil Situation,” January 18, 1971, National Security Institutional Files, Box H-180, RNL.
50. “India Will Be INOC’s Second Asian Customer,” *Arab Oil & Gas* 1, no. 2 (October 16, 1971): 14–15.
51. Edward Mead Earle, “The Turkish Oil Company—Study in Oleaginous Diplomacy,” *Political Science Quarterly* 39, no. 2 (June 1924): 265–79.
52. “Memo, Department of State to Kissinger, Oil Producing Governments Participation Demands,” March 3, 1972. RG 59, Central Files 1970–1973, PET 6, Box 1485, NARA II.
53. Kissinger and Flanigan to Nixon, January 18, 1973 Staff Member and Office Files, Flanigan Subject Files, Box 3, RNL.
54. “Interview with Mr. Saddam Hussein,” *Arab Oil & Gas* 2, no. 27 (November 1, 1972): 7–8.

55. “Shah of Iran to Nixon,” January 20, 1973, White House Special Files, Staff Member and Office Files, Flanigan Subject Files, Box 3, RNL.
56. Saunders to Haig, “Saudi Arabian Oil Negotiations,” July 26, 1972, National Security Files, Country Files—Middle East, Box 630, Folder 1, RNL.
57. NSSM 174 Report, Executive Summary, August 1973 National Security Institutional Files, Box H-068, RNL.
58. International Bank of Reconstruction and Development, Economic Analysis and Projections Department, “Some Implications of Rising Trend in Petroleum Prices for Developing Countries, 1970–1985,” December 20, 1973, Arthur Burns Papers, Box B86, Gerald Ford Presidential Library (hereafter GFL).
59. MemCon, “Meeting with Oil Company Executives,” October 26, 1973, RG 59, Central Files 1970–1973, PET 6, Box 1485, NARA II.
60. IMF Cable, Johannes Witteveen to Ali Wardhanna, January 3, 1974, Arthur Burns Papers, Box B67, GFL.
61. UN Office of Public Information, Weekly News Summary, May 10, 1974, WS/658, United Nations Library, Geneva.
62. Department of State, Bureau of Public Affairs, News Release, “Secretary Kissinger Reviews U.S-European Relations,” December 12, 1973, RG 59, Policy Planning Council Papers, Director’s Files (Winston Lord), 1969–1977, Box 346, NARA II.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# The Global Oil Market and the Status of the Suez Canal

*Yossi Mann*

**Abstract** The Suez Canal has played a significant role in the economic history of the Middle East. It is an important source of revenue for Egypt and a conduit for the commodity that is identified more than any other with the nations of the region: oil. The most traded commodity in the world is considered a mainstay of the Suez Canal's revenue, constituting about 20% of the goods transferred through it. Despite its role as an important conduit of oil, geopolitical events, and international economic crises have undermined the Suez Canal's international status. This chapter aims to describe the reciprocal relationship between the oil market and the Suez Canal. The chapter will begin with a discussion of the impact of the Arab–Israeli conflict on global oil trade through the Suez Canal, and will follow up with an examination of the impact of economic crises and OPEC decisions on canal traffic. Finally, the chapter will suggest several factors that might damage the Suez Canal's international status in the long term.

---

Y. Mann (✉)  
Bar-Ilan University, Ramat Gan, Israel  
e-mail: [yossimann1@gmail.com](mailto:yossimann1@gmail.com)

Reichman University, Herzliya, Israel

© The Author(s) 2023  
C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons  
and Future Challenges*, Palgrave Studies in Maritime Politics and  
Security, [https://doi.org/10.1007/978-3-031-15670-0\\_5](https://doi.org/10.1007/978-3-031-15670-0_5)

**Keywords** SUMED · Oil market · Arab–Israeli conflict · OPEC · Oil embargo · Oil crisis

The Suez Canal has played a significant role in the economic history of the Middle East. It is an important source of revenue for Egypt and a conduit for the commodity that is identified more than any other with the nations of the region: oil. The most traded commodity in the world is considered a mainstay of the Suez Canal's revenue, constituting about 20% of the goods transferred through it. Despite its role as an important conduit of oil, geopolitical events, and international economic crises have undermined the Suez Canal's international status. This chapter aims to describe the reciprocal relationship between the oil market and the Suez Canal. The chapter will begin with a discussion of the impact of the Arab–Israeli conflict on global oil trade through the Suez Canal, and will follow up with an examination of the impact of economic crises and OPEC decisions on canal traffic. Finally, the chapter will suggest several factors that might damage the Suez Canal's international status in the long term.

## THE SUEZ CANAL AND THE OIL INDUSTRY IN THE MIDDLE EAST

Oil has a lengthy history in the Middle East. The ancient Egyptians used it for medicinal purposes, and already in the eighth century, the Arabs aimed to try to light up Europe with it. The ancient Persians used to coat their arrows with tar in order to severely injure their enemies. But the most significant use of Middle Eastern oil occurred in the beginning of the twentieth century, after First Lord of the Admiralty Winston Churchill decided in 1911 to convert the British navy from coal to oil. The accelerated development of the car and aviation industries following their use in World War I also had a crucial contribution to the development of oil in the region. The increasing demand for “black gold” brought the international oil companies to the Middle East to search for oil, and the consequent discovery of the world's largest oil reserves in the Persian/Arabian Gulf changed the entire history of the Middle East after World War II.<sup>1</sup> In the prominent Middle Eastern oil countries, oil fulfills a central role not only in the economy but also in preserving regime stability and shaping the relationship between the

regime and the people. Thus, for instance, an examination of the Arab Spring events shows that wealthy countries survived the wave of riots that swept through the region, while countries that are not typical oil-based economies (except for Libya) experienced an enormous political upheaval and some even turned into failed states. The Arabian Gulf oil states used the oil profits that had accumulated through the years to provide benefits and implement far-reaching reforms for the local residents, thus managing to restrain the riots and criticism of the regime.<sup>2</sup>

The estimated global consumption of oil in 2021 was 96.7 million barrels per day, and according to the United States Department of Energy (DOE), 61% of this amount was transported by oil tankers. The DOE defines seven international maritime routes utilized by most of the tankers carrying the “black gold.” A disturbance in any one of these routes can change the price of a barrel of oil and generate a search for alternate routes, which sometimes lengthens the delivery time. The importance of these routes is measured by the amount of oil transited through them every day. The three most important global chokepoints are considered to be the Strait of Hormuz, the Malaka Straits, and the Suez Canal. The global oil market, and especially the Middle East market, depends on the operational and security stability of the Strait of Hormuz, the Bab el-Mandeb Strait, and the Suez Canal for the uninterrupted supply of oil. Yet, throughout the years, transiting through these routes has become a challenge for shipping companies due to pirate attacks, political instability, sabotage of tankers, and weather.<sup>3</sup>

In 2019, tankers comprised 20% of the shipping traffic traversing the Suez Canal. In other words, every day 2.8 million barrels of crude oil and oil products passed through the canal. On its way to energy storage facilities in the Netherlands, Turkey, the United States, France, and Spain, 85% of the oil that transited the Suez Canal originated in the Gulf states, led by Saudi Arabia, Iraq, and the United Arab Emirates. From 2016 to 2018, the demand for oil products in East Asian countries grew, leading to an increase in the number of tankers making their way from west to east, particularly from Russia, Libya, and Norway. The type of tankers moving through the Suez Canal indicate its physical characteristics, namely its depth and breadth. Thus, the Suez Canal cannot handle Ultra Large Crude Carriers (ULCC) and fully laden Very Large Crude Carriers (VLCC). The Suezmax-type vessel was the largest ship that could navigate through the canal until 2010, when the Suez Canal Authority extended the canal depth to 66 feet to allow more than 60% of all tankers to transit the canal,



according to the Suez Canal Authority. In addition, almost 93% of bulk carriers and 100% of container ships have been able to transit the Suez Canal since 2010.<sup>4</sup>

The challenges posed by the Suez Canal as a narrow and quite shallow route, coupled with regional political difficulties, have led to routing oil through the Suez-Mediterranean Pipeline (SUMED), which bypasses the canal. The pipeline is 320 kilometers long and transports oil from Ain Sukhna on the Red Sea shore to Sidi Kerir on the Mediterranean, with a capacity of 2.34 million barrels per day (b/d). The pipeline is controlled jointly by several companies, including the Egyptian General Petroleum Corporation and the oil companies of Saudi Arabia, Abu Dhabi, Kuwait, and Qatar. It is the best alternate solution for transporting oil from the Red Sea to the Mediterranean without using tankers. However, in the background of the historic decision made in 2014 by Egypt's president to expand the Suez Canal, a significant drop in the use of SUMED was recorded. Thus, in 2016, 1.63 million b/d were transported through the pipeline compared to 1.33 million b/d in 2018.<sup>5</sup>

### THE ARAB-ISRAELI CONFLICT AND ITS EFFECT ON THE TRANSPORT OF OIL THROUGH THE CANAL

The Arab-Israeli conflict highlighted the significance of the Suez Canal as an oil transport route. The conflict originated at the end of the nineteenth century and intensified with the establishment of the State of Israel in 1948. Following this event, the Arab states refused any economic and political ties with the newborn state, which caused the cancellation of the oil pipeline from Iraq to Haifa (the Kirkuk-Haifa oil pipeline). In addition, internal struggles over hegemony in the Arab world brought about the closure of the Iraqi Petroleum Company oil pipeline from Iraq to Syria in 1972 and the cancellation of the Trans-Arabian Pipeline (the Tapline) from Saudi Arabia to Lebanon following the civil war in Lebanon in 1975.<sup>6</sup>

The conclusion of World War II was supposed to usher in a golden age for the Suez Canal: the sharp rise in the number of private vehicles, which grew an estimated 22% in the United States alone in the years 1945-1947, brought about a great demand for oil products. The rehabilitation of Europe after the war also required a great deal of energy. Thus, for example, in 1950, the global demand for oil was estimated at 10 million b/d, rising to 20 million b/d in 1960. Furthermore, the proximity of

the Middle East oil industry to Europe created great demand for this product. German consumption of oil grew from 4.8 million tons per year in 1950 to 63.2 million tons in 1963. Improvements in the production, transport, and refining of oil in the 1950s also contributed greatly to the flowering of the global oil industry as a whole and in the Middle East in particular. For example, oil refineries in Germany were able to produce 10.3 million tons in 1955, compared to 3.4 million tons in 1950. Improvements in refining abilities and a significant growth in the number of oilfields in the Arab space raised the status of the Arab countries in the global oil market. In the years 1948–1955, oil searches in the Saudi Kingdom were accelerated, leading to the discovery of nine significant oil fields. Pumping rates swiftly increased in the country, from 60,000 b/d in 1945 to 966,000 b/d in 1954.<sup>7</sup>

The origins of the political crisis in the Suez Canal can be found in the 1950s, when Iran nationalized the oil industry in its territory. This act was aimed against the Anglo-Iranian Oil Company and was followed by a U.S. and British embargo on oil imports from the local market. This removed 19 million barrels per month from the global market in the years 1951–1953 and reduced the amount of shipping through the Suez Canal. The Iranian nationalization was therefore a prelude, if not an inspiration, for the nationalization of the Suez Canal in 1956 by the charismatic Egyptian president, Gamal Abdel Nasser. This was followed by an Israeli military action against Egypt, which put a stop to Suez Canal activity. This meant that 1.7 million barrels, which comprised 10% of daily global production in those years, could not transit through the shortest route, forcing tankers to sail the lengthier route, around the Horn of Africa.<sup>8</sup>

In Western consciousness, the Suez crisis had a great effect on the oil market. In the immediate term, Western countries feared that the oil tanker companies would be harmed. The closure of the Suez Canal meant that ships sailing from Ras Tanura Port in Saudi Arabia to New York had to route through the Cape of Good Hope, traveling 11,755 miles instead of 8288. In the long term, Western countries feared that Egypt would take over the weak oil countries, such as the Gulf emirates and Saudi Arabia, and indeed, as the West expected, the Suez crisis had far-reaching effects. Following Nasser's act, his status in the Arab world reached new heights and the masses in the Arab world joined his call to expel Western forces from the region. Two years later, the Iraqi monarchical regime was removed by a group of officers who were influenced

by Egypt. In other countries, such as Saudi Arabia, unprecedented riots broke out in the months following the Suez crisis, which led to years of acrimonious relations between the oil companies' Arab workers and their Western colleagues. As for the global oil market, the Suez crisis impressed upon the shipping companies the need to produce a greater number of ships and larger ones in order to compensate for the inability to use the Suez Canal. Consequently, between the years 1966 and 1970, global maritime transport capacity increased from 2 million tons to more than 50 million tons. This was made possible due to the construction of 188 new tankers that transported even more oil products from the Arab Gulf.<sup>9</sup>

The Suez crisis caused greater harm to the Arab economy than to the economy of the West. In the months following the crisis, a sharp decline was recorded in the export of oil from Middle Eastern countries to Western Europe. Thus, on the eve of the crisis, Western European countries imported 74% of their oil from the Middle East, while between November 1956 and March 1957, Middle East oil comprised only 48% of the imported oil in Western Europe markets. On the other hand, the effect of the crisis on Western European countries was limited, as immediately after the crisis, Venezuela increased its production by 10% and the United States did so by 7%.<sup>10</sup>

The tension that characterized the Arab–Israeli arena in May 1967 moved the Iraqi government to summon representatives of the Arab oil-producing countries to a convention held in Baghdad on June 4. Three days prior, the Arab oil ministers received a document of principles put together by the Iraqi government, which included a prohibition on exporting oil to countries that would assist Israel or take part in the coming war. The memo even included a warning to oil companies not to exploit Arab sources of oil contrary to the wishes of Arab governments. Finally, the Islamic countries were issued a demand to stand by the Arab countries in their struggle against Israel. Two days after the discussion in Iraq, the Six-Day War started, after which the oil ministers of Iraq, Saudi Arabia, Kuwait, Libya, Qatar, Bahrein, and Abu Dhabi as well as representatives of the governments of Syria, Lebanon, and Egypt were faced with a demand to stop exporting oil to countries that provided military assistance to Israel. As a result, oil exports from Saudi Arabia, Kuwait, and Iraq to British and US tankers were halted, and countries, for example, Syria, stopped pumping oil altogether.<sup>11</sup>

The fighting came to an end on June 12, 1967, with the rout being received with utter surprise in the Arab world. The oil countries were now facing heavy pressure from Arab states to avoid resuming the supply of oil to the countries that had cooperated with Israel. The demand to continue the embargo was a major challenge, especially for the government of Saudi Arabia, which found itself between a rock and a hard place: the embargo it had imposed on the United States and Britain in the six days of the war had cost an estimated \$30 million of economic damage. Furthermore, an embargo meant worsening the relations with the United States, which the Saudi King Faisal was unwilling to do, as the former was providing military support to the Kingdom.<sup>12</sup> Another problem was the economic challenges facing the Arab world, which precluded the possibility of imposing an embargo that would harm the income from oil. It was, in fact, President Nasser-led Egypt that understood during the Khartoum summit held in August 1967 that an oil embargo might inflict mortal damage on the Arab economy and especially on Egypt itself. As a gesture of reconciliation, Egypt suggested that instead of an embargo, the oil countries would dedicate part of their earnings to the rehabilitation of the countries that had taken part in the conflict with Israel. Following this compromise proposal, Saudi Arabia transferred to Egypt and Jordan an estimated \$140 million. Libya and Kuwait joined the initiative and together with Saudi Arabia agreed to transfer to Egypt and Jordan an estimated \$378 million, which constituted 20% of the oil countries' profits in that year. In return, the countries that had participated in the summit agreed to resume passage of US, British, and West German tankers, thereby officially ending the embargo.<sup>13</sup>

The 1967 oil crisis did not create significant challenges for the global energy market. In the immediate term, the export of Middle Eastern oil to the United States, Britain, and West Germany was damaged. The crisis also caused the ruin of several oil rigs in Bahrain, Iraq, and Saudi Arabia. It is estimated that the direct economic harm caused to Arab countries by the crisis was no more than 5% of their profits that year, compared to the immense harm caused to them by their commitment to assist the countries that had taken part in the war. On the other hand, Western European countries, such as Britain, were compelled to buy oil from the United States and Venezuela at higher prices than Middle Eastern oil in order to avoid an energy crisis. Thus, Britain paid \$3.80 per barrel for American oil and \$3.23 per barrel for Venezuelan oil, compared to \$3.00 that Britain had paid on the eve of the crisis for a barrel of Arab Gulf

oil transported through the Suez Canal. The United States, on the other hand, was forced to increase its inland oil inventory at a cost of \$240 million because at the time it was reinforcing its army in Vietnam and most of the oil for its soldiers came from the Arabian Gulf.<sup>14</sup>

The major challenge caused by the crisis was the closure of the Suez Canal until 1975, which desperately harmed the Egyptian economy and the long-term status of the canal. From 1967 to 1974, the size of the global oil tanker fleet grew significantly, as the lengthy closure of the Suez Canal forced the shipping companies to build giant tankers with a capacity of 300 thousand tons in order to compensate for the inability to shorten the journey. In addition, the crisis elevated the status of oil countries such as Libya, whose location did not require passing through the canal. This led its charismatic leader, Muammar Gaddafi, to demand a higher price for Libyan oil. Another negative effect was that between 1957 and 1967, global oil trade increased by 918 million tons. The demand raised the price of leasing tankers, which increased the number of contracts for constructing tankers, and eventually the number of tankers—all of which did not create income for the Suez Canal Authority in the following critical years, from 1967 to 1973.<sup>15</sup>

The oil embargo that began after the Yom Kippur War had a significant impact on the political arena, on the economic resilience of the Middle Eastern oil countries, and on the Western consumer's conception of the importance of oil as a critical energy source that can shape the policy of superpowers. The embargo altered the consciousness of decision-makers regarding how to prepare for geopolitical threats so as to maintain the stability of the local economy. Until the recent decade, research showed a strong correlation between sharp rises in the price of oil and unemployment in Western countries, which made decision-makers realize that they must establish a developed conception of "energy security" in order to guarantee the functioning of the economy in times of war, such as the one that erupted in the autumn of 1973.<sup>16</sup> Thus, as a result of the war, Western countries established the International Energy Agency, which has 30 participating members signed to an energy defense pact. In case the energy economy of any country is harmed, the others are obligated to provide its energy needs until the threat is removed. Furthermore, due to the embargo, the developed and developing countries committed themselves to a severe standard for the establishment of three-month oil reserves, aimed at reducing the risk to the local market from the loss of external energy supplies.<sup>17</sup>

The embargo on countries that traded or provided military assistance to Israel during the war caused a sharp rise in the price per barrel and a significant increase in the income from the “black gold” countries. On the eve of the war, the price of a barrel of oil was \$2.90, whereas the embargo caused an immediate rise in price to \$12.00 per barrel. To a great extent, the embargo helped pin the price per barrel to a level above \$10.00 and solidified the economic status of the Arabian Gulf countries. It also caused the other Middle East countries to flourish, as they now benefited from the income sent back by their workers, now employed in the Arabian Gulf countries, from financial investments by the wealthy oil countries, and from an increase in tourism and in the traffic of commodities passing through the prominent ports and passages in the region, such as the Suez Canal and the Port of Beirut. All of these were game changers for the economies in the region and helped the Middle East countries establish a welfare economy in the pursuant decades.<sup>18</sup>

The 1973 crisis had positive and negative effects on the passage of oil through the Suez Canal. The Yom Kippur War was followed by a reduction in global oil consumption and a drop in imports from OPEC countries due to the high cost of transport and the rise in individual consumers’ expenditure on energy. The global economic slowdown brought about a collapse of the shipping market and especially for tankers, to such an extent that in 1975, 70% of the tankers in the market were scrapped. In 1970, the cost of a very large crude carrier (VLCC) was \$31 million, while in 1973, on the eve of the oil crisis, the cost of a secondhand tanker was estimated at \$52 million. The same type of VLCC was sold for \$10 million in 1975. In other words, following the closure of the Suez Canal from 1967 to 1973, Egypt lost an enormous amount of money due to the increase in global tanker traffic, but when it reopened the canal in 1975, Egypt once again sustained losses due to the global economic slowdown.<sup>19</sup> Nonetheless, in the long term, the reopening of the Suez Canal caused a sharp increase in the number of tankers passing through it, so that 5579 ships passed through the canal in 1975, compared to 16,806 ships in 1976, as the world emerged from the economic crisis.<sup>20</sup>

## OIL CRISES AND THEIR EFFECT ON CANAL TRAFFIC AND INCOME

The term “oil crisis” has a dual meaning. From the 1970s until the 2008 crisis, the term primarily referred to a sharp rise in the price per barrel of oil following geopolitical events, while from 2008, it primarily refers to a sharp decrease in price following economic crises. Specifically, from the year 2008, the oil market has undergone three major, formative events in which the price of oil dropped by more than 70% within several months. In some cases, the crisis was a result of a market structure that was unable to absorb the huge amount of oil that was produced, as in the 2014 crisis, while in other cases the price dropped due to fears regarding the stability of the global economy. Thus, following the subprime crisis in the United States in 2008, the price dropped within four months from \$147.00 per barrel of Brent crude oil to \$33.00; in the wake of the COVID-19 outbreak in 2020, the price dropped within several months from \$67.00 for a barrel of West Texas Intermediate (WTI) to minus \$46.00.<sup>21</sup>

The significance of oil crises for the Suez Canal is clear: less oil tanker traffic. For example, following the economic slowdown in 2008, maritime activity in the Suez Canal dropped by 25%. Numerous ship owners preferred to travel through the Cape of Good Hope rather than pay transit fees to the Suez Canal Authority. Furthermore, by lengthening the trip in this way and delaying arrivals at the destination ports, the owners aimed to create demand. In some cases, traveling through the Cape of Good Hope saved \$300 thousand per tanker trip. Other tanker owners managed to get a reduced Suez Canal transit fee due to the economic situation, saving money while still trimming seven days off the trip from east to west.<sup>22</sup>

The COVID-19 crisis that erupted at the end of 2019 was a clear manifestation of the link between economic crises and reduced activity of ships and tankers, especially in the Suez Canal. Thus, due to the crisis, a sharp drop was recorded in the worldwide use of Suezmax-type tankers, as their number was reduced from 136 to 49. Although not all tankers of this type transited through the Suez Canal, such a severe drop in their activity demonstrates the damage to Suez Canal revenue. A further example can be seen in the sharp drop in tanker traffic from the Arabian Gulf to North Europe, from 127 tankers in January 2020 to just 38 tankers in May 2020.<sup>23</sup> Nonetheless, the economic growth that characterized the second half of 2020 was apparent in the financial results: the Suez Canal

Authority managed to balance its revenue so that it reached \$5.6 billion at the close of 2020, compared to \$5.8 billion on the eve of the crisis.<sup>24</sup>

Unlike the oil crises of 2008 and 2020, the crisis in the years 2006–2008 was caused by a sharp rise in price, which positively affected Suez Canal revenue. In these years, the price of oil rose from \$60.00 per barrel to a peak of \$147.00 in August 2008. The reasons for this increase were diverse and included political crises in Iraq, Venezuela, Nigeria, and Russia that lowered the rate of production, accompanied by an increase in demand in the Far East, primarily in China, as well as an increase in the number of speculators involved in the trade of crude oil futures contracts. All of these created unprecedented revenue for the canal, which benefited from a large amount of tanker traffic. Thus, from 2000 to 2004, an average of 14,000 ships passed through the canal each year, while between 2004 and 2008 the annual average was 18,000 ships. The change was manifested in Suez Canal revenues, which were estimated at \$3.264 billion in 2007, compared to \$5.11 billion in 2008, when the price of oil peaked.<sup>25</sup>

In March 2021, the *Ever Given* container ship passed through the Suez Canal. Fierce winds coupled with a brake malfunction caused the ship to get stuck between the two banks of the canal, obstructing the Suez Canal entirely. This caused an immediate rise in the price of Brent crude oil, from \$63.90 per barrel to \$67.00.<sup>26</sup> This event highlighted the direct link between canal activity and oil prices. The main parties harmed by the crisis were the primary users of the canal, namely Saudi Arabia, Russia, Iraq, the United Arab Emirates, Norway, Kazakhstan, Libya, and Algeria. Despite the direct damage to the canal, the price per barrel did not increase sharply due to the existence of alternative routes that enabled the continued transport of oil. Furthermore, in recent decades, the Suez Canal has demonstrated an ability to recover rather swiftly from momentary crises, which proves its importance to the world, as occurred after this case as well.<sup>27</sup>

The passage of ships and oil tankers through the Suez Canal can reveal trends of global economic growth or slowdown. Ships carrying various types of commodities can travel to Europe or the Eastern markets without requiring the canal, contrary to other chokepoints such as the Hormuz Straits, to which there is currently no complete alternative in case it is blocked. In times of high demand, shipping companies aim to make as many trips as possible in the shortest time possible, so that the Suez Canal route is very tempting, providing increased revenue to Egypt. On



the other hand, global slowdowns enable ship owners to reduce transport expenses by using longer routes (saving the Suez Canal transit fees) and traveling more slowly, thus saving on fuel as well, which is the main expense in shipping. In other words, the Suez Canal is a pendulum that is highly influenced by global market events, especially those related to the East Asian and European markets.<sup>28</sup>

## THE EFFECT OF OPEC ON THE SUEZ CANAL

Organization of the Petroleum Exporting Countries (OPEC) is commonly considered the factor having the greatest impact on the global oil market. According to estimates, 80% of global oil reserves are located in the territories of the 14 OPEC members. The power of OPEC is also related to the fact that its members produce 40% of the world's daily consumption, as well as to the ability of some of the members, led by Saudi Arabia, Kuwait, and the United Arab Emirates, to increase production in times of crisis or suppress sharp rises in price through spare capacity. This means that the organization has the ability to both reduce production in order to raise prices if they drop sharply, and also to increase production in order to lower prices so as to prevent a global economic slowdown. Limiting production has occurred several times in recent decades, such as after the subprime crisis in 2008; after the collapse in price per barrel in 2014–2016 following the emergence of the US oil shale industry and Iran's post-embargo return to the market; and finally in 2020, after the coronavirus outbreak brought about the collapse of the global aviation industry as well as a significant reduction in the use of private vehicles.<sup>29</sup>

Yet, throughout the years, OPEC has found it difficult to control the production rates of all its members. Many agree that in times of crisis, when oil prices fall to a level that threatens the oil states' ability to cover their budgets, they are quick to agree to and execute efficient production cuts. However, when prices rise significantly and threaten to cause a global economic slowdown, the organization finds it difficult to coordinate and supervise the production quotas that the members have agreed upon in order to maintain a fair price for consumers. The reason for this seems to be the gaps between the various members' economic needs, which leads to disagreements within OPEC regarding production policy. Most researchers believe that differences in population size, reserve sizes, type of oil possessed by each country member, per capita income,

equity, and foreign currency balance create disparate interests among the OPEC members, resulting in different policies regarding the oil market. For example, from the beginning of the 2000s, a major controversy has emerged between country members that favor a high oil price, such as Iran, Venezuela, Nigeria, and Algeria, and members that favor a pragmatic oil policy, such as Saudi Arabia, Kuwait, and the United Arab Emirates.<sup>30</sup>

OPEC's decisions have a significant impact on the transit of oil through the Suez Canal. A decision to cut production means less oil being exported from the Arab Gulf countries, which make up a large portion of oil transport through the canal. Such a decision also affects the number of tankers required for transporting oil. For example, between 2014 and 2016, oil prices collapsed from \$103.00 per barrel to \$34.00. Consequently, in November 2016, OPEC announced a sharp cut in production in order to stabilize prices, which indeed rose sharply in the following years. In the months following the announcement, fewer tankers from Gulf countries passed through the canal, but this was accompanied by a rise in the number of tankers arriving from Europe. In other words, following the production cut, which affected mainly the OPEC members from the Arabian Gulf, there was an increase in the number of tankers coming from Europe at the expense of tankers coming from the East, because producers such as Norway were not part of the production cut.<sup>31</sup> Specifically, in 2013, prior to the crisis in the oil market, 117 oil tankers from the Arabian Gulf passed through the canal to Europe, and 102 tankers went from Europe to the Far East. In 2017, after OPEC's decision on production cuts, 159 tankers from Europe passed through the canal eastward, compared to 133 tankers making their way from the Arabian Gulf to Europe.<sup>32</sup>

## FUTURE TRENDS IN THE OIL MARKET AND THEIR IMPACT ON THE STATUS OF THE SUEZ CANAL

The oil market is currently undergoing a real revolution. The transition to renewable forms of energy, the awareness of climate issues, the decrease in oil imports to the United States (with the emergence of its shale oil industry), and the significant increase in oil exports to East Asia at the expense of the West—all raise questions regarding the future status of the Suez Canal as a major conduit of oil. At the same time, regional political processes can also challenge the historic status of the Suez Canal and favor cheaper and more efficient solutions. Accordingly, there are several

issues with respect to the oil market that can challenge the status of the Suez Canal in the long term: alternatives to oil as a major energy source, geopolitical issues, environmental issues, and Egypt's ability to promote processes that will secure the status of the canal.

History shows that the most severe damage to the status of the Suez Canal came as a result of political instability in the region. In this respect, it is possible to point out several challenges that may harm the future movement of tankers in the canal. Thus, in the past, tensions in the Arabian/Persian Gulf have caused a reduction in oil transports through the Suez Canal, as the regional producers lowered their production rates due to war, economic sanctions, or internal instability. Since the Gulf states are the most prominent users of the Suez Canal for the purpose of oil transport, the stability of these countries will have a major impact on canal traffic. In this context, the tense relations between Saudi Arabia and Iran, which have boiled over to Yemen, have created a dual challenge for owners of tankers and ships that wish to use the Bab el-Mandeb Strait on their way to the Suez Canal. First, the instability in Yemen is encouraging local forces to damage shipping in the area in order to strengthen their international standing. This may create a negative perception of the Suez Canal, as occurred during the 1950s and 1960s due to the Arab–Israeli conflict, which raised the need for a long-term alternative solution to travel through the canal. The lack of governance over the Bab el-Mandeb Strait has also increased the activity of pirates in the region, which has added another negative aspect regarding the long-term benefit of the Suez Canal.<sup>33</sup>

The fear of instability in the Suez Canal alongside the rising cost of transit through the canal in times of high demand for oil resurfaced the possibility of using pipelines to bypass the canal. The Abraham Accords signed in September 2020 between Israel and the United Arab Emirates and Bahrain ignited the discourse over resuming the activity of the historic oil pipeline from Eilat to Haifa, namely the Trans-Israel pipeline, in order to transport oil from the Arabian Gulf to the Mediterranean at the expense of the Suez Canal. The agreements signed between Israel and these Arab oil states can in the future bring Israel and Saudi Arabia to the negotiation table in an attempt to revisit the vision of a pipeline from Saudi Arabia to Haifa that would transport oil directly to the Mediterranean, again, at the expense of the Suez Canal.

It is estimated that in the next few decades, oil consumption will rise mainly in East Asian countries such as China, India, and South

Korea. Accordingly, the status of the Suez Canal seems unlikely to improve, barring a rise in exports from Europe and North Africa. One should note, in this context, the gradual drop in daily oil production in Norway—which is considered an important carrier of crude oil through the canal—from a peak of 3.5 million barrels in 2005 to 2 million in 2018. Russia may also affect the status of the Suez Canal. Thus, for example, improvements in the ability of ice-breaking oil tankers may facilitate the transport of oil from Russia through its northern parts to Eastern markets. In addition, climate changes may create “warm waters” in regions that were historically covered by glaciers, which may encourage the transport of oil from northern Europe to the Far East, to the detriment of the Suez Canal.<sup>34</sup>

The European Union is considerably dependent on energy imports. The decline in the status of Norwegian oil, alongside the fear of depending on Russian oil, has brought EU countries to aspire to an energy balance. Combined with its environmental awareness, this has led the EU to set ambitious targets for the use of renewable and less polluting energy sources, which may decrease future oil imports and harm Suez Canal revenue. In this respect, one must note that a stronger market for gas at the expense of oil may lead to increased exports of liquid gas from the Arabian Gulf to EU countries, thereby balancing out the loss of Suez Canal revenue from oil tankers.<sup>35</sup>

The Arab Spring that erupted in the winter of 2010 threatened the stability of Egypt, and for the first time since the 1970s raised fears that the canal would be shut down again. Even though canal transit remained undisturbed during this period, apprehension regarding Egypt’s internal situation led to a decrease in traffic. Thus, in the first ten months of 2010, about a thousand ships passed through the canal, compared to 1200 in the prior year. Furthermore, the fall of Mubarak’s regime in the months following the beginning of the riots created a domino effect in which other regimes fell, as in Libya and Yemen, along with instability in Arabian Gulf states such as Bahrain and Oman. This demonstrates Egypt’s status and the importance of guaranteeing its internal stability in order to prevent regional instability that might impair regional oil production and reduce the volume of oil transported through the canal.<sup>36</sup>

The rise in the status of the Arab Gulf states as suppliers of oil to Europe is also a result of the drop in production of North African states, primarily Libya. The Arab Spring events mortally damaged the stability of the country, which has substantial, high-quality oil reserves, at Europe’s

doorstep. The instability in North African countries, mainly in Libya and Algeria, caused Europe to turn to the Gulf states to provide oil. However, if stability will be restored to the region, exports from these countries will grow at the expense of the Gulf states. Furthermore, an increase in the production of oil in Libya may also mean an increase in exports to the east through the Suez Canal. However, considering the physical proximity and historic connections, alongside the Russian presence in the country in recent years, Libyan oil will most likely reach European destinations, which in turn will probably lead to a decrease in the number of oil tankers transiting from the Arabian Gulf to Europe through the canal.<sup>37</sup>

## CONCLUSIONS

The Suez Canal has an important historical role in shaping the economy and discourse in the Middle East. The significance of the canal as an international route for the transport of oil from producers to consumers rose along with the emergence of oil as a major energy source. Several events have undermined the status of the canal as an oil conduit, first and foremost the Arab–Israeli conflict, as well as economic crises and OPEC-related decisions regarding oil. It appears that in the upcoming years, Egyptian authorities will have to adopt significant measures in order to maintain the status of the canal as an important oil transport route. Above all, they must guarantee the stability of the country and the Red Sea in order to instill confidence in the countries and companies that transit oil through the canal. In the absence of significant measures, and considering additional factors such as climate changes, market structure, and alternative producers, the Suez Canal may suffer a decline in its status, as occurred in the middle of the 1970s.

## NOTES

1. Laurence Lockhart, “Iranian Petroleum in Ancient and Medieval Times,” *Mondial du Pétrole* 25, no. 183 (1939): 7–16; Malcolm Yapp, *The Near East Since the First World War: A History to 1995* (New York: Routledge, 1996), 1–48; 49–115; 147–67; 209–376; 441–98.
2. Aydın Aydın, “Hereditary Oil Monarchies: Why Arab Spring Fails in GCC Arabian States?” *SDU Faculty of Arts and Sciences Journal of Social Sciences* 30 (2013): 123–38.
3. “Three Important Oil Trade Checkpoints Are Located around the Arabian Peninsula,” *U.S. Energy Information Administration*, 4 August 2017.

4. "World Oil Transit Checkpoints," *U.S. Energy Information Administration*, 25 July 2017.
5. "The Suez Canal and SUMED Pipeline Are Critical Chokepoints for Oil and Natural Gas Trade," *U.S. Energy Information Administration*, 23 July 2019; Massimo Deandries, "The New Suez Canal: Economic Impact on Mediterranean Maritime Trade," *ALEXBANK* (June 2015): 18–19.
6. David R. Reitsema, "The Iraqi Nationalization of the Iraq Petroleum Company: Implications for the International Law of Expropriation," *Denver Journal of International Law & Policy* 2, no. 2 (January 1972): 217–20; Asher Kaufman, "Between Permeable and Sealed Borders: The Trans-Arabian Pipeline and the Arab–Israeli Conflict," *International Journal of Middle East Studies* 46, no. 1 (2014): 97–101.
7. "Oil Consumption – Barrel (from 1965)," *BP Statistical Review of World Energy June 2011*; Peter P. Waller and Harry S. Swain, "Changing Patterns of Oil Transportation and Refining in West Germany," *Economic Geography* 43, no. 2 (April 1967): 143–48.
8. Peter P. Waller and Harry S. Swain, "Changing Patterns of Oil Transportation and Refining in West Germany," *Economic Geography* 43, no. 2 (April 1967): 144–48.
9. D. Hawdon, "Tanker Freight Rates in the Short and Long Run," *Applied Economics* 10 (1978): 3–5; Hallvar Gislås, Even Holte, Agathe Rialland, and Tor Wergeland, "Tanker Market Industry Analysis," *European Framework for Safe, Efficient and Environmentally-Friendly Ship Operations/Flagship Work Package D-A1-E Activity A32-Develop Scenarios Part 1 Industry Analysis* (October 2008), 2–18.
10. Harold Lube, *Middle East Oil Crisis and Western Europe Energy Supply* (Santa Monica, CA: The Rand Corporation, 1962), 2–27.
11. George Lenczowski, *Middle East Oil in a Revolutionary Age* (Washington, DC, 1976), 4; National Archives of the United States (hereafter, NA), RG59/2470/F.2, A-12, "Monthly Review for Saudi Arabia-June, 1967," July 10, 1967; The National Archives of the United Kingdom (hereafter, TNA), PRO, FCO 8/808 (BS 12/1), "Arab Oil Embargo," August 8, 1967; Morris A. Adelman, "The Real Oil Problem," *Regulation* (Spring 2004), 16–21; TNA, FCO8/808, "More Moderation over Arab Oil," June 30, 1967; TNA, PRO, FCO 8/760 (BS 2/4), "Saudi Arabia during and after the Arab–Israeli War," August 18, 1967; NA, RG59/2472/F.3, A-53, "Saudi Military and National Guard," June 6, 1967.
12. TNA, PRO, FCO 8/1546 (NBY 2/2), "Visit of Mr. E. Luard, M. P to Arabia," January 1, 1970.
13. TNA, PRO, FCO 8/808 (BS 12/1), "Further Criticism of Arab Oil Policy in Saudi Arabian Press and Broadcasting Service," August 24, 1967.
14. TNA, PRO, FCO 8/808 (BS 12/1), "Arab Oil Embargo," August 8, 1967; TNA, PRO, FCO 8/760 (BS 2/4), "Saudi Arabia during and after

- the Arab–Israeli War,” August 18, 1967; Thomas Paterson, Garry Clifford, and Kenneth Hagan, *American Foreign Policy: A History* (Lexington, MA: D. C. Heath and Company, 1977), 586; *Petroleum Press Service* 26, no. 5 (May 1959), 202.
15. Elizabeth A. Sibilila, “Oceanic Accumulation: Geographies of Speculation, Overproduction and Crisis in the Global Shipping Economy,” *Economy and Space* 51, no. 2 (2019): 474–75.
  16. John V. Mitchell, *Renewing Energy Security* (London: Chatham House, Royal Institute of International Affairs, 2002), 10–25.
  17. Richard Scott, *The History of the International Energy Agency: The First Twenty Years Volume I: Origins and Structures of the IEA, OECD and EIA* (Paris: OECD/IEA, 1994), 27–58.
  18. Giovanni Covi, “The First Oil Shock, Stylized Facts, Reflections and the Easterly Puzzle in a Forty-Year Retrospective,” *MPRA* (August 2014): 1–27.
  19. Covi, “The First Oil Shock.”
  20. Suez Canal Authority, *Suez Canal Traffic Statistics, Annual Report 2018*, 2, 4.
  21. Mohamed Hammad, “Suez Canal Suffers Double Blow from Pandemic, Collapse of Oil Prices,” *The Arab Weekly*, May 22, 2020; Fabrizio Venditti and Giovanni Veronese, “Global Financial Markets and Oil Price Shocks in Real Time,” *European Central Bank* no. 2472 (September 2020): 8–12.
  22. “Review of Maritime Transport 2009,” *United Nations Conference on Trade and Development* (2009), 114.
  23. Clemens Breisinger, Abla Abdelatif, Mariam Raouf, and Manfred Wiebelt, “COVID-19 and the Egyptian Economy Estimating the Impacts of Expected Reductions in Tourism, Suez Canal Revenues, and Remittances,” *Middle East and North Africa-Regional Program Policy*, no. 4, (March 2020): 2–3.
  24. “Suez Canal Revenues in 2020 Hit USD 5.6 despite Covid-19,” *State Information Service- Egypt*, February 6, 2021.
  25. “Egypt Maritime Transport: Suez Canal Revenues: 1991–2017,” *Suez Canal Authority*.
  26. Musaed Sulaiman, “The Effect of Suez Canal Blockage on Crude Oil Prices: An Event Study Analysis,” *IOSR Journal of Business and Management* 23 (4): 64–65.
  27. Sameer Mohindru, Vickey Du, Carina Li, Isaac Eio, “Stuck Suez Canal Container Ship Disrupts Global Commodities Trade: Sources,” *S&P Global Platts*, March 24, 2021.
  28. James D. Hamilton, “Historical Oil Shocks,” *National Bureau of Economic Research* (February 2011), 10–12.
  29. Yossi Mann, “The Middle East and the New Era in the World Oil Market,” *The Journal for Interdisciplinary Middle Eastern Studies* 1 (2017): 108–109.

30. Mansoor Hamood Al-Harthy, "Stochastic Oil Price Models: Comparison and Impact," *Engineering Economist* 52, no. 3 (Fall 2007): 4; D. P. T. Young, "The Nature of OPEC and Oil Price Changes," *Energy Economics* 16, no. 2 (1994): 1–2.
31. Florence Tan, Mark Tay, "As OPEC Cuts, Traders Send European Oil Volumes to Asia," *Reuters*, January 11, 2017; Charles Kennedy, "Oil Tankers Shun Suez Canal in Search of Cheaper Route," *Oilprice*, March 2, 2016; Emiko Terazono, "Oil Tanker Rates Surge as Bulk Carrier Prices Languish," *Financial Times*, December 14, 2016.
32. "Navigation Statistics," *Suez Canal Authority*, 2013, 2017.
33. Luigi Narbone and Cyril Widdershoven, "The Red Sea Link: Geo-Economic Projections, Shifting Alliances, and the Threats to Maritime Trade Flows," *Robert Schuman Centre Research Project Report Regional Security Initiative Issue 2021/12* (July 23, 2021), 6–9.
34. John Mitchell, "More for Asia: Rebalancing World Oil and Gas," *Chatham House*, November 2010, 5–10; A. Kozmenko, "Arctic Oil and the Eastern Direction of Russia's Energy Policy," *SHS Web of Conferences* 84, 03004 (2020): 4–5; "Country Analysis Executive Summary: Norway," *U.S. Energy Information Administration*, January 7, 2019.
35. Koen Rademaekers, Luc Van Nuffel, and Jessica Yearwood, "EU Energy Independence, Security of Supply and Diversification of Sources," *European Parliament, Policy Economic and Scientific Policy* (2017): 10–15.
36. Hakim Darbouche and Bassam Fattouh, "The Implications of the Arab Uprising for Oil and Gas Markets," *The Oxford Institute for Energy Studies*, September 2011.
37. Richard Barltrop, "Oil and Gas in a New Libyan Era: Conflict and Continuity," *The Oxford Institute for Energy Studies* (February 2019): 12–14; Chiara Loschi, Luca Raineri, and Francesco Strazzari, "The Implementation of EU Crisis Response in Libya: Bridging Theory and Practice," *EUPACK* (January 2018): 4–12.



**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



PART III

---

## Legal Aspects



# Freedom of Navigation in the Suez Canal and the Channels: Law of the Sea

*Benny Spanier*

**Abstract** The chapter examines the status of international canals and straits connecting Two Parts of the High Seas under the Law of the Sea. Strait is a natural phenomenon, while a canal is artificial. At the same time, having a similar role and designation—a passage between seas—one could assume that their legal status, as far as freedom of navigation is concerned, would be the same. Straits have been extensively and comprehensively dealt with over the years by littoral nations, and today there is a complete and innovative chapter on this subject in the 1982 United Nations Convention on the Law of the Sea. However, the Convention is silent on canals. In the first part of the chapter, the terms “strait” and “canal” will be defined with an emphasis on the Suez Canal with regard to the right to freedom of navigation. The second part will describe the

---

The author wishes to thank Ido Ledrer for reading earlier drafts of the article and making important and illuminating comments.

---

B. Spanier (✉)  
Maritime Policy & Strategy Research Center (HMS),  
University of Haifa, Haifa, Israel  
e-mail: [bennyspa19@gmail.com](mailto:bennyspa19@gmail.com)

development of the right to freedom of navigation in the Suez Canal and the straits. One can see that while with straits there has been, over the years, a process of development with regard to navigation rights in the Law of the Sea, this is not the case with regard to canals subject to specific conventions, and specifically, the Suez Canal. The third part of the chapter will be devoted to a discussion leading to some conclusions on the differences between the two passages, which will assess whether these differences have future significance in the particular context of the Suez Canal.

**Keywords** Canals vs. straits · Constantinople Convention of 1888 · Corfu Channel Case · Freedom of navigation · Innocent passage vs. transit passage · United Nations Convention on the Law of the Sea

On November 16, 1869, the Suez Canal was inaugurated, and on the following day, it was officially opened to ships.<sup>1</sup> More than 70 years ago, on April 9, 1949, the International Court of Justice delivered its first judgment in the Corfu Channel Case.<sup>2</sup>

This chapter examines the status of international canals and straits connecting two bodies of water under maritime law. The two types differ in that a strait is a natural phenomenon, while a canal is artificial.<sup>3</sup> At the same time, having a similar role and designation—a passage between seas—one could assume that their legal status, as far as freedom of navigation is concerned, would be the same. In reality, straits have been extensively and comprehensively dealt with over the years by littoral nations, and today there is a complete and innovative chapter on this subject in the 1982 United Nations Convention on the Law of the Sea.<sup>4</sup> However, the Convention is silent on canals.

Within Egypt there are two strategically important waterways that were also at the center of crises<sup>5</sup>: the Suez Canal, located west of the Sinai Peninsula and connecting the Gulf of Suez to the Mediterranean, and the Straits of Tiran, which connect the Red Sea and the Gulf of Aqaba. Opinions vary on the question of whether a canal is included in the definition of straits (channels).<sup>6</sup> On the one hand, throughout legislative processes on conventions on the Law of the Sea, some countries have asked to include the word “canals” explicitly and in addition to “straits.”<sup>7</sup> On the other hand, some scholars believe that the passage

of water between seas must be part of the natural geological formation and not an artificial creation, meaning that man-made canals cannot be considered straits.<sup>8</sup> The prevailing view today among scholars is that in dealing with straits, the Convention on the Law of the Sea includes canals that connect seas,<sup>9</sup> unless there is a specific convention that regulates their mode of operation.<sup>10</sup> Thus, for the purpose of our discussion regarding freedom of navigation, these are two different maritime passages. The straits are usually discussed under the purview of the Convention on the Law of the Sea whereas the Suez Canal is subject to a dedicated treaty regime set specifically for it.

In the first part of the chapter, the terms “strait” and “canal” will be defined, with an emphasis on the Suez Canal with regard to the right to freedom of navigation. The second part will describe the development of the right to freedom of navigation in the Suez Canal and the straits. One can see that while with straits there has been, over the years, a process of development with regard to navigation rights in the Law of the Sea, this is not the case with regard to canals subject to specific conventions, and specifically, the Suez Canal. The third part of the chapter will be devoted to a discussion leading to some conclusions on the differences between the two passages, which will assess whether these differences have future significance in the particular context of the Suez Canal.

### “STRAIT” AND “CANAL”: DEFINITIONS UNDER THE LAW OF THE SEA

Freedom of navigation in the open sea would be meaningless if similar freedom were not allowed through the passages leading to it. While it is clearly important to regulate the sailing through straits for all, the countries lining the straits could become vulnerable if accidents or mishaps occur. Hence, they want to exert their influence and control the straits they border and clarify the laws of passage.<sup>11</sup> The friction between the coastal state and the international community is highlighted when the straits are narrow and sailing takes place within the territorial waters of the coastal state.<sup>12</sup> Indeed, there are a number of straits that are under a regime of international agreements that seek to resolve the tension between the coastal state and the freedom of navigation in the strait within its borders.<sup>13</sup> In most cases, however, the regime of passage through the strait will be determined in accordance with the Law of the Sea.

Initially, when territorial waters were three nautical miles wide there was a tendency to determine that a strait would be considered a waterway that is less than six miles wide. Thus, in practice, a vessel passing through the strait will be found at any given moment within the territorial waters of one of the banks.<sup>14</sup> If the strait is wider than six nautical miles, then the area that does not fall within the territorial waters of one of the banks would be considered “High Seas” by definition even though it is within the geographical formation of the strait. Over the years and with the expansion of territorial waters to 12 nautical miles, it became clear that the width of the strait could not be the criterion for defining what constitutes an international strait. As mentioned above, international agreements at the beginning of the twentieth century created a situation in which freedom of navigation in the waters of the straits was granted even when the ships passed within the territorial waters of states.<sup>15</sup>

The preliminary ruling of the International Court of Justice in the 1949 Corfu Channel Case determined what an international strait is:

It may be asked whether the test is to be found in the volume of traffic passing through the Strait or in its greater or lesser importance for international navigation. *But in the opinion of the Court the decisive criterion is rather its geographical situation as connecting two parts of the high seas and the fact of its being used for international navigation.*<sup>16</sup>

Therefore, a strait is a geographical area that connects two seas and is used for international navigation. Although in the Corfu Channel Case there were other sea passages (west of the island of Corfu), the essential test is the fact that international navigation is taking place therein.<sup>17</sup> The Law of the Sea examines the status of a strait in a technically substantial manner but not the degree of its strategic or functional importance. The number of straits that can be considered strategic is relatively small compared to the number of straits the Law of the Sea deals with.<sup>18</sup>

There are hundreds of straits in the world,<sup>19</sup> some are located along international waterways and some between islands or within archipelagos. The definition of a strait, for the purpose of this discussion, shall be in accordance with Article 37 of the Convention on the Law of the Sea that states: “This section applies to straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone.”<sup>20</sup>

As for the definition of the term “canal” under the Law of the Sea, there are many different types.<sup>21</sup> This chapter focuses on canals of international importance that connect the seas (interoceanic).<sup>22</sup> The canals must meet the geographical element of the International Court of Justice’s definition in the Corfu Channel Case: the canal, like a strait, connects two high seas.<sup>23</sup> In addition, the function of these canals is determined by the volume of international traffic and the multiplicity of countries that use them.<sup>24</sup>

## DEVELOPMENT OF THE RIGHT TO FREEDOM OF NAVIGATION IN THE SUEZ CANAL AND THE STRAITS

### *The Right to Freedom of Navigation in the Suez Canal*

Under customary international law, in the absence of any other agreement, a canal shall be subject to the exclusive jurisdiction of the state in whose territory it passes.<sup>25</sup> If the canal passes through the territory of several countries, each has authority over the canal located in its territory. The canals discussed in this article are all under the authority of specific agreements and treaties that prevail over conventions on the Law of the Sea. The Suez Canal, in this case, operates under the Constantinople Convention of 1888.<sup>26</sup>

The Constantinople Convention was signed by the great powers at that time: Austro-Hungary, Italy, the United Kingdom, Germany, the Netherlands, Spain, France, Russia, and the Ottoman Empire.<sup>27</sup> Article 1 of the Convention states that the canal will remain open and free for navigation in peacetime as in wartime, including to warring countries. The signatory states also agreed that no action would be taken to prevent sailing in the Canal and within a radius of three nautical miles from the ports of access.<sup>28</sup> Articles 4 and 5 of the Convention set out the constraints on ships of warring countries as they pass through the canal, for example, a ban on the unloading and loading of equipment or forces.<sup>29</sup> The Constantinople Convention forbids the signatory powers from mooring ships in the waters of the canal itself and also forbids more than two warships in the areas of access thereto. Warring countries were strictly prohibited from mooring in access ports.<sup>30</sup> Representatives of the powers that signed the Constantinople Convention are responsible for overseeing its implementation, and Egypt is obliged to ensure its implementation.<sup>31</sup>

Thus, the Constantinople Convention regarding the Suez Canal guarantees freedom of navigation for merchant ships at any time without restriction; freedom of navigation for warships in times of peace and war, when in times of war they must do so while navigating with the least possible delay; the Suez Canal will be neutral; Egypt has the authority to use force to protect it, maintain public order, and ensure freedom of movement therein.<sup>32</sup>

During World War I, freedom of navigation was honored even though the Central Powers (Germany, Austro-Hungary, and the Ottoman Empire) attempted to attack the Suez Canal as part of the war against the United Kingdom but failed. The canal was attacked also during World War II by the Axis Powers and the United Kingdom defended and fortified it. Freedom of navigation was sometimes violated by the British who even used the access ports despite the prohibition in the Constantinople Convention.<sup>33</sup>

On July 26, 1956 Egypt nationalized the Suez Canal. The nationalization effectively abolished the concession granted to it by the great powers for the purpose of operating the canal but this was not a direct violation of the Constantinople Convention.<sup>34</sup> The events that led to this, as well as the results of this move on the geo-strategic level, are beyond the scope of this chapter.<sup>35</sup> The focus here is that nationalization gave Egypt absolute control and sovereignty over the canal, hence the question of the right to navigate therein from under the Law of the Sea in light of this change.<sup>36</sup>

According to Egypt, the nationalization of the Suez Canal was not intended to infringe on the freedom of navigation therein.<sup>37</sup> This was reflected in both the Egyptian declarations and the Security Council resolution of October 13, 1956, laying down six principles for the operation of the canal: freedom of navigation must be maintained in the canal without any political or technical discrimination; the sovereignty of Egypt must be respected; the question of freedom of passage in the canal must be separated from political questions; the transit fees for the canal will be determined in consultation between Egypt and the countries utilizing the canal; some of the proceeds from the canal will be used for its development; in the event of a dispute between Egypt and the canal management company, it should be settled by way of arbitration.<sup>38</sup>

On April 24, 1957 following the Sinai Campaign, Egypt submitted a declaration to the UN Secretary General, which at its request was recorded with the UN Secretariat as an official international document.



In the declaration, Egypt undertook, *inter alia*, to honor and uphold free, uninterrupted navigation to all countries in accordance with the provisions of the Constantinople Convention:

It remains the unaltered policy and firm purpose of the Government of Egypt to respect the terms and the spirit of the Constantinople Convention of 1888 and the rights and obligations arising therefrom. The Government of Egypt will continue to respect, observe and implement them.<sup>39</sup>

In the declaration, Egypt pledged to grant freedom of navigation to all,<sup>40</sup> as well as to cooperate fully with the Suez Canal Authority, which manages its operations.<sup>41</sup> The canal is operated in accordance with the Authority's regulations (Canal Code).<sup>42</sup> Thus, the Constantinople Convention and Egypt's declaration are the normative basis on which the freedom of navigation in the canal has been determined ever since—and hence, it must be open to all.<sup>43</sup> According to scholars, the Constantinople Convention, despite the changing or disappearing of the parties initially signing it, is in effect in the sense that it has become a customary law that is binding.<sup>44</sup> In fact, in their view, the freedom of navigation in the canal remains as it was in the Constantinople Convention despite all the geostrategic changes that have taken place since then.

However, in practice, since the establishment of the State of Israel more than seventy years ago, the canal has often been blocked to Israeli usage or to ships that were supposed to sail to Israel or carry goods to or from Israel despite the provisions of the Constantinople Convention and the Egyptian undertakings.<sup>45</sup> Although the legal norm was intended to guarantee freedom of navigation in the Canal to all, in practice, Egypt violated this right several times. In these cases, Egypt's sovereignty and its interests prevailed over the freedom of navigation, and therefore, the guarantee of freedom of navigation in cases of breach of the Constantinople Convention by Egypt, can be cured by way of international coercion, which means the expropriation of its sovereignty over the Suez Canal.<sup>46</sup>

### *The Right to Freedom of Navigation in the Straits*

Two opposing worldviews underlie the attitude toward the right of passage in straits, which generally derive from the history of understanding the right of navigation on the high seas.<sup>47</sup> One approach comes

from the thinking expressed as early as the seventeenth century in the writings of the Dutch scholar Hugo Grotius, who wrote a book called *Mare Liberum* (Open seas), in which it was argued that the sea could not be conquered or owned by a state or any other body. Seeking to harmonize the laws dealing with sovereignty on land and sea, Grotius wrote that if land, rivers, or the open sea have become someone's property, they must still be open to those who seek, for worthy reasons, to pass through them. Subsequently, and on this basis, scholars laid the foundations for modern thought regarding the freedom of navigation in the maritime domain due to its belonging to the world community (*res communes*),<sup>48</sup> and from it derives the universal right to freedom of navigation in the seas,<sup>49</sup> or the straits that are open to all.<sup>50</sup> This approach was advocated by the maritime powers that had the ability and vested interests to sail across all seas, and therefore sought the maritime domain to express their freedom of navigation therein—in other words, Freedom of the Seas.

The second approach was rooted in national authority over the seas, or what was called the “closed sea” (*mare clausum*). This approach is based on the argument that the sea can be conquered just as the land can be conquered, and sovereignty over occupied sea areas can be exercised just as sovereignty over occupied land can be exercised. This approach later created, and without expanding beyond what is required here, the concept of Territorial Waters that created constraints and limitations to the concept of freedom of navigation.<sup>51</sup> Accordingly, states that did not have large fleets or aspirations to control the seas were primarily concerned with the protection of their territorial waters. These countries regarded the straits as part of their sovereign waters and the right of passage in those areas as a right that should be in accordance with the law of the sea of their territorial waters and within the accepted limits.<sup>52</sup>

Over the years, and in accordance with these two approaches to the right to freedom of navigation in the seas, the right of passage through straits has evolved. The concept of Innocent Passage began to develop in the late nineteenth century.<sup>53</sup> Between 1919 and 1939, the rulings of the Permanent Court of Arbitration established the necessary balance between the state's sovereignty over the maritime area near its shores and the right of ships to innocent passage therein.<sup>54</sup> Warships posed a special challenge to this idea of innocent passage because their mere presence at sea symbolizes sovereignty and power, which can appear to be not innocent.

The ruling in the Corfu Channel Case mentioned above symbolizes the “watershed” in the attitude of international law toward straits.<sup>55</sup> This is where the principle of freedom of navigation in straits was established. With regard to warships, the Court ruled that they have the right deriving from customary law to sail through straits in peacetime, without giving prior notice, provided that the voyage is indeed innocent:

It is, in the opinion of the Court, generally recognized and in accordance with international custom that States in time of peace have a right to send their warships through straits used for international navigation between two parts of the high seas without the previous authorization of a coastal State, provided that the *passage is innocent*. Unless otherwise prescribed in an international convention, there is no right for a coastal State to prohibit such passage through straits in time of peace.<sup>56</sup>

The ruling in the Corfu Channel Case influenced and served as a basis for the states’ discussions leading up to the drafting of the First Maritime Convention on the Territorial Sea and the Contiguous Zone 1958.<sup>57</sup> As for straits, Article 16(4) therein states that in a strait connecting two seas, the navigation regime shall be innocent passage: “There shall be no suspension of the *innocent passage* of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State.”<sup>58</sup>

From all we have seen so far, it is clear that every ship has the right to innocent passage in the territorial waters of the coastal state, including in straits.<sup>59</sup> Innocent passage means passing without threatening the coastal state. That is, continuous and expeditious without stops or moorings permitted only for emergency purposes.<sup>60</sup> The state can prevent crossings that are not innocent passage, and it can prevent the innocent passage of ships for a limited time and without discrimination, but only if it is essential for its security.<sup>61</sup> There is no obligation for a ship to notify of the crossing in advance for innocent passage to be in effect.

The situation for warships is more complex. If there is an agreement on the strait then it supersedes the Convention on the Law of the Sea as we have seen thus far.<sup>62</sup> The Convention on the Territorial Sea 1958 stipulates that warships must obey the instructions of the state in whose territorial waters they pass, otherwise the state can demand them to leave and the warship must obey.<sup>63</sup> There is no prohibition on requesting

warships to notify in advance of their intention to cross the strait.<sup>64</sup> The implication is that in the same Convention on the Territorial Sea, warships were not permitted unrestricted innocent passage in straits during peace and war, in contrast to the ruling in the Corfu Channel Case.

The idea of a Transit Passage in the straits was first introduced by the United States and Soviet delegations in the early 1970s as part of the discussions on the formulation of the 1982 United Nations Convention on the Law of the Sea.<sup>65</sup> These discussions reflected the abovementioned differences between the “closed sea” and the “open sea” approaches. The starting point was the right to freedom of navigation on the high sea and the attempt to liken the passage through the straits as much as possible to the existing situation in the two high seas between which the straight is located.<sup>66</sup> The “transit passage” right is a new concept that extends innocent passage to a little less than the right to freedom of navigation on the high seas.<sup>67</sup>

The third part of the 1982 United Nations Convention on the Law of the Sea deals with straits between two open seas.<sup>68</sup> Article 38 defines transit passage as follows: “*Transit passage* means the exercise in accordance with this Part of the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone.”<sup>69</sup>

Subject to a strait not having a specific treaty regulating the navigation regime therein, and therefore superseding the Convention on the Law of the Sea,<sup>70</sup> transit passage has two conditions: first, subordination to the additional clauses in that part, and second, the passage must be continuous and expeditious. Accordingly, moorings, maneuvers or any other delays are prohibited, as set out in Articles 39 and 40 (unlike the high seas navigation regime).<sup>71</sup> The significant innovation in this article is that transit passage, as opposed to innocent passage, applies to all ships, including warships in peacetime and wartime.<sup>72</sup>

## DISCUSSION AND CONCLUSION

The substantial legal aspect that has changed over the last 150 years in the Suez Canal is the sovereignty over the canal. Egypt is the sole sovereign, operates the canal through a national company, and is obliged to uphold the rights therein under the specific treaty, international law, and in accordance with international practice. In this sense, the freedom of navigation

that was supposed to be broad, free, and impartial has become, over the years, limited—at least as far as the State of Israel is concerned. When the Constantinople Convention stood on its own and the great powers ruled the Suez Canal, the Constantinople Convention had the decisive and final power.<sup>73</sup>

The historical process with regard to canals, and specifically the Suez Canal, demonstrates that in the balance between a specific treaty on the one hand and sovereignty on the other hand, the latter becomes increasingly decisive. In any case of ambiguity, tension, or conflict of interest, the sovereign interest of the state will prevail. In line with these developments at the global level, the Constantinople Convention has also lost its power, and in the future, there is no guarantee that sovereignty will not prevail in the future over freedom of navigation in the Suez Canal, and it will be closed again. In this sense, the only way to ensure freedom of navigation in the Suez Canal would be subject to an infringement of Egyptian sovereignty, for all that that implies.

A different picture emerges over the years in relation to the freedom of navigation in straits. Starting with the Corfu Channel Case, the right is expanding, from a right to innocent passage to transit passage, which is unlimited for all ships. The international community has spoken clearly over the years. Straits are a passage artery like the open sea and the sovereign right of the state retreats from the right of passage. Thus, for example, at the end of 2019, countries cooperated to preserve the freedom of navigation in the Straits of Hormuz.

In conclusion, in case of violation of the right to freedom of navigation in straits or canals one should expect different behavior on the part of the international community. Whereas in straits, states will do what is required to ensure freedom of navigation as this is enshrined in international legal norms and is possible. With respect to canals, the meaning of ensuring that freedom of navigation will require intervention through international institutions to the point of occupying the region and abolishing sovereignty. Is this likely to happen? It is difficult to assess whether states would agree to do so today.

## NOTES

1. Ruth Lapidoth, “Freedom of Movement in the Suez Canal” [in Hebrew], *Ha’Praklit* 24 (1968): 28.

2. International Court of Justice—Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania) (1949) (hereinafter: the Corfu Channel Case). The case involved the United Kingdom’s claim against Albania in the matter of the channel between Albania and the Greek island of Corfu and had to do with the meaning of Innocent Passage. The complaint pertained to a series of incidents that occurred between May and November 1946. In one of them two British warships were damaged on October 22, 1946, in the channel as a result of an explosion of naval mines and 45 British sailors were killed. The United Kingdom claimed that Albania placed the mines. Albania claimed that it has the authority to determine the right of passage in a channel within its territorial waters. The Court was required, among other things, to decide whether the passage of the two warships violated Albanian sovereignty, and ruled that in peacetime warships have the right to Innocent Passage in international channels. The Court instituted and expanded the meaning of Innocent Passage. For more information, see also: Bing Bing Jia, *The Regime of Straits in International Law* (Oxford: Clarendon Press, 1998), 36–47; Laurence W. Maher, “Half Light between War and Peace: Herbert Vere Evatt, the Rule of International Law, and the Corfu Channel Case,” *Australian Journal of Legal History* 9 (2005): 47.
3. Lapidoth, “Freedom of Movement in the Suez Canal,” 27.
4. United Nations Convention on the Law of the Sea, signed December 10, 1982, entered into force November 16, 1994, 1833 UNTS 397, Part III in Articles 34–45 (<https://treaties.un.org/doc/Publication/UNTS/Volume%201833/volume-1833-A-31363-English.pdf>). See Jeanine B. Womble, “Freedom of Navigation, Environmental Protection, and Compulsory Pilotage in Straits Used for International Navigation,” *Naval Law Review* 61 (2012): 135.
5. On the history of the Suez Canal in general, see, for example, Lapidoth, “Freedom of Movement in the Suez Canal”; Leo Gross, “Passage through the Suez Canal of Israel-Bound Cargo and Israel Ships,” *American Journal of International Law* 51, no. 3 (1957): 530; Robert Delson, “Nationalization of the Suez Canal Company: Issues of Public and Private International Law,” *Columbia Law Review* 57, no. 6 (1957): 755. On the history of the Tiran Strait, see Ruth Lapidoth (Eschelbacher), “Freedom of Passage in the Tiran Straits” [in Hebrew], in *HaPraklti: Jubilee Book*, ed. Arnan Gabrieli and Miguel Deutch (Tel Aviv: Israel Bar Association, 1994), 224; Leo Gross, “Passage through the Strait of Tiran and in the Gulf of Aqaba,” *Law & Contemporary Problems* 33 (1968): 125.
6. Hugo Caminos and Vincent P. Cogliati-Bantz, *The Legal Regime of Straits: Contemporary Challenges and Solutions* (Cambridge: Cambridge University Press, 2014), 109–11.

7. *Ibid.*, Thus, for example, during the discussions on the First Convention on the Law of the Sea in 1958 (UNLOS I), which discussed territorial waters, Chile sought to include the word “canals.”
8. Caminos and Cogliati-Bantz, *The Legal Regime of Straits*, 109.
9. *Ibid.*, 111.
10. *Ibid.*
11. Ruth Lapidoth, *Freedom of Navigation, with Special Reference to International Waterways in the Middle East* (Jerusalem: Leonard Davis Institute for International Relations, 1975), 38; George W. Grandison and Virginia J. Meyer, “International Straits, Global Communications, and the Evolving Law of the Sea,” *Vanderbilt Journal of Transnational Law* 8 (1974–1975): 404.
12. Lapidoth, *Freedom of Navigation*, 38.
13. *Ibid.*, 38–39. See, for example, the 1936 Montreux Treaty, which regulates the passage through the Bosphorus and Dardanelles under Turkish control. As well as the Buenos Aires Agreement governing the passage in the Magellan Straits.
14. R. R. Baxter, *The Law of the International Waterways: With Particular Regard to Interoceanic Canals* (Cambridge, MA: Harvard University Press, 1964), 4.
15. *Ibid.*, 4–9. This was the case, for example, in Gibraltar in an Anglo-French declaration of 1904 that banned the fortification of the coast on the Moroccan side to ensure freedom of navigation and in the case of Japan and Taiwan (then still Formosa) when the former declared the strait to be high seas.
16. The Corfu Channel Case, 28, emphasis added.
17. Baxter, *The Law of the International Waterways*, 9.
18. *Ibid.*, 9–10.
19. Jia, *The Regime of Straits in International Law*, 2. There are various lists of the number of straits in the world that stem from the definition. Thus, the British navy indicates 32 and in various other lists there are 35 straits and even 265 or 274—see the details therein.
20. UN Convention on the Law of the Sea, Article 37.
21. Baxter, *The Law of the International Waterways*, 10–12. Resulting from the fact that the discussion deals with canals between seas, it excludes all land canals in Europe or other continents from the discussion. In Europe, for example, some of the canals are linked to the rivers to which they are connected, such as the Elbe, the Oder, and the Danube. In some cases, the canals are designed to improve the navigability of rivers and allow larger ships to pass or for ships to pass in two directions at the same time—upstream and downstream. This can lead to some rivers having extensive infrastructure work being carried out to improve the passage so that it has become in practice an artificial river—a canal. For example, the

St. Lawrence Canal from the United States to Canada. Not all canals connecting seas can be considered important international canals. For example, the Baltic-White Sea Canal, which is active only part of the year and serves as passage for a small number of low-decker ships or the Volga Don Canal, which connects the two rivers between the Baltic Sea and the Black Sea. This canal also carries a relatively low volume of ships and cannot be considered an important international canal. The Corinth Canal in Greece can in some ways meet the criteria of a canal. It is man-made, connects seas and the volume of activity is not insignificant. Nevertheless, it is a relatively small canal that has less international significance.

22. Baxter, *The Law of the International Waterways*, 10; Lapidoth, "Freedom of Movement in the Suez Canal," 27. The list actually includes the Suez Canal, Panama Canal, and Kiel Canal.
23. Lapidoth, "Freedom of Movement in the Suez Canal," 27.
24. Baxter, *The Law of the International Waterways*, 12–13.
25. Lapidoth, "Freedom of Movement in the Suez Canal," 27. For example, the Corinth Canal located in Greece's territory is under its sovereignty and it may, in theory, close it to foreign countries at any time.
26. Lapidoth, "Freedom of Movement in the Suez Canal," 28–29; Charles B. Selak, Jr., "The Suez Canal Base Agreement of 1954," *American Journal of International Law* 49 (1955): 488–91. After the Canal was opened in 1869, it was managed by the Compagnie Universelle du Canal Maritime de Suez, an economic company founded by the French entrepreneur Ferdinand de Lesseps, which was given the concession for the operation of the Canal for 99 years. Britain initially opposed the Suez Canal but eventually understood its value. When Britain learned that the rulers of Egypt (subordinate to the Ottoman Empire) needed money and wanted to sell their shares, Britain purchased, in 1875, 44% of the company's shares. In 1882, Britain took over Egypt at the request of the local ruler who sought its protection against the Ottoman Empire. Egypt thus became a protectorate of Britain. Subsequently, the states having naval forces demanded that the passage through the canal be regulated by an international agreement signed on October 29, 1888. Britain demanded that the treaty maintain its status as the region's ruler and eventually after recognizing French rule in Morocco, the latter recognized Britain's right to the Suez Canal. After this recognition, the two states ratified the treaty that became the treaty by virtue thereof and according to whose clauses the Suez Canal operated.
27. Thomas T. F. Huang, "Some International and Legal Aspects of the Suez Canal Question," *American Journal of International Law* 51 (1957): 278–80.



28. Constantinople Convention, 1888, in Article 1: "The Suez Maritime Canal shall always be free and of commerce or of war, without distinction of flag. Consequently, the High Contracting Parties agree not in any way to interfere with the free use of the Canal, in time of war as in time of peace. The Canal shall never be subjected to the exercise of the right of blockade."
29. *Ibid.*, Articles 4, 5.
30. *Ibid.*, Article 7.
31. *Ibid.*, Articles 8 and 9.
32. Lapidoth, "Freedom of Movement in the Suez Canal," 29.
33. *Ibid.*, 30.
34. *Ibid.*, 31.
35. On the moves that led to the nationalization of the Suez Canal, the reactions and significance at the geostrategic level, see, for example, Gross, "Passage through the Suez Canal of Israel-Bound Cargo and Israel Ships," 530–32; Lapidot, "Freedom of Movement in the Suez Canal," 30–38; Huang, "Some International and Legal Aspects of the Suez Canal Question," 277–89.
36. This situation has also existed in the Panama Canal since the agreement between the United States and Panama in 1977.
37. Lapidoth, "Freedom of Movement in the Suez Canal," 31.
38. *Ibid.*
39. Declaration on the Suez Canal and the Arrangements for Its Operation: Letter dated April 24, 1957, from the Minister for Foreign Affairs of Egypt, addressed to the Secretary-General, U.N. Doc. A/3576, S/3818, in Article 1; Lapidoth, "Freedom of Movement in the Suez Canal," 31.
40. Declaration on the Suez Canal, Article 3(a).
41. *Ibid.*, Article 4; Baxter, *The Law of the International Waterways*, 90.
42. Declaration on the Suez Canal, Article 6: "The regulations governing the Canal, including the details of its operation, are embodied in the Canal Code which is the law of the Canal."
43. Baxter, *The Law of the International Waterways*, 89–90.
44. Ruth Lapidoth, "The Reopened Suez Canal in International Law," *Syracuse Journal of International Law* 4, no. 1 (1976): 41.
45. Lapidoth, "Freedom of Movement in the Suez Canal," 32–38; Delson, "Nationalization of the Suez Canal Company," 780–84; Gross, "Passage through the Suez Canal of Israel-Bound Cargo and Israel Ships," 538–43.
46. Lapidoth, "Freedom of Movement in the Suez Canal," 33–34.
47. Edwin Egede, "Law of the Sea, Era of Codification," *Oxford Research Encyclopedia of International Studies*, 2–3, International Law Online Publication Date: December 2017. <https://doi.org/10.1093/acrefore/9780190846626.013.254>.
48. *Ibid.*, 2.

49. Luke T. Lee, "Legal Aspects of Internationalization of Interoceanic Canals," *Law and Contemporary Problems* 33 (1968): 160.
50. Jia, *The Regime of Straits in International Law*, 36.
51. Egede, "Law of the Sea, Era of Codification," 3–4.
52. *Ibid.*, 3.
53. Jia, *The Regime of Straits in International Law*, 82–83; Sarah Weiss Maudi, "Law of the Sea" [in Hebrew], in *International Law*, 3rd ed., ed. Robbie Sabel and Yael Ronen (Tsafririm, Israel: Nevo, 2016), 530. Innocent passage means without the passage constituting a threat to the coastal state. And the right is also for passage only and it must be continuous and direct. Vessels passing by innocent passage may stop or anchor only in an emergency. Innocent passage does not include passage for fishing, research, or any action not necessary for the passage. The right does not require prior notice, permission, or payment.
54. Jia, *The Regime of Straits in International Law*, 83.
55. *Ibid.*, 36.
56. Corfu Channel Case, 28; Baxter, *The Law of the International Waterways*, 10; Jia, *The Regime of Straits in International Law*, 97, emphasis added.
57. Jia, *The Regime of Straits in International Law*, 100.
58. Convention on the Territorial Sea and the Contiguous Zone 1958, Article 16(4) (hereinafter: Convention on the Territorial Sea 1958), emphasis added.
59. Jia, *The Regime of Straits in International Law*, 106.
60. Weiss Maudi, "Law of the Sea," 530.
61. Convention on the Territorial Sea 1958, footnote 58 supra, Article 16(1)–(3).
62. *Ibid.*, Article 25.
63. *Ibid.*, Article 23: "If any warship does not comply with the regulations of the coastal State concerning passage through the territorial sea and disregards any request for compliance which is made to it, the coastal State may require the warship to leave the territorial sea"; Jia, *The Regime of Straits in International Law*, 107.
64. Jia, *The Regime of Straits in International Law*, 107; Weiss Maudi, "Law of the Sea," 530. For example: China, Romania, and Algiers.
65. Jia, *The Regime of Straits in International Law*, 132–33.
66. *Ibid.*, 138–39.
67. Weiss Maudi, "Law of the Sea," 532.
68. The Convention on the Law of the Sea, Article 37.
69. *Ibid.*, Article 38(2), emphasis added.
70. Jia, *The Regime of Straits in International Law*, 143, 145–46.
71. The Convention on the Law of the Sea, Article 38(2), 39–40; Jia, *The Regime of Straits in International Law*, 138–43, 147–48.

72. The Convention on the Law of the Sea, Article 38(1); Jia, *The Regime of Straits in International Law*, 150–51.
73. Baxter, *The Law of the International Waterways*, 82–85.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# International Law and Freedom of Navigation Through the Suez Canal

*Robbie Sabel*

**Abstract** The Chapter commences with a study of the text and the application of the 1888 Constantinople Convention by which the Ottoman Empire agreed to apply a special regime to the Suez Canal. The Chapter continues with an analysis of the Egyptian Government's nationalization of the Canal and its statements as to the continued application of the Constantinople Convention. The next issue examined is Egypt's denial of the use of the Canal to Israeli ships and to cargoes bound for Israel. The Chapter gives the Egyptian legal justifications for this embargo based on the rights of belligerency, the language of the 1888 Convention and the 1949 Egypt-Israel Armistice Agreement. The Chapter describes the counter-legal arguments based on the cessation of belligerency, principles of the Law of the Sea, and relevant UN Security Council Resolutions. The Chapter concludes with a description of how the issue with Israel was solved in the 1979 Egypt-Israel Peace Treaty.

---

R. Sabel (✉)

The Hebrew University of Jerusalem, Jerusalem, Israel

e-mail: [robbie.sabel@mail.huji.ac.il](mailto:robbie.sabel@mail.huji.ac.il)

© The Author(s) 2023

C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons and Future Challenges*, Palgrave Studies in Maritime Politics and Security, [https://doi.org/10.1007/978-3-031-15670-0\\_7](https://doi.org/10.1007/978-3-031-15670-0_7)

135

**Keywords** International Law · Constantinople Convention · International Court of Justice · 1949 Egypt-Israel Armistice Agreement · Corfu Judgment · 1979 Egypt-Israel Treaty of Peace

All of the 193 km of the Suez Canal go through Egyptian territory. In accordance with international law, “Canals are in principle subject to the territorial sovereignty and jurisdiction of the state or states which they separate or traverse.”<sup>1</sup> Such canals are considered internal waters with no rights of navigation to foreign vessels unless the territorial state agrees to a special regime.

## THE 1888 CONSTANTINOPLE CONVENTION

In the case of the Suez Canal, Turkey, which at the time ruled Egypt, agreed in the 1888 Constantinople Convention to apply a special regime to the Suez Canal. The clauses of the Constantinople Convention relevant to freedom of passage are

### **Article 1**

The Suez Maritime Canal shall always be free and of commerce or of war, without distinction of flag. Consequently, the High Contracting Parties agree not in any way to interfere with the free use of the Canal, in time of war as in time of peace. The Canal shall never be subjected to the exercise of the right of blockade.

### **Article 4**

The Maritime Canal remaining open in time of war as a free passage, even to ships of war of belligerents, according to the terms of Article I of the present Treaty, the High Contracting Parties agree that no right of war, no act of hostility, nor any act having for its object to obstruct the free navigating of the Canal, shall be committed in the Canal and its ports, even though the Ottoman Empire should be one of the belligerent Powers.

### **Article 9**

The Egyptian Government shall, within the limit of its powers resulting from the Firmans, and under the conditions provided for in the present Treaty, take the necessary measures for insuring the execution of the said Treaty.

**Article 10**

Similarly, the provisions of Articles 4, 5, 7, and 8, shall not interfere with the measures which His Majesty the Sultan and His Highness the Khedive, in the name of His Imperial Majesty, and within the limits of the Firmans granted, might find it necessary to take for securing by their own forces the defense of Egypt and the maintenance of public order.

**Article 11**

The measures which shall be taken in the cases provided for by Articles 9 and 10 of the present Treaty shall not interfere with the free use of the Canal.<sup>2</sup>

From 1923 until 1954, Britain, as the de facto sovereign of the Suez Canal, succeeded to the rights and obligations that Turkey had under the Constantinople agreement.<sup>3</sup> In a 1954 agreement, Egypt and Great Britain agreed

The two Contracting Governments recognize that the Suez Maritime Canal, which is an integral part of Egypt, is a waterway economically, commercially, and strategically of international importance, and express the determination to uphold the Convention guaranteeing the freedom of navigation of the Canal signed at Constantinople on the 29th of October, 1888.<sup>4</sup>

On July 26, 1956, Egypt nationalized the Suez Canal Company but did not repudiate the international status of the Canal. Subsequently, Britain and France introduced a Security Council resolution that resolved

1. There should be free and open transit through the Canal without discrimination, overt or covert—this covers both political and technical aspects;
2. The sovereignty of Egypt should be respected; and
3. The operation of the Canal should be insulated from the politics of any country.<sup>5</sup>

After the 1956 Suez crisis where Britain and France seized the Canal and then withdrew, Egypt made a public unilateral declaration, which contained the following statement:

### Reaffirmation of Convention

It remains the unaltered policy and firm purpose of the Government of Egypt to respect the terms and the spirit of the Constantinople Convention of 1888 and the rights and obligations arising therefrom. The Government of Egypt will continue to respect, observe and implement them.

Freedom of navigation, tolls, and development of the Canal  
The Government of Egypt are more particularly determined:  
To afford and maintain free and uninterrupted navigation for all nations within the limits of and in accordance with the provisions of the Constantinople Convention of 1888.

This Declaration, with the obligations therein, constitutes an international instrument and will be deposited and registered with the Secretariat of the United Nations.<sup>6</sup>

Egypt further accepted “as compulsory ipso facto, on condition of reciprocity and without special agreement, the jurisdiction of the International Court of Justice in all legal disputes that may arise under the said paragraph 9 (b) of the above Declaration, dated April 24, 1957,<sup>7</sup> with effect as from that date.”<sup>8</sup>

## EGYPTIAN LEGAL JUSTIFICATIONS FOR PREVENTING ISRAELI USE OF THE CANAL

From 1948 onward, Egypt, by a series of decrees and decisions of Egyptian prize courts, prevented Israeli ships and in some cases, Israel-bound cargoes from using the Suez Canal. Egypt based its claim on the fact that it was in a state of war with Israel.

As to the question of whether the practice violated the Constantinople Convention, Egypt justified this practice by claiming that they were entitled to take steps to maintain the security of the Canal. Egypt, perhaps, could have relied on the fact that Britain had prevented Axis shipping from using the Canal during World War II, but Egypt refrained from raising this issue publicly. Regarding the 1888 Convention, Majid Khaduri writes, “No surrender of any sovereign rights was ever contemplated. Israel attacked Egypt, had not respected the neutrality of the Canal as it carried out her military operations to its very eastern bank thus Egypt would be empowered to close the Canal in self-defense, no less by general law than by the very provisions of the Convention of 1888.”<sup>9</sup>

Egypt also argued that, technically and juridically, Egyptian practices were not a “blockade” but visit, search, and seizure.<sup>10</sup> Khadduri adds that the “Six Point” UN Security Council Resolution of October 13, 1956, which called for “free and open transit through the Canal” also called for “Respect for Egypt’s Sovereignty,” which means that Egypt should not be denied the right of self-defense.<sup>11</sup> The Egyptian delegate to the UN explained to the Security Council in January 1955:

The Egyptian Government is entitled, in exceptional circumstances, to take measures prohibited to other States to ensure its own security and that of the Canal. These exceptions have been provided for Egypt, the territorial sovereign. Although the text of the article [Article 11] seems to set no limits on the free use of the Canal, Egypt could not reasonably be required to permit the free use of the Canal by enemy shipping, since the security of the Canal would be threatened together with that of Egypt. Under the Convention of Constantinople, no formal obligation is imposed on Egypt to grant free passage to enemy shipping. In view of the serious consequences it might entail, such an obligation would have had to be expressly included in the Convention, which is not the case. In those circumstances, is Egypt not entitled to invoke the right of self-defense, since it fears that the security of the Canal and its own security are endangered?

Examples to illustrate this point. We pointed out that a mine could be laid and a ship deliberately sunk. This could be done, even without the knowledge of the Israel Government by Israeli extremists or terrorists, who can easily infiltrate into Egyptian territory and commit acts of espionage and sabotage. In the interests of the maritime Powers, we are anxious to prevent obstruction or damage to the Canal.

The Suez Canal lies in Egyptian territory; it is an integral part of Egypt and is subject to Egyptian sovereignty. The fact that the ports of Suez and Port Said are ports of access to the Canal does not alter the fact that they are Egyptian ports, under Egyptian sovereignty, and that the area of the territorial sea along their coasts is also under Egyptian sovereignty.<sup>12</sup>

### THE RELEVANCE OF THE 1949 EGYPT-ISRAEL ARMISTICE AGREEMENT

In 1949, Egypt and Israel signed a general armistice agreement.<sup>13</sup> A legal question arose as to whether this agreement prohibited Egypt from blocking Israeli shipping. Egypt claimed that the state of war continued



despite the 1949 Armistice agreement and thus Egypt had rights of belligerency, including the right of visit, search, and seizure of enemy shipping. Egypt further claimed that there was no clause in the 1949 Armistice Agreement that allowed Israel use of the Canal. The Egyptian delegate to the Security Council explained in 1954

The question of the existence of Egypt's right of visit and of search was therefore raised even before the armistice negotiations were started. The fact that the Armistice Agreement is silent on this point, although it is fairly common practice to include a provision on this subject in armistice agreements, shows, as indeed the Mixed Armistice commission has confirmed, that the armistice agreement of classical type concluded between Egypt and Israel expressed the joint will of the signatories and left them free to exercise their legitimate right of visit and search.<sup>14</sup>

Israel's position was that Egypt had no right to commit acts of belligerency. Israel claimed that the 1949 Egypt-Israel Armistice Agreement ended the state of war, if there was one. Louis M. Bloomfield reflects this Israel position when he writes, "Egypt and Israel are both member states of the United Nations and by virtue of their membership are not and cannot be in a state of war with each other."<sup>15</sup> Israel's position would not appear to have been correct law, as armistice agreements do not end a state of war. Leo Gross writes that, as a general rule, armistice agreements indeed do not end the state of war, but the Egypt-Israel Armistice Agreement "has been interpreted authoritatively as prohibiting belligerent acts of visit, search and seizure."<sup>16</sup> According to Gross, "Even assuming the correctness of the Egyptian contention namely, that a state of war continues to exist, Israeli ships have a right of passage through the Canal." Gross bases his statement on the clause in the Constantinople Convention that Egyptian measures should "not interfere with the free use of the Canal."<sup>17</sup> Gross also relies on the Corfu judgment ruling that Albania could issue regulations for passage in the Straits but not prohibit such passage.<sup>18</sup> "Egypt is authorized to take 'reasonable and necessary' measures but these measures must not interfere with the 'free use' of the Canal," he writes, adding that the Egyptian practice in the Canal in regard to its claim that it was only visit, search, and seizure was, in fact, more akin to "blockade."<sup>19</sup>

Israel relied on an interpretation by Ralph Bunche, the UN Mediator who had informed the UN Security Council in 1949, "There should be

free movement for legitimate shipping, and no vestiges of the wartime blockade should be allowed to remain as they are inconsistent with both the letter and the spirit of the Armistice Agreements.”<sup>20</sup> The Chief of Staff of the UN Truce Supervision Organization, General Riley, reached the conclusion that it was not clear that the blockade was a violation of the 1949 Armistice Agreement and the Mixed Armistice Commission was therefore not authorized to deal with the issue. The Chief of Staff added, however,

It is quite clear to me that action taken by Egyptian Authorities in interfering with passage of goods destined for Israel through the Suez Canal must be considered an aggressive action and interference with the passage of goods destined for Israel is a hostile act, entirely contrary to the spirit of the General Armistice Agreement and does, in fact, jeopardize its effective functioning. It was certainly never contemplated at Rhodes that what, is, in effect, an act of blockade or at least an act undertaken in the spirit of a blockade and having the partial effect of one, would be continued by one of the parties to the General Armistice Agreement more than two years after it had been signed.<sup>21</sup>

### THE ROLE OF THE UN AS REGARDS NAVIGATION IN THE CANAL

In 1950, Israel submitted a draft proposal to the UN Security Council that called upon Egypt “to abandon blockade practice and to restore the free movement of shipping through the Suez Canal.” The Resolution was not adopted.<sup>22</sup> However, in 1951 the UN Security Council adopted a resolution, stating in the preamble that “Since the armistice regime, which has been in existence for nearly two and a half years, is of a permanent character, neither party can reasonably assert that it is actively a belligerent or requires to exercise the right of visit, search and seizure for any legitimate purpose of self-defense.” The operative part called for Egypt

To terminate the restrictions on the passage of international commercial shipping and goods through the Suez Canal wherever bound and to cease all interference with such shipping beyond that essential to the safety of shipping in the Canal itself and to the observance of the international conventions in force.<sup>23</sup>

In 1954, Israel submitted a complaint that Egypt was not complying with the 1951 Security Council Resolution.<sup>24</sup> The Egyptian delegate to the Security Council reacted, surprisingly candidly for a diplomat, that “Egypt is taking action which is perhaps not in conformity with the Security Council’s decision of 1 September 1951,” explaining that “[t]he Council, in adopting that resolution, had based it on considerations other than the essentially legal aspects of the case.”<sup>25</sup> New Zealand consequently submitted a draft resolution to the Security Council that called upon Egypt to comply with the 1951 Security Council Resolution.<sup>26</sup> The resolution was vetoed by the Soviet Union and subsequently not adopted. Israel received Western support for its right to navigation, particularly from the maritime nations,<sup>27</sup> however Egypt continued to bar Israeli shipping and goods, basing its actions on the right of preserving the safety of the Canal.

### THE CANAL POST-1967

During the June 1967 war, Israel troops reached the east bank of the Canal and Egypt scuttled ships in the Canal blocking its use. After the 1973 Yom Kippur war, the parties signed a disengagement of forces agreement of 1974<sup>28</sup> and Egypt, with international help, began clearing the Canal. The 1975 “Interim Agreement between Egypt and Israel” stipulated, “Non-military cargoes destined for or coming from Israel shall be permitted through the Suez Canal.”<sup>29</sup> The 1979 Treaty of Peace between Egypt and Israel on this issue reads

Ships of Israel, and cargoes destined for or coming from Israel, shall enjoy the right of free passage through the Suez Canal and its approaches through the Gulf of Suez and the Mediterranean Sea on the basis of the Constantinople Convention of 1888, applying to all nations, Israeli nationals, vessels and cargoes, as well as persons, vessels and cargoes destined for or coming from Israel, shall be accorded non-discriminatory treatment in all matters connected with usage of the canal.<sup>30</sup>

This clause was drafted by Israel, it spells out explicitly that the 1888 Constantinople Convention allows Israeli ships and cargoes to use the Canal. Israel was also apprehensive that Israeli ships would be denied access to the Canal through Egyptian waters, hence the language “and its approaches through the Gulf of Suez and the Mediterranean Sea.” Israel

was also apprehensive that Egypt might apply discriminatory charges on the pretext that special security measures were needed. Hence the language, “Non-discriminatory treatment in all matters connected with usage of the canal.” Subsequent to the entry into force of the Egypt Israel Peace Treaty, there has been no interference with the passage of Israeli ships through the Canal.<sup>31</sup>

The actions of all the parties concerned with passage through the Canal—Egypt, Israel, and the maritime powers—were clearly dictated by strategic and commercial interests. Nevertheless, all the States attempted to base their actions on international legal norms. It was important for them to claim international legitimacy for their positions. This was particularly so since the UN Security Council was involved and the language of the relevant resolutions was the language of international law.

## NOTES

1. James Crawford, *Brownlie’s Principles of Public International Law*, 9th ed. (2019), 325.
2. The parties to the Convention were Turkey, Great Britain, Austria-Hungary, France, Germany, Holland, Italy, Spain, and Russia. W. A. White, Calice Radowitz, Miguel Florez y Garcia, G. de Montebello, A. Blanc, Gus. Keun, Nélidow, and M. Saïd, “Convention Respecting the Free Navigation of the Suez Maritime Canal. Signed at Constantinople, October 29, 1888,” *American Journal of International Law* 3, no. S2 (1909): 123–27. <https://doi.org/10.2307/2212141>.
3. The Treaty of Lausanne, 1923. The Treaty of Alliance between Egypt and Great Britain, 1936.
4. *Egypt and United Kingdom of Great Britain and Northern Ireland: Agreement* (with annexes and appendices). Signed at Cairo, on 19 October 1954. *United Nations Treaty Series* 210, No. 2833: 3–61, Article 8. <https://treaties.un.org/doc/Publication/UNTS/Volume%20210/v210.pdf>.
5. Situation Created by the Unilateral Action of the Egyptian Government in Bringing to an End the System of International Operation of the Suez Canal, which Was Confirmed and Completed by the Suez Canal Convention of 1888, UN Doc. 8/3675, October 13, 1956.
6. UN Doc. A/3576, 24 April 1957.
7. Paragraph 9 (b) dealt with disputes or disagreements arising out of the 1888 Convention or the Egyptian Declaration.

8. Mahmoud Fawzi, "Declarations Recognizing the Jurisdiction of the Court as Compulsory," *International Court of Justice*, 18 July 1957. <https://www.icj-cij.org/en/declarations/eg>.
9. Majid Khadduri, "Closure of the Suez Canal to Israeli Shipping," 33 *Law and Contemporary Problems* (Winter 1968): 147, 148, 154.
10. UN Doc. S/PV.658, February 5, 1954, para. 163.
11. Khadduri, "Closure of the Suez Canal to Israeli Shipping," 147, 148, 154.
12. UN Doc. S/PV 688 13 January 1955 paras. 89, 90, 96.
13. "Egyptian-Israeli General Armistice Agreement. Signed at Rhodes, on 24 February 1949." *United Nations Treaty Series* 42, no. 654: 252–84. <https://treaties.un.org/doc/Publication/UNTS/Volume%2042/v42.pdf>.
14. UN Doc. S.Pv.661 para. 64.
15. Louis M. Bloomfield, *Egypt, Israel and the Gulf of Aqaba in International Law* (Toronto: Carswell, 1957), 53.
16. Leo Gross, "Passage through the Suez Canal of Israel-Bound Cargo and Israel Ships," *American Journal of International Law* 51 (1957): 530, 546, 549, 567.
17. *Ibid.*
18. Corfu Channel Case (United Kingdom v. Albania) [1949] ICJ Reports 4, at 29.
19. Gross, "Passage Through the Suez Canal," 530, 537, 542.
20. Ralph Bunche, *Security Council Official Records*, Fourth Year, 433rd meeting, No. 36, 4 August 1949, p. 6.
21. Cablegram dated 12 June 1951, From the Chief of Staff of the Truce Supervision Organization, addressed to the Secretary General, transmitting a Report to the Security Council, S/2194, June 13, 1951.
22. UN Doc. S/1900, 13 November 1950.
23. Security Council Resolution S/2322, 1 September 1951.
24. UN Doc. S/3168 and Add.1, 28 January 1954.
25. The Egyptian delegate to the UN Security Council, UN Doc. S/PV.659, 15 February 1954, paras. 65.135.
26. New Zealand Draft Resolution UN Doc. S/3188, Corr. I, 19 March 1954.
27. For example, "So far as free passage of ships through the Canal is concerned, we have always held that under the 1888 Convention there was freedom for all shipping of all nations, including Israel, through the Suez Canal," Earl Home, House of Lords *Hansard* HL Deb 14 May 1957 vol. 203 cc 633–42. The representative of the United States to the UN told the Security Council on January 4, 1955, "We cannot fail to state our view that Egyptian restrictions on ships passing through the Suez Canal, whether bound to or from Israel, or whether flying the Israel or some other flag, are inconsistent with the spirit and intent of the

- Egyptian-Israeli General Armistice Agreement, contrary to the Security Council resolution of 1 September 1951, and a retrogression from the stated objectives to which both sides committed themselves in signing the armistice agreement.” UN Doc S/PV.687 para. 681.
28. Egyptian-Israel Agreement on Disengagement of Forces in Pursuance of the Geneva Peace Conference, January 18, 1974 UN Doc. S/11198 (1974).
  29. *Interim Agreement between Israel and Egypt*, September 4, 1975, Article VII, [https://ecf.org.il/media\\_items/599](https://ecf.org.il/media_items/599).
  30. *Peace Treaty between Israel and Egypt*, March 26, 1979, Article V (1) <https://mfa.gov.il/mfa/foreignpolicy/peace/guide/pages/israel-egypt%20peace%20treaty.aspx>.
  31. The Egypt Israel Peace Treaty entered into force April 25, 1979.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# Israel's Freedom of Passage in the Suez Canal, 1957–1967

*Eitan Barak*

**Abstract** Following the Suez War, Israel demanded freedom of passage through the Suez Canal. By July 1957, a tacit understanding was reached in which Egypt acquiesced to passage of Israeli goods on foreign ships. Nevertheless, in March 1959, the Egyptians suddenly breached the agreement. The UNSG subsequently formulated a new tacit arrangement: the “effective stand.” Egypt refused to “play the game” while Israel refrained from military response, recognizing that such a response could endanger the two countries’ only shared interest: an aversion to war.

**Keywords** Sinai War · Freedom of passage · Dag Hammarskjöld · Gamal Abdel Nasser · Embargo · Straits of Tiran

---

The author is a faculty member of the Shalem Academic College. This is a condensed, modified and updated version of an article that appeared in *The Middle East Journal* (Summer 2004) 58(3): 444–68.

---

E. Barak (✉)  
Shalem College, Jerusalem, Israel  
e-mail: [eitan.barak@mail.huji.ac.il](mailto:eitan.barak@mail.huji.ac.il)

© The Author(s) 2023  
C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons and Future Challenges*, Palgrave Studies in Maritime Politics and Security, [https://doi.org/10.1007/978-3-031-15670-0\\_8](https://doi.org/10.1007/978-3-031-15670-0_8)

At the end of the Sinai War (1956), Israel and Egypt faced a new diplomatic-security situation during which the perceptions, interests, and power dispositions prevailing before the war underwent change. Attendant on these events, the two countries embarked upon a sequence of limited arrangements, agreed upon both formally and informally, arranged by third parties, the chief of which were the United Nations Secretary General (UNSG) at the time, Dag Hammarskjöld, and US government officials.

One of these arrangements was designated to resolve Israel's demand for freedom of passage through the Suez Canal. Documents in Israel's archives, together with documents from the US State Department and UN archives, have recently exposed a fascinating chapter in Egyptian-Israeli relations at the time: the achievement of a tacit understanding, its subsequent disavowal, and the failed attempts to revive that understanding.<sup>1</sup> More importantly, the arrangement, reached through third-party brokerage on the matter of passage of Israeli goods through the Suez Canal, provides a real world, classic example of situations that require tacit understandings. As Nasser was unable to consent in public to Israeli use of the Canal for fear of appearing to submit to Israeli dictates, a covert agreement enabled him to preserve prestige in the Arab world while neutralizing a potentially explosive political situation from the perspective of both sides.

In order to provide a frame of reference for the period under study, we open with a summary of the events relevant to the question at hand.

### ISRAEL AND ATTAINMENT OF FREEDOM OF PASSAGE IN THE SUEZ CANAL, 1948–1956

Although Egypt first imposed an embargo on Israeli-owned ships in December 1947, the outbreak of the Arab-Israeli War of 1948 brought about the embargo's immediate expansion to "contraband" goods (i.e., cargoes might strengthen and support the enemy's war efforts) being transported to Israel. An order was issued in February 1950 directing the search of ships and planes and the seizure of cargoes identified as contraband by the Egyptian authorities.<sup>2</sup>

Israel confined its response to diplomatic activity that included submission of complaints to the Egyptian-Israeli Mixed Armistice Committee (EIMAC), which favored Israel's claims, and finally to the UN Security



Council (UNSC). In September 1950, the UNSC accepted Israel's position in principle and demanded that Egypt end the embargo forthwith.<sup>3</sup> In November 1953, however, the embargo was expanded to include ships sailing to Israel under foreign flags as well as all cargoes shipped to and from Israel. Israel again complained before the UNSC in January 1954.<sup>4</sup> The USSR, however, which had abstained in the 1951 vote, cast a veto in March 1954 against a draft decision favorable to Israel.<sup>5</sup> At this point Israel decided to "test Egypt by forcing it either to remove the embargo or else stand before the world in an embarrassing situation."<sup>6</sup> Thus, in September 1954, an Israeli ship (*Bat Galim*) was sent through the Canal as a probe. As expected, it was stopped, and Israel hurried to complain again before the UNSC, but to no avail. Notwithstanding these blows, Israel refrained from using this Egyptian violation of the cease-fire agreement as a *casus belli*, for reasons resting in its lack of sufficient operational capabilities.<sup>7</sup>

#### THE ATTAINMENT OF A TACIT ARRANGEMENT REGARDING FREEDOM OF PASSAGE IN THE SUEZ CANAL FOLLOWING THE WAR, NOVEMBER 1956–JULY 1957

By November 11, 1956, Israel had declared that withdrawal of its forces from the Sinai was conditional upon UN forces remaining in the Canal's proximity, apparently as a guarantee of its freedom of navigation.<sup>8</sup> Two months later, in January 1957, the Israeli cabinet decided to demand a formal guarantee of freedom of passage.<sup>9</sup> However, the subject had not yet arisen on the agendas of either Hammarskjöld or the Western powers. In effect, Israel's demand was backed with little conviction regarding its realization.<sup>10</sup>

Israel's attempt to win freedom of navigation through the canal was encouraged by the US President Dwight Eisenhower in an address delivered on February 20, 1957. During his speech, he equated freedom of passage in the Straits of Tiran with freedom of passage in the Canal.<sup>11</sup> Despite the US position, Nasser declared on March 11 that he would not allow the passage of Israeli ships through either the Canal or the Gulf of Eilat. At the same time, he nonetheless secretly promised Dr. Ralph Bunche, Hammarskjöld's assistant, to postpone any decision on "important subjects," such as mentioned by Eisenhower.<sup>12</sup>

In the meanwhile, Israel evacuated its forces from the Sinai as UN forces took up positions in the Gaza Strip and the Straits of Tiran (March 7–8). In the UN General Assembly (UNGA), the maritime powers, including the United States, went so far as to authorize Israel's interpretation of her status regarding passage through the Straits, as previously agreed. However, Israel's demand for freedom of passage in the Canal went unanswered.

It must be recalled that negotiations were then underway between Egypt and the Western powers over sensitive issues touching upon the reopening of the Canal after its nationalization and the Anglo-French-Israeli Suez Operation. Hence, there was some concern that launching an Israeli test vessel would consign these efforts to ruin.

Accordingly, Abba Eban, Israel's ambassador to the United States and the United Nations was forced to promise that Israel would refrain from raising the issue before a temporary arrangement was reached and, in any case, consult with the United States before sending ships to the Canal.<sup>13</sup>

### *UNSG Activities*

On March 19, 1957, Hammarskjöld arrived in Cairo for five days of intense discussions with Nasser and the Egyptian Foreign Minister Mohammed Fawzi. Upon his arrival, Hammarskjöld clarified to Fawzi that Egypt was required to take two mandatory steps: (1) to grant an effective role to the UN Emergency Force (UNEF), and (2) to allow unrestricted passage in the Canal. However, while Fawzi hinted at a possible arrangement with respect to the first step and a solution to the Straits problem, he demurred at agreement to the second step. Hammarskjöld was thus forced to raise the issue directly in his conversation with Nasser and Fawzi held four days later. Surprisingly, Nasser did not base his rejection of the demand on his traditional claim that Israel and Egypt were in a state of belligerency, a claim that he knew Hammarskjöld rejected. Instead, Nasser and Fawzi maintained that "Egyptian public opinion and the resulting security problems would make it impossible. They recalled that even the British, with eighty thousand troops in the Canal Zone had been unable to let Israeli ships through."<sup>14</sup>

Having failed to achieve progress on this subject, Hammarskjöld decided upon a new tack that would enable him to handle Israeli pressure and simultaneously retain a positive image internationally: linkage between freedom of passage in the Canal and deployment of the UNEF

within Israel's borders. Hammarskjöld indeed held fast to this approach despite the specious character of the linkage, whose construction had not involved the Egyptians.<sup>15</sup> Therefore, when the first convoy passed through the Canal on March 29, 1957, after its clearance, no arrangement on this subject had been devised.

### *Egyptian Policy and Hammarskjöld's Efforts After the Opening of the Canal*

After the failure of his talks on the subject during his visit to Cairo in March, Hammarskjöld continued to seek a secret understanding. To this end he wrote a personal letter to Fawzi on April 3, 1957. Bunche, who conveyed it, made sure to add a verbal admonition from Hammarskjöld, urging Egypt to change its stance.<sup>16</sup> These efforts were in vain: ten days later, the Egyptian Embassy in Washington, DC, published an announcement that Egypt would continue to deny freedom of passage in the Canal and the Gulf of Aqaba to Israel.<sup>17</sup>

On April 24, 1957, the United States asked to convene the UNSC in order to discuss the question of passage in the Suez Canal. Egypt, in response, hurried to submit their official Suez Canal declaration to the UN on the same day.<sup>18</sup> In this declaration, Egypt declared that it would grant unhindered passage to every country in accord with the provisions of the 1888 Constantinople Convention, effectively implying no change in Egypt's approach vis-à-vis Israeli ships. This act was construed as a heavy blow to the UNSG and his efforts.<sup>19</sup>

On the operational level, Egypt reiterated that it would require all vessels approaching the Canal to identify themselves. In addition, it demanded far-reaching declarations from their captains with respect to their designated destination.<sup>20</sup>

### *External Pressures*

Renewed anxiety was felt among the Western powers regarding possible Israeli actions that, it was feared, would hinder free movement in the Canal at the very least.<sup>21</sup> Although Israel told the United States that according to Hammarskjöld, Nasser's resolute opposition to Israeli passage through the Canal did not pertain to Israeli cargo under other flags. By the end of April, Secretary of State Dulles hurriedly proposed that Israel refrain from shipping Israeli cargo at all; other countries applied

similar pressure.<sup>22</sup> Still, as tensions regarding the Canal remained too great to be calmed by mere informal indications, the United States was led to attempt creation of a potential modus vivendi between Israel and Egypt regarding the Canal.

Senior US State Department as well as Israeli officials vouched that during the Cairo conversations, Nasser had expressed his intentions only regarding ships carrying the Israeli flag as opposed to the transport of cargo. US officials also recalled that upon his return from talks with Nasser in April, John McCloy, the US emissary to Cairo, had been impressed that “Egypt won’t stop cargo bound for Israel through the Canal with flags other than Israel – even carrying oil.”<sup>23</sup>

Accordingly, a number of days after McCloy’s return to Washington, a senior State Department official commented to Shimshon Arad, an Israeli diplomat, that the Canal’s closure to Israeli traffic ran counter to the US position. However, he stressed, “that’s reality” and speculated aloud: “Let’s say that the passage of Israeli cargo on foreign ships doesn’t encounter difficulties from the Egyptians – do you think that it will be possible to make some kind of deal?”<sup>24</sup>

### *Israeli Policy Formation, April–June 1957*

Parallel to its confrontations with Western powers and the UN, Israel’s political elite pondered the question of sending an Israeli test ship. Should Israel decide to go ahead with the plan, the question then arose as to whether its leaders should content themselves with the passage of merchandise under a foreign flag or, following statements made after the Suez War, demand free passage for ships flying the Israeli flag.

Israel’s decision to send a test ship had, in fact, already been made before the Egyptian Suez Canal Declaration and before any indication of the Western powers’ stance on the issue had become public. The only question that remained was the move’s timing.

Yet, after the picture cleared (i.e., publication of the official Egyptian Suez Canal Declaration and announcement of the stances to be taken by the Western powers) and external pressures mounted at the end of April, Israel began to vacillate. In a Knesset Foreign Affairs and Defense Committee (FADC) meeting held on April 30, a debate took place between doves who surmised that current circumstances were unfavorable to sending a ship through the Canal and hawks who proposed that Israel threaten to mine the Canal if its ships were not granted free

passage. Golda Meir, Israel's Foreign Minister, closed the discussion by dismissing the hawks' proposals, noting that "there is no doubt that the response can only be diplomatic."<sup>25</sup>

Thus, senior officials in the Israeli Ministry of Foreign Affairs (MFA) had agreed that Israel should focus on obtaining passage of "'prohibited' cargo on an American ship" or, at least, on a ship under the flag of a state that was not a party to the Constantinople Convention.<sup>26</sup> Meir was briefed about the options entailed with "the test of Israel's rights": (a) the passage of a ship under an Israeli flag, and (b) the passage of "prohibited" cargo on foreign ships. In any case, the briefing paper concluded, "after the seizure of the Israeli ship, the matter would eventually end up at The Hague [i.e., before the International Court of Justice]."<sup>27</sup>

At the beginning of June 1957, it was already clear that the prevailing opinion was inclined toward a commercial solution, that is, the use of foreign vessels carrying Israeli cargo. Yet, disagreement continued in the MFA over the feasibility of shipping prohibited Israeli cargo in a foreign vessel. After reviewing a list of political (that is, non-military options), Israel chose what it termed "the decision for a staged test." This test was described by Israel's Ministry of Foreign Affairs as follows: "The government's decision ... is that we shall begin with a foreign flag vessel carrying cargo, among which will be [goods] which appear on the list of prohibited cargo."<sup>28</sup> Before turning to the decision's execution, however, we shall examine the main difficulty lurking behind it, which explains the lengthy period of time required to take this decision.

### *Linkage and the Israeli Political-Legal Quagmire*

It is impossible to understand Israeli politics at the time without considering the quagmire in which Israel found itself. The source of this quagmire was the perceived linkage between the question of passage in the Canal and the question of passage in the Straits of Tiran. It was clear to Israeli decision-makers that the struggle over freedom of passage in the Canal—hopeless though it may be—was intended to prevent future confrontations over passage through the Straits of Tiran.<sup>29</sup> Israel did declare blockage of the Straits to be a *casus belli*. Yet, despite this outward stance, Israel busied itself with reaching achievements on the ground, such as a steady flow of shipping to and from Eilat, Israel's southern-most port, and recruiting international support, especially from the United States, in

recognition of this fact. Israel thus had an interest in creating a new crisis by threatening to send a test ship and following through on that threat.

At the same time, Israel understood that because of its inability to solve the problem with military force exclusively, it had only one other recourse: the International Court of Justice (ICJ). Still, the linkage between the freedom of passage in the Canal and in the Straits of Tiran meant that every decision regarding freedom of passage would have ramifications on the status of the Straits. That is, a defeat on legal grounds in the case of the Canal would undermine the second achievement, which was declared a *casus belli*: freedom of passage in the Straits.

It is not surprising, then, to discover that Israel was preoccupied with predicting the ICJ's ruling on the matter of the Canal as well as the question of whether it was possible to limit the legal debate to that site. In fact, as Golda Meir announced to members of the FADC: "We don't want this matter to arrive at the Hague, neither the Straits nor the Suez matter."<sup>30</sup> Egypt nonetheless signaled that it had no objection to litigation. The US State Department documents teach us that Hammarskjöld understood from Fawzi that Egypt considered resorting to the ICJ an elegant way of resolving the problem. Such a path would free Egypt from taking any initiative or directly agreeing to Israeli passage; it merely would have to obey the ICJ's ruling.<sup>31</sup>

Israel explained its opposition to bringing the issue before the ICJ in these terms: Israel objected to an ICJ hearing "not from the standpoint of our case not being just and supported, rather that bringing the matter to the Hague is likely to obscure and distort our clear rights."<sup>32</sup> Not only did Israel sense that Hammarskjöld and the United States were both interested in bringing the issue before the ICJ, it was also experiencing growing anxiety surrounding King Saud's newfound interest, encouraged by Nasser, in Israeli traffic passing through the Straits.<sup>33</sup>

### *Applying the Chosen Political Course*

In an attempt to escape from the aforementioned quagmire, Israel finally decided upon "a test in stages." The MFA energetically applied itself to carrying out the decision.

In July 1957, Jerusalem reported to its delegates in the United States that it was Israel's intention to pass through the Canal in the near future. A number of foreign ships were chartered by Zim, Israel's national shipping company, although their manifests listed them as rented to "Middle

East Agencies, New York.” It was explicitly pointed out that they were slated to arrive at Israeli ports. On July 22, 1957, eight months after the conclusion of the Suez Campaign, a second vessel, the Danish ship *Birgitta Toft*, served as the actual test ship for regular cargo as it passed through the Canal on its way to Haifa from Burma. Israel braced itself for a fierce diplomatic struggle should the cargo be confiscated. However, as the American emissary McCloy had hinted, “Egypt turned a blind eye” and the ship was not detained. The fact that Rafi Ayalon, a sailor holding Israeli citizenship, was removed from the ship and arrested by the Egyptians testifies that they were fully aware of the ship’s passage and cargo.<sup>34</sup>

A week later, another ship, loaded with cargo from Haifa yet this time bearing an Italian flag, passed through the Canal in the opposite direction. The first test had been passed successfully and it appeared that a tacit understanding had been put into practice.

### OPERATION OF THE “TACIT UNDERSTANDING,” JULY 1957–MARCH 1959

It now remained for Israel to carry out the next step of its decision: the transfer of “contraband” cargoes through the Canal.

#### *Passage of Contraband Cargo*

Israel’s Foreign Ministry was soon requested to carry out “stage two” of its probe of Egyptian intentions. Two conditions were to be met by the move: (a) the goods chosen would be among those the Egyptians regularly confiscated, excluding oil; (b) the ship chosen would bear the flag of an acknowledged maritime power.<sup>35</sup> It appeared that calcium carbide was the only substance capable of complying with the conditions of the planned test. Therefore, in a special effort to try and implement “stage two,” 200 tons of the compound was loaded on the *Hobed*, a Norwegian ship chartered by Zim, originally meant to transport fish from South Africa to Israel.<sup>36</sup>

However, the August 1957 attempt failed, and the ship departed without carrying the test substance. An unanticipated obstacle had arisen: the Norwegian captain had refused to load the calcium carbide together with the original main cargo (fish). In any case, Egypt made a show of

force by detaining the ship for a short time. Israel, on its part, hurried to submit a complaint to the President of the UNSC.<sup>37</sup>

What is surprising is that the attempt to carry through stage two was never repeated, and the plan remained in abeyance. It has since become clear that preparations were being made to execute the third stage—passage of ships under an Israeli flag—parallel to the attempted implementation of stage two.

### *Passage of Ships Under the Israeli Flag*

It appears that Israel's Foreign Ministry had located and rented a local ship, the *Halkis*, that was suitable for the final stage of the test of Egyptian intentions. However, at this stage, another mishap occurred: the ship went aground in Port Massawa, Ethiopia. The extent of the damage forced Israel to sell the vessel forthwith.<sup>38</sup>

Two factors apparently explain the cessation in attempts to execute the second and third stages: (a) the understanding that seizure of a ship and confiscation of its prohibited cargo would eventually lead to a petition to the ICJ; and (b) such a step would risk Israel's only tangible accomplishment thus far—free passage of routine cargoes. As routine cargoes comprised the principal cargoes passing through the Canal to and from Israel, practical and economic considerations prevailed over the political ones (declared free passage for Israeli vessels) that were, as explained, rather problematic.

In effect, the main “prohibited” cargo that Israel sought to ship through the Canal was oil from Iran, usually arriving in Eilat and shipped north from there. If tankers could arrive directly at the northern port of Haifa, a route possible only through the canal, Israel might reap substantial savings. It was nonetheless felt that the capture of a ship and the event's repercussions would undermine Iran's willingness to continue to supply Israel with oil.<sup>39</sup>

Israel, then, could not allow itself to create additional friction—further to the Suez Canal controversy—which might arouse the ire of the international actors on the scene, especially the UNSG. The political context was especially tense as a result of two vitriolic incidents that required Israel to recruit massive international support. The first involved the September 1957 Egyptian seizure of an Israeli fishing vessel, the *Doron*, some 50 kms from the Egyptian coast. However, by the time the crew was released, the “tacit arrangement” regarding the transport of routine cargoes had



already come into effect. An attempt to transport prohibited cargo at this time would have been perceived as an Israeli violation of the *modus vivendi*. The second incident was the arrest of an Israeli sailor on a Dutch ship passing through the Canal and Egypt's subsequent refusal to free him.<sup>40</sup>

In December 1957, Pinhas Sapir, Israel's Minister of Commerce and Industry happily wrote a letter to Ben Gurion attesting to the power of the tacit understanding: "You may be interested to hear that ships are navigating back and forth through the Suez to Haifa without any delays – not even a single day due to the censorship placed on this issue in the press."<sup>41</sup> By March 1959, the IMFA was able to inform its diplomatic staff that 41 ships carrying cargo to and from Israel had passed through the Canal as of July 1957, some even chartered by Israeli companies.<sup>42</sup>

### THE COLLAPSE OF THE "TACIT UNDERSTANDING" AND ISRAEL'S FAILURE TO RESTORE IT, MARCH 1959–JUNE 1960

On February 26, 1959, the Egyptians suddenly detained the Liberian vessel *Capetan Manolis*, en route to the Far East from Haifa.<sup>43</sup> Like many vessels in those days, the *Capetan Manolis*, had been chartered by a company acting as a cover for Zim. The vessel's "routine cargo" was confiscated on the claim that the enemy merchandise had been captured in territorial waters.

Israel reasoned at first that a "technicality" was at issue; hence, it proceeded to turn to the UN Secretariat for clarification of the matter while it requested the behind-the-scenes intervention of Ceylon, Liberia, and the United States.<sup>44</sup> Yet, on March 17, before the Secretariat had managed to respond to the request, the Egyptians confiscated Israeli goods on board the West German vessel *Lealott*, en route to the Far East, which had likewise been chartered undercover by Zim.<sup>45</sup>

This second incident made it clear that something had changed; the violation together with the existence of the "tacit arrangement" was now made public. Israel submitted an initial complaint to the UNSC on the same day, emphasizing Israel's continued right to take such steps as it saw fit, and details on the incident were forwarded to the local media.<sup>46</sup>

Hammarskjöld, who had already fired off a protest to Cairo, applied urgently to Fawzi for a rapid and satisfactory response and proposed

a meeting to be held in Geneva in May. Fawzi did not reply to the message.<sup>47</sup>

In Jerusalem, it was reasoned that the Egyptians would not inflate the violation of the “tacit understanding” because if it did so, it would likely be forced to retreat. That is, Israel believed that Egypt had made a limited probe to test the reactions of the international community. Therefore, this line of reasoning continued, high-pressure tactics from the international community would in all probability move Cairo to alter its position.<sup>48</sup> Israeli pressure nonetheless drew varied responses.<sup>49</sup>

To Israel’s satisfaction, two ships chartered by Zim passed through the Canal a week later. Based on messages from the United States, Israel believed that the diplomatic pressure initiated had borne fruit. Yet, on the declarative level, Egypt maintained that cargo to and from Israel would not pass through the Canal and stood by its refusal to turn over the cargo confiscated from the first two vessels halted. Bunche’s trip to Cairo (April 20, 1959), meant to deal with the problem, failed; the subject would come up again in a meeting between Bunche, Hammarskjöld, and Fawzi only two weeks later (May 9, 1959) in Switzerland. During the meeting Fawzi justified the ships’ detention on the grounds that “going so far as to charter ships was ‘cheating’ around Egyptian policy.” He clarified that “there has been no change in UAR policy or attitude concerning the passage of Israeli cargo through the Canal. But my government is elaborating the details of this policy and these will be put on the table.” However, although Fawzi refused to say how this policy would be translated in practice, his meeting partners became quite optimistic. As Bunche informed Israel few days afterward, he and Hammarskjöld “do not expect the impounding of cargoes in future.”<sup>50</sup>

To demonstrate that the passage of the two previously mentioned vessels was unexceptional and that the international pressure had done its part, Israel decided to send another Danish vessel, the *Inge Toft*, through the Canal. An additional incentive driving this decision was the fact that the International Bank for Reconstructing and Development (IBRD) was discussing an Egyptian request for a loan in order to widen the Canal. Israel reasoned that if the Egyptians allowed passage of this well-publicized ship through the Canal, they would achieve their aim. Conversely, if the Egyptians confiscated the cargo, it would embarrass the UN and provoke the wrath of the Western powers, which would act to deny Egypt the loan; Israel would again emerge with benefits.<sup>51</sup>

Upon arrival at the Canal on May 21 with its “regular” cargo, the *Inge Toft* was indeed detained; Egypt informed Denmark that the cargo would be confiscated. However, as the captain refused to unload the cargo, the vessel remained in Port Said for most of the next nine months. However, before exploring Israel’s response, we should add that the Egyptian reasons for this violation are yet to be revealed.

As such, and in the absence of clear information, we can only assume that a combination of reasons, primarily the establishment of the union between Egypt and Syria the previous year, had inspired the Egyptians to act. The union increased feelings of security among the Egyptians and fed their daring. They apparently believed that Israel would be prevented from responding militarily to any violation of the tacit understanding.

### *Israel’s Response After the Detention of the Inge Toft*

A storm subsequently broke out in Israel; the Knesset convened on July 3, 1957, to discuss the problem under the banner “the Egyptian’s piracy.” The opposition attacked the government for what was perceived as a humiliation. Prime Minister David Ben Gurion, nonetheless responded that “this matter affects not only Israel, but all the world ... **we won’t respond to this by war.**”<sup>52</sup>

### *The Legal and Diplomatic Struggle*

An overt diplomatic and legal struggle broke out in the aftermath. In addition to the standard justifications for the closure of the Canal to Israel, Egypt now claimed that maritime law allowed for the confiscation of Israeli goods, and the authorities had taken pains not to damage the rest of the cargo or the vessels themselves. Moreover, these actions against “Israeli schemes” (i.e., a fraudulent flag and concealment of the goods’ owners) were necessary to prevent collapse of the Arab boycott. Yet, as before, on the legal level, the problem of “linkage” remained, provoking Israel to seek to prevent the matter from coming before the ICJ, contrary to Hammarskjöld’s wishes.<sup>53</sup> On the diplomatic level, it became clear that Israel ought not to pin its hopes on the Western powers because Nasser was involved in a virulent anti-Soviet polemic in the media, and the Western powers therefore refrained from provoking him.<sup>54</sup>

Therefore, Israeli as well as international pressure from Israel’s friends was directed at Hammarskjöld who, after a number of failed attempts

to dissuade the Egyptians to alter their stance, was compelled to depart for Cairo at the end of July in an attempt to straighten out the misunderstandings with Nasser.<sup>55</sup>

### *Military Response*

While Hammarskjöld was arranging the final details for his visit to Egypt, Israel considered a limited military response. In Jerusalem, as reported to its delegates in Washington, frustration and anger prevailed. The prime minister was looking for “a strike against Egypt that would not escalate into war, that would arouse second thoughts on the matter of their policy in the Suez, and that would in any case set the Western powers in motion regarding Cairo.” Following a series of policymaking discussions, the capture of every ship sailing between Egypt and Syria (at the time, the two states acted as one political unit, the United Arab Republic) was selected among the options raised. However, it appears that knowledge of Hammarskjöld’s intention to travel to Cairo, and the realization that any type of military activity would cause automatic failure of his visit, led to abandonment of the military option.<sup>56</sup>

### *Hammarskjöld’s Compromise: The “Effective Stand”*

Hammarskjöld arrived in Cairo in July 1959 to find a way to restore the situation that had prevailed as of 1957–1958. After he failed to change the Egyptian attitude, the Israeli diplomat Michael Comay claimed that “he proposed a shrewd formula that would enable him to save face.”<sup>57</sup> The arrangement agreed upon with Fawzi on July 2, 1959, what Hammarskjöld later termed “the effective stand,” cargo destined for Israel (imports) would be sent C.I.F. (i.e., Cost, Insurance, and Freight), meaning that they would be under the ownership of the vendor until they arrived in Israel, whereas Israeli cargo (exports) would be sent F.O.B. (Free on Board), that is, the goods would be under the ownership of the purchaser from the moment of their loading onto the vessel.<sup>58</sup>

From a legal standpoint, this “classification” implied that the goods on board a vessel would not be the property of Israel at any time while being transported through the Canal, irrespective of the direction of transit. The rationale behind this formula enabled Egypt to claim publicly that there was no Israeli cargo passing through the Canal. To satisfy the terms of its logic, two conditions were demanded by the Egyptians: (a) the shipments

would not be publicized; and (b) the arrangement would be a matter of “honest trade,” meaning “that no public exploitation of this position would be made” or, using US State Department parlance, “the Egyptians will not allow passage of vessels dispatched for political reasons.”<sup>59</sup>

This was a classic informal arrangement. Accordingly, when Israel requested some form of documentation in regards to the arrangement from Bunche in July 1959, the UN official replied: “Hammar skjöld had prohibited him from sending anything in print.”<sup>60</sup> Hammar skjöld himself wrote the following to Arthur Luria, the Israeli representative at the UN, on November 9, 1959: “I well know that you would prefer to have something in black on white, but that is what I cannot count on any more in this case than in the many, many other cases in which we have had to live as well as we can with pragmatic solutions never put in writing.”<sup>61</sup>

Now it remained for Hammar skjöld to obtain Israel’s agreement, which he had already attempted to secure in July 1959. When presenting the formula to Israel, he stated that he had “reason to believe that if Israel would agree ... the UAR authorities won’t interrupt the vessel.”<sup>62</sup> Israel, then considering sending a Norwegian vessel, the *Pronto*, empty of cargo through the Canal, received the proposal with reservations, based on negative legal opinions it had received.<sup>63</sup> The proposed arrangement was leaked to the Israeli press, which interpreted it as dealing a serious blow to Israeli trade with the Far East. In the absence of a fixed trade route between Israel and the Far East, there was no one that would be willing to buy Israeli goods F.O.B. or worry about their successive passage.<sup>64</sup>

On July 9, Israel announced that its initial response on the matter was unfavorable, and on the following day ordered the Norwegian vessel to pass through the Canal despite the pressure applied by the UNSG and the United States. However, the Egyptians allowed its passage without any hindrance because—according to Hammar skjöld’s interpretation—they were anxious about the West’s response.<sup>65</sup> Yet, although Ben Gurion saw the new arrangement (i.e., the effective stand) as “meaningless,” Israel continued to examine its actual significance while stressing that the state of secrecy was not acceptable.

On July 12, 1959, Israel decided to reject the arrangement and refrained from sending a ship to further test it (an experiment that earned the title “the quiet test” in Israel). The fear was that the successful passage of a vessel through the Canal would be enough to cause foreign actors to drop the matter. As mentioned above, Israel had a major interest in

keeping the matter high on the international agenda given the perceived linkage.<sup>66</sup>

In the following two months, Egypt tightened its stance on transport through the Canal. In response, Israel served a complaint to the President of the UNSC on August 31, 1959, that related to Egyptian Suez Canal policy in its entirety as of February 1959 and to the continued detention of the *Inge Toft*.<sup>67</sup> Yet, in his meeting with Golda Meir on September 30, Hammarskjöld declared that in his opinion, “the effective stand” was a temporary pragmatic step meant to earn time until it was possible “at least to return to the 1958 situation, when passage of Israeli cargo through the Canal was tacitly accepted.”<sup>68</sup> At the end of two weeks, Israel transmitted an official request for handling the affair to Hammarskjöld.

### THE LOAN FROM THE IBRD

Considering Israel’s understanding that the arrangement was uneconomical and that shipping exports FOB from Israel was artificial, its agreement to test the arrangement is quite surprising.<sup>69</sup> As it turned out, however, parallel to the hope that the proposed arrangement was to be a stopgap measure on the way to renewal of the tacit understandings of 1957–1958, Israel’s agreement was related to its desire to torpedo a pending Egyptian request for a loan from the IBRD to upgrade the Canal.<sup>70</sup>

After the Egyptians detained an Israeli ship for two days in October, Israel intensified its pressure on Hammarskjöld. Ministry of Foreign Affairs officials clarified that “matters are dragging on without an end [in sight]; in the meanwhile, the loan will be granted which will put an end to its being employed as a factor in the deliberations with the UAR.” Hammarskjöld replied that he harbored doubts as to “whether that had ever been a factor”<sup>71</sup> in this matter.

In contrast to the Western powers’ past policy of maintaining a low profile regarding passage of Israeli cargoes through the Canal, the anticipated necessity of voting favorably in the matter of the Egyptian loan caused concern given the negative international opinion generated in the wake of Nasser’s policy toward Israeli cargo. The main source of apprehension was the possibility Egypt’s confiscation of Israeli goods shipped through the Canal might come up for discussion at the same time.

As early as August 28, 1959, Selwyn Lloyd, the British Foreign Minister, had hurried to meet with US Secretary of State Christian Herter

in an attempt to forge an agreement on the issue. Should the above-mentioned situation arise, explained Lloyd, he anticipated a strong public backlash in Britain in which the government would find it difficult to explain why Nasser was being granted the loan. Herter clarified that should a discussion arise in the UN, they would make sure that there would be a postponement of the appointed time for the vote on the loan.<sup>72</sup> Eventually, the two governments decided to leave the question of the vote's timing to the President of the World Bank, Eugene R. Black.<sup>73</sup>

*"The Quiet Test": Testing the "Effective Stand" (the Astypalea)*

On November 23, 1959, Hammarskjöld replied to Israel's letter from October by clarifying that he saw the "effective stand" as a proposal for a transition period, which "one could usefully pass on the way back to the 1958 policy" and requested that quiet diplomacy be allowed to work.<sup>74</sup> On December 9, Avraham Harman, Israel's ambassador to the United States was informed that as long as Hammarskjöld's suggestion had not been implemented, it would be impossible to attempt to postpone granting the loan. Only two days later, Israel hurriedly informed Hammarskjöld and the State Department of the expected sailing of the Greek vessel *Astypalea* toward Port Said on her way to Djibouti in accordance with the supposedly new "effective stand" (its cargo of cement had been purchased F.O.B. in Israel by an Asmara firm under conditions of strict silence). The instructions to the Israeli mission to the UN came straight from the Foreign Minister who, in a highly classified telegram explained: "The object is to launch a political and information campaign on the eve of the World Bank's approval of the loan to Egypt, which is expected on the 21st, in a last attempt to foil that transaction."<sup>75</sup>

Hammarskjöld, who endorsed the step and expressed his belief that the cargo would pass unmolested, alerted Fawzi the next day (December 12) of Israel's intentions and impressed upon him that there would be no publicity involved.<sup>76</sup> Moreover, he urged Fawzi to ensure that "this first real test of the 'effective stand' formula went smoothly, with strict observation of the rules of the game on both sides." Surprisingly, Fawzi's deputy, Zolfikar Sabry, replied that secrecy had already been violated. Fawzi's evasion of a personal response as well as Sabry's reply enraged Hammarskjöld because, as he explained later to Fawzi, he saw it as a personal affront in light of his own declaration that the condition of secrecy had indeed been met by Israel.<sup>77</sup> In retrospect, it appears that the

Egyptians saw Hammarskjöld's announcement regarding the *Astypalea's* sailing as "an act of Israeli diplomacy by way of a third party."<sup>78</sup> On December 17, 1959, upon its clandestine arrival in Port Said, the *Astypalea* was detained despite Hammarskjöld's immediate request to Fawzi that Egypt honor its word.

While Israel imposed a news blackout in order to permit Hammarskjöld's and the United States to act in the matter, the Egyptians defended their actions in the media by claiming that Israel had sent the vessel with the intention of causing an incident so as to prevent Egypt from receiving the loan from the IBRD. Fawzi also noted that there were irregularities in the *Astypalea's* papers.<sup>79</sup> Yet, Nasser even denied the existence of any sort of arrangement between Fawzi and the UNSG pertaining to the passage of Israeli goods through the Canal.<sup>80</sup>

At first, Israel reasoned that detention of the *Astypalea* was a diplomatic stroke.<sup>81</sup> However, the following day, on December 21, despite the initial optimism, the \$56 million loan to Egypt was approved. due to, *inter alia*, the Bank President's belief, influenced by Hammarskjöld, that approval would enable a return to the understandings achieved in 1958.<sup>82</sup>

In Israel, it was felt that it had come out with the worst of all possible options; feelings were stormy.<sup>83</sup> Bunche, who has been requested by Israeli delegates to the UN to transmit to Hammarskjöld some paragraphs from Meir's planned address at the Knesset in advance, strongly urged Israel not to follow this tack (i.e., public attack) but to no avail.<sup>84</sup>

The spotlight was now turned on Hammarskjöld who, on the day of the loan's approval sent Fawzi a message explaining that he thought it would now be fitting for Egypt to allow the *Astypalea* to pass through the Canal. However, to his surprise, his request met with refusal, and he found himself, as did the President of the IBRD, in a state of embarrassment. His deputies agreed that "the attempt to restore the 1958 conditions in two stages has failed." They promised Israel on Hammarskjöld's behalf that they would keep demanding the ship's free passage.<sup>85</sup>

At first, Bunche was sent to Cairo to set the stage for the UNSG's visit. However, Egyptian policy had become more radicalized and Fawzi refused to see Bunche in the absence of Hammarskjöld. Thus, on January 20, 1960, Hammarskjöld arrived in Cairo for a last diplomatic effort on the subject in general and the *Astypalea's* release in particular. In his first conversation with Fawzi (January 21), the latter explained that from



the vessel's papers it had become apparent this was not in fact a F.O.B. transaction, meaning that the "effective stand" was not an issue. In addition, Fawzi pointed out that the timing of the attempt was "just as the [World] Bank was about to act on the loan to the UAR for the Canal." He thus clarified that for Egypt, this action was intended to block the loan's approval. In response to Hammarskjöld's question as to whether the vessel would be allowed to pass should it turn out that the papers were in order, Fawzi replied that it "might," even though there was a lot of "buzz" over the issue in the Arab countries.

In Hammarskjöld's conversation with Nasser later on the same day, Nasser attempted to link the issue to the Palestinian problem. As to the *Astypalea*, he was angry over a message that had been passed on to him according to which Hammarskjöld had, for the first time, cast doubt on Egypt's good faith. In his opinion, Egypt had not broken its word because "in the first place, there was no agreement, as often alleged." And he had refrained from publicly declaring that merely to avoid embarrassing the UNSG. Second, Israel had rejected the "effective stand" in a declaration on August 26, 1959, which was published in all the Arab countries and was very embarrassing to the UAR. Third, the timing proved that this was not honest trade but a deliberate test designed to "embarrass the UAR's application to the bank for the Canal loan."<sup>86</sup>

The next day, Hammarskjöld left Cairo angrily and Nasser rushed to announce that no agreement had been reached regarding the passage of Israeli cargo through the Canal, that there never was such an agreement, and that the two ships, the *Inge Toft* and the *Astypalea*, would be allowed to pass only after their cargo had been confiscated.<sup>87</sup>

When Israel sent an informal representative to Hammarskjöld to make threatening allusions to an offensive operation, the UNSG himself made use of this channel to clarify that he was not completely gullible and that he well knew what was behind the ship's mission.<sup>88</sup> Furthermore, in his formal meeting with Israeli representatives in the UN on February 3, 1960, Hammarskjöld suddenly claimed that "there [had] never been any agreement in the technical sense of the word between President Nasser and myself – neither an open nor a clandestine one – but simply an indication of the conditions under which goods of Israeli origin might pass through the Canal." Hence, he refused to publicly condemn Egypt's actions.<sup>89</sup>

### THE INGE TOFT AFFAIR: CONCLUSION

Israel now understood that there was no further benefit to be gained in berthing the vessel in Port Said, especially given her owners' desire to discharge her cargo in order to complete urgent repairs. However, not only did the Egyptians confiscate the cargo and force the owner to pay for its unloading—despite early guarantees to Hammarskjöld to the contrary—the empty ship was prevented from sailing southward on February 14 and forced to turn back to Haifa. Israel did not react because of concern that publicizing it would lead the Egyptians to prevent the passage of ships without cargo from Israel in the future.<sup>90</sup> Yet, violating their guarantees initiated a turnabout in relations between Hammarskjöld and Egypt. Bunche explained explicitly to Israeli representatives that it was likely that Hammarskjöld would break off relations with Nasser over this issue.<sup>91</sup>

### CONTINUATION OF THE DIPLOMATIC STRUGGLE: THE ATTEMPT TO RELEASE THE *ASTYPALEA*

In Israel it was decided that although there was no point in pinning hopes on Hammarskjöld's efforts, it was necessary to continue the diplomatic campaign. However, Israel attempted to prevent the subject from coming up in the UNSC, which could put the final nail in the coffin of diplomatic activity and send the issue to the ICJ.<sup>92</sup> Therefore, it was now decided to abide by Hammarskjöld's request to fetch him *Astypalea's* papers even while still rejecting the necessity of this requirement—the declared reason behind the delay. However, the Egyptians tarried in checking the papers. When, in March 1960, its charter of the vessel was about to expire, Israel turned to Hammarskjöld for the last time to ensure that *Astypalea* was allowed to depart southward forthwith.<sup>93</sup> Hammarskjöld explained that at this point the subject had become a test of prestige. At the same time, however, he emphasized that he could not “draw conclusions that there was no possibility of arriving at a *modus vivendi*” and that he intended to continue to be active in the matter.<sup>94</sup>

Now prevented from initiating any diplomatic activity yet still obliged to return the *Astypalea* to its Greek owners by April 9, 1960, only two possible directions remained open to Israel: achievement of propaganda gains and a military response.

### *Propaganda Gains*

Israel now busied itself with a publicity campaign centered on the unloading and confiscation of the cargo on April 8, 1960, which forced Hammarskjöld to announce that the Egyptian action was contrary to UN principles.<sup>95</sup> Eventually, the success of the publicity campaign, as Hammarskjöld told Blaustein, had, temporarily at least, shut the door on the possibility of Israeli passage through the Canal.<sup>96</sup>

### *Military Response*

As in the *Inge Tuft* affair, detention of the *Astypalea* aroused voices calling for a military response. In a stormy Knesset debate held on December 22, 1959, it was even proposed “to block the Suez Canal.”<sup>97</sup>

Indeed, to all appearances, after unloading of the *Astypalea*'s cargo in April, it was decided to put into effect the proposal to “block the Canal.” In an attempt to do so, Israel had planned to sink an Egyptian military transport that departed on a set course twice monthly from Alexandria to Egyptian military bases at the southern end of the Canal. The plan was aborted,<sup>98</sup> almost certainly for political reasons related to factors linked to the cornerstone of relations between the two countries: a common aversion to war.

## FINALE

After the *Astypalea*, Israel desisted from its efforts to change Egypt's stance and developed the Port of Eilat as the alternative outlet for commercial trade with East Africa and the Far East.<sup>99</sup> In fact, although there were still some instances in which Egypt confiscated mail and other goods destined for Israel in ships that passed through the Canal throughout 1961, Israel had ceased, in principle, to channel shipping through the Canal.<sup>100</sup> During secret negotiations held between the two countries in 1965–1966, Israel requested the reinstatement of the 1958 understanding. When the Egyptians replied that significant obstacles stood in the way of carrying out this request—“the Canal was tied to the Arab boycott, in which other countries participated”—Meir Amit, then head of the Mossad, responded in a manner reflecting the pattern of the two countries' relationship at the time: “If you really want to, you can find an acceptable formula.”<sup>101</sup>

## CONCLUSION

The arrangement reached through third-party brokerage on the matter of the passage of Israeli goods through the Suez Canal following the Suez War provides a classic example of situations that require tacit understandings. The Egyptians were unable to tell Hammarskjöld explicitly that they would agree to Israeli use of the Canal, especially with Israeli vessels, for fear of appearing to submit to Israeli dictates. At most, Nasser was willing to consider a tacit understanding, with Israel's cooperation needed to preserve its secrecy. Such a covert agreement would enable Nasser to claim that he was blocking the passage of Israeli cargo through the Canal. This claim was a critical component in the preservation of his prestige against the background of Saudi Arabian and Jordanian objections to his allowing Israeli ships free passage in the Straits of Tiran and the UNEF presence in Egyptian territory. Accordingly, this understanding made possible the transport of goods and the neutralization of an explosive political situation from Nasser's perspective—a fact clear to all sides.

These details illuminate the formation of the “tacit understanding” attained. Nonetheless, Nasser's disavowal of that understanding still requires interpretation. Indeed, in the absence of official Egyptian documents or Nasser's personal files, the reason for Nasser's decision remains shrouded. It would be reasonable to assume that in his view, the unification with Syria, begun a year earlier, carried significant weight and substantially augmented Egypt's strength. Therefore, it appears that Nasser felt his challenge of this fragile tacit understanding was opportune, convinced as he was that it would not drag Egypt into another war with Israel.

It is no less interesting to make note of the Israeli response. In the first instance, knowledge of Hammarskjöld's plans to arrive in Cairo and the awareness that any military activity would be considered responsible for the failure of his diplomatic endeavors, Israel refrained from initiating any offensive action. However, in the second instance, after the failure of Hammarskjöld's arrangement (“the effective stand”), the political leadership continued to avoid military action. From the perspective of costs and benefits, there was, indeed, no room for any military operation. Not only were the chances for reviving prior arrangements regarding commercial cargoes—primarily freedom of passage—nil, but the blocking of the Suez would have aroused the wrath of Western capitals and the UN. In addition, any offensive action focusing on the Canal, such as the one planned

by Israel, could have constituted a genuine risk to the fragile relationship maintained between the two countries during that period.<sup>102</sup> The two adversaries shared nothing other than a common interest, however limited, in avoiding the sole possible outcome of non-collaboration: war.

In September 1975, following the 1973 War, both states signed The Sinai Interim Agreement allowing free passage of “non-military cargoes destined for or coming from Israel.”<sup>103</sup> On April 30, only five days after the 1979 Egyptian-Israeli Peace Treaty went into effect, the first Israeli cargo ship, *Ashdod*, passed through the Canal.<sup>104</sup> A few months later, in December 1979, the first Israeli Navy ship, *Tarshish*, passed through the Canal with Rear Admiral Zeev Almog, then the Navy’s Commander in Chief, on board.<sup>105</sup>

## NOTES

1. Raymond Cohen, for instance, defined a tacit understanding as: “an understanding contained neither in a written document, nor in an explicit verbal promise, nor even in the spirit of a written agreement.” See Raymond Cohen, “Rules of the Game in International Politics,” *International Studies Quarterly* 24, no.1 (March 1980): 142.
2. See Ruth Lapidot, “Hofash Hasiel Betalat Suoets” [Freedom of Navigation through the Suez Canal], *Hapraklit* 24 (1968): 33 [In Hebrew].
3. For the Israeli complaint see UN Depository Libraries, S/2241, July 12, 1951 (unless otherwise stated, all the UN documents mentioned here are available in the Depository Libraries). For the UNSC Res. 95, see S/2322, September 1, 1950.
4. In practice, there was no case of confiscation of Israeli exports goods because no goods were exported to the Far East before the 1956 War. See Israel State Archive (hereinafter ISA), Knesset Foreign Affairs and Defense Committee (hereinafter FADC), A/7566, File No. 8, Protocol 32/D, July 14, 1959, p. 8.
5. For the draft, see S/3188.
6. Avner Yaniv, *Politikah ve-astategyah be-Yisra’el* [Politics and Strategy in Israel] (Tel-Aviv: Sifriat Hapoalim, 1994), 63.
7. For instance, as Israeli Prime Minister and Defense Minister, Ben Gurion had declared to his Cabinet on March 3, 1955: “We would not be able to navigate through the Suez [Canal] by force. Our attempts would fail.” A week later he mentioned that: “In my opinion, there is nothing we can do in the Suez matter.” Cabinet meetings, March 3, 1955 and March 10, 1955, respectively. Ben Gurion Archives (Ben Gurion Research Center, Sedeh Boker), Cabinet Meeting file.

8. See David Ben Gurion, *Diary* (Givatayim: The Israel Military and Defense Establishment Archives) [hereinafter IMDEA], entry for November 11, 1956 (hereinafter, BGD and date).
9. See Mordechai Bar-On, *The Gates of Gaza: Israel's Road to Suez and Back, 1955-1957* (New York: St. Martin's, 1994), 292.
10. Israel's activities regarding this demand became more strident only after Israel had resolved its other problems, such as freedom of navigation through the Straits of Tiran. See FADC A/7565, File No. 6, Protocol 17/B, February 5, 1957.
11. Eisenhower D. Dwight, *Waging Peace, 1956-1961* (New York: Doubleday, 1965), 188.
12. For Nasser's promise, see the UNSG's report to the UNEF's Advisory Committee. *UN Archive*, S-0316-002-4 Advisory Committee, 24th Meeting, Minutes (March 16, 1957), 2. For his declaration see Abba Eban, *The Diplomatic Battle in the United Nations and the United States in the Aftermath of the Suez Operation, October 1956-March 1957*, vol. II, annex I (Washington: June 1957), 7 (Heb.). Unpublished manuscript, ISA, Foreign Office Files (hereinafter FO) 2458/18-19.
13. See Eban, *The Diplomatic Battle*, 318; *Foreign Relations of the United States* (hereinafter: *FRUS*), 1955-1957, vol. XVII, *the Arab-Israeli Dispute, 1957* (Washington, DC: United States Government Printing Office, 1990), no. 208. An additional request that Israel temporarily refrain from sending test vessels arrived from France, then Israel's closest ally. See ISA, FADC A/7565, File No. 7, Protocol 24/B (March 13, 1957), 26.
14. Brian E. Urquhart, *Hammar skjöld* (London: Harper & Row, 1972), 219. See also *FRUS*, 1955-1957, vol. xvii, no. 252.
15. For Hammar skjöld's view on this issue see Advisory Committee, 29th Meeting, Minutes, April 15, 1957, 21, *UN Archive*, S-0316-002-7.
16. For the warning's version, see Urquhart, *Hammar skjöld*, 223.
17. Radio Cairo repeated this announcement after a few days. See "Egyptian Declarations on the State of War with Israel," Letter, Yosef Tekoah, Director for Armistice Affairs at the MFO, to the Foreign Minister's Bureau, Jerusalem, May 7, 1957, ISA, FO 3112/7.
18. For the US request, see S/3817/rev.1, April 24, 1957. For the declaration, see *Declaration on the Suez Canal and the Arrangements for Its Operation, 1957*, *United Nations Treaty Series*, vol. 265, 300.
19. See "Constantinople Convention Respecting Free Navigation of the Suez Maritime Canal, 1888," *American Journal of International Law*, Supp., 123 (1909): 3. On the "heavy blow to Hammar skjöld," see Urquhart, *Hammar skjöld*, 224.

20. ISA, FO 3112/8, vol. III. For the new demands from chartered ships see Telegram, Ministry of Foreign Affairs, Jerusalem (hereinafter: Jerusalem), to Yaacov Herzog, June 4, 1957, ISA, FO 3112/7, vol. II.
21. The US, for instance, hinted to Israel that in light of the ongoing negotiations between Nasser and the Suez Canal Company that had managed the Canal until its nationalization by Nasser, raising Israeli concerns was "likely only to do damage" to possibilities for concluding the talks. See Israeli embassy in the US (hereinafter IsEmbassy, US) to Jerusalem, April 29, 1957, ISA, FO 3112/6, vol. I.
22. *FRUS*, vol. XVII, No. 264. For Dulles's advice and the involvement of additional states, see ISA, FADC A/7565, File No. 8, Protocol No. 27/b, April 30, 1957, 21.
23. For Israeli policy makers' awareness, see ISA, FADC A/7565, File no. 8, Protocol No. 27/b, April 30, 1957. For John McCloy's impression, see memo from Gideon Rafael to the Foreign Minister, July 15, 1957 ISA, FO 3112/7, vol. II. In fact, after his meeting with Hammarskjöld upon the latter's return from Cairo, Henry Cabot Lodge, Jr., the US Ambassador to the UN, recommended to his superiors that "Israel should therefore not introduce Israeli-flag vessels the moment the Canal opens, but should wait and see whether non-Israeli-flag vessels carrying Israeli cargo are allowed to pass." see *FRUS*, vol. XVII, no. 252.
24. Israeli Embassy, New York to Jerusalem, April 29, 1957, ISA, FO 3112/6, vol. I. The American official was identified as Samuel de Palma.
25. ISA, FADC's meeting A/7565, File no. 8, Protocol No. 27/b, April 30, 1957, 11–12.
26. Memo from M. Shneerson, Head of the British Commonwealth Division, to M. Gazit, Head of the Office of the Minister of Foreign Affairs, May 8, 1957, ISA, FO 3112/7, vol. II.
27. Memo from Gideon Rafael to the Foreign Minister, July 15, 1957, ISA, *ibid.*
28. For the complete statement see ISA, FADC's meeting A/7565, File no. 8, Protocol No. 29/b, June 18, 1957, 7.
29. Israeli embassies were briefed as follows: "the diplomatic struggle on the matter of the Suez constituted a first line of defense for freedom of passage through the Straits of Tiran." Telegram, Jerusalem to Israeli embassies, April 14, 1957, see ISA, FO 3112/6, vol. I.
30. ISA, FADC's meeting A/7565, File no. 8, Protocol No. 29/b, June 18, 1957, p. 8.
31. *FRUS*, Vol. XVII, No. 252. Infact, Egypt had already committed itself to accepting ICJ decisions in cases of differences with parties to the Constantinople Convention given Israel's non-party status regarding the agreement.

32. See memo of conversation between the Foreign Minister and Margaret Meagher, the Canadian representative in Israel, as cited in letter, Jerusalem to the Israel's Embassy in Canada, May 7, 1957, ISA, FO 3086/14.
33. For the Israeli concerns, see *ibid.* For the US approach regarding bringing to issue before the ICJ, see *FRUS*, Vol. XVII, No. 264. For the fears regarding Saudi Arabia, see letter, Gideon Rafael to the Foreign Minister's bureau, May 8, 1957, ISA, FO 3112/7, vol. II. As Rafael stressed in the wake of capture of an Israeli ship, Israeli restraint (i.e., a non-military response) "would be interpreted as his [Nasser's] victory and likely to influence King Saud, who would then flex his own muscles in the Straits of Tiran."
34. Ayalon himself was released after three weeks of detention at the Egypt-Israel border, thanks to Danish intervention. For an overview on this affair, see a report by M. Ben-Dov, ISA, FO 3112/19. Against the background of the special relationship created between the countries (the so-called limited security regime), it appears that the speedy return of the sailor was due to the blackout imposed by Israel over the entire affair.
35. See, e.g., Letter, Y. Alizor to the Foreign Minister's bureau, July 17, 1957, ISA, FO 3112/7, vol. II.
36. For the considerations leading to the choice of Hobed, see *ibid.*
37. For the detention and the complaint, see Telegram, Jerusalem to the Israeli Embassy in Norway, August 22, 1957, ISA, FO 3112/8, vol. III.
38. Letter, Jerusalem (Comay) to the Deputy Director-General of the Treasury Ministry, September 29, 1957, see ISA, *ibid.*
39. ISA, FADC's meeting A/7565, File no. 10, Protocol No. 37/b, August 27, 1957, 21–22.
40. Ben Gurion raised those issues during his conversation with the UNSG in the end of 1957. See IMDEA, IDF General Staff meetings No. 23/57, File No. 35, December 5, 1957.
41. Pinhas Sapir to the PM and Minister of Defense, David Ben Gurion, December 8, 1957 ISA, FO 3112/8, vol. III.
42. Telegram, Jerusalem (Comay) to the Israel's embassies, March 27, 1959 ISA, FO 3745/11.
43. A methodological comment: Although Egypt changed its name to the "United Arab Republic" (UAR) after its union with Syria in February 1958, we continue using the old name for simplicity.
44. Telegram, IsEmbassy US to Jerusalem, March 13, 1959, in ISA, *Documents on The Foreign Policy of Israel, 1958–1959*, vol. 13, *Companion Volume*, ed. Baruch Gilead (Jerusalem: State of Israel, 2001), no. 86 (hereinafter cited as ISA, Documents, 1958–1959).



45. Telegram, Jerusalem to Israel's embassies, March 17, 1959, ISA, Documents, 1958–1959, no. 87.
46. Ibid. For the complaint see S/4173, ISA, Documents, 1958–1959, main volume, appendix A.
47. Urquhart, *Hammar skjöld*, 302.
48. See exchange of letters in ISA, FO 3112/8, vol. III; see also ISA, Documents, 1958–1959, no. 88.
49. The United States told Egypt that it preferred not to raise the subject before the UNSC but if Israel insisted upon it, the United States would not object. Hammar skjöld, however, wished to refrain from a dramatic response due to his trepidation that Egypt would react by demanding removal of the UNEF. On US and UK involvement, see letter, Jerusalem to IsEmbassy US, March 23, 1959, ISA, FO 3112/8, vol. III. For Hammar skjöld's stance, see letter, Jerusalem to the Israeli mission in Italy, April 5, 1959. See ISA, FO 3112/8, vol. III. For the activities of other states such as Germany, Ceylon, Liberia, Switzerland, and Malaya, see ISA, Documents, 1958–1959, p. 69, note 5.
50. For the conversation's transcription, see UN Archive S-0370-0042-25. For his talk with Israel's representatives to the UN, see Israel mission to the UN to Jerusalem, May 13, 1959, ISA, Documents, 1958–59, no. 90.
51. See telegrams, Jerusalem to the Israeli Ambassador in The Hague, May 17, 1959, and Jerusalem to IsEmbassy US, May 18, 1959, ISA, FO 3112/8, vol. III.
52. Emphasis added. See *Divrei ha-Knesset* (hereinafter *DK*), vol. 28 (1959), 2151 (Heb). Documents uncovered only in 2003 show that on May 27, the PM had already come under attack in the Knesset's Foreign and Security Affairs Committee over the publicity surrounding the ship's mission. Surprisingly, Ben Gurion claimed that he had not known about it and blamed the media for publishing the item. He insisted that had he been consulted on this matter, he would have approved the mission. FADC, A/7566 File No. 7, Protocol, 26/D May 27, 1959, 12.
53. Telegram, Jerusalem to Israeli embassies, June 7, 1959, ISA, FO 3112/9, vol. IV. The perception of "linkage" was a major reason to avoid calling a UNSC session or holding a discussion in the UNGA. See FADC, A/7566 File No. 8, Protocol 34/D, August 6, 1959, 3–4.
54. Crosbie K. Sylvia, *A Tacit Alliance: France and Israel from Suez to the Six Day War* (Princeton, NJ: Princeton University Press, 1974), 143.
55. For *Hammar skjöld*'s efforts and letters to Fawzi dated June 4 and June 11, 1959, prior to his visit in Cairo see UN Archive S-0316-0011-7. Urquhart mentioned an additional letter, missing from the UN files; see Urquhart, *Hammar skjöld*, 303.

56. BGD, June 7, 1959. For the three offered options, see Letter, Jerusalem to IsEmbassy US, June 1, 1959, ISA, FO 3112/9, vol. IV. On July 14, one member of the FADC presented a legal construction enabling seizure of Egyptian vessels in the high seas while abiding by international law. FADC, A/7566 File No. 8, Protocol 32/D, July 14, 1959, 12.
57. Michael Comay, *UN Peace Keeping in the Israeli-Arab Conflict, 1948–1975: An Israeli Critique* (Jerusalem: The Leonard Davis Institute, 1976), 79. It is not clear, however, who proposed the formula as Fawzi had hinted about its existence in early talks with Bunche in April. Hammarskjöld, in any case, presented it as an Egyptian solution. Urquhart, *Hammarskjöld*, 304.
58. For the Egyptian consent to Hammarskjöld's offer, see minutes of the meeting between Fawzi and Hammarskjöld (with Bunche), January 21, 1960, UN Archive S-0370-0042-25.
59. Minutes of meeting between R. Bunche and A. Cordier with Israel's representatives to the UN, July 4, 1959. ISA, Documents, 1958–1959 (main volume), no. 95. For the US interpretation, see IsEmbassy in the US to Jerusalem, July 4, 1959, *ibid.*, (companion volume), no. 96.
60. Telegram, IsDel UN to Jerusalem, July 17, 1959. ISA, FO 3112/9, vol. IV.
61. See UN Archive S-0316-0011-7. See also ISA, Documents, 1958–1959 (main volume), no. 104.
62. See a transcript of the Foreign Minister's remarks, *DK 28* (1960): 175.
63. For Hammarskjöld's words as cited by the Israeli Foreign Minister, see *DK 28* (1960): 175. As some senior officials reasoned, "we mustn't speak about arrangements that we have to accept or reject because what is at issue is not an arrangement at all, since the Egyptians are determining all the facts" (see, e.g., letter to the General-Director by his Deputy, July 7, 1959, ISA, FO 3112/9, vol. IV).
64. See, e.g., *Ha'aretz*, July 9, 1959. For an elaboration of this point, see FADC, A/7566 File No. 8, Protocol 32/D, July 14, 1959, 3.
65. Telegram, Jerusalem to IsEmbassy US, July 13, 1959, ISA, Documents, 1958–1959, no. 98; Urquhart, *Hammarskjöld*, 304.
66. For a summary of the Israeli cabinet meeting on that issue see Telegram, Jerusalem to IsEmbassy US, July 13, 1959, ISA, Documents, 1958–1959, no. 98.
67. There was, however, no request to take up the matter. For the change in Egyptian policy, see letter, Arie Lapid to the Director-General, August 25, 1959, ISA, FO 3112/10, vol. VI. For the Israeli complaint, see S/4211; ISA, Documents, 1958–1959 (main volume), appendix B.
68. Urquhart, *Hammarskjöld*, 304.
69. Telegram from Jerusalem to IsEmbassy US, July 12, 1959, ISA, FO 3112/9, vol. IX. See also ISA, Documents, 1958–1959, no. 98, note 5.

70. Golda Meir articulated the position in August 1959: "the only scourge we have against Nasser, and even this is not absolute, is its negotiation with the IBRD." FADC, A/7566 File No. 8 Protocol 34/D, August 6, 1959, 6.
71. To Israel's position and Hammarskjöld's reply, see Telegram from the IsDel UN to Minister of Foreign Affairs, Jerusalem, November 10, 1959, ISA, FO 3112/11, vol. VI.
72. *FRUS*, 1958–1960, vol. XIII, *Arab-Israeli Dispute*, no. 89.
73. Black himself would covertly turn to Britain and the United States for guidance on how to negotiate the matter. *Ibid.*, no. 245.
74. For the letter see UN Archive S-0316-0011-7. See also ISA, Documents, 1958–1959, no. 107.
75. Telegram, Israeli Foreign Minister to IsDel UN, December 11, 1959, ISA, Documents, 1958–1959, no. 108.
76. For the announcement to Hammarskjöld and his reaction, see Urquhart, *Hammarskjöld*, 305; telegram, Comay to Jerusalem December 11, 1959, ISA, Documents, 1958–1959, no. 109.
77. Urquhart, *Hammarskjöld*, 305–6.
78. Minute of Hammarskjöld and Bunche's conversation with Fawzi and Nasser on January 21, 1960, UN Archive S-0370-0042-25.
79. The Egyptians later explained to Hammarskjöld that the papers revealed that the charter by Israel "had been done far too directly, the ship's bill of lading did not show that the cargo was F.O.B." and, finally, the buyer "was not entirely a non-Israeli." Telegram, IsDel UN to Jerusalem, February 3, 1960, ISA, *Documents on The Foreign Policy of Israel*, vol. 14, 1960, ed. Baruch Gilcead (Jerusalem: State of Israel, 1997), companion volume, no. 50 (hereinafter cited as ISA, Documents, 1960).
80. *Radio Cairo*, December 22, 1959; *A-Aharam*, December 21, 1959.
81. Telegram, IsDel UN to Jerusalem, December 20, 1959, ISA, FO 3112/11, vol. XI.
82. Urquhart, *Hammarskjöld*, 306.
83. A special discussion was held in the Knesset, during which Foreign Minister Meir vented her anger at Hammarskjöld and assigned him full responsibility for Egypt's policy and Israel's deception. See *DK*, vol. 28 (1960), 177.
84. See telegram, Bunche to Hammarskjöld, December 20, 1959, UN Archive S-0316-009-20.
85. Telegram, IsDel UN, December 30, 1959, ISA, Documents, 1958–1959, no. 108.
86. For the conversation's summary, see UN Archive S-0370-0042-25.
87. For Nasser's announcement, see Yitzhak Oron, ed., *Middle East Record*, 1960, vol. I (London: Weidenfeld & Nicolson, 1966), 39 (hereinafter *MER*, 1960).

88. See the report of the informal representative (Jacob Blaustein, honorary president of the American Jewish Committee) as cited in telegram, Tekoah to Jerusalem, February 11, 1960, ISA, Documents, 1960, no. 56.
89. The refusal also reflected his understanding of Israeli motives regarding the timing of the vessel's departure. For summary of the conversation, see UN Archive S-0370-0042-26.
90. For Fawzi's promise, see IsDel UN to Jerusalem, February 10, 1960, ISA, Documents, 1960, (main volume), no. 54.
91. *Ibid.*
92. See FADC, A/7566 File No. 9, Protocol 32/D, February 2, 1960, 36.
93. Telegram, Jerusalem to the IsDel UN, March 30, 1960, ISA, FO 2333/20.
94. IsDel UN to Jerusalem, March 31, 1960. ISA, Documents, 1960 (main vol.), no. 67.
95. See statement by the UNSG, New York, April 8, 1969, ISA, Documents, 1960 (main volume), no. 72.
96. Urquhart, *Hammar skjöld*, 308. The publicity campaign's success is borne out by behavior such as the April 13 refusal of New York harbor stevedores to unload cargo from the Egyptian passenger ship *Cleopatra*. The ship was delayed in the harbor for several weeks until US government involvement brought about its release. For a detailed description of the affair in New York, see *MER*, 1960, 41–45.
97. *DK*, vol. 28 (1960), 173.
98. Zemeret Nizia, "Yaacov'ala Cohen – An Actor on the Stage of Life" (Past Affair – The Operation of Sinking an Egyptian Ship in the Canal, 1960), *Bulletin of the Center for the Intelligence's Heritage* 12 (December 1995): 6–7 [In Hebrew].
99. In November 1960, Israel passed another message on the matter to the President of the SC but without a request for a discussion of the subject, *MER*, 1960, 40.
100. See, e.g., ISA, FO 3386/27 entitled "Australia – Confiscation of Bags of Mail by Egypt on Their Way from Australia to Israel."
101. Meir Amit, *Rosh Be-Rosh* [Head On] (Or Yehuda: Hed Arzi, 1999), 217.
102. This fragile structure still allowed for economic warfare, propaganda wars and even indirect war, as Israel proved by way of its involvement in the War in Yemen. See Yossi Melman, "Former Head of the Mossad Admits: Israel Has Intervened in the War in Yemen," *Ha'aretz*, February 21, 2000.
103. Interim Agreement between Israel and Egypt 4 September 1975. Art. VIII. <https://peacemaker.un.org/egyptisrael-interimagreement75> (accessed March 10, 2022).

104. "3 Israeli Navy Vessels Go Through the Suez Canal," *New York Times*, May 30, 1979, Sec. A, P. 3.
105. Ze'ev Almog, *Commander Flotilla 13: The Sails of My Life* (Or Yehuda: Kinneret, Zmora-Bitan, 2014), 1126.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



PART IV

---

Environmental and Human Impacts



# The Impact of the Suez Canal on Egypt's Geography and Economy, 1867–2019 (150 Years Since Its Opening)

*Arnon Soffer*

**Abstract** We assume in this article that the geographical location and special international role of the Suez Canal had and still has great potential for strengthening the Egyptian economy in general and for the development of the Canal area in particular. On the 150th anniversary of the inauguration of the Suez Canal, the article attempts to see if the potential has materialized, at least in part. We find that, despite the very large gap discovered between expectations and reality, there are achievements to point to: The Canal is an unusually important source of income for Egypt, the construction of the Canal led to the establishment of three major cities, in the three Canal cities, new industrial areas have been established, accompanied by modern infrastructure, along the cities, modern bridges and tunnels have been built that effectively connect the West and East banks of the Canal, and Egypt has invested tremendous efforts in agricultural development of all periphery areas. The Canal area has received special treatment. There is a new five-year plan for the development of

---

A. Soffer (✉)  
University of Haifa, Haifa, Israel  
e-mail: [soffer@geo.haifa.ac.il](mailto:soffer@geo.haifa.ac.il)

the area, a plan in which large investments are made in the area with high expectations.

**Keywords** Nile Valley · Fayum Depression · New Suez Canal · Urbanization

It was Herodotus, the Greek historian of the fifth century BC, who claimed that Egypt was the gift of the Nile and indeed, since the beginning of Egyptian history, more than 5000–6000 years ago, human settlement in Egypt took place near the Nile only. The Fayum Depression—an extensive area that developed west of the Nile Valley, is also, in fact, an extension of the valley, since it is lower than the Nile and water can be pumped to it using gravity alone. In order to leave the Nile Valley to the Sahara Plateaus it was necessary to bring up water from the Nile to higher areas, which was impossible before pumps were invented.

The construction of the Suez Canal in 1869 marked a change in the Egyptian settlement map, for the first time in thousands of years. Efforts have since continued to go beyond the Nile Valley and its delta into the desert, in a desperate attempt to catch up with Egypt's alimentary needs.

The completion of the Canal's construction, which took place little more than 150 years ago, was an event of international importance and even more, held great potential for the development of Egypt itself.

Large enterprises, both economic (such as refineries or steel mills) and cultural (such as the establishment of a special museum), attract a very large number of people—consumers and visitors. By this, these enterprises also become anchors for development and sometimes could even lead to the establishment of new cities.

The construction of the Suez Canal, which shortened the route between London and Bombay by 4450 km, was a mega-project and there were very high expectations that this enterprise would be followed by many additional projects.

To date, only some of these expectations have been fulfilled, and in this article, we will address the gap between expectations and reality.

## DEFINING THE SUEZ CANAL AREA

The Canal area includes three districts<sup>1</sup>:



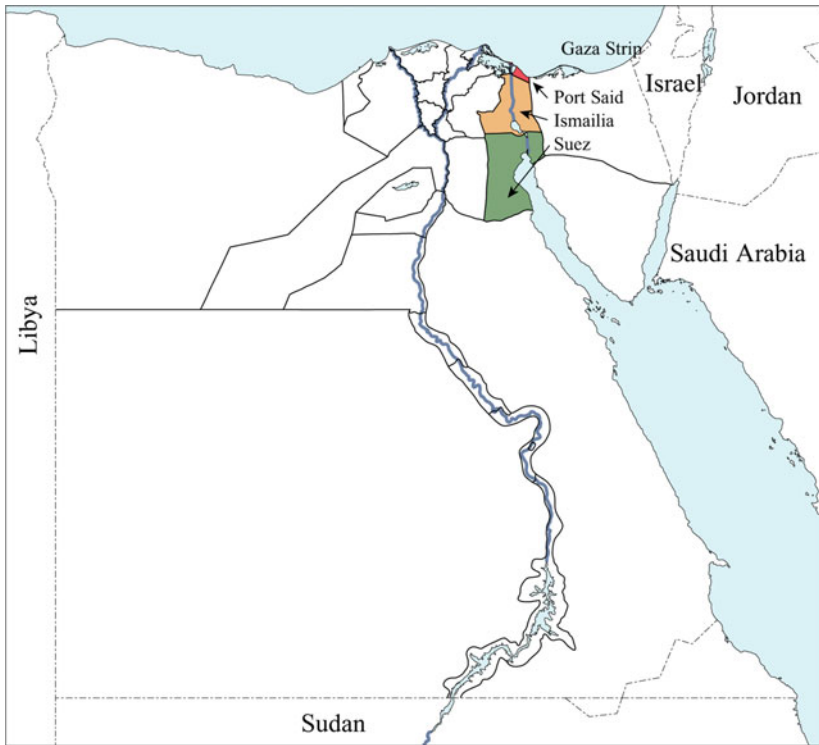
1. District 12: Ismailia District

The Ismailia region is a natural continuation of the Egyptian Delta through Wadi Tumilat which is an ancient tributary of the Nile that reached as far as the Sabkat al-Bardawil region of Sinai. The freshwater canal passes through this wadi, thus there is a high percentage of farmers in this area. In the other two districts of the Canal area there is almost no agricultural hinterland.

2. District 19: Port Said District

3. District 26: Suez District

It is important to note that these are not the cities of Ismailia, Port Said, and Suez but the districts at the center of which are these cities (Map 1).



**Map 1** Egypt—Administrative division, with emphasis on the Suez Canal area

## SUEZ CANAL—BASIC DATA (SOURCE SCA)

The purpose of constructing the Suez Canal was to shorten the route between Europe and India. Before the Canal was constructed, ships that left London on their way to Bombay were forced to circumnavigate South Africa and cross a 10,700 km route. The Canal's construction shortened the route to 6250 km. This means a shortening of the route by 4450 km.

In 1869, the year the Canal was completed, it was 195 km long, 7.5 m deep and 58 to 100 m wide. In 1995, the Canal was widened and deepened, and its dimensions reached a width of 286–300 m, its depth 25 m.

In 2015, a large project called the “New Suez Canal” was carried out, in which, in just one year, additional canals were dug (parallel to the original Canal) to shorten the waiting time for ships. In addition, the Canal was widened to 313 m, and deepened to 24 m, in several sections. The duration of the voyage through the Canal was shortened from 15 to 11 h. The waiting time was shortened from 8 to 3 h.

As a result of the development work, the number of ships capable of crossing the Canal per year has increased. Until 2015, about fifty ships a day could pass through the Canal. The Canal's capacity doubled to one hundred ships per day, at least in theory. The larger volume of ships crossing the Canal was planned to increase Egyptian revenues. In reality, as of 2019, Egypt's revenues from the Canal do not meet expectations. This is due to global problems and changes in the nature of goods.

Although the number of ships passing through the Canal is relatively small compared to previous years, the size of the ships is constantly increasing. For Egypt what matters is the amount of goods and the volume of ships passing through the Canal and not necessarily the number of ships. Following are some data for comparison (Table 1).

The nature of the goods has changed: Comparing the nature of the goods that passed through the Canal in the last decade (2010s) to the goods that passed through it in the 1960s, one finds that there was a dramatic decrease in the number of passengers, a moderate increase in the number of oil tankers, a marked increase in gas tankers and a dramatic increase in container carriers.

Egypt's revenues from the Canal have also changed. For example, in 2016, the Canal generated Egypt \$4.2 billion, which accounted for about 13.9% of the total revenues of Egyptian economy and about 25% of the total exports that year (which stood at \$23.3 billion). Egyptian imports

**Table 1** Passage of ships, goods, and the income from the Suez Canal, 1961–2018<sup>2</sup>

<i>Year</i>	<i>Number of ships passing through the Canal</i>	<i>Millions of tons of goods</i>	<i>Revenue (in billions of dollars)</i>
1961		55.50	
1997		296.00	
2004	12,000	702.00	2.5
2010	18,050	897.00	3.4
2016	17,200	987.00	4.2
2018		1140.00	9.0

The data for the years 2010–2016 indicate an increase in the amount of cargo while there was a decrease in the number of ships

that year stood at \$59.78 billion. Egypt was left with a deficit of \$34.48 billion that year.<sup>3</sup>

Egypt's greatest problem is the size of its population compared to its physical and human resources. In 2019, one hundred million people lived in Egypt, most of them poor. The primary cause for Egypt's inability to break out of the cycle of poverty is its constant need to provide its huge population with food and other basic needs at affordable prices. Thus, for example, although Egypt has quite fine wheat crops, it has in recent years become the world's largest wheat importer.

The cost of maintaining the Canal, including its development, is very high. Against this background, the profits from it should be carefully examined. In 2016, the profits from the Canal stood at \$4.2 billion, but the expenses for the development of the Canal that year stood at \$8 billion.<sup>4</sup>

Why did Egypt take such a dangerous expense, financially speaking? Opinions vary: some argue that the spending was outrageous while others argue that non-economic considerations such as the pride of a people and the prestige of leaders should also be taken into account. They also argue that under conditions of uncertainty, such as those existing in respect of the Canal, there is no choice but to take risks.

Below we will try to answer the following questions:

1. After 150 years of the Canal's existence, what is its contribution to urbanization, the population of the Canal area, and to the policy of dispersal of the population in Egypt in general?

2. How did the Canal affect the development of agriculture in the area?
3. What are the indirect consequences of the Suez Canal on the Egyptian economy?
4. What is Israel's connection to the Canal area (1948–2019)?

In replying to these questions, I will refer to Mayan Alony's article in *Horizons in Geography* 96 (2019) that refers to all four questions, however, it dealt with the whole of the Sinai Peninsula, and we refer only to the Canal districts, therefore there is a difference in the data.<sup>5</sup>

Alony describes in detail the planning and incentives to develop the whole of Sinai, following the IDF's withdrawal from there in 1982 and discusses the reason for the failure to implement the plans. When the explanations do not match, I will add my own data and explanations.

### THE CANAL'S CONTRIBUTION TO URBANIZATION, POPULATION AND DISPERSAL OF THE POPULATION IN EGYPT

At the time of writing this article, 2018, there were 99.4 million people in Egypt (a natural increase of 2.38% brought the population in 2019 to 100 million people) (Table 2).

In 2018, the residents of the Canal area constituted 2.7–2.8% of the total population of Egypt. In 2006 as well, the residents of the Canal area constituted 2.7% of the total population of Egypt indicating that there is no population growth in this area. Moreover, while the natural increase in the Canal cities is 2.38%, the urban growth rate in Canal cities stands only at 1.8%.<sup>7</sup>

This figure indicates an abandonment of the Canal area, and this fact is consistent with what is happening elsewhere in the world in the age of

**Table 2** Population of the Canal Area (2018)<sup>6</sup>

<i>District</i>	<i>Number of residents</i>	<i>Division between urban residents and farmers</i>
Port Said	749,000	737,000 in the city + 12,000 farmers
Suez	728,000	Overwhelming majority in the city + few farmers
Ismailia	1,325,000	601,000 (44%) in the city + 724,000 (56%) farmers
Total	2,832,000	

globalization and greedy economy. The population converges mainly to the big cities (such as Beijing, Paris, and in Israel—Tel Aviv) and abandons the periphery. Those leaving are mostly young people leaving an aging population in the periphery.

The Canal area employs 2.8% of all employed in Egypt (857,000 out of 29,953,000 in 2017). This figure corresponds with the percentage of the population in the Canal area, relative to the total Egyptian population. This is a disappointing situation, as this area has a very high potential for industrialization, both in traditional industries and in high-tech industries. The potential is not realized. The failure to realize the potential can also be seen in the unemployment figures: unemployment in the Canal area reaches about 12.2%, which is also the unemployment rate in the whole of Egypt.<sup>8</sup> At the end of 2019, many development works were carried out in the Canal area, including the establishment of new industries and this fact gives rise to cautious optimism concerning employment in the near future.

### THE CONTRIBUTION OF THE CANAL AREA TO EGYPTIAN AGRICULTURE DATA

In Egypt as a whole, agriculture contributes 11.7% of the total GDP of the country, but it is important to note that the rate of those employed in agriculture is 25.8% of all workers in the economy—a figure that characterizes third world countries.<sup>9</sup>

In order to compare the contribution of the Canal area to Egyptian agriculture we will select four main crops in Egypt and examine the contribution of the Canal area to each of these crops. The examination will be done by comparing the areas of these crops (in 2016) in the units of Feddan (1 Feddan = 4.2. Dunams) (Table 3).

Apparently, the contribution of agriculture of the Canal area to the Egyptian economy is small. In fact, agriculture in this area fails to meet even the needs of the local population.

The struggle to expand agricultural land in Egypt in general and in the Canal area in particular is ongoing. From a national point of view, the construction of the Canal and the establishment of the three Canal cities should be seen as a first and successful attempt to go beyond the Nile Valley into the desert. 150 years have passed since the Canal was constructed, and the map of the dispersal of the Egyptian population has indeed changed.

**Table 3** The contribution of agriculture to the Canal area<sup>10</sup>

<i>The Crop The Region</i>	<i>Rice (area in Feddan)</i>	<i>Sugar Cane (area in Feddan)</i>	<i>Cotton (area in Feddan)</i>	<i>Wheat (area in Feddan)</i>
<b>All of Egypt</b>	<b>1,353,377</b>	<b>325,912</b>	<b>131,750</b>	<b>3,353,151</b>
Port Said Region	21,051	0	346	10,267
Suez Region	0	0	0	4452
Ismailia Region	4651	0	454	44,525
<b>Total Canal Area</b>	<b>25,702</b>	<b>0</b>	<b>800</b>	<b>59,244</b>
Contribution of the Canal area in relation to the whole of Egypt	<b>1.8%</b>	<b>0%</b>	<b>0.6%</b>	<b>0.9%</b>

Today we have tools and technologies that make it possible to settle the desert: there are pumps, bulldozers, electricity, and so on. Despite this, the Egyptian government is finding it hard to attract population from the old areas toward the periphery.

Since the opening of the Canal, large enterprises in the field of agriculture have been established in Egypt with an emphasis on the prospering of the wilderness in the periphery. There are such enterprises on both sides of the Nile Valley. East of the Nile Valley there was a plan to add 3.1 million dunams to the agricultural area and west of the Nile Valley there was talk of adding 900,000 dunams.

The area at the center of our discussion is the area east of the Nile Delta. There is a plan for a total addition of 4.5 million dunams of agriculture. There is also a tourism development plan along the shores of the Mediterranean to Libya and it also includes the beaches of Nuweiba in Sinai and some of the beaches of the Red Sea. The tourism development plan speaks of a development that includes about 10 million dunams.

According to development plans for the Sinai Peninsula from 2005 and even earlier, the goal was to make prosper about 411,000 feddan (= 1.6 million dunams). According to the plan, a project was carried out in Sinai to transport water to El Arish in a 90 km long canal (the "Peace Canal"). The water enters the canal from the Damietta (the eastern tributary of the Nile). The project was indeed completed and water began to flow but was suspended due to climate change and domestic and international politics.

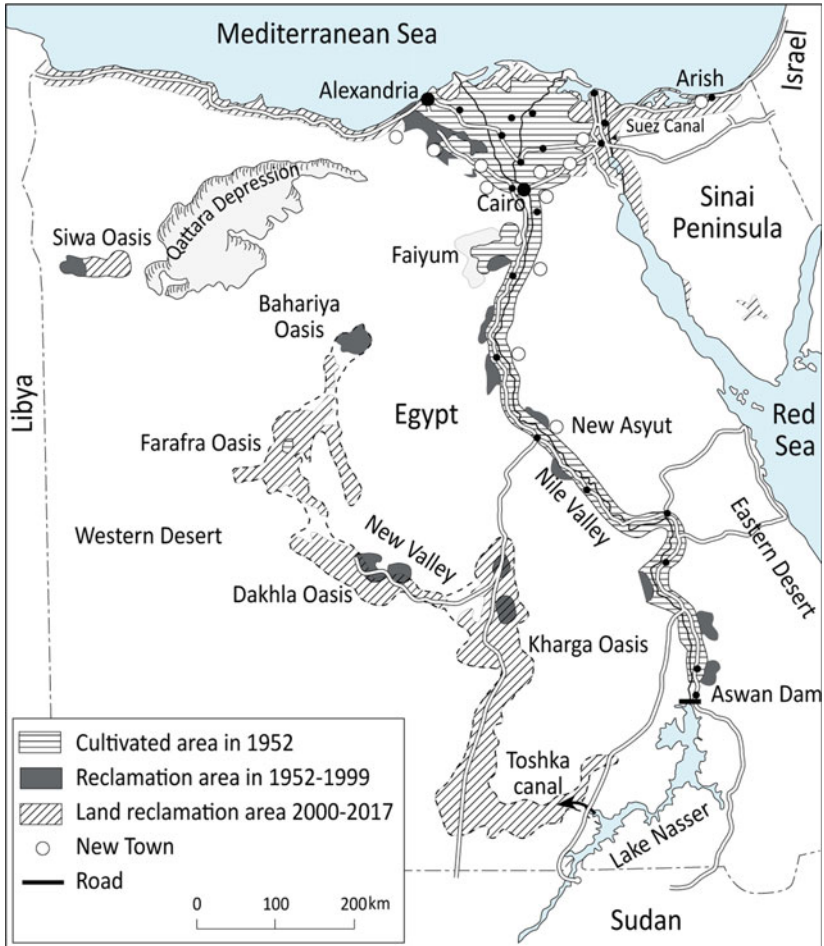
The biggest of the Egyptian development plans is the plan to revive the “New Valley.” This refers to a series of large soil depressions located in the desert west of the Nile Valley. One of these depressions is the Tushka Depression that covers an area of 3.3 million dunams and the Tushka plan speaks of its irrigation using the Nile water (but in reality, there is no water for this plan). Another depression is the Farafra Depression that covers an area of 5.2 million dunams and is partially irrigated by groundwater (Maps 2 and 3).

Two comments are in place:

- a. The development data presented above are official data of the Egyptian government. However, not all researchers accept them. This is because over the years all Egyptian development plans went wrong time and time again until it is difficult to know what was actually done and what remained only as an idea or as a plan or as an attempt to cover up failure.<sup>11</sup>
- b. Some scholars even talk about the loss of new lands in alarming proportions.<sup>12</sup> Reasons for this include severe water shortages (which is not exclusively an Egyptian problem), non-functioning bureaucracy, land erosion due to unprofessional manpower as well as extensive urban construction on land, new as well as old (Map 4).<sup>13</sup>

According to the above calculations, the total cultivated area in the Canal districts in 1973 was 1.7 million dunams (405,000 feddan). And in 2019 the total cultivated area in the Canal areas was 6.2 million dunams (1,400,000 feddan). According to this comparison, the area currently cultivated in the Canal area is at least 265% larger compared to the area cultivated there in 1973. This is a positive state of affairs compared to what is happening in Tushka, in northern Sinai and in other areas in Egypt. Today the entire region is flourishing and is an important source of livelihood for thousands of Egyptians.

Despite all the delays we have enumerated thus far, Egypt has managed to collect fragments of successes and accomplished achievements in going beyond the Nile Valley into the desert. The agricultural area on both sides of the Suez Canal is encouraging evidence for the future.

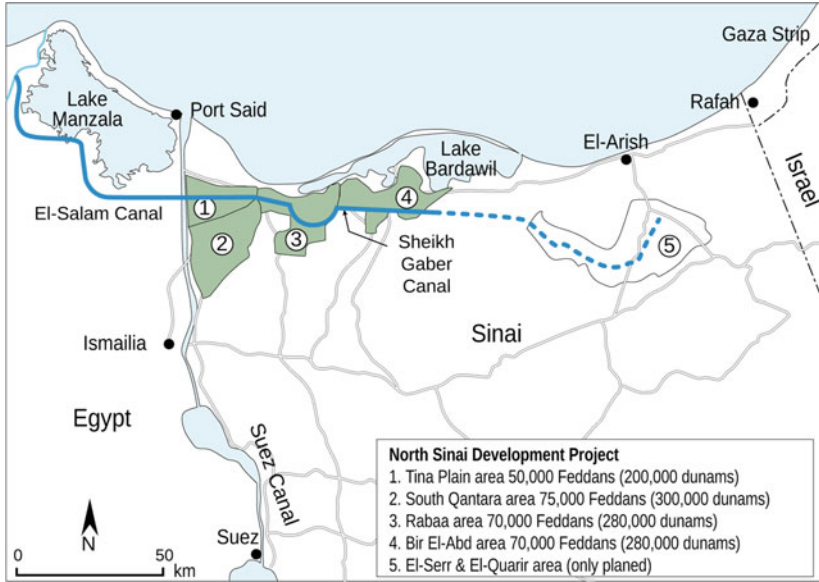


**Map 2** Plans for the expansion of the agricultural areas and the new cities in Egypt 1902–2017 (From Soffer and Borkowski 2014)

### INDIRECT IMPLICATIONS OF THE SUEZ CANAL FOR EGYPT’S ECONOMY AND SECURITY

We noted in the introduction that the Suez Canal provides a very significant contribution to improving the country’s commercial balance sheet.



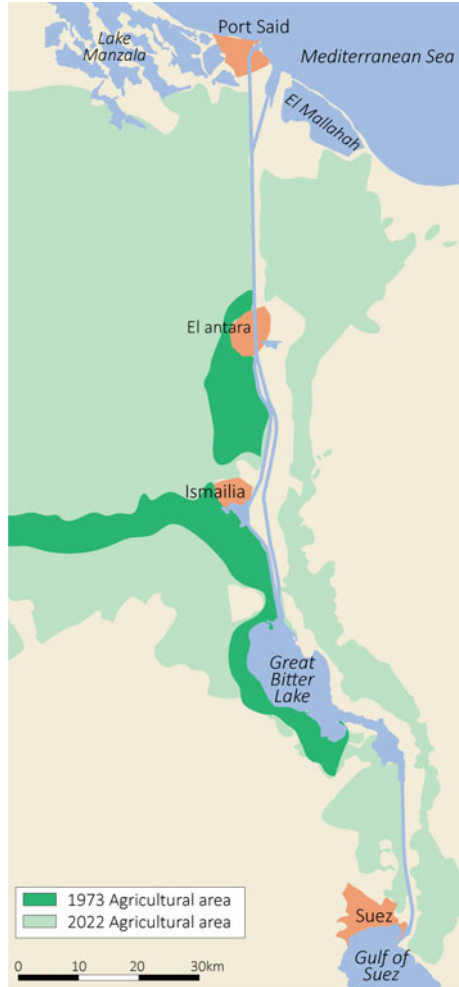


**Map 3** The Peace Canal for the development of North Sinai with emphasis on the Western section near the Suez Canal—a suspended enterprise (Soffer and Borkowski 2014)

The profits of the Canal are identical to the profits from tourism and constituted, at least in the years 2010–2019, about a quarter of all Egyptian exports. There are additional implications of the Canal, listed below.

Simultaneously with the construction of the Suez Canal they also began to dig a freshwater canal that would lead drinking water to the hundreds and thousands of workers employed in the construction of the Suez Canal. This freshwater canal later became a lever for the development of agriculture in the area. Near the Suez Canal and the freshwater canal, three new cities have been established in the adjacent desert area. These cities began to take in workforce for the operation of the ports and the Canal. The expectation was that qualified manpower would arrive in the area that would staff thousands of jobs, both in the municipal services and in the establishment of new industrial areas at such an important international junction.

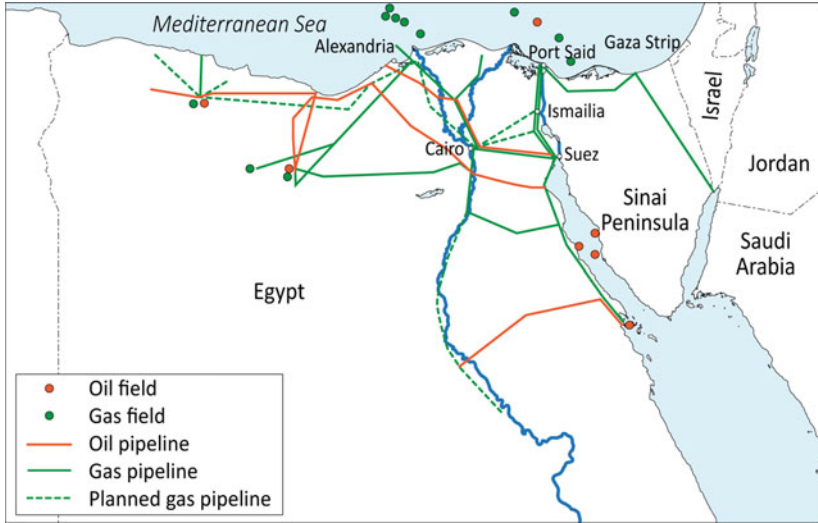
**Map 4** Green areas in the Suez Canal area in 1973 (Mapping by the author, 1973)



To this one must add the indirect implications the Canal has on the Egyptian economy and security:

- a. On both sides of the Suez Canal there are now green agricultural areas.

- b. From Port Said in the north to the city of Suez in the south industrial areas have been established and are still being established. These industrial areas, located east of the Canal, are connected to the west of the Canal by ferries and mainly by modern bridges and tunnels.<sup>14</sup>
- c. The Suez Canal created a very important bridge between the north and the south, but not only. Indirectly, it also created a west–east bridge that Egypt has been missing since the dawn of its history. The Canal area is the logistical base for the cities that attract tourists to the desert—Hurghada, Sharm al-Sheikh, and Nuweiba. This new bridge has turned the whole of southern Sinai into an important international tourist center.
- d. The city of Suez is extremely important to the Egyptian energy economy and has become the fuel center of Egypt (see Map 5). Suez produces 23% of Egypt's total energy. It serves as a base for everything done in most areas of energy and houses a number of refineries. Gas and oil are drained to Suez from Sinai and the Red Sea and from there they are transported, through a serious transportation system, to Cairo and the rest of the country and even if there are surpluses for export.
- e. During the British Mandate, many British military forces were deployed to the area of the Canal. Since 1956, thousands of Egyptian soldiers have arrived there. For the needs of the military forces, many bases were built in the area and to this day the Canal area serves as Egypt's largest military base.



**Map 5** Location of the city of Suez in the oil and gas transportation system in Egypt (Soffer and Borkowski 2014)

### WHAT IS ISRAEL'S CONNECTION TO THE CANAL AREA?

On security grounds, the Suez Canal is important for both Egypt and Israel. For Egypt it is important as a barrier against invasion from the northeast and for Israel it is important as a barrier against an Egyptian invasion. It is these concerns that have led the demilitarization of the Sinai Peninsula a central basis for the peace treaty between Israel and Egypt.

Twice Israel reached the banks of the Suez Canal: the first time in the 1956 Sinai War and the second time from the 1967 Six Day War to the evacuation of Sinai in 1982 following the signing of the peace treaty with Egypt. Today, more than ever, it is clear that maintaining the demilitarization of the Sinai Peninsula is essential to maintaining the cold and fragile peace between Israel and Egypt.

As of 2020, Israel and Egypt experience cold, sometimes tense peace relationship. However, there are diverse collaborations between them as the two countries wish to expand the peace treaty between them for their own interests in the areas of security, the war on terror, preserving freedom of navigation in the region and more.<sup>15</sup>

Israel also invests considerable efforts in the development of common industrial zones in the Canal area (Qualifying Industrial Zones—QIZ). The more money is invested in Sinai and the Canal area, the greater the Egyptian interest in maintaining the region's stability and improving relations with Israel.<sup>16</sup>

Israel and Egypt also have a common interest in environmental issues, since environmental damage does not recognize political boundaries. The widening of the Suez Canal caused great damage to the shores of Israel and to the shores of the Mediterranean in general. These are added to the extensive damage that the Aswan Dam has brought, earlier, to the entire eastern basin of the Mediterranean.<sup>17</sup>

## CONCLUSION

The assumption of this article is that the geographical location and special international role of the Suez Canal had and still has great potential for strengthening the Egyptian economy in general and for the development of the Canal area in particular. On the 150th anniversary of the inauguration of the Suez Canal, I attempted to see if the potential has materialized, at least in part. My conclusion is that, despite the very large gap discovered between expectations and reality, there are achievements to point to:

- There is no doubt that the Canal is an unusually important source of income for Egypt.
- The construction of the Canal led to the establishment of three major cities.
- In the three Canal cities, new industrial areas have been established, accompanied by modern infrastructure.
- Along the cities, modern bridges and tunnels have been built that effectively connect the west and east banks of the Canal.
- Egypt has invested tremendous efforts in agricultural development of all periphery areas. The Canal area receives special treatment. There is a new five-year plan for the development of the area, a plan in which large investments are made in the area with high expectations.

However, the efforts to disperse the population did not bear fruit. The situation is similar to what is happening in other countries around the

world. All of them have difficulty bringing population from the cities to the agricultural areas. The process is usually in the opposite direction: the cities (especially the main ones) are growing and prospering, while the periphery is dwindling. The proportion of the population in the Canal area does not exceed 2.8% of Egypt's population. This is also the proportion of agricultural land in the area out of the total Egyptian agricultural land. The dimensions of the failure are evident throughout Sinai.<sup>18</sup>

The dwindling of the periphery has many causes: the droughts and climate changes that occur in the Nile Basin, as well as in many other regions of the world, result in a reduction in water volumes and severe damage to the sensitive fabric of life of the Nile and its surroundings. The rapid population growth is, in turn, burdening the carrying capacity of the area. As a result, most development programs in Egypt have been halted or slowed down greatly.

Despite the difficulties in dispersing the population, it is important to note that the Canal area was and is a pioneer in bringing out a relatively large population from the Nile Valley to the periphery. This was the first case of an Egyptian exodus out into the desert far from the Nile Valley (from about 150 km to about 250 km out of the Valley), beyond the old population map that included only the Nile Valley and its delta. The transport of fresh water on such a scale has not happened in Egypt before. In the introduction to this article, I posed the question: Does the importance of the Canal to the Egyptian economy really meet the expectations that were placed on it?

After examining the Canal's contribution in a number of parameters such as contribution to budget, industry, tourism, construction, and agricultural and industrial development in the present and future—the conclusion is clear: the Canal has a significant contribution to the Egyptian economy and although to date not all expectations have been met, the plans (and especially the current ones) leave great hope for their realization.

## NOTES

1. Egypt's Statistical Yearbook by the Central Agency for Public Mobilization and Statistics (CAMPASA), <https://www.capmas.gov.eg/HomePage.aspx>. See also Map 1.
2. CAMPAS 2018, SCA.
3. CAMPAS 2016, Balance of payments.

4. SCA, CAMPAS 2016.
5. Mayan Alony, "The Development of the Sinai Peninsula during the Years 1982–2011: Plans and Implementations," *Horizons in Geography* 96 (2019): 223–250 (Hebrew).
6. CAMPAS 2018.
7. CAMPAS 2018, Demography.
8. CAMPAS 2018, Employment.
9. CAMPAS 2018, agriculture.
10. CAMPAS 2018, agriculture.
11. Soffer (2006, p. 39). On this matter, see also 'Water Profile of Egypt' Kundell, J. (2010) which also notes the large discrepancy between what was planned and what was actually done.
12. Hanna and Abdel-Ghani Osman (1995).
13. Given the great ambiguity regarding the data published in Egypt, I will use in this article the 1973 data which I compute from Maps 4 and 5, and compare to the 2019 data collected from Google Earth. The data in this article contradicts the data presented in Alony's article.
14. Gal (2015) and Winter (2019).
15. Soffer and Borkowski (2013, 2014) and Soffer (2014).
16. Ministry of Foreign Affairs, Israel (2006), Ministry of Industry, Trade and Labor (2011), Elnatan (2018), and Alony (2019).
17. Soffer (1999, 2006).
18. Alony (2019).

## BIBLIOGRAPHY

- Alony, Mayan (2019), "The Development of the Sinai Peninsula During the Years 1982-2011: Plans and Implementations", *Horizons in Geography* 96, pp. 223–250 (Hebrew).
- Egypt—Central Agency for Public Mobilization and Statistics (CAPMAS), <http://capmas.gov.eg>.
- Elnatan, Yael (2018), "Cold Peace, Hot Economy", *Davar*, May 25, <https://www.davar1.co.il/128313/> (Hebrew).
- Gal, Yitzhak (2015), "Al-Sisi and Egypt's Economic Future: Fundamental Challenges, Bold Moves, and High Risks", *Strategic Assessment* 18, Issue 2, INSS, pp. 21–34.
- Hanna, F., and Abdel-Ghani Osman, M. "Agricultural Land Resources and the Future of Land Reclamation and Development in Egypt". In Abdel Hakim T. (ed.), *Egyptian Agriculture Profile*. Montpellier: CIHEAM, 1995, pp. 15–32. <http://ressources.ciheam.org/om/pdf/b09/CI950933.pdf>.
- Kundell, J. (2010), "Water Profile of Egypt". In *FAO: The Encyclopaedia of Earth*. <http://www.cocarth.org/view/article/156938/>.

- Ministry of Foreign Affairs, Israel (2006), Protocol Between the Government of the State of Israel and the Government of the Arab Republic of Egypt on Qualifying Industrial Areas: Signed in Cairo on December 14, 2004 and entered into force on February 16th, 2005. The Governmental Printer, Jerusalem.
- Ministry of Industry, Trade and Labor (2011), Israel-Egypt Trade Relations, [http://economy.gov.il/InternationalAffairs/EconomicReviews/Documents/egypt\\_2010.pdf](http://economy.gov.il/InternationalAffairs/EconomicReviews/Documents/egypt_2010.pdf).
- Soffer, Arnon (1999), *Rivers of Fire: The Conflict Over Water in the Middle East*, Lanham, MD: Rowman & Littlefield.
- Soffer, Arnon (2006), *The Struggle for Water in the Middle East*, Am Oved Publishing, Tel Aviv and the Chaikin Chair in Geostrategy, University of Haifa (Hebrew).
- Soffer, Arnon (2014), “Beyond the Pale”, *Ma’arachot* 457, pp. 10–13 (Hebrew).
- Soffer, Arnon and Borkowski, Anton (2013), “Red Sea Basin—From the Periphery to the Center”, *Ma’arachot* 450, pp. 4–9 (Hebrew).
- Soffer, Arnon and Borkowski, Anton (2014), *Egypt 2014: A Geo-Strategic Analysis*, Chaikin Chair in Geostrategy, University of Haifa (Hebrew).
- SCA—Suez Canal Authorities. <https://www.suezCanal.gov.eg/English/About/SuezCanal/Pages/CanalCharacteristics.aspx>.
- Winter, Ofir (2019), “The Suez Canal: A Route for Cultivating the Peace with Egypt”, *INSS Insight*, Issue 1231, November 23, <https://www.inss.org.il/en/publication/the-suez-canal-a-route-for-cultivating-the-peace-with-egypt/>.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.







# A Sea, a Canal, a Disaster: The Suez Canal and the Transformation of the Mediterranean Biota

*Bella S. Galil*

**Abstract** The introduction of non-native species is among the main direct drivers of biodiversity change. Off the Israeli coast 445 non-native species were recorded thus far, more than anywhere in the Mediterranean Sea. The number of recorded introductions has been rising inexorably, tripling since the 1970s. Nearly all have been introduced through the ever-enlarged Suez Canal. Worldwide there is no other vector of marine bioinvasions that delivers as high a propagule supply for so long to a certain locale. Once established, the non-native species are unlikely to be contained or controlled and their impacts are irreversible. The Canal-introduced species form prominent micro-communities and biological facies in most littoral habitats, some have been documented to displace or reduce populations of native species, alter community structure and food webs, change ecosystem functioning and the consequent provision of goods and services—profound ecological impacts that undermine the goals of sustainable *blue economy* in the *Mediterranean Sea*.

---

B. S. Galil (✉)

Curator (Emerita) of Crustacea, Steinhardt Museum of Natural History,  
Tel Aviv, Israel

e-mail: [bgalil@tauex.tau.ac.il](mailto:bgalil@tauex.tau.ac.il)

© The Author(s) 2023

C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons  
and Future Challenges*, Palgrave Studies in Maritime Politics and  
Security, [https://doi.org/10.1007/978-3-031-15670-0\\_10](https://doi.org/10.1007/978-3-031-15670-0_10)

199

These species have been spreading throughout the Mediterranean Sea while the Israeli shelf serves as a hotspot, beachhead, and dispersal hub. Their spatial and temporal spread has advanced concurrently with successive enlargements of the Suez Canal, rise in mean seawater temperature, and prevalence, duration, and severity of marine heat waves increase. The invasion poses a challenge to the environmental ethics and policies of the Mediterranean countries. As signatories to the Convention on Biological Diversity these countries are required to prevent the introduction of, control or eradicate alien species which threaten ecosystems, habitats or species (Article 8(h)), and ensure that the environmental consequences of their policies that are likely to have significant adverse effects on biological diversity are taken into account (Article 14.1). The present Egyptian government is in a position to reduce future introductions. Egypt announced the development of 35 desalination plants, of which the first 17 plants will add 2.8 million m<sup>3</sup> daily capacity. It is suggested that an environmental impact assessment evaluates the environmental and economic consequences of utilizing the brine effluents from the large-scale desalination plants constructed in the vicinity of the Suez Canal to restore the salinity barrier once posed by the Bitter Lakes.

**Keywords** Convention on Biological Diversity · Desalination brine effluent · Erythraean invasion · Non-indigenous species · Invasive marine species · Salinity barrier · United Nations Convention on the Law of the Sea

## THE MEDITERRANEAN SEA

The Mediterranean Sea, a remnant of the Tethys Ocean, was disconnected from the Atlantic Ocean approximately six million years ago with the sealing of the precursor of the Strait of Gibraltar. At its nadir, termed the “Messinian salinity crisis,” the isolation led to desiccation and the creation of evaporitic basins, and its once high level of biodiversity was severely reduced. With the re-opening of the strait approximately five million years ago, the sea was repopulated by Atlantic biota. Subsequent changes in climate, sea level, salinity levels, and oxygen levels resulted in alternate entries of boreal and subtropical Atlantic biota.

The sea's main hydrologic features are a microtidal regime, scarce freshwater inputs, and evaporation compensated by inflow of Atlantic surface water, high salinity (38–39.5) in the eastern basin, oligotrophy, with organic carbon inputs 15–80 times lower in the eastern than in the western basin and extremely low concentrations of chlorophyll-a in surface offshore waters (ca 0.05  $\mu\text{g l}^{-1}$ ), high homeothermy from approximately 300–500 m downward, bottom temperatures about 12.8–13.5 °C in the western basin and 13.5–15.5 °C in the eastern basin. With an average depth of around 1500 m, climate-driven thermohaline circulation and short water residency (75–100 years), the Mediterranean Sea is more vulnerable to climate change.

More than 17,000 marine species were recorded from the Mediterranean Sea, comprising an estimated 7% of the world's marine biodiversity.<sup>1</sup> However, recent rapid human population growth of coastal residents and transient recreational populations (the latter 244 million in 2000, 342 million in 2014, 590 million expected in 2050),<sup>2</sup> coupled with intensification of anthropogenic activities, are driving unprecedented changes.<sup>3</sup> Symptoms of complex and fundamental alterations to native species populations, habitats, and ecosystems proliferate, including increases in non-indigenous species (NIS). Much of the Mediterranean shelf ecosystems lack resilience and are so heavily impacted by stressors that they change in unexpected and undesirable ways. The biota across wide stretches of the sea, including marine protected areas, has already been altered with significant ecological, economical, and human health impacts.<sup>4</sup>

## THE SUEZ CANAL

### *A Very Brief History*

A French engineer, Linant-Bey (Linant de Bellefonds), was enlisted by Mehemet Ali Pasha, the Ottoman governor of Egypt, to build the Mahmoudieh Canal, from Alexandria to the Nile, allowing navigation upstream to Cairo. Linant surveyed the Suez Isthmus and was confident of the feasibility of a direct isthmian canal traversing Lake Timsah and the Bitter Lakes and communicated his plans to the French consul, Mimaut, and his vice-consul, de Lesseps, then newly arrived in Egypt. In 1846, a European Study Group was formed, and the next year visited Egypt closely instructed by Luigi Negrelli, a noted civil engineer. In 1854, when Mohammed Said acceded to the viceroyalty, de Lesseps presented him

with the detailed maps of the Isthmus prepared by Linant de Bellefonds and the plan for a direct trans-isthmian canal, and by the end of 1854 the initial concession to build a canal, with a port at each end, was approved and signed. A Scientific Commission, convened in 1855, and charged with the examination of the plans for the Canal, favored Linant's proposal for a "direct route" canal across the Suez Isthmus with locks at each end of the canal and the canalization of the lakes. Negrelli argued strongly against canalization and locks, and the Commission adopted his 1847 plans for a "direct route" canal without locks—a fateful decision that determined the environmental impact of the Suez Canal.<sup>5</sup> The Universal Company of the Maritime Suez Canal, formed in 1858 under de Lesseps's direction, raised, by popular subscription in France, more than half the capital needed, and much of the rest was invested by Said himself. Twenty thousand conscripted *fellahin* and prisoners, working in shifts, formed the bulk of the laborers, later replaced by steam-powered bucket dredgers. The canal was 8 m deep, 58–90 m wide at the surface, cross-sectional area 304 square meters, and 160 km long, and along its banks three new cities were built: Suez, Ismailia, and Port Said. Its construction was completed in 1869.

### *The Expansion of the Suez Canal*

The *Compagnie Universelle du Canal Maritime de Suez* embarked on major improvements including the widening and deepening of the channel in 1876, and by 1880 the number of ships transiting the Canal was 2026. In 1955, 14,666 ships traversed the canal, and a plan to enlarge the canal was announced. The events of the summer and autumn of 1956—the nationalization of the Suez Canal Company, followed by the Anglo-French invasion of the Canal Zone, the Arab-Israeli war, and the blockage of the Canal by the Egyptians—derailed those plans. During the months of closure and blockage sand had accumulated, reducing the permissible navigable depth. The first stage of the "Nasser Plan" entailed doubling the canal's width along its entire length, and deepening it to 15.5 m, to a cross-sectional area of 1800 square meters. In 1966, a six-year program, the second stage of the "Nasser Plan" was launched. Its object was to allow the navigation of 110,000 ton loaded tankers and 125,000 tons of partially loaded vessels by 1972. The Six-Day War forced the Suez Canal to close in June 1967, blocking it for the second time in

ten years. The canal remained inoperative until June 1975, when maintenance work was recommenced to clear the sand that filled the channel bed. By that time the Canal was incapable of handling half of the world's tanker fleet, with Very Large Crude Carriers (VLCC) (200,000–300,000 dead weight tons [DWT]) plying alternate sea routes.<sup>6</sup> In 1980, its depth was increased to 19.5 m, and its cross-sectional area to 3600 square meters. The Canal was doubled in five parts (Port Said, Ballah, Timsah, Deversoir, Kabret) for a total of 77 kms, to allow transit in both directions. In 2001, its depth increased to 22.5 m, and the cross-sectional area to 4800 square meters in order to maintain the Canal's market share against the inexorable increase in the size of ships. In 2010, it increased yet again to 24 m, and the cross-sectional area to 5200 square meters. In 2015, the Canal was doubled along 113.3 kms.<sup>7</sup>

## A DISASTER

The introduction of non-indigenous species (NIS) is an important element of global change in marine ecosystems. This phenomenon is considered to be among the main direct drivers of biodiversity change, exacerbated as it is by climate change, pollution, habitat loss, and other human-induced disturbances. Many introduced marine species have been documented to displace or reduce native species populations, alter community structure and food webs, change ecosystem functioning and the consequent provision of goods and services. Once established, they are unlikely to be contained or controlled and their impacts are irreversible. NIS have become a concern in virtually all marine coastal ecosystems around the world, but nowhere more than in the Mediterranean Sea.<sup>8</sup>

The Suez Canal is the main pathway of NIS introduction into the Mediterranean Sea. Its successive enlargements have raised concern over increasing propagule pressure resulting in continuous introductions of new Erythraean species and associated degradation and loss of native populations, habitats, and ecosystem services.<sup>9</sup> The concern harks back to the mid-nineteenth century: even before the Canal was fully excavated, a French malacologist argued that the breaching of the Suez Isthmus would cause the mixing of faunas, advocated what today would be considered a “baseline study,” and raised provocative and prescient questions.<sup>10</sup> The opening of the Suez Canal engendered debates on its impact on the Red

Sea and Mediterranean biotas, yet for the next 50 years the documentation of the biota in the Canal itself and the changes in the adjacent marine environments were largely left to learned amateurs, for example, Arthur René Jean Baptiste Bavay and Jean Baptiste Tillier, employees of the Compagnie du canal maritime, are to be thanked for assiduously collecting mollusks and fish.<sup>11</sup> In the first decade of the twentieth century, 13 of the 14 NIS recorded for the first time in the Mediterranean entered through the Suez Canal.<sup>12</sup> A century ago, Walter Steinitz, another learned amateur, recognized the scientific significance of the movement of biota through the Canal and noted that no scientific institute had taken on a comprehensive study of biotic transfer.<sup>13</sup> He raised questions as to the changes caused by Red Sea in the fauna of the eastern basin of the Mediterranean. Yet the sole multidisciplinary, multitaxa survey to investigate the spread of the Erythraean biota in the Levant Sea was a joint program by the Smithsonian Institution, the Hebrew University of Jerusalem, and the Sea Fisheries Research Station (Haifa) in the late 1960s. The resulting list enumerated 140 Erythraean species,<sup>14</sup> forming the base for the compendium prepared by Francis D. Por.<sup>15</sup>

For much of the previous century little attention had been paid to Erythraean NIS in the Mediterranean Sea. As long as their impacts were inconspicuous, confined to the Levant, induced no direct economic cost or impinged on human welfare, Erythraean NIS were ignored by scientists, conservationists, policymakers, and managers. However, in the 1980s the rapid spread and injurious impacts of invasive Erythraean NIS helped raise awareness of the insidious invasion.<sup>16</sup> Since the Levant Sea was recognized early on as vulnerable to bioinvasion,<sup>17</sup> it was *ipso facto* considered to have been “biologically enriched” by it,<sup>18</sup> being “biologically underexploited by marine life... a sort of ecological vacuum where many ecological niches are available.”<sup>19</sup> Por postulated that “[t]he Lessepsian migration is therefore, a phenomenon with a rather clearly set frame which is rapidly approaching its fulfilment,”<sup>20</sup> and “[t]he Lessepsian migrants may be considered, in a figurative sense ‘welcome guests’ in the impoverished, subtropical cul-de-sac.”<sup>21</sup> He was proved wrong on both counts when scientists realized that the number of Erythraean NIS had greatly increased over time and profoundly altered the composition of the biota of the eastern Mediterranean Sea, impoverishing native species richness, and causing major shifts in community structure, function, and services. It is now widely believed that “If we do not understand and mitigate the ecological risks associated with the expansion of the Suez Canal,

the integrity of a large part of the Mediterranean ecosystem could be in jeopardy.”<sup>22</sup>

Erythraean algae, invertebrates, and fish have profoundly marked the composition of the biota of the southeastern Mediterranean Sea,<sup>23</sup> their impacts are determined, in part, by their demographic success (abundance and spread). With few exceptions, the ecological impact of NIS on the native Mediterranean biota have not been scientifically studied. Where populations of native Mediterranean species appear to have been outcompeted or displaced by an NIS, these could be part of a profound anthropogenic alteration of the marine environment. Still, a number of Mediterranean NIS have drawn the attention of scientists, management, and media, for the conspicuous impacts on the native biota attributed to them.

Two species of rabbitfish, *Siganus rivulatus* and *S. luridus*, entered the Mediterranean through the Suez Canal, were first recorded off the southern Levantine coast in 1924 and 1955, respectively.<sup>24</sup> The species were later recorded as far west as France and Tunisia.<sup>25</sup> The schooling, herbivorous fishes form thriving populations in the Levant Sea where “millions of young abound over a rocky outcropping grazing on the relatively abundant early summer algal cover.”<sup>26</sup> The siganids comprise a third of the fish biomass in rocky habitats in Israel,<sup>27</sup> 80% of the abundance of herbivorous fish in shallow coastal sites in Lebanon,<sup>28</sup> 83–95% of the biomass of herbivorous fish at sites on the Mediterranean coast of Turkey<sup>29</sup>; and have replaced native herbivorous fish.<sup>30</sup> Their diet has had a significant impact on the structure of the algal community: by selectively feeding, the siganids have nearly extirpated some of their favorite algae locally<sup>31</sup>; “once flourishing algal forests have disappeared to leave space to sponges and wide areas of bare substratum... The shift from well-developed native algal assemblages to ‘barrens’ implies a dramatic decline in biogenic habitat complexity, biodiversity and biomass... with effects that may move up the food chain to the local fisheries.”<sup>32</sup> A survey along one thousand kilometers of Greek and Turkish coasts found that in regions with abundant siganids canopy algae were 65% less abundant, benthic biomass was reduced by 60%, and species richness by 40%.<sup>33</sup>

The small Erythraean mytilid mussel, *Brachidontes pharaonis*, in the early 1970s was “250 times rarer” than the native mytilid *Mytilaster minimus*, that formed dense *Mytilaster* beds on intertidal rocky ledges along the Israeli coastline.<sup>34</sup> More recently “the same rocks are... completely covered with the Erythrean *B. pharaonis*, while *M. minimus* is

only rarely encountered.”<sup>35</sup> The Erythraean mytilid has spread westward to Italy, where in the south it forms dense populations with over 25,000 specimens/m<sup>2</sup>,<sup>36</sup> and to Corsica, France.<sup>37</sup> The Erythraean Spiny oyster, *Spondylus spinosus*, and jewel box oyster, *Chama pacifica*, have supplanted their native congeners *S. gaederopus* and *C. gryphoides*. The Erythraean dragonet, *Callionymus filamentosus*, replaced the native callionymids *C. pusillus* and *C. risso*.<sup>38</sup>

The Levant Sea is unique in hosting six Erythraean scyphozoan jellyfish: *Cassiopea andromeda*, *Chrysaora pseudoocellata*, *Cotylorhiza erythraea*, *Marivagia stellata*, *Phyllorhiza punctata*, and *Rhopilema nomadica*. *Rhopilema nomadica*, first recorded in the Mediterranean in the 1970s, is notorious for the large swarms it has formed each summer since the early 1980s along the southeastern Levantine coast.<sup>39</sup> They periodically clog seawater intake pipes of coastal powerplants, and disrupt coastal fisheries by clogging nets: “It is not uncommon that fishermen, especially purse seines, discard entire hauls due to the overwhelming presence of poisonous medusae in their nets.”<sup>40</sup> Gelatinous plankton outbreaks affect production cycles and food webs that are more significant than their obvious impacts in economic and human health terms. Indeed, *R. nomadica* is but one of a dozen venomous or poisonous Erythraean NIS that have drawn the attention of scientists, managers, media, and the public for their conspicuous human health impacts.<sup>41</sup>

The venomous devil lionfish, *Pterois miles*, an Erythraean NIS, has spread throughout the eastern Mediterranean in the past decade.<sup>42</sup> An opportunistic piscivore, it preys on small fish inhabiting rocky reefs and as well as foraging in nearby soft bottom habitats. A recent study revealed a diet comprising a great variety of native species.<sup>43</sup> Its populations inhabit natural and anthropogenic structures (i.e., wrecks, breakwaters), as well as shallow sandy bottoms frequented by bathers. It was recently observed at shelf-edge mesophotic reefs—patchy assemblages of large arborescent anthozoans and sponges that attract highly diverse biota. The occurrence of the piscivorous and highly fecund lionfish at these depths threatens the unique mesophotic assemblages.<sup>44</sup> The lionfish is not unique in establishing populations beyond the shelf edge. Whereas in the 1970s, Erythraean biota was largely limited to habitats shallower than 50 m,<sup>45</sup> recent findings increasingly document them on the deeper shelf, beyond the shelf break and well into the upper slope to a depth of 200 m and beyond.<sup>46</sup>



What may have caused thermophilic Erythraean NIS to descend into the lower shelf and upper slope? The successive enlargements of the Suez Canal<sup>47</sup> have likely increased propagule pressure—increasing the delivery of multiple species, including epipelagic larvae/juveniles of deeper living species. At the same time the Levantine surface waters (LSW) and Levantine intermediate waters (LIW) masses in the southeastern Mediterranean have displayed increasing long-term trends in salinity of  $+0.008 \pm 0.006$  and  $+0.005 \pm 0.003 \text{ year}^{-1}$ , respectively, and temperature of  $+0.12 \pm 0.07$  and  $+0.03 \pm 0.02 \text{ }^\circ\text{C year}^{-1}$ , respectively.<sup>48</sup> A wider thermal niche confers advantages to thermophilic NIS, as they are more likely to colonize, establish viable populations, and spread in novel habitats. It seems that the climatic niche of some Erythraean NIS is wider than accounted for and is likely to facilitate bathymetric range expansion, as well as higher invasion risk into a wider geographic range. This phenomenon exacerbates the inherent risk in “invasion debt” that may last decades, when the population is not in equilibrium within its novel habitat, nor reached its final distributional extent.

Based on the results from global climate change projection scenarios, the Mediterranean is one of the regions most responsive to climate change, literally a “Hot-spot.” Analysis of the largest time series (1982–2019) of deseasonalized sea surface temperature (SST) revealed a consistent warming trend of  $0.035 \text{ }^\circ\text{C/year}$  across the Mediterranean Sea with noticeable spatial variability, the highest values are in the eastern-most Mediterranean, along the Levant coast (about  $0.040 \text{ }^\circ\text{C/year}$ ). The warming trend is boosted by ever more frequent Marine heat-waves (MHWs). The MHWs resulted in the most catastrophic mass mortality events, covering ever larger areas, affecting emblematic communities, crucial habitat-forming species—scleractinian corals, gorgonians, sponges, and seagrasses—major contributors to the ecosystem structure and functioning (i.e., through the provision of habitat, food, shelter or via facilitation processes). A progressive loss was noted in overall taxonomic biodiversity. Yet only recently did scientists realize that MHWs-triggered degradation and functional shifts provide “resource opportunities” (e.g. nutrients, space) for thermally tolerant species adapted to warmer waters, native as well as non-native. Climate change projections suggest increased frequency and duration of MHWs in the Mediterranean Sea: by 2100 MHWs are projected to occur more frequently, last longer, and affect at peak the entire basin.<sup>49</sup> Bearing in mind that climatic models predict that the Mediterranean Sea will be most affected by warming and MHWs, the

synergic and additive effects of warming and Erythraean invasion, augur degradation of the native communities on the Mediterranean shelf, and even upper slope. It is likely native stenothermal biota unable to shift their range to deeper or colder water, endure increasing stress and demographic attrition, and plausibly replaced by Erythraean aliens.<sup>50</sup>

### LEGISLATIVE RESPONSE, BUT NO ACTION, TO ERYTHRAEAN INVASIONS IN THE MEDITERRANEAN SEA

Vector/pathway management is the most effective strategy for preventing translocation of species, thereby reducing introduction and spread of marine NIS. Lack of effective control on propagule transfer, reduces management to frequently futile eradication/removal and control efforts. Once NIS have spread widely, eradication/removal is virtually impossible, and attempts for long-term reduction of the population to an economically or ecologically acceptable level are rarely successful.

The United Nations Convention on the Law of the Sea (UNCLOS) was the first global legally binding instrument dealing with the intentional or unintentional introduction of marine species and called for “States... take all measures necessary to prevent, reduce and control... the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto.”<sup>51</sup> Article 8(h) of the Convention on Biological Diversity (CBD) requires parties, as possible and as appropriate “to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species.”<sup>52</sup> The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean came into force in 2004. The Barcelona Convention and its protocols, together with the Mediterranean Action Plan (MAP), form part of the United Nations Environment Programme (UNEP) Regional Seas Programme. The signatories to the convention adopted an “Action Plan concerning species introductions and invasive species in the Mediterranean Sea” in 2003.<sup>53</sup> A Draft Guidelines for controlling the vectors of introduction into the Mediterranean of non-indigenous species and invasive marine species<sup>54</sup> states that “...the greatest influx of invaders resulted from the opening of the Suez Canal in 1869 that allowed entry of Indo-Pacific and Erythraean biota.”<sup>55</sup> The recent Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea UN Environment/MAP Athens, Greece 2017 acknowledges

“The trend of new introductions of alien species in the Mediterranean has been increasing. About 1000 marine alien species have been reported in the Mediterranean Sea up to now, of which more than half are considered established. Many of these species have become invasive with serious negative impacts on biodiversity, human health, and ecosystem services [and pledges] . . . to promote the development of coordinated efforts and management measures throughout the Mediterranean region in order to prevent as appropriate, minimize and limit, monitor, and control marine biological invasions and their impacts on biodiversity, human health, and ecosystem services.”<sup>56</sup>

Meanwhile, many Erythraean species have become the most conspicuous denizens in Marine Protected Areas across the Levant, having displaced and replaced native species, thereby reversing marine conservation efforts and hampering stock recovery of key economically and ecologically important species.<sup>57</sup> Yet, the ample scientific documentation of Erythraean bioinvasions in the Mediterranean Sea failed to elicit the implementation of effective management policies.

Egypt nationalized the Universal Company of the Suez Maritime Canal in 1956, undertaking all its assets, rights, and obligations. Egypt is a signatory to UNCLOS, signed and ratified CBD, and is a Contracting Party of the Barcelona Convention, but it has made no attempt to curb the influx of Erythraean biota into the Mediterranean. As most of the canal shipping originates from and destined to European ports, it is in the best interest of the EU and the Barcelona Convention signatories to proactively promote biosecurity and work together with Egypt and the international maritime industry to address the threat to the Mediterranean biota, and by extension, to the economic and social wellbeing of the coastal populations.

In fact, the Egyptian government is in a position to reduce future introductions. In 2021 Egypt issued tenders for 17 new desalination plants adding 2.8 million m<sup>3</sup> daily capacity, and plans to increase to 6.4 million m<sup>3</sup> by 2050—the hypersaline brine effluent will establish a formidable salinity barrier if discharged into the canal, recreating the Bitter Lakes. Construction of locks would decrease the transit of current-borne propagules.

Commemorative stamps issued by Egypt on the occasion of the inauguration of the “New Suez Canal” depict a pair of locks. The Suez Canal Authority ought to turn this image into reality—for the sake of the Mediterranean and its inhabitants.

## NOTES

1. M. Coll, C. Piroddi, J. Steenbeek, K. Kaschner, F. Ben Rais Lasram, J. Aguzzi, E. Ballesteros, et al., “The Biodiversity of the Mediterranean Sea: Estimates, Patterns, and Threats,” *PLoS ONE* 5, no. 8 (2010): e11842.
2. M. S. Tosun, “Demographic Divide and Labor Migration in the Euro-Mediterranean Region,” Institute for the Study of Labor, Discussion Paper No. 6188 (2011).
3. F. Micheli, B. S. Halpern, S. Walbridge et al., “Cumulative Human Impacts on Mediterranean and Black Sea Marine Ecosystems: Assessing Current Pressures and Opportunities,” *PLoS ONE* 8, no. 12 (2013): e79889; EEA (European Environment Agency), “State of Europe’s Seas.” Technical report No. 2/2015 (Copenhagen: European Environment Agency, 2015).
4. B. S. Galil, “Eyes Wide Shut: Managing Bio-Invasions in the Mediterranean Marine Protected Areas,” in *Management of Marine Protected Areas: A Network Perspective*, ed. P. D. Goriup (New York: John Wiley & Sons, 2017), 187–206; B. S. Galil, A. Marchini, A. Occhipinti-Ambrogi, et al., “The Enlargement of the Suez Canal: Erythraean Introductions and Management Challenges,” *Management of Biological Invasions* 8, no. 2 (2017): 141–52; B. S. Galil, A. Marchini, and A. Occhipinti-Ambrogi, “Mare Nostrum, Mare quod invaditur: The History of Bioinvasions in the Mediterranean Sea,” in *Histories of Bioinvasions in the Mediterranean: Environmental History*, vol. 8, ed. A. Queiroz and S. Pooley (New York: Springer, 2018), 21–49.
5. H. Helps, “Luigi Negrelli, Engineer, 1799–1858: Planner of The Suez Canal,” *Transactions of the Newcomen Society* 75, no. 2 (2005): 317–39.
6. H. J. Schonfield, *The Suez Canal in Peace and War, 1869–1969* (Miami, FL: University of Miami Press, 1969).
7. Suez Canal Authority, “Canal Characteristics,” *Suez Canal Authority*. <https://www.suezcanal.gov.eg/English/About/SuezCanal/Pages/CanalCharacteristics.aspx> (accessed December 15, 2019).
8. B. S. Galil, H. K. Mienis, R. Hoffman, and M. Goren, “Non-Native Species Along the Israeli Mediterranean Coast – Tally, Policy, Outlook,” *Hydrobiologia* 848, no. 4 (2020): 2011–29.
9. Galil et al., “The Enlargement of the Suez Canal.”
10. L. Vaillant, “Recherches sur la faune malacologique de la baie de Suez,” *Journal de Conchyliologie* 13 (1865): 97–127.
11. A. Bavay, “Au sujet du passage d’un mollusque de la Mer Rouge dans la Méditerranée,” *Bulletin de la Société Zoologique de France* 22 (1897): 199; A. Bavay, “Note sur les mollusques du Canal de Suez,” *Bulletin de la Société Zoologique de France* 23 (1898): 161–64; J. B. Tillier, “Le Canal de Suez et sa faune ichthyologique,” *Mémoires de la Société zoologique de*

- France* 15, no. 3–4 (1902): 279–318; J. B. Tillier, and A. Bavay, “Les mollusques testacés du Canal de Suez,” *Bulletin de la Société Zoologique de France* 30 (1905): 170–81; J. B. Tillier, and A. Bavay, “Au sujet des mollusques testacés du Canal de Suez,” *Bulletin de la Société Zoologique de France* 31 (1906): 129–31.
12. B. S. Galil, “Taking Stock: Inventory of Alien Species in the Mediterranean Sea,” *Biological Invasions* 11, no. 2 (2009): 359–72.
  13. W. Steinitz, “Memorial on the Founding of a Sea-Station on the Coast of Palestine for Zoological Investigations,” Manuscript, 1919.
  14. H. Steinitz, “A Critical List of Immigrants via the Suez Canal,” *Biota of the Red Sea and Eastern Mediterranean* 1970: 59–63 [mimeo].
  15. F. D. Por, “Lessepsian Migration: The Influx of Red Sea Biota into the Mediterranean by Way of the Suez Canal,” *Ecological Studies*, vol. 23 (Berlin: Springer-Verlag, 1978), 228.
  16. Galil, “Taking Stock.”
  17. W. Steinitz, “Beiträge zur Kenntnis der Küstenfauna Palästinas,” *I. Pubblicazioni della Stazione zoologica di Napoli* 8, no. 3–4 (1927): 311–53.
  18. E. Tortonese, “Facts and Perspectives Related to the Spreading of Red Sea Organisms into the Eastern Mediterranean,” *Annali del Museo civico di storia naturale Giacomo Doria* 79 (1973): 322–29, here 327.
  19. M. Oliverio and M. Taviani, “The Eastern Mediterranean Sea: Tropical Invasions and Niche Opportunities in a ‘Godot Basin,’” *Biogeographia* 24 (2003): 313–27, here 314.
  20. F. D. Por, “One Hundred Years of Suez Canal—A Century of Lessepsian Migration: Retrospect and Viewpoints,” *Systematic Zoology* 20, no. 2 (1971): 138–59, here 158.
  21. Por, “Lessepsian Migration,” 123.
  22. C. Samaha, H. zu Dohna, and M. Bariche, “Analysis of Red Sea Fish Species’ Introductions into the Mediterranean Reveals Shifts in Introduction Patterns,” *Journal of Biogeography* 43, no. 9 (2016): 1797–807, here 1806.
  23. Steinitz, “A Critical List of Immigrants via the Suez Canal”; Por, “Lessepsian Migration”; B. S. Galil, H. K. Mienis, R. Hoffman, and M. Goren, “Non-Indigenous Species Along the Israeli Mediterranean Coast: Tally, Policy, Outlook,” *Hydrobiologia* 848, no. 9 (2021): 2011–202.
  24. Steinitz, “Beiträge zur Kenntnis der Küstenfauna Palästinas”; A. Ben Tuvia, “Two Siganid Fishes of Red Sea Origin in the Eastern Mediterranean,” *Bulletin of the Sea Fisheries Research Station, Haifa* 37 (1964): 3–9.
  25. B. Daniel, S. Piro, E. Charbonnel, P. Francour, and Y. Letourneur, “Lessepsian Rabbitfish *Siganus luridus* Reached the French Mediterranean Coasts,” *Cybium* 33, no. 2 (2009): 163–64; F. Ktari-Chakroun and M.

- Bahloul, "Capture de *Siganus luridus* (Rüppell) dans le golfe de Tunis," *Bulletin de l'Institut National Scientifique et Technique d'Océanographie et de Pêche* 2, no. 1 (1971): 49–52.
26. C. J. George and V. Athanassiou, "A Two-Year Study of the Fishes Appearing in the Seine Fishery of St. George Bay, Lebanon," *Annali del Museo Civico di Storia Naturale di Genova* 76 (1967): 237–94.
  27. M. Goren and B. S. Galil, "Fish Biodiversity in the Vermetid Reef of Shiqmona (Israel)," *Marine Ecology* 22, no. 4 (2001): 369–78.
  28. M. Bariche, Y. Letourneur, and M. Harmelin-Vivien. "Temporal Fluctuations and Settlement Patterns of Native and Lessepsian Herbivorous Fishes on the Lebanese Coast (Eastern Mediterranean)," *Environmental Biology of Fishes* 70 (2004): 81–90.
  29. E. Sala, Z. Kizilkaya, D. Yildirim, and E. Ballesteros, "Alien Marine Fishes Deplete Algal Biomass in the Eastern Mediterranean," *PLoS ONE* 6, no. 2 (2011): e17356.
  30. C. Papaconstantinou, "Distribution of the Lessepsian Fish Migrants in the Aegean Sea," *Biologia Gallo-hellenica* 13 (1987): 15–20; Bariche et al., "Temporal Fluctuations."
  31. B. Lundberg, R. Ogorek, B. S. Galil, and M. Goren, "Dietary Choices of Siganid Fish at Shiqmona Reef, Israel," *Israel Journal of Zoology* 50 (2004): 39–53.
  32. Sala et al., "Alien Marine Fishes."
  33. A. Vergés, F. Tomas, E. Cebrian, et al., "Tropical Rabbitfish and the Deforestation of a Warming Temperate Sea," *Journal of Ecology* 102, no. 6 (2014): 1518–27.
  34. U. N. Safriel, T. Felsenburg, and A. Gilboa, "Distribution of Rocky Intertidal Mussels in the Red Sea Coasts of Sinai, the Suez Canal and the Mediterranean Coast of Israel, with Special Reference to Recent Colonizers," *Journal of Biogeography* 7 (1980): 39–62.
  35. H. K. Mienis, "Native Marine Molluscs Replaced by Lessepsian Migrants," *Tentacle* 11 (2003): 15–6, here 15.
  36. G. Sarà, C. Romano, and A. Mazzola, "A New Lessepsian Species in the Western Mediterranean (*Brachidontes pharaonis* – Bivalvia: Mytilidae): Density, Resource Allocation and Biomass," *Journal of Marine Biological Association of UK* 2. *Biodiversity Records* (2006): 1–7.
  37. P. Merella, A. Porcheddu, and S. Casu, "La malacofauna della riserva naturale di Scandola (Corsica Nord-occidentale)," *Bollettino Malacologico* 30, no. 5–9 (1994): 111–28.
  38. D. Golani, "Impact of Red Sea Fish Migrants through the Suez Canal on the Aquatic Environment of the Eastern Mediterranean," in *Transformations of Middle Eastern Natural Environments: Legacies and Lessons*, ed. J. Albert, M. Bernhardsson, and R. Kenna, Yale University Conference.

- Yale University School of Forestry & Environmental Studies Bulletin 103 (1998): 375–87.
39. B. S. Galil, E. Spanier, and W. Ferguson, “The Scyphomedusae of the Israeli Mediterranean Coast, including Two Lessepsian Migrants to the Mediterranean,” *Zoologische Mededelingen* 64, no. 7 (1990): 95–105; B. S. Galil, “Poisonous and Venomous: Marine Alien Species in the Mediterranean Sea and Human Health,” in *Invasive Species and Human Health*, ed. G. Mazza and E. Tricarico (CABI, 2018), 1–15.
  40. D. Golani and A. Ben Tuvia, “Lessepsian Migration and the Mediterranean Fisheries of Israel,” in *Condition of the World’s Aquatic Habitats, Proceedings of the World Fisheries Congress*, ed. N. B. Armantrout (Lebanon, NH: Science Publishers 1995), 279–89.
  41. Galil, *Poisonous and Venomous*, 2018.
  42. S. Yapıcı, “Piscis non grata in the Mediterranean Sea: *Pterois miles* (Bennett, 1828),” *Ege Journal of Fisheries and Aquatic Sciences* 35, no. 4 (2018): 467–74, here Fig. 2.
  43. K. Zannaki, M. Corsini-Foka, Th. E. Kampouris, and I. E. Batjakas, “First Results on the Diet of the Invasive *Pterois Miles* (Actinopterygii: Scorpaeniformes: Scorpaenidae) in the Hellenic waters,” *Acta Ichthyologica et Piscatoria* 49, no. 3 (2019): 311–17.
  44. N. Stern and B.-S. Rothman, “Divide and Conserve the Simultaneously Protected and Invasive Species,” *Aquatic Conservation: Marine and Freshwater Ecosystems* 29, no. 1 (2019): 161–62.
  45. B. S. Galil and C. Lewinsohn, “Macrobenthic Communities of the Eastern Mediterranean Continental Shelf,” *Marine Ecology* 2, no. 4 (1981): 343–52, Figs. 1–5; M. Tom and B. S. Galil, “The Faunal Associations of Haifa Bay, Mediterranean Coast of Israel,” *Marine Ecology* 12, no. 1 (1991): 75–86.
  46. B. S. Galil, R. Danovaro, S. Rothman, R. Gevili, and M. Goren, “Invasive Biota in the Deep-Sea Mediterranean: An Emerging Issue in Marine Conservation and Management,” *Biological Invasions* 21, no. 2 (2018): 281–88; G. Innocenti, G. Stasolla, M. Goren, N. Stern, Y. Levitt-Barmats, A. Diamant, and B. Galil, “Going Down Together: Invasive Host, *Charybdis longicollis* (Leene, 1938) (Decapoda: Brachyura: Portunidae) and Invasive Parasite, *Heterosaccus dollfusi* Boschma, 1960 (Cirripedia: Rhizocephala: Sacculinidae) on the Upper Slope off the Mediterranean Coast of Israel,” *Marine Biology Research* 13, no. 2 (2017): 229–36.
  47. Suez Canal Authority, “Canal Characteristics,” *Suez Canal Authority*. <https://www.suezcanal.gov.eg/English/About/SuezCanal/Pages/CanalCharacteristics.aspx> (accessed 15 December 2019).
  48. T. Ozer, I. Gertman, N. Kress, J. Silverman, and B. Herut, “Interannual Thermohaline (1979–2014) and Nutrient (2002–2014) Dynamics in

- the Levantine Surface and Intermediate Water Masses, SE Mediterranean Sea,” *Global and Planetary Change* 151 (2017): 60–7.
49. S. Darmaraki, S. Somot, F. Sevault, P. Nabat, W. D. Cabos Narvaez, L. Cavicchia, V. Djurdjevic, L. Li, G. Sannino, and D. V. Sein, “Future Evolution of Marine Heatwaves in the Mediterranean Sea “ *Climate Dynamics* 53 (2019), 1371–92; F. Pastor, J. A. Valiente, and S. Khodayar, “A Warming Mediterranean: 38 Years of Increasing Sea Surface Temperature,” *Remote Sensing* 12, no. 17 (2020): 2687; A. Pisano, S. Marullo, V. Artale, F. Falcini, C. Yang, F. E. Leonelli, R. Santoleri, and B. Buongiorno Nardelli, “New Evidence of Mediterranean Climate Change and Variability from Sea Surface Temperature Observations,” *Remote Sensing* 12, no. 1 (2020): 132.
  50. D. Gómez-Gras, C. Linares, A. López-Sanz, R. Amate, J. B. Ledoux, N. Bensoussan, P. Drap, O. Bianchimani, C. Marschal, O. Torrents, and F. Zuberer, “Population Collapse of Habitat-Forming Species in the Mediterranean: A Long-Term Study of Gorgonian Populations Affected by Recurrent Marine Heatwaves,” *Proceedings of the Royal Society B* 288, issue 1965 (2021): 20.212,384; L. Piazzì, F. Atzori, N. Cadoni, M. F. Cinti, F. Frau, A. Pansini, F. Pinna, P. Stipcich, and G. Ceccherelli, “Animal Forest Mortality: Following the Consequences of a Gorgonian Coral Loss on a Mediterranean Coralligenous Assemblage,” *Diversity* 13, no. 3 (2021): 133.
  51. United Nations 1982. Convention on the Law of the Sea. United Nations. Article 196.
  52. United Nations Convention on Biological Diversity 1992. Chapter XXVII. Environment.
  53. United Nation Environment Programme, <https://www.unep.org/resources/report/invasive-alien-species-growing-threat-regional-seas> (accessed May 25, 2022).
  54. UNEP/MAP, “Annex XIII. Draft Guidelines for Controlling the Vectors of Introduction into the Mediterranean of Non-Indigenous Species and Invasive Marine Species,” in *Report of the Eighth Meeting of National Focal Points for SPAs*, UNEP(DEPI)/MED WG.308/14 (2007).
  55. Ibid.
  56. United Nations Environment Programme, *Action Plan Concerning Species Introductions and Invasive Species in the Mediterranean Sea* (Athens: UNEP/MAP, 2017). [http://www.rac-spa.org/sites/default/files/action\\_plans/pa\\_alien\\_en.pdf](http://www.rac-spa.org/sites/default/files/action_plans/pa_alien_en.pdf).
  57. M. D’Amen and E. Azzurro, “Lessepsian Fish Invasions in Mediterranean Marine Protected Areas: A Risk Assessment under Climate Change Scenarios,” *ICES Journal of CMarine Science* 77, no. 1 (2020): 388–97.



**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# Increased Anthropogenic Activity in the Mediterranean Since the Opening of the Suez Canal

*Semion Polinov*

**Abstract** Humans depend on oceans and seas' marine ecosystems for important and valuable goods and services, but human use has also altered the marine environment through direct and indirect means. Land-based and ocean-based human activities vary in their intensity of impact on the marine environmental conditions and their spatial distribution across the scape. Since opening the Suez Canal, the spatial distribution of such a human-made environmental change needs to be understood and quantified to be able to evaluate tradeoffs between the canal and the protection of the Mediterranean marine ecosystem. Such temporal and spatial evaluation will help to improve and rationalize the spatial management of the Mediterranean Sea of human activities. Evaluation of the ecological impact of the Suez Canal on the Mediterranean Sea requires a method for translating the impact into marine impacts and spatial data of the activities.

---

S. Polinov (✉)  
Department of Marine Geosciences, Charney School of Marine Sciences,  
University of Haifa, Haifa, Israel  
e-mail: [semion.polinov@gmail.com](mailto:semion.polinov@gmail.com)

© The Author(s) 2023  
C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons  
and Future Challenges*, Palgrave Studies in Maritime Politics and  
Security, [https://doi.org/10.1007/978-3-031-15670-0\\_11](https://doi.org/10.1007/978-3-031-15670-0_11)

217

**Keywords** Marine environment · Human footprint · Marine ecosystem management · Shipping · Marine pollution · Nighttime light pollution

Humans depend on oceans and seas' marine ecosystems for important and valuable goods and services, but human use has also altered the marine environment through direct and indirect means.<sup>1</sup> Land-based and ocean-based human activities vary in their intensity of impact on the marine environmental conditions and their spatial distribution across the scape. Since opening the Suez Canal, the spatial distribution of such a human-made environmental change needs to be understood and quantified to be able to evaluate tradeoffs between the canal and the protection of the Mediterranean marine ecosystem. Such temporal and spatial evaluation will help to improve and rationalize the spatial management of the Mediterranean Sea of human activities. Evaluation of the ecological impact of the Suez Canal on the Mediterranean Sea requires a method for translating the impact into marine impacts and spatial data of the activities.

The Mediterranean Sea is a marine biodiversity "hotspot" threatened by historical and current pressures that have led to significant changes in marine ecosystems and conflict users (Coll et al., 2012; Lotze et al., 2010).<sup>2</sup> Since opening the Suez Canal in 1869, with such intense pressure from multiple users and stressors, the Mediterranean is characterized as a sea "under siege." Whereas shipping as a main human footprint at sea is a powerful means of the global economy, the majority of alien species in the eastern Mediterranean entered through the Suez Canal.

The central role of the Mediterranean in the historic maritime scene was diminished following the geographical discoveries of the fifteenth century, but it regained its prominence when the Suez Canal opened in 1869. The development of the Middle East oil field and the ascendance of the Southeast Asian economies in the latter part of the twentieth century reasserted the Mediterranean as a major shipping route. Today, "Suez Canal" is a subject that has captured the imagination of both academics and politicians and is often presented as part of a narrative of technological progress in the nineteenth century, shifted the Mediterranean realm of human activity. As a result of the opening of the Suez Canal, the human impact on the marine environment of the Mediterranean Sea has significantly increased, which has led to an increase in activity on land as well as an increase in marine activity, mainly related to



Fig. 1 Population density in the Mediterranean Sea basin, 2008<sup>4</sup>

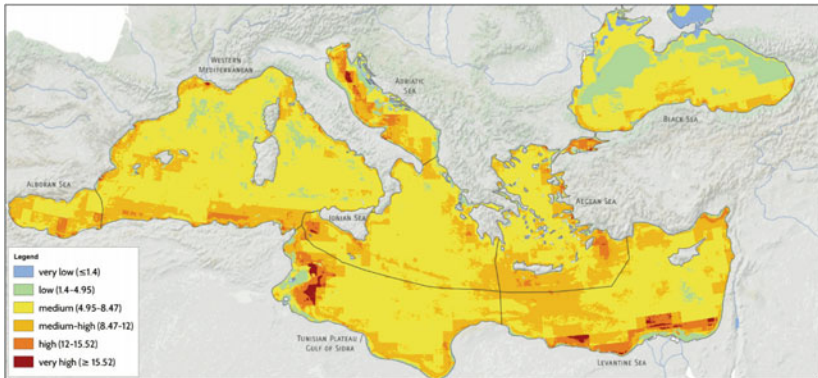


Fig. 2 Spatial distribution of cumulative human pressures to marine ecosystems of the Mediterranean Sea<sup>7</sup>

shipping in the region. The marine-human pressures vary in their intensity of impact on the marine ecosystems of the Mediterranean Sea (see Fig. 2) and their spatial distribution across the seascape depends on the coastal human population (see Fig. 1). Understanding and quantifying the spatial distribution in local and regional scales of change in human impact since opening the Suez Canal is needed for the evaluation of trade-offs between human uses of the Mediterranean Sea and marine ecological status. Such mapping helps improve the spatiotemporal management of the Mediterranean Sea.<sup>3</sup>

## ANTHROPOGENIC ACTIVITY IN THE MEDITERRANEAN SEA

The total population of the Mediterranean countries grew from 276 million in 1970 to 412 million in 2000 (a 1.35% increase per year) and 466 million in 2010. The population is predicted to reach 529 million by 2025. Four countries account for about 60% of the total population: Turkey (81 million), Egypt (100 million), France (62 million), and Italy (60 million). The Mediterranean region's population is concentrated near the coasts. More than a third live in coastal administrative entities totaling less than 12% of the surface area of the Mediterranean countries. The population of the coastal regions grew from 95 million in 1979 to 143 million in 2000. It could reach 174 million by 2025. The concentration of population in coastal zones is heaviest in the western Mediterranean, the western shore of the Adriatic Sea, the eastern shore of the Aegean-Levantine region, and the Nile Delta. Overall, the concentration of population in the coastal zone is higher in the southern Mediterranean countries. This is also where the variability of the population density in the coastal zone is highest, ranging from more than 1000 people/km<sup>2</sup> in the Nile Delta to fewer than 20 people/km<sup>2</sup> along parts of coastal Libya.

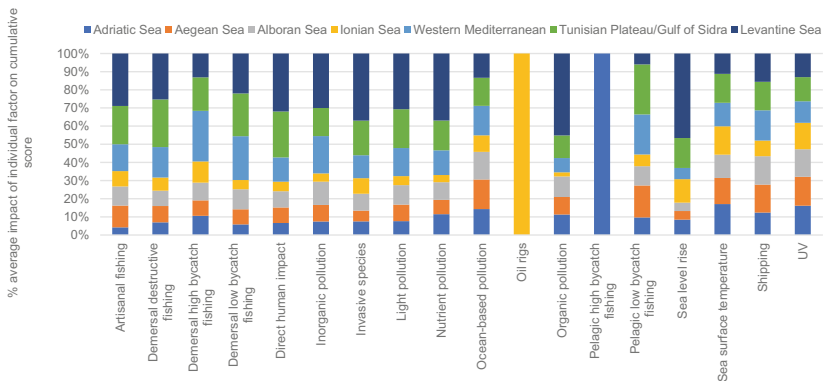
## MAPPING HUMAN IMPACTS IN THE MEDITERRANEAN SEA

Marine ecosystem management requires spatial and temporal information about current impacts and their causes. The first step toward understanding the impact of the Suez Canal as a human footprint on the Mediterranean marine environment is to determine the impact of individual and cumulative factors of human activity on the sea (see Fig. 2). The opening of the Suez Canal led to the development of the maritime industry and played an important role in globalization since the distances between Asia and the European continent were significantly reduced. Before the opening of the Suez Canal, for example, the countries of the Levantine region were more "isolated." The opening of the Suez Canal and the development of maritime industries led to the development and accessibility of the Levantine region to the world.

Figure 3 highlights the cumulative impacts of 22 human activities, such as shipping, invasive species, oil spills, and more, with direct impact on the Mediterranean Sea environment. The Alboran and Levantine seas have the highest average of anthropogenic cumulative impact, the western

Mediterranean and the Black Sea the lowest. Most of Egypt’s and the southern part of Israel’s coastlines had medium–high to very high impact. Areas subject to high impact are: 20% of the entire Mediterranean Sea and 60–99% of the territorial waters of EU member states. Only less than 1% remains relatively unaffected by human activities.<sup>5</sup> Regions of medium–high to very high impact (20.5% of the total area) are found within the Alboran Sea, the Gulf of Lyons, the Sicily Channel and Tunisian Plateau, the Adriatic Sea, off the coasts of Egypt and Israel, along the coasts of Turkey, and within the Marmara and the Black Sea (Fig. 2). Areas of very low to low impact account for a total of 13.6% of the total surface area and are present within the central Tyrrhenian Sea, parts of the northern and central Adriatic Sea, the southern Levantine Sea, and the eastern and western sides of the Black Sea (Fig. 2). A majority (65.9%) of the Mediterranean and the Black Sea are subject to the medium cumulative impact.<sup>6</sup>

As shown in Fig. 2, the coastal zone of the Nile Delta and the northern outlet of the Suez Canal is characterized by a high level of anthropogenic pressure on the marine ecosystem. The high-pressure zone extends from the western coast of Egypt to the southern coast of Israel. Moreover, the opening of the canal led to the development of new sea routes in the Mediterranean and to many ships carrying various types of cargo, thus creating new pressure hotspots on the marine environment of the



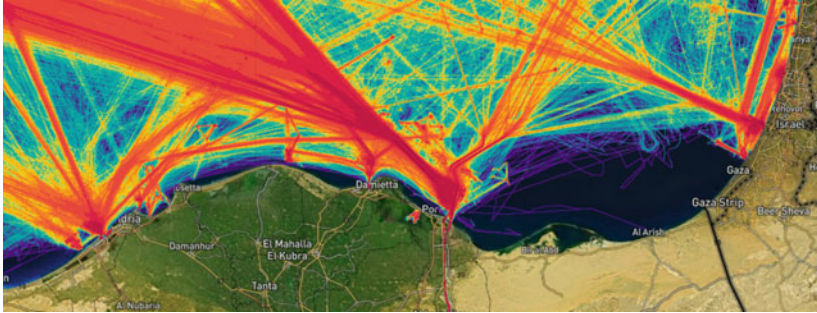
**Fig. 3** Average impact scores for each stressor in 2013 by ecoregions of the Mediterranean Sea<sup>10</sup>

Mediterranean. As a result, various sources of pollution appeared along the new sea routes, such as oil spills,<sup>8</sup> light pollution,<sup>9</sup> etc. In Fig. 2, the trace of paths is clearly visible along the central part of the Mediterranean Sea.

## MEDITERRANEAN SEA STRESSORS

All Mediterranean ecoregions are influenced by both natural climatic and anthropogenic factors, but the relative influence of various individual factors differs significantly in different ecoregions of the Mediterranean Sea (Fig. 2). Anthropogenic-climatic factors contribute most to the cumulative impact in the Mediterranean ecoregions (Fig. 3), although their contribution is relatively small in the Alboran and Adriatic Seas, for example. Direct impacts from human activities at sea, such as bottom fishing, and ocean pollution, as well as from land, are the main activities that contribute to cumulative impacts in the Mediterranean. The Levantine region represents a hotspot of environmental problems in the Mediterranean. Sea level rise is one of the significant problems in this region, accounting for 47% of all cumulative impacts. Organic, inorganic, and nutrient pollution is mainly concentrated in the Levantine region. Nighttime light pollution, despite having a minor impact on much of the Mediterranean, is a significant contributing factor. As expected, the problem of invasive species in the Levantine region is a hotspot and accounts for 37% of the problems in the entire Mediterranean. Many factors, including climatic factors, may be secondary products of the opening of the Suez Canal, but also the definition of change, such as rising ocean levels and biophysical changes in seawater, can also affect the operation of the Suez Canal.

The management and conservation of the Mediterranean region require synthesis of spatial data on the distribution and intensity of human activities and the overlap of their impacts on marine ecosystems. The analytical process and maps provide flexible tools for regional and Mediterranean efforts to allocate conservation resources; to implement ecosystem-based management; and to inform marine spatial planning, education, and basic research in the region.



**Fig. 4** Map of the overall shipping traffic density in the vicinity of Suez Canal in 2020<sup>11</sup>

## SUEZ CANAL

One of the main influences of the opening of the Suez Canal was manifested in the large number of ships in the southeastern Mediterranean. Figure 4 shows a map of the density of the total flow of ships in the Suez Canal area for 2020 (data from marine traffic).

After its opening and later expansion, the canal became one of the main ship arteries not only in the Mediterranean and Red Seas but also throughout the world. On average over the past 10 years, an average of 15,000–19,000 ships pass through the Suez Canal per year, or 40–50 per day (Fig. 5). Approximately two-thirds of the total flow of incoming and outgoing ships sail toward the Black Sea, the Mediterranean Sea, and the Strait of Gibraltar, and a third is distributed to the ports of the Levantine countries. The capacity of the Suez Canal, which on average can allow for one ship to pass in one direction in most sections, leads to some ships being forced to wait in line.

## OIL POLLUTION

The shipping industry is the backbone of global trade and value chain, and the Suez Canal is one of the main arteries.<sup>13</sup> One of the negative consequences is the release of oil and oil products, accidentally or intentionally spilled from ships.<sup>14</sup> Since the late 1960s, scientists have



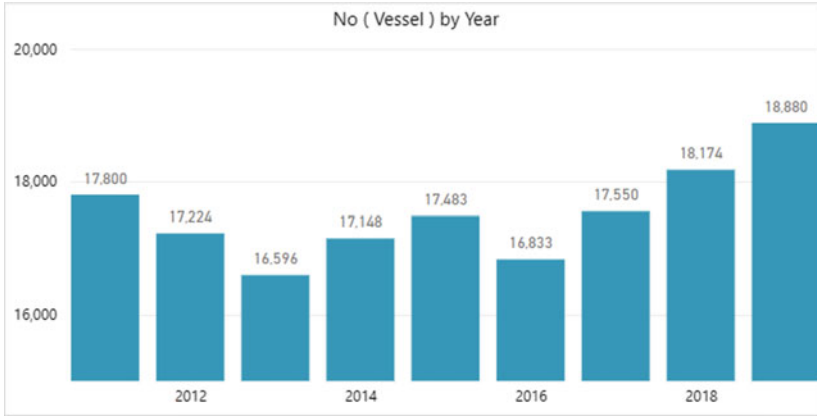


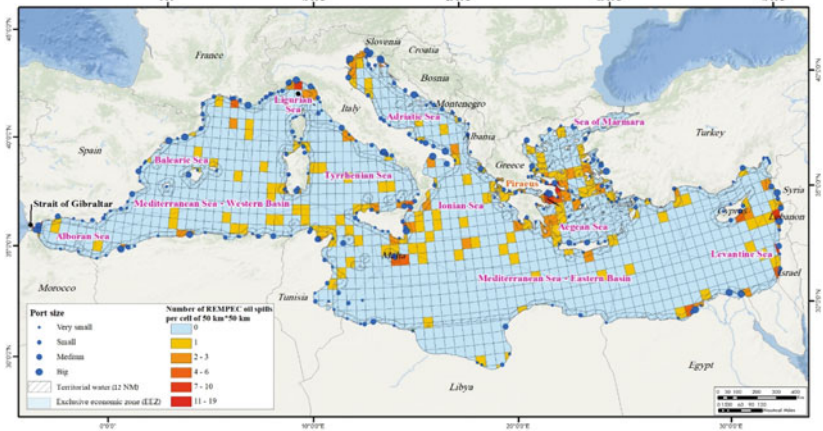
Fig. 5 The number of ships that passed through the Suez Canal in a year<sup>12</sup>

recognized that maritime transport is the main source of oil pollution in the oceans and, in particular, one of the greatest threats to the Mediterranean environment.<sup>15</sup>

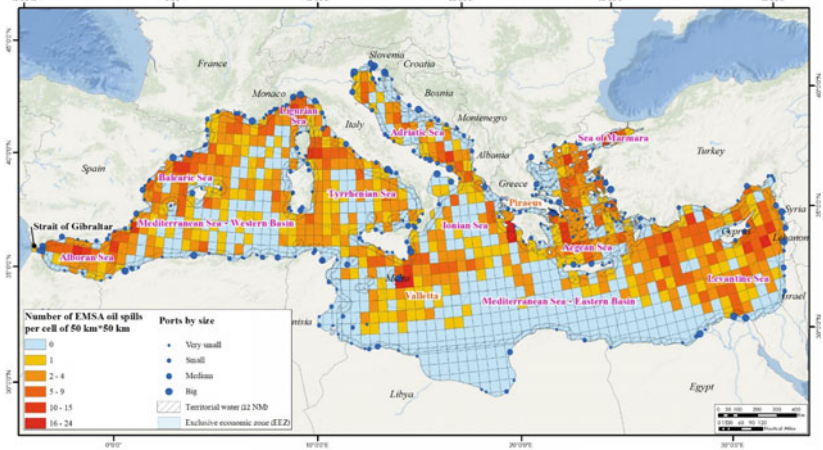
As shown in Figs. 6 and 7, the Suez Canal area is mainly due to a high concentration of deliberate releases rather than oil spills from tankers. Moreover, a high concentration of pre-drainage plumes can also be traced from the Suez Canal in accordance with the dominant routes toward the Mediterranean Sea and the Aegean Sea.

### *Artificial Nighttime Light Pollution*

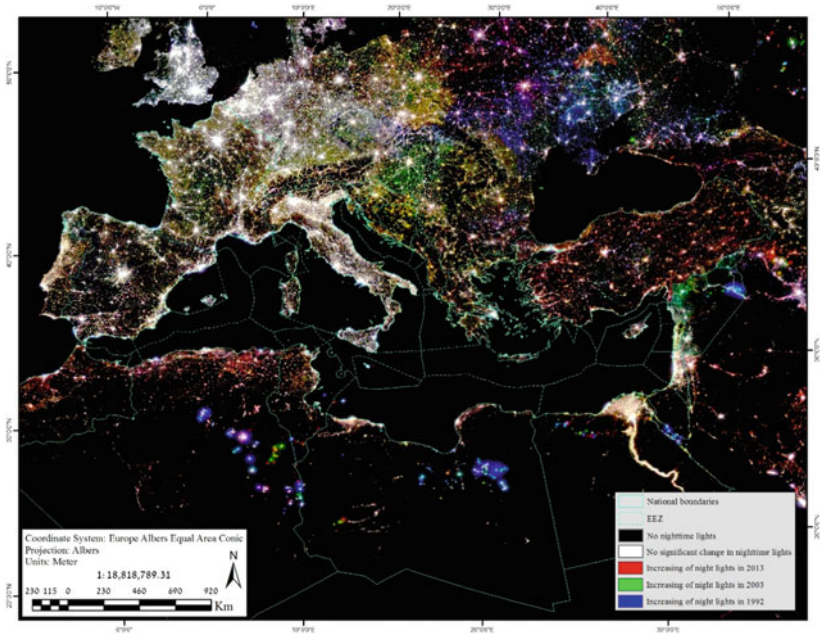
Artificial lights at night pose a major threat to multiple species. However, this threat is often disregarded in conservation management and action because it is difficult to quantify its effect. The increasing availability of high spatial-resolution satellite images may enable us to better incorporate this threat into future work, particularly in highly modified ecosystems such as the coastal zone,<sup>18</sup> and assessment of the shipping activities (Polinov et al., 2022) (Fig. 8).



**Fig. 6** The distribution of 385 Regional Marine Pollution Emergency Center (REMPEC) spills in the Mediterranean Sea for the period 1977–2000<sup>16</sup>



**Fig. 7** The distribution of 2066 European Maritime Safety Agency (EMSA) oil spills in the Mediterranean Sea for the period 2015–2017<sup>17</sup>



**Fig. 8** Nighttime light pollution in the Mediterranean region. Each color represents domination of artificial lights in specific years over others: Blue = 1992, Green = 2003, Red = 2013, White = no significant changes, Black = no artificial lights

## CONCLUSION

A new era of maritime activity in the Mediterranean was launched with the opening of the Suez Canal. Due to increased ship traffic, pressure increased on the surface of the sea, in the water column, as well as on the seabed. Despite the advancement of science and access to vast amounts of data, the assessment of human activity remains little studied. The impact of human activity has manifested itself not only in the increased number of ships passing through the Suez Canal, but also in local problems surrounding the canal, while most of them could still be defined as a research gap.

## NOTES

1. Benjamin S. Halpern, Shaun Walbridge, Kimberly A. Selkoe, Carrie V. Kappel, Fiorenza Micheli, Caterina D'Agrosa, John F. Bruno, et al., "A Global Map of Human Impact on Marine Ecosystems," *Science* 319, no. 5865 (2008): 948–52. <https://doi.org/10.1126/science.1149345>.
2. Fiorenza Micheli, Benjamin S. Halpern, Shaun Walbridge, Saul Ciriaco, Francesco Ferretti, Simonetta Fraschetti, Rebecca Lewison et al., "Cumulative Human Impacts on Mediterranean and Black Sea Marine Ecosystems: Assessing Current Pressures and Opportunities," *PLoS ONE*, 8, no. 12 (2013): e79889. <https://doi.org/10.1371/journal.pone.0079889>.
3. Benjamin S. Halpern and Rod Fujita, "Assumptions, Challenges, and Future Directions in Cumulative Impact Analysis," *Ecosphere* 4, no. 10 (2013): art 131. <https://doi.org/10.1890/ES13-00181.1>.
4. "Population Density and Urban Centers in the Mediterranean Basin," *GRID Arendal*, 2013. <https://www.grida.no/resources/5900> (accessed October 24, 2021).
5. Benjamin S. Halpern, Melanie Frazier, John Potapenko, Kenneth S. Casey, Kellee Koenig, Catherine Longo, Julia Stewart Lowndes et al., "Spatial and Temporal Changes in Cumulative Human Impacts on the World's Ocean," *Nature Communications* 6 (2015): art 7615. <https://doi.org/10.1038/ncomms8615>.
6. Micheli et al., "Cumulative Human Impacts."
7. Ibid.
8. Guido Ferraro, Annalia Bernardini, Matej David, Serge Meyer-Roux, Oliver Muellenhoff, Marko Perkovic, Dario Tarchi, and Kostas Topouzelis, "Towards an Operational Use of Space Imagery for Oil Pollution Monitoring in the Mediterranean Basin: A Demonstration in the Adriatic Sea," *Marine Pollution Bulletin* 54, no. 4 (2007): 403–22. <https://doi.org/10.1016/j.marpolbul.2006.11.022>; Guida Ferraro, Serge Meyer-Roux, Oliver Muellenhoff, M. Pavliha, J. Svetak, Dario Tarchi, and Kostas Topouzelis, "Long Term Monitoring of Oil Spills in European Seas," *International Journal of Remote Sensing* 30, no. 3 (2009): 627–45. <https://doi.org/10.1080/01431160802339464>; Semion Polinov, Revital Bookman, and Noam Levin, "Spatial and Temporal Assessment of Oil Spills in the Mediterranean Sea," *Marine Pollution Bulletin* 167 (2021): 112338. <https://doi.org/10.1016/j.marpolbul.2021.112338>.
9. Michael H. Depledge, Céline A. J. Godard-Codding, and Robert E. Bowen, (2010) "Light Pollution in the Sea," *Marine Pollution Bulletin* 60, no. 9 (2010): 1383–85. <https://doi.org/10.1016/j.marpolbul.2010.08.002>; Chao Sun, Yongxue Liu, Saishuai Zhao, and Song Jin, "Estimating Offshore Oil Production Using DMSP-OLS Annual Composites,"

- ISPRS Journal of Photogrammetry and Remote Sensing* 165 (2020): 152–71. <https://doi.org/10.1016/j.isprsjprs.2020.05.019>; Semion Polinov, Revital Bookman, and Noam Levin, “A Global Assessment of Night Lights as an Indicator for Shipping Activity in Anchorage Areas,” *Remote Sensing* 14, no. 5 (2022): 1079. <https://doi.org/10.3390/rs14051079>.
10. Based on supplementary material 3 of Halpern et al. “Spatial and Temporal Changes.”
  11. “Marine Traffic.” [www.marinetraffic.com](http://www.marinetraffic.com) (accessed April 9, 2022).
  12. “Suez Canal Authority.” <https://www.suezcanal.gov.eg/English/Navigation/Pages/NavigationStatistics.aspx> (accessed April 9, 2022).
  13. Jihong Chen, Wentao Bian, Zheng Wan, Zaili Yang, Huiying Zheng, and Paopao Wang, “Identifying Factors Influencing Total-Loss Marine Accidents in the World: Analysis and Evaluation Based on Ship Types and Sea Regions,” *Ocean Engineering* 191 (2019): 106,495. <https://doi.org/10.1016/j.oceaneng.2019.106495>; G. Zodiatis, M. De Dominicis, L. Perivoliotis, H. Radhakrishnan, E. Georgoudis, M. Sotillo, R. W. Lardner et al., “The Mediterranean Decision Support System for Marine Safety Dedicated to Oil Slicks Predictions,” *Deep-Sea Research Part II: Topical Studies in Oceanography* 133 (2016): 4–20. <https://doi.org/10.1016/j.dsr2.2016.07.014>.
  14. Jeff B. Curtis, “Vessel-Source Oil Pollution and Marpol 73/78: An International Success Story?” *Environmental Law*, 15, no. 4 (1985): 679–710. <https://www.jstor.org/stable/43265739>; Tsz Leung Yip, Wayne K. Talley, and Di Jin, “The Effectiveness of Double Hulls in Reducing Vessel-Accident Oil Spillage,” *Marine Pollution Bulletin* 62, no. 11 (2011): 2427–32. <http://doi.org/10.1016/j.marpolbul.2011.08.026>.
  15. J. Teal, “Oil Spill Studies: A Review of Ecological Effects,” *Environmental Management* 8, no. 1 (1984): 27–43; Roberto Danovaro, “Pollution Threats in the Mediterranean Sea: An Overview,” *Chemistry and Ecology* 19, no. 1 (2003): 15–32. <https://doi.org/10.1080/0275754031000081467>; Ferraro et al., “Long Term Monitoring of Oil Spills.”
  16. Polinov, Bookman, and Levin, “Spatial and Temporal Assessment of Oil Spills in the Mediterranean Sea.”
  17. Ibid.
  18. Tessa Mazor, Noam Levin, Hugh P. Possingham, Yaniv Levy, Duccio Rocchini, Anthony J. Richardson, and Salit Kark, “Can Satellite-Based Night Lights Be Used for Conservation? The Case of Nesting Sea Turtles in the Mediterranean,” *Biological Conservation* 159 (2013): 63–72. <https://doi.org/10.1016/j.biocon.2012.11.004>.

## REFERENCES

- Coll, M. et al. (2012). 'The Mediterranean Sea Under Siege: Spatial Overlap Between Marine Biodiversity, Cumulative Threats and Marine Reserves', *Global Ecology and Biogeography*, 21(4), pp. 465–480. <https://doi.org/10.1111/j.1466-8238.2011.00697.x>.
- Lotze, H. K., Coll, M., and Dunne, J. A. (2010). 'Historical Changes in Marine Resources, Food-Web Structure and Ecosystem Functioning in the Adriatic Sea, Mediterranean', *Ecosystems*, 14(2), pp. 198–222. <https://doi.org/10.1007/s10021-010-9404-8>.
- Polinov, S., Bookman, R., and Levin, N. (2022). 'A Global Assessment of Night Lights as an Indicator for Shipping Activity in Anchorage Areas', *Remote Sensing*, 14(5), p. 1079. <https://doi.org/10.3390/rs14051079>.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# Stranding of the Mega-Ship *Ever Given* in the Suez Canal: Causes, Consequences, and Lessons to Be Learned

*Aleksander Gerson*

**Abstract** In March 2021, the mega container ship *Ever Given*, a 400-m-long vessel weighing 200,000 tons, with a maximum capacity of 20,000 containers, grounded in the southernmost stretch of the Suez Canal. Ship convoys in the southern part of the Suez Canal can only travel in a single lane, therefore the grounding of the *Ever Given* effectively blocked all traffic through the Canal. The six-day blockage exacted a heavy financial price and loss of revenues for Egypt and for consumers worldwide. When the *Ever Given* was finally freed, she was arrested by Egyptian authorities and detained for over three months, while all her cargo worth hundreds of millions of dollars could not reach its various destinations, causing further financial losses and claims. This incident demonstrates the vital importance that Suez Canal holds for global maritime trade by considerably shortening the route between the Far East and Europe and the Americas (as an alternative to journeying around Africa). However, it highlights the consequences of failure to adapt to the pace of growth

---

A. Gerson (✉)

Wydra Division for Shipping and Ports Research,  
Maritime Policy & Strategy Research Center, University of Haifa, Haifa, Israel  
e-mail: [alexgerson49@gmail.com](mailto:alexgerson49@gmail.com)

© The Author(s) 2023

C. Lutmar and Z. Rubinovitz (eds.), *The Suez Canal: Past Lessons and Future Challenges*, Palgrave Studies in Maritime Politics and Security, [https://doi.org/10.1007/978-3-031-15670-0\\_12](https://doi.org/10.1007/978-3-031-15670-0_12)

231

of container ships in the last two decades, and the lack of preparedness of the Suez Authorities to deal with an event of such magnitude. The race to increase profitability by economies of scale has a profound global impact on shipping and ports. The article discusses the regulatory regime of this vital waterway in the context of responsibilities, liability, and cooperation between Suez Canal authorities and ships' commands. The lack of clarity regarding legal relationships between national authorities, ship operators, and masters is discussed with emphasis on straits, narrow passages, rivers, and channels.

**Keywords** Suez Canal blockage · Ever Given · Suez Canal widening and deepening · Global bottleneck passages · Suez Canal Authority · International Maritime Organization

On March 23, 2021, the mega container ship *Ever Given* grounded in the southernmost stretch of the Suez Canal. The *Ever Given* is a 400-m-long vessel weighing 200,000 tons, with a maximum capacity of 20,000 containers; owned by the Japanese Shoeni Kisen Kaisha and operated by Evergreen Line. Ship convoys in the southern part of the Suez Canal can only travel in a single lane, therefore the grounding of the *Ever Given* effectively blocked all traffic through the Suez Canal (Fig. 1).

Dislodging the giant ship required six days, causing a backlog of hundreds of ships unable to traverse the Suez Canal on their route to and from the United States, Europe, and the Far East.

The importance of the Suez Canal as a vital waterway for global maritime commerce, connecting the East and West of the globe, cannot be overestimated. The Canal annually serves some 19,000 ships carrying over 1 billion tons of cargo. Approximately 12–15% of global trade, around one million barrels of oil, and roughly 8% of transported liquefied natural gas pass through the Canal daily. An accident of such magnitude has a global impact on the vital maritime supply chain, with potential delays, backlogs, and financial losses to shippers, receivers, and the maritime community, lasting for many months after the ship has been freed and the Canal has resumed its activity (Fig. 2).

In this context, several questions arise:



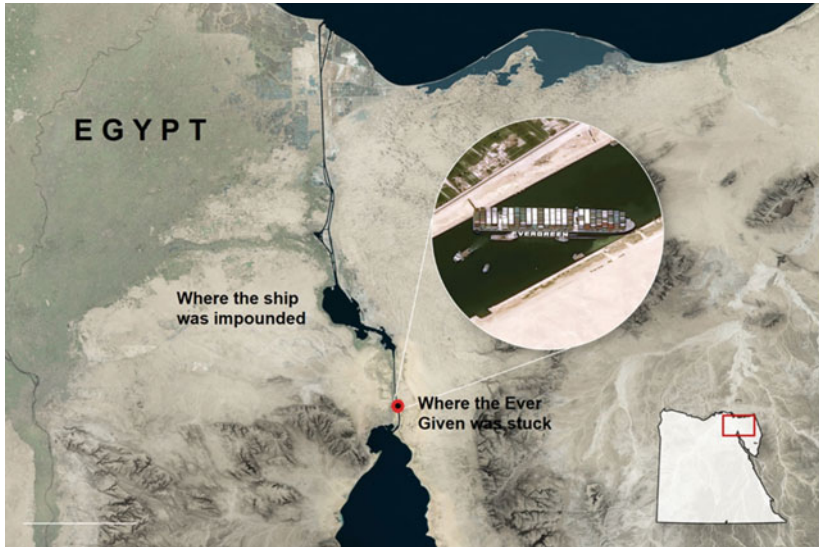


Fig. 1 Location of the grounding of the *Ever Given*<sup>1</sup>

- Is the Suez Canal fit for purpose in the modern era of ever-growing container ships?
- Can the global maritime regulator—the IMO (International Maritime Organization)—adapt to the rapidly changing reality?
- Does the complex relationship between the captain and pilot (“The pilot has the conn,<sup>3</sup> the master is in command”) require a fresh international approach and standardization?
- Have all lessons been learned from the accident?

### HISTORIC PERSPECTIVE

The Suez Canal was opened in 1869, however its international status remained undefined for many years. In 1888, the major maritime powers of the time (with the exception of Great Britain) signed the Convention of Constantinople, which declared that the Canal should be open to ships of all nations in times of both peace and war (Fig. 3).

When it first opened, the Suez Canal consisted of a channel barely 8 m deep, 22 m wide at the bottom, and 61–91 m wide at the surface.

## Alternative route for shipping while Suez Canal blocked

<b>Using Suez Canal</b>	<b>Around Cape of Good Hope</b>
10,000 nautical miles (18,520km)	13,500 nautical miles (25,002km)
<b>25.5 days*</b>	<b>34 days*</b>

\*Based on ship's average speed of 16.43 knots

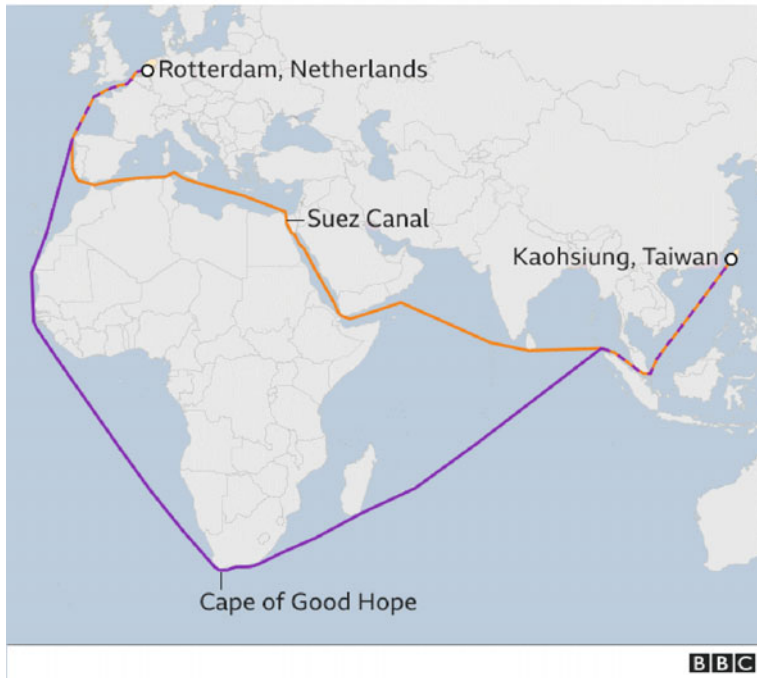


Fig. 2 Alternative shipping routes<sup>2</sup> (Source Vessels Value)

In order to allow ships to pass alongside each other, passing bays were constructed every 8–10 km (5–6 miles). However, in the first fifteen years some 3000 ships grounded because of the narrowness and tortuousness of the channel. Major improvements began in 1876, and, after successive widenings and deepenings, by the 1960s (almost one hundred years



**Fig. 3** The Suez Canal, mid-twentieth century<sup>4</sup>

after its opening), the Canal had a minimum width of 55 m at a depth of 10 m along its banks and a channel depth of 12 m at low tide. During that period, passing bays were also greatly enlarged, and new bays were constructed. Bypasses were created in the Bitter Lakes and at Al-Ballah, stone or cement cladding and steel piling for bank protection were almost entirely completed in areas particularly liable to erosion, tanker anchorages were deepened in Lake Timsah (named after a Nile crocodile), and new berths were dug at Port Said to facilitate the grouping of ships in convoy.

The original Suez Canal did not permit two-way traffic, and ships were required to stop in a passing bay to allow the passage of reciprocal traffic. Transit time, which in the 1870s averaged 40 h, had been reduced to 13 h by 1939. A system of convoys was adopted in 1947, consisting of one northbound and two southbound per day, followed by further widening of the Canal. With the significant increase in tanker traffic, transit time since 1975 has ranged from 11 to 16 h. Upon entering the Canal at Port Said or Suez, ships are assessed for tonnage and cargo and are handled by one or two pilots for actual canal transit, which is increasingly

Fig. 4 Map of Suez Canal after August 2015



radar controlled. Southbound convoys moor at bypasses in Port Said, Al-Ballāh, Lake Timsah, and Al-Kabrīt, which allows northbound convoys to proceed without stopping. In August 2015, a new 35-km (22-mile) expansion running parallel to the main channel was opened, enabling two-way transit through most of the Canal. The main channel was deepened to allow for the passage of larger ships. The expansion project, launched by Egyptian President Abdel Fattah El-Sisi in 2014, was part of an effort to boost Egypt's economy.

Over the last century, the nature of Suez Canal traffic has altered significantly, in particular due to the enormous growth in shipments of crude oil and petroleum products from the Persian Gulf since 1950. Oil in northbound traffic multiplied 570 times (from 295,700 metric tons in 1913 to 168,700,000 metric tons in 1966). The closure of the Suez Canal between 1967 and 1975 (the Israeli-Egyptian conflict) triggered the introduction of large oil tankers on the route around the Cape of Good Hope (Fig. 2) and prompted the development and opening of the Sumed pipeline from Suez to Alexandria in 1977. At present, the Suez Canal handles 12–15% of global maritime traffic (Fig. 5).

A shift of Australasian trade from Europe to Japan and East Asia resulted in some decline in Suez Canal traffic, however the movement of oil from refineries in Russia, southern Europe, and Algeria has continued, chiefly to India, and the shipment of dry cargoes, including grain, ores, and metals has increased. A more recent feature has been the growth of container and roll-on/roll-off (“ro-ro”) traffic through the Canal, chiefly destined for the highly congested ports of the Red Sea and Persian Gulf.

Several global bottleneck passages possess some similarities to the Suez Canal: the Panama Canal, the Strait of Istanbul (the Bosphorus) connecting the Sea of Marmara and the Black Sea (which operates under the “Montreux” Convention of 1936), and the “Kattegat-Skagerrak” Passage connecting the Baltic and the North Seas. None, however, carries as great a share of world maritime tonnage in as narrow a channel as the Suez Canal, and none are located entirely within the full jurisdiction of a single country.

## NARRATIVE OF EVENTS

The *Ever Given* is one of the largest container ships ever built (the latest builds reach 24,000 containers and belong to the Evergreen Company). Its keel floated only a few yards from the Canal's bottom. There were warning signs well before it ran aground. Just before dawn on March 23,

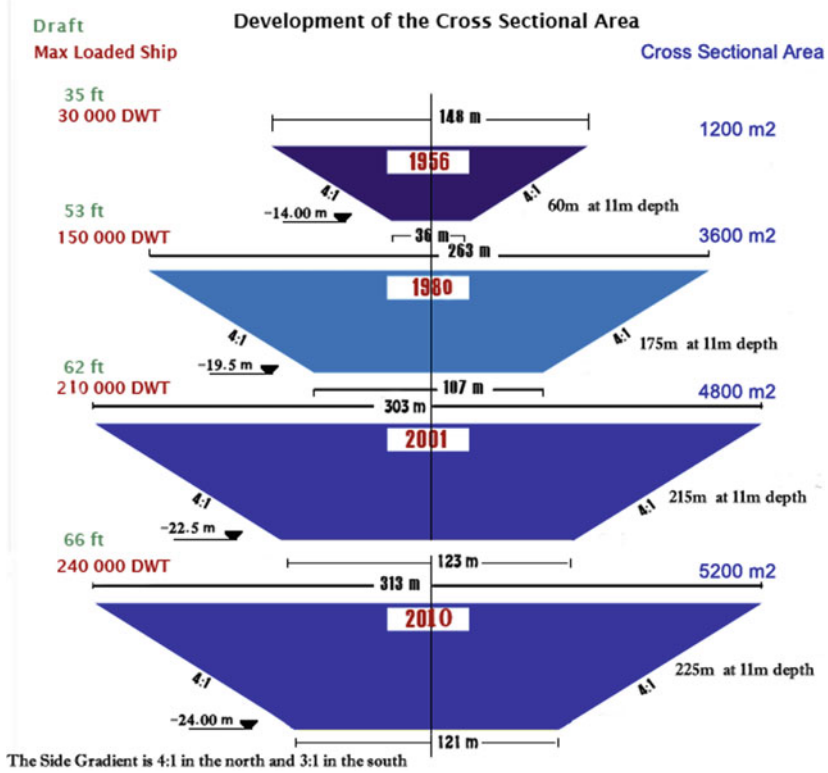


Fig. 5 Width and cross-sectional area of Suez Canal expanded with time<sup>5</sup>

2021, weather in the Suez Canal zone was worsening and the winds from the south had picked up, triggering a burst of concerned radio chatter among ships waiting to cross. The Canal Authority had no system in place for monitoring weather conditions or for warning ships regarding bad weather. The *Ever Given* and other ships were dragging their anchors, an unmistakable indication that the weather was unusually rough. Nevertheless, the ship’s captain decided to go ahead, perhaps submitting to the same high-pressure commercial demands that have driven the industry to build increasingly gigantic container ships over the past 15 years.

The global shipping market was already under strain in 2020–2021 because of the global COVID-19 pandemic and increased ordering of

online commodities by Western consumers under pandemic-related “lock-down.” Waiting for weather to improve would have delayed the cargo the *Ever Given* was carrying from Asia to Rotterdam, bound for customers in Europe. As the *Ever Given* entered the Suez Canal in a convoy of north-bound vessels, the wind from the south suddenly gusted to more than 49 knots (Nautical Miles per hour). Sheets of sand swirled across the Canal, graying the horizon and cutting visibility. Ships in the convoy soon lost sight of one another. When the visibility cleared a little before 8:00 a.m., the *Ever Given* was already wedged diagonally across the Canal (Fig. 6).

Pilots with local knowledge have been employed on board ships for centuries to guide vessels into or out of port safely or wherever navigation may be considered hazardous, particularly when a shipmaster is unfamiliar with the area.<sup>7</sup> Using a pilot is compulsory in most ports. Under Suez Canal Authority rules, local pilots advise the ship’s crew on steering and navigation, although captains retain final responsibility and can overrule

## MV Ever Given and the Suez Canal

The huge container ship of the Evergreen Marine Corporation has blocked the canal

### THE MV EVER GIVEN

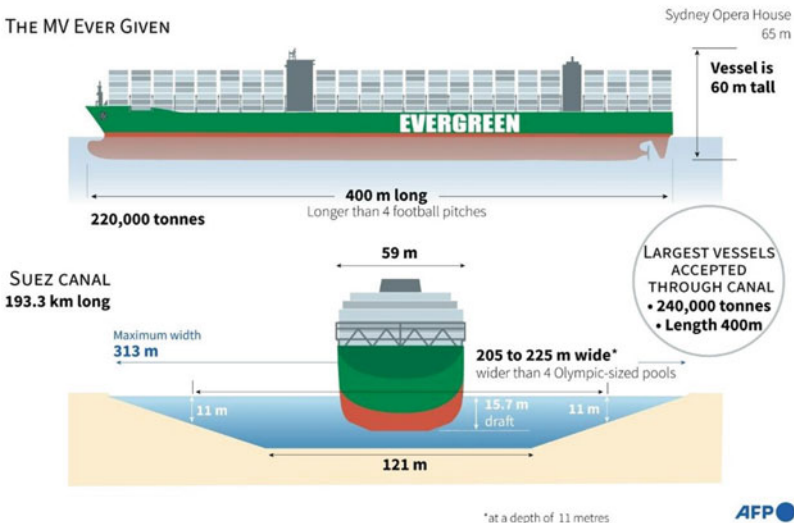


Fig. 6 Illustration showing the Suez Canal’s cross section vs. *Ever Given*<sup>6</sup> (Source [fleetmon.com](http://fleetmon.com), Suez Canal authorities, Vessel finder)

a pilot's order. In practice, however, captains usually defer to the local pilots' expertise and rarely contradict their commands. At this point, it would be important to note that many (if not most) countries follow the antiquated British law (the UK Merchant Shipping Act of 1894), which largely exonerates the pilot from any responsibility in case of an accident ("Despite the duties and obligations of a pilot, his presence on board does not relieve the master or officer in charge of the watch from their duties and obligations for the safety of the ship"<sup>8</sup>). The Panama Canal is one of the few places where the canal pilot legally takes the responsibility for the navigation aspect of the passage of any vessel transiting the Panama Canal.

For example, despite various court rulings on the matter, one can still find the following in Israeli Maritime Law:

Damage by Vessels Under Pilotage Ordinance (No. 11 of 1939).

1. This ordinance may be cited as the Damage by Vessels Under Pilotage Ordinance, 1939
2. Notwithstanding anything contained in any Ottoman law or any other law or Ordinance the *owner or master of any vessel under pilotage, whether compulsory or otherwise, shall be answerable* for any loss or damage caused by the vessel or by any fault of the navigation of the vessel [emphasis added].

The captain may find himself in a difficult spot, being basically "damned if he does and damned if he doesn't." Although the International Convention of Safety of Life at Sea (SOLAS Chapter V regulation 34-1) states: "The owner, the charterer, the company operating the ship, or any other person SHALL NOT prevent or restrict the master of the ship from taking or executing any decision which, in the master's professional judgement, is necessary for the safety of life at sea and protection of the marine environment," the pilot is the local expert, is intimately familiar with all local conditions and procedures, and the master depends on him and will not readily overrule the pilot.

In the case of the *Ever Given*, the dynamic difficulties were put to the test almost as soon as the ship entered the Canal. A few miles in, the ship began weaving, perhaps shoved by the wind as its 14-story-high cargo was forming a huge windage area and functioned like a massive sail. Whatever



caused the initial zigzag, the Suez pilots' efforts to correct course proved counterproductive (Fig. 7).

Much of the sequence of events on the bridge was first reported by *Bloomberg Businessweek*.<sup>10</sup> According to audio recordings from the ship's voyage data recorder (as reported by people who had access to the recording but spoke on condition of anonymity) one of the two pilots (on a ship of this size, there are usually two pilots during the transit) gave a series of unusually confused commands, shouting to the ship's helmsman to steer hard right, then hard left. When the pilot sent the ship as far as it would go in one direction, the captain apparently stepped in and straightened it, provoking an argument with the pilot. As the helmsman struggled to center the ship, there seemed to be a disagreement between the two pilots in regard to action to be taken. As it lurched up the canal, satellite data shows the *Ever Given* was already gaining speed. The first pilot ordered the ship to go "full ahead," revving it up to about 13 knots—much faster than the Canal's limit of about 8 knots. When the captain tried to intervene to slow the ship down, the pilot apparently responded with an implied threat to walk out (which was in any case an idle threat, as at that stage it would have been impossible). It must be emphasized that at the time of writing this chapter, official recordings of the VDR (Voyage Data Recorder) have not yet been published. However, the frantic radio traffic between pilots and Suez Canal control must have been picked up by other ships in the convoy and seamen who served on board the *Ever Given* must have spread the word.

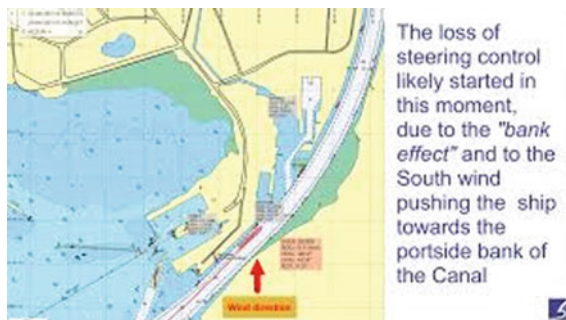


Fig. 7 *Ever Given* grounding in Suez Canal. AIS-based Dynamic Reconstruction from Maritime Casualty Specialists on Vimeo<sup>9</sup>

Citing experts, by speeding up, the pilot was likely trying to regain control of the rudder, which needs water rushing past it to work effectively. But the ship was now pushing a huge bow wave at high speed, generating an impossible-to-stop momentum of a 200,000 tons ship, thereby placing the *Ever Given* at the mercy of external forces.

Excessive speed while navigating a narrow channel, creates a range of problems that affect the ship's control. As the water around the ship rushed ever faster between the ship and the canal wall, its pressure was falling (similar to the Venturi effect). As a result, the *Ever Given* succumbed to what seafarers call the "bank effect" (or "cushion effect"), a phenomenon in which the stern tends to swing toward one bank while the bow is pushed away from it. Furthermore, the ship's "squat" (squat is a known physical property where the draught of a ship can become deeper (by meters) with an increase in speed and the proximity of shallow water and narrow channels<sup>11</sup>) caused the ship's steering to become erratic, as the ship was sinking dangerously close to the canal bottom. Most likely, when under keel clearance (UKC) shrank dangerously (in maritime jargon—"smelling the ground") the ship might have become uncontrollable. This combination of factors probably sent the *Ever Given*'s bow plowing into the right bank of the canal. Twenty-two minutes after the pilots boarded the ship, the *Ever Given* was embedded so deeply in the sandy mud that it would take six days, a team of high-powered dredgers, and more than a dozen tugboats to dislodge it.<sup>12</sup> Fortunately, an unusually high tide contributed to the success of the operation.

Neither of the two tugboats accompanying the ship as per Suez Canal regulations was close enough and, in any case, they were insufficiently powerful to have prevented the ship's deviation. Figure 8 clearly shows the ship's bow and stern embedded in mud due to the sloping walls on both sides of the channel.

The Suez Canal Authority has, even at the time of writing, denied that its pilots were at fault, emphasizing that the "responsibility for pilotage operation in port and in Suez Canal lies entirely with the Master of the guided vessel even in case of the pilot's error" (Egyptian Maritime Code No. 8 of 1990 [Article 279]). The Suez Authority's senior chief pilot blamed the weather and the ship's sluggish response to steering, explaining: "What happened was beyond any pilot's control, with the sandstorm and the lack of visibility and strong wind." He added that the two pilots, whose names were not released, were both experienced

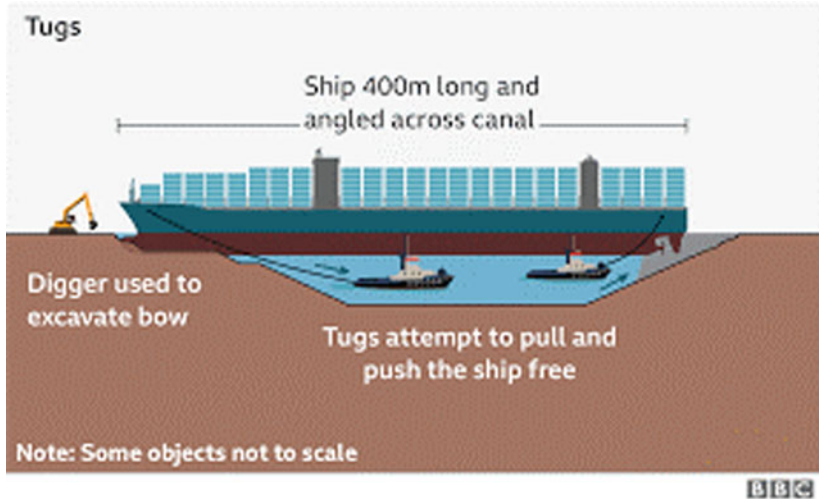


Fig. 8 Salvage attempts of the *Ever Given*<sup>13</sup> (Source B5M, media reports)

senior pilots. A former head of the Suez Authority, when interviewed, acknowledged that even seasoned Suez pilots needed more training on the largest container ships, as currently they undergo only one training run on a real ship after practicing on a simulator. The ship's Japanese owner Shoei Kisen Kaisha declined to comment on the circumstances of the grounding. The ship's captain could not be reached for comment.

While dozens of other freighters roughly the size of the *Ever Given* had traversed the Suez uneventfully in the previous year, shipping analysts have been warning for years that container ships have grown too large to operate safely in many ports and canals. Fifteen years ago, the average container ship carried 4000–6000 containers and measured approximately 280–300 m long. The size of the new mega-ships had increased dramatically not just in length, but more importantly, in their beam and draught. However, the shipping industry was looking for larger, more efficient ships that could haul more while costing less. Ultra-large container vessels now stretch as long as 400 m, measure 65 m in width, have a draught of 16 m, and can carry more than 20,000 containers (the largest, *Ever Ace*, carries 24,000). Over a hundred such mega-ships now operate worldwide (Fig. 9).



Fig. 9 Cargo stacked 14 stories high on the “Ever Given”<sup>14</sup>

Professional voices in the industry have expressed concerns as to the handling of such ships, and have predicted the risks involved with the trend of smaller rudders on large ships, introduced in order to reduce fuel consumption, however associated with reduced maneuverability in channels and shallow water as compared to benefits gained in the open sea.<sup>15</sup> Canals around the world have been widened to accommodate bigger ships. This includes the Suez Canal, which has been dredged and was expanded in 2015 to add a second lane. However, the 18-mile segment of the Canal where the *Ever Given* got stuck had not been widened, and the Canal’s tugboats were not sufficiently powerful to dislodge it once it was stuck. The Suez Canal Authority has so far declined to accept any responsibility for its part.

- Maritime protocols assign responsibility for investigating an accident to the country where the accident occurred and to the *country whose flag the ship flies*, in this case Panama, rather than to a neutral party such as the International Maritime Organization. It is customary for the investigating country to promptly share all information with the vessel’s Flag. On this occasion, Egyptian authorities were in no hurry to turn over important information to Panamanian investigators, including answers to queries regarding the pilots’ experience, bad-weather procedures, and conversations in the Suez Canal’s control tower.

- IMO regulations have not kept up adequately with the swiftly changing reality of technologies and the extremely rapid growth of container ships. Unlike the aircraft industry, there is no standardization in the ship's construction and/or bridge layout. The Convention of Safety of Life at Sea (SOLAS) "Chapter V – Safety of Navigation Regulation 2 (Shipborne navigation equipment and systems)" explicitly mentions only the basic compulsory equipment according to ships' size where the biggest ship is of 50,000 Gross Ton (GT) or above. The fact that the magnetic compass is still listed as the primary compass, demonstrates the maritime world's slow pace of adaptation to new technologies. The introduction of new international conventions or amendments to existing IMO conventions, codes, and resolutions, requires a clear majority among the 175 member states, rendering it a cumbersome and lengthy process. Ship owners are generally reluctant to invest in any technology that has not been made compulsory. Furthermore, the maritime industry is the most regulated industry of all (66 conventions and numerous international codes and resolutions), which makes efficient oversight difficult to carry out and creates a huge administrative burden on the captain and officers. A VDR is compulsory and should store information, in a secure and retrievable form, regarding the position, movement, physical status, command, and control of a vessel over the period leading up to and following an incident.<sup>16</sup> However, a standard VDR may be substituted on cargo ships by a simplified system (S-VDR). Moreover, a ship's VDR does not provide the same level of information as that of the aviation industry black box, therefore may not provide sufficient information when investigating an accident.<sup>17</sup>
- Experts have advised that the IMO should mandate stricter standards. Regional rules and regulations employed in some places (such as the United States, EU, Singapore [Malacca Strait]) a sophisticated Vessel Traffic Systems (VTS), can similarly enhance the safety of navigation in port approaches or during long pilotage in rivers and channels. Such systems would greatly contribute to the safety of navigation in the Suez Canal.

## THE AFTERMATH

A week after the accident and with a backlog of some 400 ships carrying cargo worth many billions of dollars waiting north and south of the Suez Canal, the *Ever Given* was dislodged and sailed to the Bitter Lakes near Ismailia where she was arrested by local court order for official investigation. Three months later, after payment of an undisclosed sum (apparently in excess of half a billion USD) by the owners, the ship was released.

During and after the Suez Canal blockage, the global maritime industry was engaged in debating its consequences, including means of overcoming the backlog of container ships waiting to discharge their cargo at ports of destination. Although the question of alternatives to the Suez Canal (round the Cape of Good Hope) has become relevant again, this will be very much dependent on fuel prices and daily hire of ships, both of which are currently very high. Ever since its deployment in the 1950s, container shipping has revolutionized global trade by expanding the availability of consumer goods and lowering prices. Exponential increases in the number of containers that may be stacked atop a single ship have effectively shrunk the globe further. Capacity has increased 15 fold over the last half-century and has nearly doubled over the last decade alone. However, these same advances have added vulnerabilities. A single major incident such as the disruption at the Suez Canal intensified the strains on the shipping industry and ports, which were already under pressure due to the COVID-19 pandemic.

The looming possibility of opening the Northern Passage and considerably shortening the route to the Far East (Shanghai to Rotterdam—16,000 Nautical Miles (NM) instead of 20,000 NM)<sup>18</sup> is currently under advanced planning, including appropriate regulation by the IMO.<sup>19</sup> However, many legal questions remain regarding international access to this waterway. Is it a passage or a strait? Currently, impediments facing all countries considering using the Northwest Passage include: the need for advanced ships and technology, high insurance costs, and the fees involved in using icebreaker escort vessels (Fig. 10).

The Suez Canal Authority has moved briskly to prevent future disruptions of canal traffic, which generates more than \$5 billion a year (\$6.7 billion in 2021) in much-needed foreign currency for Egypt.

In early 2022, the state-owned Suez Canal Authority (SCA) announced plans to extend the two-way section south of the Great Bitter Lake by lengthening the second Canal Lane (opened in 2015) by 10 km,

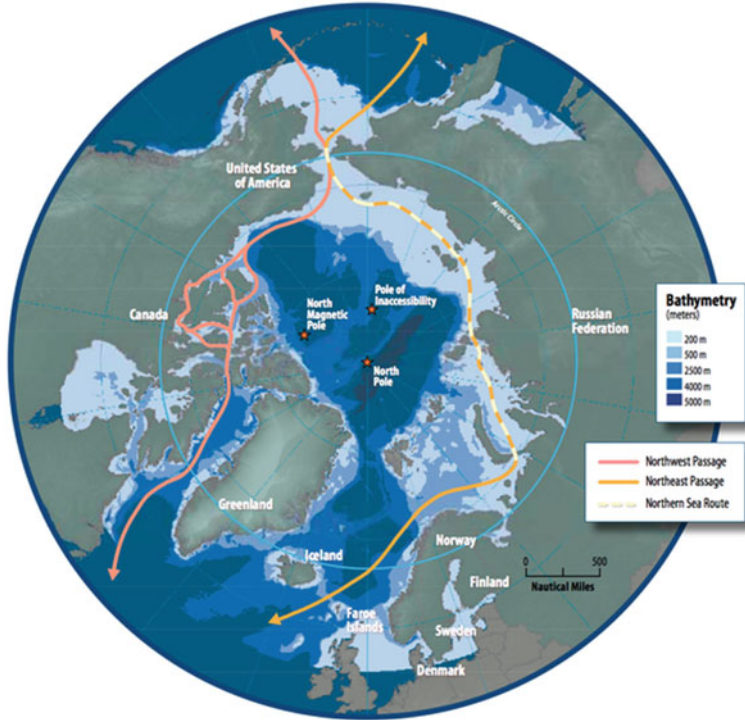


Fig. 10 Potential route via Northwest Passage<sup>20</sup>

totaling 82 km in length. In addition, it plans to widen and deepen a single lane stretch at the southern end of the Canal. These projects are expected to be completed by July 2023 after two years of work, as announced by the chairman of the Suez Canal Authority (SCA).<sup>21</sup> Plans were also announced to purchase a fleet of more powerful tugboats, a support vessel, and cranes that could partially relieve the load of any future grounded ship.

Egyptian experts emphasize that no alternative trade route can compete with the unique advantages of the Suez Canal's geographic location, including fewer accidents than on other global trade routes; lower costs than land trade routes requiring loading and unloading of goods; future options for widening and deepening the Suez Canal route, if necessary; and advanced control systems.<sup>22</sup>

## DISCUSSION

With the perspective of a ship's captain of many years' experience, having traversed the Suez Canal numerous times, as well as serving as former Deputy Director of the Israeli Maritime Administration and a representative to the IMO, several issues come to mind that should be considered by the maritime industry:

- Ports and approaches for docking mega-ships require sufficient depth and robustly constructed piers that can support cranes with a reach exceeding 60 m. Most existing ports worldwide, for example in northern Europe and the eastern United States, are not suitable for handling mega container ships. Only 20 ports in the world can accommodate 19,000 TEU (Twenty-foot Equivalent Unit, i.e., a 20-foot-long container) vessels.<sup>23</sup> Major European ports such as Rotterdam, Antwerp, Felixstowe, and Liverpool are investing huge sums in adapting their ports to the logistics of handling mega-ships, while the remainder of ports can only be served by smaller vessels. This might herald the end of the traditional city-port era, with dedicated ports being constructed at a considerable distance from the city.
- The potential for ecologic disaster in case of an accident involving a mega-ship, is significantly increased, in view of the quantity of cargo on board, including very large amounts of dangerous goods and the large quantities of fuel required for propulsion of such ships.
- In the adverse weather circumstances of the Suez Canal on March 23, 2021, the *Ever Given's* captain might have considered delaying entry to the Suez Canal had he been confident of receiving support from his employer for exercising professional judgment. The massive shift of the maritime industry to Flags of Convenience (FCs) and international Management Companies, means that seafaring crews can be recruited from anywhere in the world (preferably as cheaply as possible). This often places the captain under undue pressure from owners, charterers, and management, but lacking the support of a national administration or organized workers' union. These situations may impinge on the masters' ability to exercise their authority and make difficult decisions.



- The ambiguous master–pilot relations, as demonstrated in the case above, beg to be re-addressed in general, with emphasis on navigation in narrow passages/channels and other places of vulnerability, where the captain has a very limited scope of control.
- A “Crew Negligence” clause is standard in all marine ship insurance contracts. This means that while the owner claims insurance in case of a mishap, based on this clause the captain and the officers are automatically labeled responsible. This circumstance frequently facilitates laying the blame on ship’s command, and it sometimes means the end of their career. A case example is the master of the *Erika*, which broke in two and sank in a storm in the Bay of Biscay (1999).<sup>24</sup> The Indian-nationality captain acted professionally and saved the entire crew prior to the ship’s sinking. While the owner received insurance compensation, the captain was summarily dismissed and was never re-employed as a captain.

The case of the stranding of the *Ever Given* has touched upon and highlighted several burning issues related to international shipping in the modern era.

Will the exponential growth of container ships continue, or will it be curbed in view of the diminishing returns beyond a certain size,<sup>25</sup> as well as the increase in risks of a vessel of such size involved in a serious accident?

Energy prices are soaring and a steep increase in Suez Canal transit fees has been introduced (approximately 15% in 2022—a 20,000 TEU container ship will pay approximately \$700,000 for a single transit<sup>26</sup>). Approximately 60% of the cost savings of the most recent container ships are related to more efficient engines. Have the advantages of economies of scale exceeded their usefulness, and will the maritime community push more aggressively for alternative routes and invest in new propulsion techniques?<sup>27</sup> These trends will unravel in the future.

## NOTES

1. Satellite image by CNES, via Airbus. By Scott Reinhard. <https://regiamarinho.medium.com/the-suez-canal-news-the-massive-ship-is-still-stuck-b1d5a9e25f10>.
2. Mary-Ann Russon, *BBC News*, 29 March 2021.

3. “Conn,” *Merriam-Webster.com Dictionary*. <https://www.merriam-webster.com/dictionary/conn> (accessed April 10, 2022). To conduct or direct the steering of (a vessel, such as a ship).
4. Alan B. Mountjoy, “The Suez Canal at Mid-Century,” *Economic Geography* 34, no. 2 (1958): 155–67.
5. Department of Naval Architecture and Marine Engineering, Bangladesh University of Engineering & Technology, Bangladesh.
6. “Fleetmon, Tracking the Seven Seas,” <http://Fleetmon.com> (accessed April 10, 2022): Suez Canal authorities, Vessel Finder.
7. “Pilotage,” *International Maritime Organization*. <https://www.imo.org/en/OurWork/Safety/Pages/Pilotage.aspx> (accessed April 10, 2022).
8. “Master Pilot Exchange – Duties, Responsibilities and Elements of Effective Relationship,” *Cult of Sea*. <https://cultofsea.com/navigation/master-pilot-exchange-duties-responsibilities-and-elements-of-effective-relationship/> (accessed April 10, 2022).
9. Maritime Casualty Specialists, “Ever Given Grounding in Suez Canal - AIS Based Dynamic Reconstruction,” *Vimeo*, April 1, 2021. <https://vimeo.com/531626438>.
10. Kit Chellel, Matthew Campbell, and K Oanh Ha, “Six Days in Suez: The Inside Story of the Ship that Broke Global Trade,” *Bloomberg*, June 24, 2021. <https://www.bloomberg.com/news/features/2021-06-24/how-the-billion-dollar-ever-given-cargo-ship-got-stuck-in-the-suez-canal>.
11. “Under Keel Clearance: What Lies Beneath,” special issue, *The Navigator: Inspiring Professionalism in Marine Navigators* 26 (2021). <https://www.nautinst.org/uploads/assets/9b9942d1-3ad4-41fa-821c778b79ebd07b/26-UKC.pdf>.
12. Vivian Yee and James Glanz, “How One of the World’s Biggest Ships Jammed the Suez Canal,” *New York Times*, July 19, 2021. <https://www.nytimes.com/2021/07/17/world/middleeast/suez-canal-stuck-ship-ever-given.html>.
13. “Suez Canal: How Did They Move the *Ever Given*?” *BBC Reality Check & Visual Journalism*, *BBC News*, March 29, 2021. <https://www.bbc.com/news/56523659>.
14. <https://www.insurancejournal.com/news/international/2021/07/07/621607.htm>.
15. Jennifer K. Waters and Alan L. Blume, Ensuring the Safe and Efficient Movement of Ships in Channels, PIANC 2002, 30th International Navigation Congress 2002. <http://www.graduadosportuaria.com.ar/Vias%20Navegables/Tema%205/Ensuring%20the%20safe.....PDF>.
16. “Resolution A.861(20), adopted on 27 November 1997, Performance Standards for Shipborne Voyage Data Recorders (VDRs),” International

- Maritime Organization, December 3, 1997. [https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/AssemblyDocuments/A.861\(20\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/AssemblyDocuments/A.861(20).pdf).
17. Yee and Glanz, "How One of the World's Biggest Ships Jammed the Suez Canal."
  18. With expectations that Arctic Sea ice will melt totally by 2050, the Northwest Passage will become fully navigable for mega container ships. (Reuters).
  19. "Shipping in Polar Waters," *International Maritime Organization*. <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Polar-default.aspx> (accessed April 10, 2022).
  20. Siri Gulliksen Tømmerbakke, "Old Conflict Reignited: 30 Year-Old Compromise Divides USA and Canada," *High North News*, April 12, 2019. <https://www.highnorthnews.com/en/30-year-old-compromise-divides-usa-and-canada>.
  21. Egypt: Suez Canal expansion to finish in July 2023. i24NEWS – Reuters, January 17, 2022.
  22. Tomer Fadlon, Ofir Winter, and Shmuel Even, "The Blocking of the Suez Canal: Lessons and Challenges" *INSS Insight* No. 1460, May 3, 2021.
  23. Gary Peters, "Mega Container Ships and How They Are Changing Ports," *Ship Technology*, August 10, 2016, updated February 4, 2020. <https://www.ship-technology.com/features/featuremega-container-ships-and-how-they-are-changing-ports-4974826/>.
  24. Report of the Enquiry into the sinking of the ERIKA off the coasts of Brittany on 12 December 1999. [http://www.bea-mer.developpement-durable.gouv.fr/IMG/pdf/RET\\_ERIKA\\_En\\_Site.pdf](http://www.bea-mer.developpement-durable.gouv.fr/IMG/pdf/RET_ERIKA_En_Site.pdf).
  25. "Just How Big Can Container Ships Be Before Point of Diminishing Returns Reached?" *SupplyChainBrain*, July 8, 2016. <https://www.supplychainbrain.com/articles/24152-just-how-big-can-container-ships-be-before-point-of-diminishing-returns-reached>.
  26. "Admiral Rabea: 'Increasing the transit tolls of all the types of transiting ships through the canal with 6% during 2022 and fixing/stabilizing the tolls of LNG ships and cruise ships only,'" *Suez Canal Authority*, November 4, 2021. [https://www.suezcanal.gov.eg/English/MediaCenter/News/Pages/navigation\\_04-11-2021.aspx](https://www.suezcanal.gov.eg/English/MediaCenter/News/Pages/navigation_04-11-2021.aspx).
  27. The Impact of Mega Ships. OECD. [https://www.itf-oecd.org/sites/default/files/docs/15cspa\\_mega-ships.pdf](https://www.itf-oecd.org/sites/default/files/docs/15cspa_mega-ships.pdf).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



## CONCLUSION

This volume is the outcome of a conference held at the University of Haifa in November 2019 signifying 150 years of the Suez Canal. Our objective in this volume has been to explore, describe, and analyze various aspects related to the Canal, including its historical development throughout the years to become a major artery for international trade. We hoped to understand the various mechanisms for the emergence of the Canal as a central player in the region. Thus, one main purpose has been to apply insights from different disciplines gained from scholarship on the Canal and to provide it with a more analytical framework that will allow for a systematic examination.

The canal is extensively used by modern merchant vessels (bulk carriers, container ships, tankers, and passenger ships), as it is the fastest crossing between the Atlantic Ocean and the Indian Ocean. Tolls paid by the vessels represent a critical source of income for the Egyptian government. In recent decades, the Suez Canal has also strengthened Egypt as one of the most significant geopolitical cornerstones of the Middle East. The Suez Canal is one of the eight narrow chokepoints, which are critical to the world's oil trade. It is also a strategic passageway for navies which are deploying their forces in the arena of the Arabian Sea and the Persian Gulf.

Since the signing of a peace treaty between Israel and Egypt in 1979 and the evacuation of the Israeli Navy naval bases in Sharm el-Sheikh and the Gulf of Suez, the Israeli Navy has also been moving through the Suez

Canal on its way to secure its sea lines of communication (SLOC) in the Red Sea.

In this book, our goal was two-fold. One was to provide a survey of past political, geopolitical, economic, legal, and environmental developments in the last 150 years of the Suez Canal, and the other was to highlight future challenges it faces as it pertains to the areas mentioned earlier. We argue that the centrality of the canal—geostrategically and otherwise—requires a shift in scholarly focus to study the various aspects from an interdisciplinary perspective. To do so, it is important to consider the history of the canal, the challenges ahead, and the linkages between them from various perspectives and methodologies.

We believe that the chapters in this volume fulfilled three goals in terms of addressing a few gaps in the literature. First, they provide a fairly comprehensive systematic examination of historical aspects of the development of the Canal during its first 150 years. Second, they also locate the Canal within the geostrategic environment, and emphasize its importance. Third, they represent a combination of several disciplines that examine the centrality of the Suez Canal, and while some of these case studies have been addressed in other scholarly sources, some have not been explored almost at all in the context of the Suez Canal, such as the anthropogenic activity.

### WHAT HAVE WE LEARNED?

The chapters in this volume provide several important lessons that we want to highlight.

1. The historical development of the Suez Canal, and its becoming a major trade route, has always been a consequence of great power politics and not the regional players. This would likely continue, as the great powers' use of the canal for commercial or military purposes will determine its geostrategic importance much more than any action by a regional player.
2. However, regional players are not at all insignificant in the Suez Canal's historical development. This was demonstrated during the Arab–Israeli conflict, specifically the Egypt–Israel conflict from 1948 to 1979, during which the Canal was a target for Israel in pushing the Egyptian military out of the Sinai Peninsula in 1956 and 1967. The latter war ended in an eight-year suspension of the Canal's

operation. Yet, in peacetime, the regular operation of the canal is impacted more by the great powers than the relations among regional powers. Thus, good relations among the regional powers are an important factor in the overall operation of the Canal.

3. The volume of commodities passing through the canal had increased dramatically over the years, and more than once it became unseaworthy for massive ships that couldn't navigate the too narrow and too shallow canal. However, Egypt had renovated the canal—in 1975 before reopening it, and in 2015 by doubling the canal in its northern part to allow more traffic to cross. This indicates, on the one hand, that the Suez Canal has a potential to continue serving international shipping and accommodate its growing needs, while on the other hand, this accommodation might be slow and challenging in various ways, such as the engineering of renovation projects while not impacting the intense traffic.
4. The future role of the Suez Canal is not only in the hands of the regional or great powers. Climate change—global warming—could create a serious competition for the canal with the Northern Passage opening due to the melting of ice in the Northern Sea. While this Passage might still be frozen during the winter, its existence would challenge the Suez Canal and reduce Egypt's revenues when it's active. This might result in economic problems that would soon lead to political disquiet, hence impacting the stability of the region surrounding the Suez Canal.
5. Other challenges to the central role of the Suez Canal could emerge from China's Belt and Road Initiative or, to a lesser extent, from other plans such as transfer of various goods through Israel. Whatever the future might hold in its wings for the canal, it is clear that its significance will not diminish but rather increase as it faces new (and old) challenges.

### WHERE DO WE GO FROM HERE?

In this section we would like to offer a few general conclusions and future directions for research. Ironically enough (and clearly appropriate when talking about the Middle East) those conclusions can be summed up at ISIS—Interaction, Strategies, Intervention, and Stability. Let us delve deeper into each one of these concepts.

## INTERACTION

Each chapter in this volume offers different avenues for future research. However, it is also quite evident that if we want to fully understand why, and in what ways, the Suez Canal is so important, we need to look at it in an interdisciplinary way. This volume sets a framework for conceptualizing linkages between maritime history, maritime studies, and security and applying those to a particular region. This is especially important in the context of current events in the Middle East, the upheavals in several countries in the region, and how those affect states' incentives in foreign policy decision-making, and on security decisions.

Lastly, it is not clear from the chapters in this volume whether the conditions that contribute to the Canal's crucial role throughout the last 150 years are also relevant and applicable to other regions in the world.

For all these reasons, and many more, we advocate an approach that incorporates variables from various theoretical paradigms, and different disciplines, as we firmly believe that it is this synthesis of multi-paradigmatic interaction that can yield better, broader, and deeper insights into some of the questions and puzzles raised in the chapters.

## STRATEGIES

One of our goals in this volume, even if not stated upfront, is to identify mechanisms and strategies that facilitate the free flow of trade in the Suez Canal. Whereas some of the chapters address this issue in a straightforward manner, others leave this question elusive.

We believe that in order to better understand the processes of historical evolution of maritime trade there needs to be an emphasis on a better conceptualization of what are the best strategies that can facilitate this. Given the interdisciplinary nature of our investigation, the challenge is even bigger. Even if we can reach some common agreed definitions and typologies, are these typologies equally applicable to all regions? Or maybe we need some pre-conditions of a certain kind in the first phase (or region) to facilitate the application to the next regions?

We contend that these questions are theoretically of ultimate importance, and have tremendous policy implications; therefore, any useful discussion on the topic should address them.



## INTERVENTION

As mentioned, one of the assumptions that lie at the root of this volume is that each investigation of this sort can, and in fact should, be interdisciplinary, and that we should look for insights from various sub-fields. The rationale for this is that each can offer a unique lens through which we can analyze the phenomenon we look at, and also that combining insights from several ones is by far more useful.

Though the underpinnings of the paradigmatic approaches in international relations are not emphasized in this volume, still, many of the chapters mention (or assume) some of these theoretical lenses, and presume that systemic changes have an impact on states' behavior. As such, it is crucial to understand and incorporate great power politics in our analysis. These play an important role in shaping states' preferences, incentives, and behavior in the international system. Moreover, as it has always been evident in the Middle East, it is great power politics to a large extent that shapes many of the outcomes on a regional level. Moreover, as the introduction and some of the chapters in the first section of the volume show, great powers played a crucial role in determining the Canal's fate throughout the last 150 years.

Thus, we assert that it is of crucial importance to address some of the following questions: under what conditions would great powers choose to intervene in regional conflicts in order to shape their trajectory, and eventually, their outcomes? Do these interventions guarantee for a peaceful outcome? Can we adapt the lessons learned from the Suez Canal to similar cases? If yes, can we do that fully or only partially? And if not—what is different in the great power dynamics in the Middle East that makes it so difficult for implementing it in other regions?

## STABILITY

Following all of the above, it is clear that one of the dangers to a smooth operation of the Suez Canal as the main artery for trade is the extended violence in the process. And so, an additional theoretical question we pose here is under what conditions would those potentially less stable periods be less violent? But beyond that—we would also like to know how we can assure the stability of the institutional arrangements, and the regional agreements and alliances, once those are reached, to ensure smooth commerce. In this sense, we can look at the more stable periods

during the last 150 years, and ask what are the conditions allowed for this stability to be preserved?

While we are cognizant of the fact that the Suez Canal is a mere reflection, and only a partial one, of more complex and intertwined relationship between several countries, certainly in a war-ridden region like the Middle East, we believe that preserving the stability of peace in operating it is an important goal as we attempt to prevent a recurrence of violence.

## CONCLUSION

In this volume we took a holistic approach, that is, we attempted to look at the phenomenon we investigate—the Suez Canal—from various angles and perspectives, and in an interdisciplinary manner. However, the chapters do not address the way those lessons can be applied to similar phenomena. We offered above several useful avenues for future research, and we believe that those are particularly fruitful in addressing some of the more theoretically relevant questions and puzzles related to some of the core question that came up in the chapters.

We view our moderate contribution as satisfying. We believe that it opens the door (in fact, many doors) to future research on a topic that is not only theoretically important, but also has tremendously crucial policy implications as we witness daily news in and from the Middle East. The region's uncertainty and volatility guarantee an interesting and dynamic future that could have dramatic effects on the Suez Canal and its surroundings.

# INDEX

## 0–9

- 1888 Constantinople Convention, [xiv](#),  
[121–123](#), [127](#), [131](#), [136](#), [138](#),  
[140](#), [142](#), [151](#), [153](#), [171](#)
- 1949 Egypt-Israel Armistice  
Agreement, [139](#), [140](#)
- 1956 Nationalization of the Canal, [ix](#),  
[28](#), [99](#), [122](#), [150](#), [202](#)
- 1956 Suez crisis, [ix](#), [xi](#), [72](#), [77](#), [79](#),  
[80](#), [83](#), [99](#), [100](#), [137](#)
- 1967 Arab-Israeli War (Six Day War),  
[xiii](#), [xiv](#), [81](#), [194](#)
- 1973 Arab-Israeli War (Yom Kippur  
War), [28](#), [102](#), [103](#), [142](#)
- 1975 Interim Agreement (Sinai II),  
[169](#)
- 1979 Egypt-Israel Treaty of Peace,  
[142](#)

## A

- al-Ahram*, [52](#), [75](#)
- American/US, [x](#), [46–50](#), [60](#), [75](#), [80](#),  
[81](#), [83–85](#), [101](#), [153](#), [155](#)

- Amin, Gen. Abdel Moneim, [46](#), [47](#),  
[49](#), [63](#), [64](#)
- Arabian Peninsula, [xi](#)
- Aswan Dam, [ix](#), [195](#)

## B

- Barbour, Walworth, [55](#), [57](#), [60](#)
- Belt and Road Initiative (BRI), [xiii](#), [5](#),  
[7](#), [12](#), [17](#), [28](#), [30–36](#), [255](#)
- Bergus, Donald C., [47](#), [48](#), [53](#), [59](#),  
[61](#), [63](#), [64](#)
- Britain, [17](#), [72](#), [74](#), [78](#), [79](#), [81](#), [101](#),  
[128](#), [130](#), [137](#), [138](#), [163](#), [175](#),  
[233](#)
- British, [ix–xi](#), [13](#), [15–17](#), [72–75](#), [78](#),  
[80](#), [82](#), [85](#), [91](#), [96](#), [99–101](#), [122](#),  
[128](#), [129](#), [150](#), [162](#), [193](#), [240](#)
- Bunche, Ralph, [140](#), [149](#), [151](#), [158](#),  
[161](#), [164](#), [166](#), [174](#), [175](#)

## C

- Cambodia, [49](#)
- canal capacity, [6](#)

Cape of Good Hope, *viii*, *ix*, 78, 99, 104, 237, 246  
 cargoes, 138, 142, 148, 149, 155, 156, 158, 162, 168, 169, 237  
 chokepoints, *vii*, *xi*, *xiii*, 4, 10, 17, 97, 105, 253  
 contraband goods, 148  
 Convention on Biological Diversity (CBD), 208, 209  
 Corfu judgment, 140

**D**

Dayan, Moshe, 46, 47, 62, 63  
 de Lesseps, Ferdinand, *ix*, 130, 201, 202  
 desalination brine effluent, 209  
 District 12, 183  
 District 19, 183  
 District 26, 183

**E**

Eban, Abba, 46, 47, 51, 54, 55, 60, 150, 170  
 effective stand, 160–163, 165, 168  
 Egypt/Egyptian, *viii*–*xiv*, 4–8, 10–14, 18, 21–23, 27–30, 33–38, 44–64, 66, 67, 74, 75, 96, 98–103, 105, 108–110, 122, 123, 126, 127, 130, 136–145, 148–152, 154–160, 162–169, 171–176, 182–197, 201, 209, 221, 237, 242, 244, 246, 247, 253–255  
 Egypt agriculture, *xiv*, 5, 11, 187  
 Egypt economy, *xiv*, 5, 6, 8, 10, 12, 23, 29, 33, 102, 184, 186, 187, 192, 193, 195, 196, 237  
 Egypt energy, 10, 193  
 Egypt population, 5, 11, 29, 35, 185–187, 196, 220

Egypt security, 14, 22, 51, 55, 60, 138, 139, 150, 159, 192, 194  
 embargo, 81–83, 99, 101–103, 148, 149  
 enemy shipping, 139, 140  
 Erythraean invasion, 208  
 expansion of the Suez Canal, 7, 17, 21, 202, 204

**F**

Farouk, King of Egypt, *ix*  
 Fawzi, Mohammed, 150, 151, 154, 158, 160, 163–165, 173–176  
 Fayum Depression, 182  
 F.O.B. (Free on Board), 160, 161, 163, 165, 175  
 Foreign Affairs and Defense Committee (FADC), 152, 154, 169, 173  
 France, *ix*–*xi*, 16, 79, 81, 97, 121, 137, 170, 202, 205, 206, 220  
 freedom of passage, *xiv*, 122, 136, 148–151, 153, 154, 168, 171  
 French, *ix*, *x*, 15, 16, 86, 130, 201, 203

**G**

Gazit, Mordechai, 51, 65, 66, 171  
 global trade, 232

**H**

Haifa, 98, 108, 155–157, 166, 204  
 Hammarskjöld, Dag, 148–151, 154, 157–168, 170, 171, 173–175  
 Heikal, Mohamed Hassanein, 52, 53, 63, 65  
 Herodotus, 182  
 human footprint, 218  
 human pressure, 219

## I

Indian Ocean, x, 4, 13, 15, 31–34,  
51, 52, 72, 82, 253

*Inge Toft*, 158, 159, 162, 165, 166

interaction, 256

internal waters, 136

International Court of Justice (ICJ),  
xiii, 118, 120, 121, 128, 138,  
153, 154, 156, 159, 166

international law, xiv, 73, 87, 121,  
125, 126, 136, 143, 174

intervention, 257

invasive marine species, 208

Ismailia District, 183

Israel/Israeli, viii–xiv, 4, 18, 29, 36,  
44–61, 66, 77, 87, 98–101, 103,  
108, 123, 127, 138–144,  
148–176, 186, 187, 194, 195,  
197, 205, 221, 237, 240, 248,  
253–255

Israel-Egypt peace treaty, x

## J

Jarring, Gunnar, 44–48, 53–60

## K

Kissinger, Henry A., 44, 48–50,  
54–57, 60–62, 64, 65, 67, 82,  
85–88, 92

## L

Laos, 49

## M

marine environment, 204, 205, 208,  
217, 218, 221, 240

marine pollution, 203, 222

marine stressors, 201, 218

marine traffic, 223

McCloy, John, 152, 155, 171

Mediterranean Sea, vii, viii, x, xiv, 14,  
16–18, 31, 34, 37, 142, 200,  
201, 203–205, 207–209,  
217–225

Meir, Golda, 46, 47, 52, 54–57,  
59–63, 65, 66, 153, 154, 162,  
164, 167, 175, 176

merchant vessels, 4, 253

Mixed Armistice Commission, 140,  
141

## N

Nasser, Gamal Abdel, ix, x, 44, 45,  
52, 79, 83, 99, 101, 148–152,  
154, 159, 160, 162–166, 168,  
170–172, 175, 202

navigation, x–xii, xiv, 20, 22, 33, 44,  
50, 51, 55, 58, 120, 121, 123,  
125, 126, 136, 138, 142, 201,  
202, 239, 240, 245, 249

New Suez Canal, 184

New Zealand, 142

nighttime light pollution, 222, 224,  
226

Nile Valley, 29, 30, 182, 187–189,  
196

Nixon, Richard M., 44, 46, 49, 50,  
54, 56, 59, 61–64, 66, 81, 82,  
85–88, 92

non-indigenous species (NIS), 201,  
203–208

## P

peace treaty 1979, xii, xiv, 4, 253

Persian Gulf, xi, 4, 13, 15, 16, 31,  
72, 74, 80, 82, 85, 87, 108, 237,  
253

Port Said District, 183

**R**

- Rabin, Yitzhak, 46, 49, 50, 53–56, 58–60, 65–67  
 Rafael, Gideon, 51, 171, 172  
 Red Sea, vii, viii, x, xii, xiv, 4, 10, 14, 15, 17, 18, 21, 22, 30–34, 37, 72, 76, 82, 98, 110, 118, 188, 193, 204, 223, 237, 254  
 revenues, 6, 8, 20, 22, 29, 79, 105, 184, 255  
 Rogers, William P., 44, 45, 48, 49, 58–62, 64, 67

**S**

- Sadat, Anwar, xiii, 44–67  
 salinity barrier, 209  
 Security Council, 47, 50, 57, 122, 137, 140, 142–145  
 self defence, 138, 141  
 Sharm el-Sheikh, 4, 18, 55, 59, 61, 253  
 shipping, vii, viii, x, xi, xiii, 6, 8, 12, 15, 18–22, 32, 36, 47, 53, 54, 57, 66, 80, 97, 99, 100, 102, 103, 105, 106, 108, 138, 139, 141, 142, 144, 151, 153, 154, 162, 167, 209, 218–220, 223, 224, 234, 238, 243, 246, 249, 255  
 Sinai Peninsula, viii, x, 10, 18, 21, 22, 47, 51, 59, 67, 118, 186, 188, 194, 197, 254  
 Sinai War, ix, x, xiv, 148, 194  
 Sisco, Joseph J., 46, 50, 51, 53, 54, 56, 58–60  
 Soviet, xi, xiii, 45, 51, 52, 59, 62, 126, 159  
 Soviet Union, x, 36, 45, 49, 51, 52, 54, 59, 72, 77, 82, 142  
 stability, 5, 17, 22, 51, 73, 79, 82, 86, 88, 96, 97, 102, 104, 108–110, 195, 255, 257, 258

- Straits of Tiran, 55, 59, 118, 149, 150, 153, 154, 168, 170–172  
 strategies, 256  
 Suez District, 183  
 Suez War, 28, 152, 168

**T**

- tacit understanding, xiv, 148, 155, 157–159, 162, 168, 169  
 Tekoah, Yosef, 170, 176  
*the Astypalea*, 163–167  
 the Bureau of Intelligence and Research (INR), 51  
 the Egyptian-Israeli Mixed Armistice Committee (EIMAC), 148  
 The International Bank for Reconstructing and Development (IBRD), 158, 162, 164  
 the UN Security Council (UNSC), xiv, 28, 50, 57, 58, 139–141, 149, 151, 156, 157, 162, 166  
 trade, vii, viii, xi, xii, 4–6, 8, 10–12, 15, 16, 18, 20, 21, 32–35, 75–77, 96, 102, 103, 105, 161, 165, 167, 223, 237, 246, 247, 253, 254, 256, 257  
 Turkey, 34, 84, 97, 136, 137, 205, 220, 221

**U**

- UAR, 48, 61, 158, 161, 162, 165, 172  
 UN Emergency Force (UNEF), 150, 168, 170, 173  
 United Kingdom/Britain, ix–xi, 82, 122  
 United Nations Convention on the Law of the Sea  
 Arab Gulf, 100, 101, 107, 109  
 Arab-Israeli conflict, 51, 57, 59, 96, 98, 108, 110, 254

- Bab el-Mandeb, 15, 16, 18, 97, 108
- canals, 118, 119, 121
- Cape of Good Hope, viii, ix, 78, 104, 237
- Constantinople Convention of 1888, 121, 122
- Corfu Channel Case, 118, 120, 121, 125, 126
- Covid-19, 9, 104, 238, 246
- crisis, 78, 81, 154
- Egypt, 118, 121, 122, 209
- embargo, 81–83, 101, 102, 148, 149
- Europe, viii, x, xi, xiii, 5, 6, 17, 18, 20, 21, 31, 34, 51, 75–81, 83, 84, 96, 98–100, 104, 105, 107, 109, 110, 129, 184, 232, 237, 239, 248
- Ever Given*, vii, 9, 10, 29, 105, 232, 233, 237–244, 246, 248, 249
- freedom of navigation, 118–120, 122–126, 138, 149
- global bottleneck passages, 237
- growth of container ships, 245, 249
- Hormuz, 13, 16, 97, 105, 127
- IMO, 233, 245, 246, 248
- innocent passage, 124–126, 132
- international law, 73, 87, 121, 125, 143
- Israel, 149, 195
- Law of the Sea, 119–122, 124
- Liberum*, 124
- Libya, 14, 17, 80–83, 85, 86, 97, 100–102, 105, 109, 110, 188, 220
- mare clausum, 124
- mega-ships, 8, 243, 248
- Middle East, xi, xiii, 4, 5, 14, 16, 34–36, 44, 45, 49, 51, 54, 56, 59–61, 72–81, 85, 87, 96, 97, 99, 100, 103, 110, 155, 218, 253, 255–258
- Nasser, ix, 79, 99, 148
- nationalization, 86, 88, 122
- Northwest Passage, 19, 246, 247
- oil, 86
- oil ministers, 86, 100
- OPEC, 83–87, 96, 103, 106, 107, 110, 113
- Persian Gulf, xi, 4, 13, 15, 16, 31, 74, 80, 82, 87, 108, 237
- Red Sea, 118
- Russia, 15, 20, 34, 77, 109, 110, 237
- ship hydrodynamics in shallow water, 242, 244
- ship's squat, 242
- Six days war, 83, 100, 202
- straits, 118–120, 123–126
- Straits of Tiran, 118
- Suez Canal, 118, 119, 121, 122
- Suez Canal Authority, 4, 6–8, 10, 12, 97, 98, 102, 104, 105, 123, 209, 238, 239, 242, 244, 246, 247
- Suez Canal blockage, 246
- Suez Canal widening and deepening, 202, 247
- SUMED, 98
- tanker, 75, 77, 100, 101
- transit passage, 126
- ULCV (Ultra-Large Container Vessel), 243
- under keel clearance, 242
- Yom Kippur, 28, 102, 103, 142
- United Nations Secretary General (UNSG), 148, 150, 151, 156, 161, 164, 165, 170, 172, 176
- United States, ix–xiii, 8, 13–15, 29, 36, 44–62, 66, 67, 72–88, 91, 97–102, 104, 106, 107, 126, 130, 131, 144, 148–154, 157,

158, 161–164, 170–176, 232,  
245, 248  
urbanization, [xiv](#), 185, 186

**V**

Vietnam War, [xi](#), [xiii](#), 81

**W**

War of Attrition, [x](#), 44

**Z**

Zim, 154, 155, 157, 158