

# IMPACT OF THE KRA CANAL ON SINGAPORE'S SECURITY

A thesis presented to the Faculty of the U.S. Army  
Command and General Staff College in partial  
fulfillment of the requirements for the  
degree

MASTER OF MILITARY ART AND SCIENCE  
General Studies

by

CHIEH SHIUNG WAYNE HO, MAJOR, SINGAPORE ARMY  
BSc, Economics, University of Warwick, Coventry, UK, 2011  
MA, Terrorism, Security, and Society, King's College London, London, UK, 2012

Fort Leavenworth, Kansas

2020

Approved for public release; distribution is unlimited. United States Fair Use determination or copyright permission has been obtained for the use of pictures, maps, graphics, and any other works incorporated into the manuscript. This author may be protected by more restrictions in their home countries, in which case further publication or sale of copyrighted images is not permissible.

| <b>REPORT DOCUMENTATION PAGE</b>   |                           |  | <i>Form Approved</i><br><i>OMB No. 0704-0188</i> |  |  |
|--|---------------------------|--|--|--|--|
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</b>  |                           |  |  |  |  |
| <b>1. REPORT DATE (DD-MM-YYYY)</b><br>12-06-2020   |                           | <b>2. REPORT TYPE</b><br>Master's Thesis |  | <b>3. DATES COVERED (From - To)</b><br>AUG 2019 – JUN 2020 |  |
| <b>4. TITLE AND SUBTITLE</b><br><br>Impact of the Kra Canal on Singapore's Security  |                           |  | <b>5a. CONTRACT NUMBER</b>                       |  |  |
|  |                           |  | <b>5b. GRANT NUMBER</b>                          |  |  |
|  |                           |  | <b>5c. PROGRAM ELEMENT NUMBER</b>                |  |  |
| <b>6. AUTHOR(S)</b><br><br>MAJ Chieh Shiung Wayne Ho   |                           |  | <b>5d. PROJECT NUMBER</b>                        |  |  |
|  |                           |  | <b>5e. TASK NUMBER</b>                           |  |  |
|  |                           |  | <b>5f. WORK UNIT NUMBER</b>                      |  |  |
| <b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b><br>U.S. Army Command and General Staff College<br>ATTN: ATZL-SWD-GD<br>Fort Leavenworth, KS 66027-2301   |                           |  | <b>8. PERFORMING ORG REPORT NUMBER</b>           |  |  |
| <b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>   |                           |  | <b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>          |  |  |
|  |                           |  | <b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>    |  |  |
| <b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b><br>Approved for Public Release; Distribution is Unlimited   |                           |  |  |  |  |
| <b>13. SUPPLEMENTARY NOTES</b>   |                           |  |  |  |  |
| <b>14. ABSTRACT</b><br>The idea of constructing the Kra Canal through the narrow Kra Isthmus of Thailand has been around for almost 350 years. Recent Chinese interest in funding and building the canal has reignited discussion of its potential impacts for the region. Singapore, which benefits significantly from its strategic position along one of the busiest trading routes in the world through the Straits of Malacca, potentially has the most to lose from the canal's construction. While some studies have attempted to quantify the canal's economic impact on Singapore, none have explored the potential security impact that it may have. Using the US Army's Risk Management framework, this thesis attempts to measure the impact of the Kra Canal's construction on Singapore's security in three subsidiary research areas: (1) impact to Singapore's geopolitical strength; (2) unique implications of a Chinese-funded Kra Canal; and (3) potential for the intensification of the terrorist threat against Singapore should the separatist conflict in southern Thailand be internationalised. This thesis finds that the Kra Canal is likely to pose a medium risk to Singapore's security, in particular to Singapore's ability to pursue her strategic interests without fear of external coercion. |                           |  |  |  |  |
| <b>15. SUBJECT TERMS</b><br>Kra Canal, Belt and Road Initiative, String of Pearls, Singapore, China, Thailand  |                           |  |  |  |  |
| <b>16. SECURITY CLASSIFICATION OF:</b>   |                           |  | <b>17. LIMITATION OF ABSTRACT</b>                | <b>18. NUMBER OF PAGES</b>                                 | <b>19a. NAME OF RESPONSIBLE PERSON</b>       |
| <b>a. REPORT</b><br>(U)  | <b>b. ABSTRACT</b><br>(U) | <b>c. THIS PAGE</b><br>(U)               |  |  | <b>19b. PHONE NUMBER (include area code)</b> |
|  |                           |  | (U)  | 148  |  |

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Chieh Shiung Wayne Ho

Thesis Title: Impact of the Kra Canal on Singapore's Security

Approved by:

\_\_\_\_\_, Thesis Committee Chair  
Philip G. Pattee, Ph.D.

\_\_\_\_\_, Member  
Thomas E. Ward II, Ph.D.

\_\_\_\_\_, Member  
Wilburn E. Meador Jr., M.A.

Accepted this 12th day of June 2020 by:

\_\_\_\_\_, Acting Director, Office of Degree Programs  
Prisco R. Hernandez, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

## ABSTRACT

IMPACT OF THE KRA CANAL ON SINGAPORE'S SECURITY, by Chieh Shiung Wayne Ho, 148 pages.

The idea of constructing the Kra Canal through the narrow Kra Isthmus of Thailand has been around for almost 350 years. Recent Chinese interest in funding and building the canal has reignited discussion of its potential impacts for the region. Singapore, which benefits significantly from its strategic position along one of the busiest trading routes in the world through the Straits of Malacca, potentially has the most to lose from the canal's construction. While some studies have attempted to quantify the canal's economic impact on Singapore, none have explored the potential security impact that it may have. Using the US Army's Risk Management framework, this thesis attempts to measure the impact of the Kra Canal's construction on Singapore's security in three subsidiary research areas: (1) impact to Singapore's geopolitical strength; (2) unique implications of a Chinese-funded Kra Canal; and (3) potential for the intensification of the terrorist threat against Singapore should the separatist conflict in southern Thailand be internationalised. This thesis finds that the Kra Canal is likely to pose a medium risk to Singapore's security, in particular to Singapore's ability to pursue her strategic interests without fear of external coercion.

## ACKNOWLEDGMENTS

I would like to thank my thesis committee, including chairman Dr Philip Pattee, and members Dr Thomas Ward and Mr Bud Meador, who have provided sound guidance and insightful feedback throughout the process of writing this thesis. My thanks as well to my small group instructor, Mr Nathaniel Stevenson, and US Army Command and General Staff College faculty member LTC Randy Johnson, with whom I have had insightful conversations regarding this topic.

Finally, special thanks go out to my wife, Amanda, whose strong support throughout the entire year here in Fort Leavenworth has been truly invaluable.

## TABLE OF CONTENTS

|   | Page |
|---|------|
| MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE .....                           | iii  |
| ABSTRACT.....   | iv   |
| ACKNOWLEDGMENTS .....   | v    |
| TABLE OF CONTENTS.....  | vi   |
| ACRONYMS.....   | viii |
| ILLUSTRATIONS .....   | ix   |
| TABLES .....  | x    |
| CHAPTER 1 INTRODUCTION .....  | 1    |
| Research Questions, Purpose, and Significance .....                                     | 5    |
| Definition, Limitations, Delimitations, and Assumptions .....                           | 7    |
| Thesis Overview .....   | 11   |
| CHAPTER 2 LITERATURE REVIEW .....   | 12   |
| Section 1: History and Background of the Kra Canal .....                                | 13   |
| 17th-19th Century .....   | 13   |
| 20th Century.....   | 14   |
| 21st Century .....  | 16   |
| Key Characteristics of the Kra Canal.....   | 20   |
| Section 2: Defining National Security in the Singaporean Context .....                  | 23   |
| Section 3: The Founts of Power for Small States .....                                   | 26   |
| Section 4: Subsidiary Research Areas .....  | 29   |
| Singapore’s Geopolitical Realities.....   | 29   |
| The Kra Canal’s Potential Impact on Singapore.....                                      | 29   |
| Chinese Geopolitical Interests in the Kra Canal .....                                   | 34   |
| Chinese Dependence on the Straits of Malacca.....                                       | 34   |
| China’s Approach to solving its “Malacca Dilemma” .....                                 | 38   |
| Religious Dimensions of the Thai Separatist Conflict, and Potential for Contagion ..... | 44   |
| Origin and Trajectory of the Separatist Movement in Southern Thailand.....              | 45   |
| Section 5: Lessons from the Suez and Panama Canals.....                                 | 50   |
| Summary.....  | 51   |
| CHAPTER 3 RESEARCH METHODOLOGY .....  | 53   |

|  |         |
|--|---------|
| Risk Management as a Framework for Analysis .....  | 54      |
| Identifying Hazards.....   | 55      |
| Assessing Risk .....   | 56      |
| SRQ 1: Geopolitical Repercussions for Singapore.....   | 62      |
| SRQ 2: Unique Security Implications of a Chinese-Funded Kra Canal.....                                     | 63      |
| SRQ 3: Potential for Contagion of Separatist Violence .....  | 63      |
| Conclusion .....   | 63      |
| <br>CHAPTER 4 ANALYSIS .....   | <br>64  |
| Section 1: Singapore’s Foreign Policy Approach.....  | 65      |
| Section 2: SRQ-Specific Risk Assessment.....   | 68      |
| Geopolitical Repercussions of the Kra Canal on Singapore.....  | 68      |
| Probability Assessment.....  | 71      |
| Severity Assessment .....  | 74      |
| Unique Security Implications of a Chinese-Funded Kra Canal.....  | 78      |
| Probability Assessment.....  | 78      |
| Severity Assessment .....  | 83      |
| The Kra Canal’s Impact on the Terrorist Threat to Singapore .....  | 93      |
| Probability Assessment.....  | 93      |
| Severity Assessment .....  | 104     |
| Section 3: Overall Risk Assessment.....  | 111     |
| Summary.....   | 113     |
| <br>CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS .....  | <br>114 |
| Policy Implications .....  | 116     |
| Way Ahead for Future Research.....   | 118     |
| <br>ILLUSTRATIONS .....  | <br>120 |
| <br>GLOSSARY .....   | <br>121 |
| <br>APPENDIX A DETENTIONS OF RADICALISED INDIVIDUALS IN SINGAPORE<br>UNDER THE INTERNAL SECURITY ACT ..... | <br>122 |
| <br>BIBLIOGRAPHY.....  | <br>126 |

## ACRONYMS

|        |  |
|--------|--|
| ASEAN  | Association of Southeast Asian Nations                       |
| BRI    | Belt and Road Initiative                                     |
| KTKIID | China-Thailand Kra Infrastructure Investment and Development |
| MILF   | Moro Islamic Liberation Front                                |
| SAF    | Singapore Armed Forces                                       |
| SEZ    | Special Economic Zone  |
| SRQ    | Secondary Research Question                                  |
| TRQ    | Tertiary Research Question                                   |



## ILLUSTRATIONS

|  | Page |
|--|------|
| Figure 1. Proposed Kra Canal Route 9A through the Kra Isthmus..... | 2    |
| Figure 2. Risk Assessment Example .....                            | 61   |
| Figure 3. China’s “String of Pearls” Ports .....                   | 81   |
| Figure 4. Overall Risk Assessment .....                            | 112  |
| Figure 5. Map of World Trading Routes.....                         | 120  |

## TABLES

|   | Page |
|---|------|
| Table 1. Probability and Severity Levels Defined.....   | 57   |
| Table 2. Risk Assessment Matrix .....   | 57   |
| Table 3. Adapted Definitions for Probability and Severity Levels.....                                   | 59   |
| Table 4. Detentions of Radicalised Individuals in Singapore (al-Qaeda/JI-centric Phase, 2001-2014)..... | 122  |
| Table 5. Detentions of Radicalised Individuals in Singapore (ISIS-Centric Phase, 2014-Present) .....    | 123  |

## CHAPTER 1

### INTRODUCTION

The Straits of Malacca is one of the world's busiest trade routes. In 2017, over 84,000 vessels transited the narrow waterway,<sup>1</sup> and traffic is set to grow by a further 50 percent by 2030.<sup>2</sup> Its strategic importance is further enhanced by its status as the world's second most important world oil trading chokepoint after the Straits of Hormuz.<sup>3</sup> Singapore, situated fortuitously at the tip of Peninsular Malaysia, has benefited tremendously from its strategic location and has grown to become the world's second largest transshipment port.

Nevertheless, the need for ships plying the route from the Indian Ocean to the South China Sea to circumnavigate the Malaysian Peninsula adds days to the journey, racking up thousands of dollars in fuel and running costs. Eliminating the need for this circumnavigation would save fuel and time, making trade more efficient and profitable. It should therefore be no surprise that the idea of cutting a canal across the narrow Kra

---

<sup>1</sup> Marcus Hand, "Exclusive: Malacca Straits VLCC Traffic Doubles in a Decade as Shipping Traffic Hits All Time High in 2017," *Seatrade Maritime*, 19 February 2018, accessed 15 September 2019, <https://www.seatrade-maritime.com/news/asia/exclusive-malacca-straits-vlcc-traffic-doubles-in-a-decade-as-shipping-traffic-hits-all-time-high-in-2017/>.

<sup>2</sup> Karamjit Kaur, "Vessel Movements in Singapore, Malacca Straits Set to Rise 50% by 2030," *The Straits Times*, 25 September 2018, accessed 15 September 2019, <https://www.straitstimes.com/singapore/transport/vessel-movements-in-singapore-malacca-straits-set-to-rise-50-by-2030>.

<sup>3</sup> U.S. Energy Information Administration (EIA), "World Oil Transit Chokepoints," accessed 15 September 2019, <https://www.eia.gov/beta/international/regions-topics.php?RegionTopicID=WOTC>.

Isthmus in Thailand has existed as far back as the 17th Century. Recent proposals for the Kra Canal project, estimated to cost US\$28 billion, would reduce shipping distances by about 1,200 km and transit times by two to three days (see Figure 1). Besides purely economic benefits, early proposals of the Kra Canal also considered the strategic value of such a waterway—the ability to rapidly transfer troops and ships between the South China Sea and Indian Ocean theatres was seen by Thailand in the 18th Century and subsequently Britain in the 19th Century as a significant strategic advantage.<sup>4</sup>

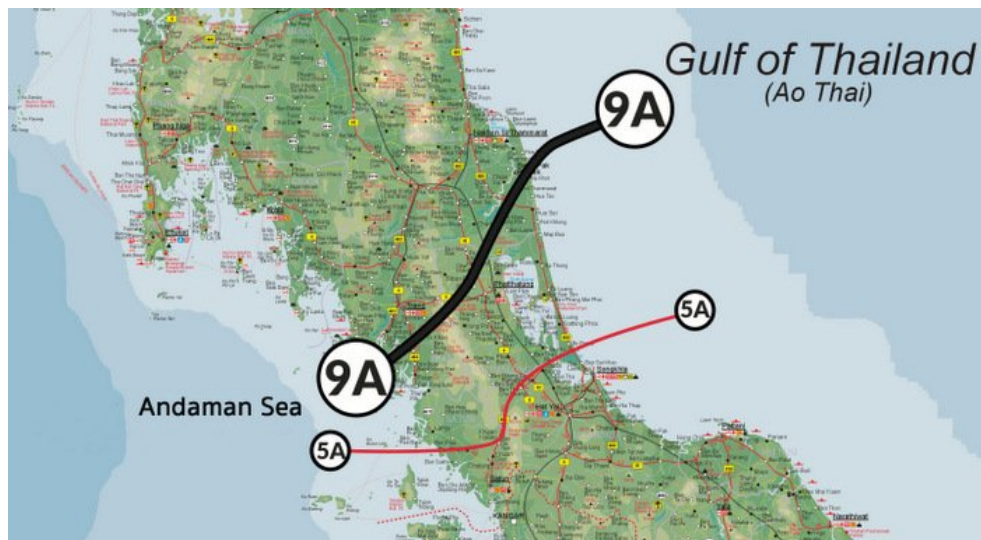


Figure 1. Proposed Kra Canal Route 9A through the Kra Isthmus

Source: The Phuket News, “Phuket Poll: Should Thailand Build the Kra Canal?,” 14 February 2018, accessed 15 September 2019, <https://www.thephuketnews.com/phuket-poll-should-thailand-build-the-kra-canal-65961.php>.

---

<sup>4</sup> Patrick Low and Yue-Man Yeung, *The Proposed Kra Canal: A Critical Evaluation and its Impact on Singapore*, Field Report Series No. 2 (Singapore: Institute of Southeast Asian Studies, 1973), 2.

Numerous studies over the past three and a half centuries have recommended the construction of the canal. None, however, has actually been realised, due to a variety of reasons relating to technological feasibility, commercial viability, political concerns, and socio-cultural tensions. Nonetheless, like the ebb and flow of the tides, there has been a major surge of interest in the canal project in every decade since the 1970s—driven by the Japanese in the 1970s, the Americans and Japanese in the 1980s-1990s, and the Chinese since the early 2000s.

It is clear that despite the barriers to its construction, the value proposition of the canal makes the project more than just a pipe dream; shifting circumstances in the economic and geopolitical realm warrant periodic re-evaluation of the project's viability. Given the growth in international trade, especially with the fast-growing economies of Southeast Asia and China, we should expect interest in the Kra Canal to remain high. Additionally, maritime traffic in the Straits of Malacca is expected to grow to reach its annual capacity of 122,640 vessels within the next 10-15 years. At that point, vessels would have to take the longer detour via the Lombok Strait or Sunda Strait; alternatively, another route from the Indian Ocean to the South China Sea will have to be found.<sup>5</sup>

The latest resurgence in interest comes in tandem with China's development of the Belt and Road Initiative (BRI). Besides economic benefits, a Chinese-funded Kra Canal would hold tremendous strategic value for China as well, as it seeks to expand its

---

<sup>5</sup> Pithaya Pookaman, "Thailand's Kra Canal: Economic and Geopolitical Implications," *Asia Sentinel*, 22 August 2018, accessed 15 September 2019, <https://www.asiasentinel.com/econ-business/thailand-kra-canal-economic-geopolitical-implications/>.

regional influence within Southeast Asia and the Indian Ocean.<sup>6</sup> The canal would also alleviate China's heavy reliance on the Straits of Malacca—in 2012, 80 percent of China's oil imports transited the Straits; denial of the waterway to Chinese shipping would be crippling to the Chinese economy, in what the Chinese government considers its “Malacca Dilemma.”<sup>7</sup> It is therefore unsurprising that China, in pursuit of its BRI strategy, has strong interest in the canal's construction, especially with the abundance of funds available through the initiative. It can therefore be argued that the project is the closest to realisation that it has ever been, especially with (1) the increasing congestion of the Straits of Malacca; and (2) expanding Chinese economic and strategic interest in the region; and (3) the availability of Chinese financing to fund the canal's construction.

Given the increasing likelihood of the canal's construction, then, it would be prudent for countries affected by the diversion of shipping routes to assess the impact that this canal would have on their national interests. Prime amongst these countries is Singapore, which relies considerably on trade for its economic prosperity. While Singapore's political leadership, with its characteristic foresight, has diversified away from a reliance on trade, it still had a trade-to-GDP ratio of 326 percent in 2018, ranking third in the world behind Hong Kong and Luxembourg.<sup>8</sup> Additionally, the maritime and

---

<sup>6</sup> Peng Er Lam, “Thailand's Kra Canal Proposal and China's Maritime Silk Road: Between Fantasy and Reality?” *Asian Affairs: An American Review* 45, no. 1 (February 2018): 5, accessed 16 September 2019, <https://doi.org/10.1080/00927678.2017.1410403>.

<sup>7</sup> Ian Storey, “China's ‘Malacca Dilemma,’” *China Brief* 6, no. 8 (12 April 2006): 4, accessed 16 September 2019, <https://jamestown.org/program/chinas-malacca-dilemma/>.

<sup>8</sup> The World Bank, “Trade (% of GDP),” accessed 16 September 2019, <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS>.

petroleum industries contribute significantly to Singapore's GDP as well.<sup>9</sup> The construction of the Kra Canal, in providing a shorter route connecting the Andaman Sea and the Gulf of Thailand, has the potential to divert maritime traffic away from the Straits of Malacca.<sup>10</sup> This, in turn, has the potential to impact Singapore's economy negatively through reduced trade, and reduce demand for Singapore's maritime and oil-refining services, should the construction of the canal be accompanied by complementary infrastructure. In doing so, the canal would reshape the country's geopolitical realities as well, though the impacts here are not yet well-researched and thus unclear. Therefore, this thesis aims to evaluate the impact that the canal would have on Singapore's security.

#### Research Questions, Purpose, and Significance

In its analysis, this thesis aims to answer the primary question, "What impact would the establishment of the Kra Canal have on the national security of Singapore?" This thesis adapts the US Army's Risk Management process as a framework for analysis, by assessing the likelihood and impact that potential hazards would pose to Singapore's security as a result of the Kra Canal's construction. These hazards are classified in three subordinate areas of study, which are detailed in the secondary research questions (SRQs) below.

---

<sup>9</sup> Maritime and Port Authority of Singapore, "Singapore's 2016 Maritime Performance," 11 January 2017, accessed 17 September 2019, <https://www.mpa.gov.sg/web/portal/home/media-centre/news-releases/detail/05460688-fe49-42e7-9740-4ce88b157b46>.

<sup>10</sup> Joseph V. Micallef, "The Geopolitics of the Kra Canal," *Military.com*, 4 October 2017, accessed 15 September 2019, <https://www.military.com/daily-news/2017/10/04/geopolitic-kra-canal.html>.

First, Singapore draws part of its geopolitical strength from its strategic position at the tip of the Malaysian Peninsula. This gives it significant clout with the great powers, especially China and the USA. The shortening of shipping lanes resulting in the bypass of Singapore could undermine this strength. What geopolitical repercussions would the Kra Canal have on Singapore?

Second, given that China had previously indicated its willingness to finance the construction of the canal,<sup>11</sup> one could reasonably assume that it would be built with Chinese financial aid, and possibly Chinese companies with Chinese labour as well. What are the unique security implications of a Chinese-funded Kra Canal on Singapore?

Third, states south of the Kra Canal contain a significant Malay-Muslim population. One of the key concerns of the Thai government, and a major reason why the Kra Canal has not already been built, is a potential upsurge in existing separatist violence caused by the resultant physical separation of southern Thailand.<sup>12</sup> Would the construction of the Kra Canal intensify the terrorist threat to Singapore? For greater clarity, this SRQ is split into two further Tertiary Research Questions (TRQs). First, would separatist violence in southern Thailand intensify and become internationalised as a result of the Kra Canal's construction? Second, would extremist elements in Singapore support the separatist cause, and what implications would there be for Singapore's security? The second TRQ is especially pertinent as there have been radicals who have

---

<sup>11</sup> Rini Suryati Sulong, "The Kra Canal and Southeast Asian Relations," *Journal of Current Southeast Asian Affairs* 31, no. 4 (2012): 119, accessed 15 September 2019, <https://doi.org/10.1177/186810341203100405>.

<sup>12</sup> Lam, "Thailand's Kra Canal Proposal and Chinas Maritime Silk Road," 11.



supported the Al-Qaeda and ISIS causes in the past, and have planned terrorist attacks in Singapore in pursuit of those causes.<sup>13</sup>

The research is particularly timely given the latest uptick of Chinese interest in the canal. This, coupled with the increasing congestion in the Straits of Malacca, provide strong impetus for its construction. While most of the existing literature has been focused regionally, assessing the economic and geopolitical impacts for Southeast Asia, limited research has been conducted specifically on the security implications that the canal would have on Singapore. Furthermore, where studies have considered Singapore, they have focused mainly on the canal's economic impact on the country. This is a glaring gap in research—as a small island state in Southeast Asia, Singapore's fate is tied inextricably to the trajectory of the region. The prospect of a Chinese-funded Kra Canal holds significant geopolitical implications for the region, and as such the resultant security impact for Singapore certainly cannot be ignored. This thesis aims to fill that gap by assessing the impact that the Kra Canal would have on Singapore's national security. In doing so, it also aims to suggest security policy implications that would allow Singapore to better prepare for the possibility of the canal's construction.

#### Definition, Limitations, Delimitations, and Assumptions

In approaching the above research questions, it is necessary to first define the term “security” in the Singaporean context. Two aspects predominate Singapore's conception of national security: the maintenance of public order, and the protection of her

---

<sup>13</sup> Rohan Gunaratna, “The Changing Terrorist Threat Landscape in Singapore,” in *Perspectives on the Security of Singapore: The First 50 Years*, eds. Barry Desker and Cheng Guan Ang (Singapore: World Scientific, 2016), 233.

sovereignty.<sup>14</sup> Given that, it will be sufficient for this chapter to define national security for Singapore as (1) the ability to pursue her strategic interests without fear of coercion; and (2) the ability to maintain public order. Chapter 2 will provide a further analysis of what national security entails for Singapore, and more deeply explore the implications of her unique position as a small state within a diverse and often tense Southeast Asian region. With this definition in mind, this thesis will therefore analyse the impact the Kra Canal's construction on Singapore's autonomy in the political and diplomatic domains, and on the physical security of Singapore.

At this point, it is necessary to address the elephant in the room: what of the impact of the Kra Canal on Singapore's economic security? Surely, for a nation with the third highest GDP per capita in the world, a discussion of the economic impacts of the canal would be especially germane. Additionally, with Singapore having the fourth highest per capita military expenditure globally,<sup>15</sup> one would expect economic security to be particularly important in maintaining the budget necessary for the upkeep of its military capabilities. However, as noted earlier, much of existing literature focuses on the economic impact of the canal's construction on Singapore. The value proposition of this thesis is in presenting a unique analysis of the geopolitical and physical security impacts; including the economic impacts would digress from this thesis's line of research. Therefore, the main delimitation to this thesis is its limited treatment of the economic

---

<sup>14</sup> Norman Vasu and Bernard Loo, "National Security and Singapore: An Assessment," in *Perspectives on the Security of Singapore: The First 50 Years*, eds. Barry Desker and Chen Guan Ang (Singapore: World Scientific, 2015), 22.

<sup>15</sup> Stockholm Peace Research Institute (SIPRI), "SIPRI Military Expenditure Database," accessed 8 September 2019, <https://www.sipri.org/databases/milex>.

implications of the Kra Canal on Singapore. Concomitantly, it also does not cover the second-order effect of potential reductions in defence spending.<sup>16</sup> However, this is not to say that the economic impact will be completely disregarded—it will be considered insofar as it underpins the geopolitical aspects of Singaporean national security.

Another minor delimitation, as the reader might have already surmised, is the use of British English spelling conventions in the paper, which the author is accustomed to using.

The obvious assumption that this thesis makes is that the Kra Canal will be built in the first place. While it must be acknowledged that there exists some contention over the cost feasibility of the canal, that issue is outside the scope of this research. Moreover, as illustrated above and as will be explored in greater detail in Chapter 2, Chinese interest in the Kra Canal extends beyond just economic benefits—their strategic objectives in funding the canal’s construction could well outweigh cost feasibility concerns. Furthermore, as the Straits of Malacca is expected to reach capacity within the next 10-15 years, it is not unreasonable to consider the Canal’s construction as a way to handle increased ship traffic through the region.

This leads to the second assumption for the thesis—that the Kra Canal would be built using Chinese funds. The challenging terrain in the Kra Isthmus presents engineering difficulties and a hefty price tag of US\$28 billion, precluding the unilateral

---

<sup>16</sup> Besides, defence spending has been shown to be recession proof—defence spending actually increased year-on-year in 1998 after the Asian Financial Crisis, and also in 2009, after the global financial crisis of 2008. See charts provided in: Trading Economics, “Singapore Military Expenditure,” <https://tradingeconomics.com/singapore/military-expenditure>.

construction of the canal by Thailand. As it stands today, China represents the principal candidate for foreign funding of the canal, given the strong synergy with its BRI strategy.<sup>17</sup> China has also demonstrated its willingness to fund construction of other infrastructure projects in the region, through its other projects in Myanmar, Pakistan, Sri Lanka, and the Maldives—especially if these projects yield significant strategic benefits for China.<sup>18</sup> This assumption is critical as a Chinese-funded Kra Canal holds a unique set of implications for the region. The Sri Lankan and African experiences of the Chinese-funded infrastructure projects are instructive. In Sri Lanka, easy Chinese money allowed the construction of the port of Hambantota, even though feasibility studies indicated that the port was unviable.<sup>19</sup> When it eventually failed, Sri Lanka was forced into a 99-year lease of the port to China, allowing the latter a foothold in the Indian Ocean, a stone's throw away from its rival India. In Africa, Chinese funding of infrastructure projects in Africa was tied to the employment of Chinese contractors for the projects.<sup>20</sup> These episodes reveal less-than-benevolent Chinese intentions behind such projects, and could foretell the implications behind a Chinese-funded Kra Canal.

---

<sup>17</sup> Lam, “Thailand’s Kra Canal Proposal and China’s Maritime Silk Road,” 4–5.

<sup>18</sup> Geoffrey R. Sloan, “The Geopolitics of China and the Pacific Pivot,” in *Geopolitics, Geography, and Strategic History* (London: Routledge, 2017), 210.

<sup>19</sup> Maria Abi-habib, “How China Got Sri Lanka to Cough Up a Port,” *The New York Times*, 25 June 2018, accessed 17 September 2019, <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>.

<sup>20</sup> Jevans Nyabiage, “Are Chinese Loans Putting Africa on the Debt-Trap Express?” *South China Morning Post*, 28 July 2019, accessed 19 September 2019, <https://www.scmp.com/news/china/diplomacy/article/3020394/are-chinese-infrastructure-loans-putting-africa-debt-trap>.

## Thesis Overview

The remainder of the thesis will be laid out as follows. Chapter 2 provides an overview of the geography and history of the Kra Canal, with specific focus laid on recent developments with China. It will also provide a deeper analysis of the definition of national security in the Singaporean context and briefly discuss Tom Long's framework of the determinants of power for small states as a basis for analysis in the thesis. Chapter 2 will also review existing literature in each of the three subordinate areas of research, namely: (1) Singapore's geopolitical situation; (2) China's regional influence, and how the Kra Canal ties in with its regional interests; and (3) the religiously-based separatist movement in Southern Thailand. In addition, it draws upon the historical examples of the Suez and Panama Canals (and other canals), as the experiences of these past two canal projects could hold historical lessons that are pertinent to this thesis.

Chapter 3 describes the use of the US Army's Risk Management process as a methodology of assessment for this thesis's analysis. Chapter 4 then assesses the level of risk posed to Singapore's security within each of the respective SRQ's fields, and provides an overall impact assessment of the Kra Canal on Singapore's security. Finally, Chapter 5 will conclude by suggesting some policy implications to mitigate the risks posed to Singapore's security as determined by Chapter 4.

## CHAPTER 2

### LITERATURE REVIEW

The material gathered in this chapter provides the foundation upon which the analysis in Chapter 4 will be built. This chapter is divided into five sections. The first section provides a historical overview of developments in the Kra Canal until contemporary times and elucidates the reasons why the canal was never actually built despite the numerous proposals. It also provides key characteristics of the Kra Canal such as its proposed location, size, construction cost, and likely impact on trade in the Southeast Asian region.

The second section critically establishes a working definition of national security in the Singaporean context. This definition provides the criteria with which the primary research question can be addressed. It integrates academic definitions of “security” with an understanding of Singapore’s unique geopolitical context.

The third section provides a review on the determinants of power for small states, and provides a framework for Chapter 4’s analysis of the Kra Canal’s impact on Singapore’s security.

The fourth section consolidates material from across the domains of the three subsidiary research questions, namely: (1) the expected impact that the Kra Canal will have on Singapore’s economic and geopolitical situation; (2) Chinese geopolitical interests in the Kra Canal; and (3) the religious dimensions of Thailand’s separatist conflict in the south, and the expected impact of the Kra Canal on the separatist movement in southern Thailand.

Finally, the fifth section consolidates literature from comparative case studies of the Suez and Panama Canals. Lessons drawn from these case studies could potentially be applied to the Kra Canal. In particular, the Suez and Panama Canals were funded by foreign nations; implications of foreign financing in these cases could potentially apply to Chinese funding of the Kra Canal.

### Section 1: History and Background of the Kra Canal

#### 17th-19th Century

The idea of a canal through the narrow Kra Isthmus is far from new. Motivated by the economic and military advantages that such a canal would bring to Thailand, the Thai monarchy in the 17th and 18th Centuries considered its construction—King Ramathibodi III in 1677, and King Rama I’s brother in 1793. However, these ideas failed to manifest, as the canal was infeasible at the time due to the prohibitive cost, lack of technology, and mountainous terrain in the region.<sup>21</sup>

Subsequently in the 19th Century, the British and French launched numerous expeditions to conduct feasibility studies for the construction of the canal. If built, the canal would reduce shipping voyages to East Asia by days if not weeks, which would contribute significantly to the growth of their colonial ports in the Indochina region. Throughout the reigns of King Rama IV Mongkut (1851-1868) and King Rama V Chulalongkorn (1868-1910), both colonial powers lobbied multiple times for permission to build the canal.<sup>22</sup> In 1858, having just emerged from the Indian Mutiny of 1857, a

---

<sup>21</sup> Micallef, “The Geopolitics of the Kra Canal.”

<sup>22</sup> Yew Kit Clarence Ngui, “Kra Canal (1824-1910): The Elusive Dream,” *Akademika* 82, no. 1 (2012): 79, accessed 20 September 2019,

British proposal noted the particular strategic value of the canal. This would allow for rapid transfers of troops between both sides of Thailand, allowing the Empire to better police their colonial interests in the region.<sup>23</sup> Notably, the French in 1881 sent none other than Ferdinand de Lesseps of Suez Canal fame to survey the Kra Isthmus. However, the steep financial costs and the kings' concerns over Siamese independence meant that these efforts were ultimately unsuccessful.<sup>24</sup> At the close of the century in 1897, British commercial interests in the development of Singapore resulted in the signing of a treaty agreement with Thailand, with the latter undertaking not to allow any foreign power to "acquire dominion or to establish its influence or a protectorate" in the isthmus without British consent.<sup>25</sup>

## 20th Century

20th Century developments in the Kra Canal opened with rumours of Japanese interest in building the canal in the 1930s, but nothing came of this proposal.<sup>26</sup> Thai facilitation of the Japanese invasion of the Malay Peninsula caused the British to impose even stricter conditions in a 1946 treaty, which stated that "the Siamese Government undertake[s] that no canal linking the Indian Ocean and Gulf of Siam shall be cut across

---

[https://www.researchgate.net/publication/277868620\\_Kra\\_Canal\\_1824-1910\\_The\\_Elusive\\_Dream](https://www.researchgate.net/publication/277868620_Kra_Canal_1824-1910_The_Elusive_Dream).

<sup>23</sup> Low and Yeung, *The Proposed Kra Canal*, 2.

<sup>24</sup> Ngui, "Kra Canal (1824-1910): The Elusive Dream," 79.

<sup>25</sup> Lam, "Thailand's Kra Canal Proposal and China's Maritime Silk Road," 10.

<sup>26</sup> William J. Ronan, "The Kra Canal: A Suez for Japan?" *Pacific Affairs* 9, no. 3 (1936): 406-415, accessed 20 September 2019, <https://doi.org/10.2307/2750653>.



Siamese territory without the prior concurrence of the Government of the United Kingdom.”<sup>27</sup> Though the treaty was subsequently revoked in 1954,<sup>28</sup> it, together with the 1897 treaty, reflects the concerns that the British had with regards to the implications of the canal for Singapore’s prosperity.

The latter half of the century saw burgeoning interest in the canal. From 1983-1984, the US-based Executive Intelligence Review (EIR) and Fusion Energy Foundation (FEF) co-sponsored two conferences to discuss 50-year “Great Projects” to develop regional infrastructure in the Pacific and Indian Ocean basins, of which the Kra Canal featured prominently. These conferences were held in Bangkok, with the support of the Thai Ministry of Transportation.<sup>29</sup> This was followed by optimistic studies in 1984 that determined the canal to be economically feasible.<sup>30</sup> In 1986, the EIR also found close support from Japan’s Global Infrastructure Fund (GIF), which was sponsored by the

---

<sup>27</sup> Megan Rouillard and Asuka Saito, “Building the Kra Canal and Southeast Asian Development,” *Executive Intelligence Review* 40, no. 40 (11 October 2013): 16-24, accessed 20 September 2019, [https://larouchepub.com/eiw/public/2013/eirv40n40-20131011/16-24\\_4040.pdf](https://larouchepub.com/eiw/public/2013/eirv40n40-20131011/16-24_4040.pdf).

<sup>28</sup> Micallef, “The Geopolitics of the Kra Canal.”

<sup>29</sup> These events marked the rise of the Executive Intelligence Review as a major proponent of the Kra Canal project, an enthusiasm that still remains to this day. See Michael O. Billington, “Kra Canal, One of LaRouche’s ‘Great Projects’, Is Back on the Agenda,” *Executive Intelligence Review* 38, no. 34 (2 September 2011): 17, accessed 20 September 2019, [https://larouchepub.com/eiw/public/2011/eirv38n34-20110902/17-19\\_3834.pdf](https://larouchepub.com/eiw/public/2011/eirv38n34-20110902/17-19_3834.pdf).

<sup>30</sup> Uwe Parpart Henke, “The Kra Canal: Gateway to Asia’s Development,” *FUSION* 6, no. 2 (July-August 1984):22-24, accessed 20 September 2019, <http://wlym.com/archive/fusion/fusion/19840708-fusion.pdf>.

Mitsubishi Research Institute.<sup>31</sup> Notably, the GIF put forth a proposal to excavate the canal using nuclear blasts, but this was rejected for environmental reasons.<sup>32</sup> Ultimately, however, the 1980s proposals met insurmountable political obstacles and ultimately were not implemented.

Closing off the century, the GIF once again conducted a feasibility study in 1999, riding on the wave of economic interest in the wake of the Asian Financial Crisis. This study estimated that the canal would cost a minimum of US\$20 billion, and because of a lack of funds, the project never took off.<sup>33</sup>

## 21st Century

The 21st Century was marked by a steady growth in interest domestically in Thailand. Thaksin Shinawatra's administration in September 2001 established a committee to study the Kra Canal and invited Chinese and Japanese participation as well. Two years later, however, the study was halted due to a corruption scandal and internal political conflict, which also led to Thaksin's ouster as Prime Minister.<sup>34</sup> Thailand's Senate later tentatively approved the Canal's construction in 2007 pending further feasibility studies, but construction never commenced due to environmental concerns and

---

<sup>31</sup> Billington, "Kra Canal, One of LaRouche's 'Great Projects', Is Back on the Agenda," 17.

<sup>32</sup> Euan Graham, *Japan's Sea Lane Security, 1940-2004 a Matter of Life and Death?* (Abingdon: Routledge, 2006), 166.

<sup>33</sup> Sulong, "The Kra Canal and Southeast Asian Relations," 110.

<sup>34</sup> Lam, "Thailand's Kra Canal Proposal and China's Maritime Silk Road," 8; Sulong, "The Kra Canal and Southeast Asian Relations," 110.

political distractions.<sup>35</sup> Subsequently, with the election of Thaksin's sister Yingluck Shinawatra as Prime Minister in July 2011, the project was once again revived.<sup>36</sup> However, in a case of déjà vu, Yingluck like her brother was ousted in a military coup that saw her subsequently flee the country and join Thaksin in self-exile in the United Kingdom.

The 2000s also saw the beginnings of Chinese interest in the Kra Canal. In 2005, a Booz Allen Hamilton report to then-Defense Secretary Donald Rumsfeld noted that China was considering funding the US\$20 billion canal, which would give them “access to port facilities, warehouses, and other infrastructure in Thailand aimed at enhancing Chinese influence in the region”.<sup>37</sup>

Subsequently, while Thai-Chinese interactions regarding the Kra Canal have seemed to intensify especially with the announcement of China's Belt and Road Initiative (BRI), both countries have seemingly avoided overt government-to-government interactions over the development of the Kra Canal. Instead, several Thai and Chinese non-government bodies have been interacting closely. On the Chinese side, the main entity is the China-Thailand Kra Infrastructure Investment and Development (KTKIID). On the Thai side, entities include the Asia Union Group, as well as the Thai Canal

---

<sup>35</sup> Micallef, “The Geopolitics of the Kra Canal,”; Sulong, “The Kra Canal and Southeast Asian Relations,” 111.

<sup>36</sup> Billington, “Kra Canal, One of LaRouche's ‘Great Projects’, Is Back on the Agenda,” 17.

<sup>37</sup> “China Builds up Strategic Sea Lanes,” *The Washington Times*, January 17, 2005, accessed 21 September 2019, <https://www.washingtontimes.com/news/2005/jan/17/20050117-115550-1929r/>.

Association for Study and Development (TCA), a group of former senior Thai military officers who advocate for the canal's construction. Developments have been centred on several high-profile events between these entities in recent years. In 2015, the KTKIID of China and the Asia Union Group of Thailand reportedly signed a Memorandum of Understanding on the canal.<sup>38</sup> Thai-Chinese interest in the canal has continued to build—in September 2017, an international conference jointly organised by a leading Thai university and the Thai Canal Association for Study and Development urged the Thai government to prioritise the canal's construction.<sup>39</sup> Allegedly, a local fisherman was also asked to take a group of retired Thai generals and Chinese businessmen on a tour of the isthmus in 2017.<sup>40</sup> The recent ascent to the Thai throne of King Rama X, who reportedly favours the construction of the canal, also presents a more favourable climate for the construction of the canal.<sup>41</sup>

---

<sup>38</sup> Rhea Menon, "Thailand's Kra Canal: China's Way Around the Malacca Strait," *The Diplomat*, 9 April 2018, accessed 28 October 2019, <https://thediplomat.com/2018/04/thailands-kra-canal-chinas-way-around-the-malacca-strait/>.

<sup>39</sup> William Mellor, "European Business Joins China in Pushing \$28bn Thai Canal," *Nikkei Asian Review*, 11 September 2017, accessed 28 October 2019, <https://asia.nikkei.com/Politics-Economy/Economy/European-business-joins-China-in-pushing-28bn-Thai-Canal>.

<sup>40</sup> William Mellor, "Influential Thais in Push for Kra Canal Project," *Nikkei Asian Review*, 7 August 2017, accessed 28 October 2019, <https://asia.nikkei.com/Economy/Influential-Thais-in-push-for-Kra-Canal-project2>.

<sup>41</sup> "Major Breakthrough on Kra Canal Potential," *LaRouchePAC*, 17 January 2017, accessed 28 October 2019, <https://larouchepac.com/20170117/major-breakthrough-kra-canal-potential>.

However, both countries' governments, cognisant of the canal's significant implications for the region, have been quick to downplay any hype on the canal's construction. The Chinese government has distanced itself from Chinese-Thai initiatives regarding the canal, which were led by private Chinese companies. This includes the 2015 MOU that was denied by the Chinese government,<sup>42</sup> and the September 2017 conference held in Bangkok. Thai ex-Prime Minister Chavalit Yongchaiyudh reportedly signed that same MOU, but later denied it.<sup>43</sup> The one official indication from the Chinese government of its interest in the canal came when Beijing's ambassador to Bangkok, appointed in August 2017, said in high-level meetings that the canal was envisioned to be a part of the BRI.<sup>44</sup> Nonetheless, as Robert Parra Sanchez writes, the "lack of official endorsement does not mean that the Chinese are removed from the potential construction, but rather means that China may be publicly keeping its distance to avoid international attention being redirected to Beijing."<sup>45</sup> On the Thai side, as recently as February 2018,

---

<sup>42</sup> Hui Min Chiew, "Renewed Hype over China-Thai Canal Project: 5 Things about the Kra Canal," *The Straits Times*, 21 May 2015, accessed 28 October 2019, <https://www.straitstimes.com/asia/se-asia/renewed-hype-over-china-thai-canal-project-5-things-about-the-kra-canal>.

<sup>43</sup> "Kra Canal to have huge security and social implications," *The Nation Thailand*, 8 June 2015, accessed 28 October 2019, <https://www.nationthailand.com/business/30261841>.

<sup>44</sup> Shawn W. Crispin, "A man, a plan, a canal...Thailand?" *Axis of Logic*, 1 February 2018, accessed 28 October 2019, [http://axisoflogic.com/artman/publish/Article\\_78703.shtml](http://axisoflogic.com/artman/publish/Article_78703.shtml).

<sup>45</sup> Robert Parra Sanchez, "The Strategic and Geopolitical Implications of Canals," (thesis, California Maritime Academy, 2019), 24, accessed 28 March 2020, [http://dspace.calstate.edu/bitstream/handle/10211.3/209759/Robert\\_Sanchez-18784\\_Robert\\_Sanchez\\_RS\\_Capstone\\_151893\\_1109757060.pdf](http://dspace.calstate.edu/bitstream/handle/10211.3/209759/Robert_Sanchez-18784_Robert_Sanchez_RS_Capstone_151893_1109757060.pdf).

the Thai government declared that the canal project was not a priority and that it did not have a policy on the project.<sup>46</sup>

Despite these denials, Thai Prime Minister Prayut Chan-o-cha ordered his National Economic and Social Development Board and the Office of the National Security Council in October 2018 to conduct yet another feasibility study of the canal.<sup>47</sup> Most recently, in January 2020, the *Bangkok Post* reported that both government and opposition Members of Parliament in the Thai House of Representatives had supported a motion to conduct a feasibility study of the canal project, with a 49-member committee to be set up within 4 months.<sup>48</sup> While the mixed signals out of Beijing and Bangkok present an unclear picture on the way ahead for the canal, it is clear that Chinese and Thai interest in the canal has continued to burgeon.

#### Key Characteristics of the Kra Canal

Available sources provide different estimations on the proposed dimensions of the Kra Canal depending on the exact location where the canal would be cut. Nonetheless, the sources correspond in their description of the canal as a two-way channel, with a depth of at least 25m—similar to that of the Malacca Strait, and thus able to

---

<sup>46</sup> “Proposed Kra Canal Not Priority Project for Thai Govt,” *The Straits Times*, 12 February 2018, accessed 28 October 2019, <https://www.straitstimes.com/asia/se-asia/proposed-kra-canal-not-priority-project-for-thai-govt>.

<sup>47</sup> “Thai Prime Minister Launches Kra Canal Study,” *Executive Intelligence Review*, 30 October 2018, accessed 28 October 2019, [https://larouchepub.com/pr/2018/181030\\_launch\\_kra\\_study.html](https://larouchepub.com/pr/2018/181030_launch_kra_study.html).

<sup>48</sup> “Time to revisit canal project,” *Bangkok Post*, 20 January 2020, accessed 25 January 2020, <https://www.bangkokpost.com/opinion/opinion/1839359/time-to-revisit-canal-project>.

accommodate Malaccamax-class ships. This thesis will use the dimensions from the latest proposal that resulted from the 2015 China-Thai MOU signing, which reported the canal to be 102km long, 400m wide, and 20m deep. The proposal also estimated that the canal would take 10 years to build, with a cost of US\$28bn.<sup>49</sup> An accompanying Special Economic Zone (SEZ) would also be constructed in the surrounding areas, which would cost an additional US\$22bn.

At the time of writing, there have been no formal studies conducted on the potential savings that the Kra Canal could offer to ships transiting from the Indian Ocean to the South China Sea. Rough estimates have been made by various sources, but they differ somewhat. Abdul Rahman et al., in a 2016 study, quoted a saving of US\$350,000 per 100,000 deadweight ton oil tanker per trip.<sup>50</sup> This figure probably provides a high-end estimate that is applicable to larger ships that might utilise the canal—in 2004, the average vessel transiting the Straits carried 42,550 deadweight tonnes.<sup>51</sup> Other sources provide estimates that would be closer to average ship transit fees. Mikhail Voytenko of FleetMon, a company that collects data on shipping, estimated that an average ship would

---

<sup>49</sup> Cheng Wee Teo, “China not involved in Kra canal work,” *The Straits Times*, 20 May 2015, accessed 25 January 2020, <https://www.straitstimes.com/asia/east-asia/china-not-involved-in-kra-canal-work>.

<sup>50</sup> Noorul Shaiful Fitri Abdul Rahman, Nurul Haqimin Mohd Salleh, Ahmad Fayas Ahmad Najib, and Venus Y.H. Lun, “A Descriptive Method for Analysing the Kra Canal Decision on Maritime Business Patterns in Malaysia,” *Journal of Shipping and Trade* 1, no. 1 (2016): 13, accessed 25 January 2020, <https://doi.org/10.1186/s41072-016-0016-0>.

<sup>51</sup> Sam Bateman, Joshua Ho, and Mathew Mathai, “Shipping Patterns in the Malacca and Singapore Straits: An Assessment of the Risks to Different Types of Vessel,” *Contemporary Southeast Asia* 29, no. 2 (2007): 326, accessed 7 January 2020, [www.jstor.org/stable/25798833](http://www.jstor.org/stable/25798833).

save US\$54,000 by using the Kra Canal.<sup>52</sup> Operating costs aside, charging a rate of \$55,000 per ship, at a rate of 50 daily transits (or 18,250 transits per year, approximately 22 percent of annual traffic in the Straits of Malacca in 2017), approximately 50 years would be required to recover the construction costs of the canal and the SEZ. Gary Norman, writing for the energy news site OilPrice.com, estimated that savings from bypassing the Malacca, Sunda, and Lombok Straits would range from US\$40,000 to US\$120,000 per trip, calculated based on fuel consumption rates and prevailing oil prices at the time. Norman also estimated that for the canal's investment to be paid back in 20 years, canal fees of US\$115,000 would have to be charged based on a rate of 40 transits per day (or 14,600 transits per year, approximately 17 percent of annual traffic in the Straits of Malacca in 2017).<sup>53</sup> These figures are reasonable, considering that average transit fees for vessels through the Suez Canal and Panama Canal stand at about US\$250,000 and US\$125,000 respectively.<sup>54</sup> These estimates suggest at first glance that the canal would struggle to sustain itself economically based on ship transit fees alone. However, it should be noted that Norman's and Voytenko's estimates are based on current ship traffic within the Straits of Malacca. Moving ahead, with traffic through the

---

<sup>52</sup> Mikhail Voytenko, "Kra Canal Project and unbiased approach," *Fleetmon*, 20 November 2017, accessed 7 January 2020, <https://www.fleetmon.com/maritime-news/2017/20547/kra-canal-project-and-unbiased-approach/>.

<sup>53</sup> Gary Norman, "The Oil Canal That May Never Be," OilPrice.com, 15 March 2018, accessed 7 January 2020, <https://oilprice.com/Energy/General/The-Oil-Canal-That-May-Never-Be.html>.

<sup>54</sup> Praveen Swami, "Fears rise in India as China pushes plan for canal to reshape Indian Ocean," *Business Standard*, 6 April 2018, accessed 28 October 2019, [https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034\\_1.html](https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034_1.html).



Straits set to grow by a further 50 percent by 2030,<sup>55</sup> the canal would only need to divert a smaller proportion of traffic to be economically viable. Optimistic estimates have indicated that the canal could divert up to 30 percent of Straits traffic, a much higher rate than the forecasts made by both authors.<sup>56</sup>

In addition to the economic value of the canal, its strategic value must also be considered, especially to China as the primary candidate to finance its construction. This will be explored in further detail in Section 4 of this chapter, as well as in the analysis provided in Chapter 4. Adding the canal's strategic value to the calculus could in fact make the canal a viable project despite the apparent concerns over its monetary cost.

### Section 2: Defining National Security in the Singaporean Context

But some things are not negotiable. My survival and how I design my security is not negotiable. This is something fundamental. We may be small but we are sovereign, and we decide how we ensure our own security.

—Prime Minister Lee Kuan Yew, Television Interview

In order to set the boundaries for subsequent discussion of the Kra Canal's impact on Singapore's security, a working definition of national security in the Singaporean context will have to be established. A brief review of theoretical underpinnings of national security will first be presented, after which this will be applied to the Singaporean context.

---

<sup>55</sup> Kaur, "Vessel Movements in Singapore, Malacca Straits Set to Rise 50% by 2030."

<sup>56</sup> Mellor, "Influential Thais in Push for Kra Canal Project."

National security as a concept can be excessively broad—Paleri describes 15 separate elements of national security, ranging from the more traditional aspects of military security and economic security, to less widely-used concepts such as genomic security and disaster security.<sup>57</sup> To exhaustively discuss the impact of the Kra Canal on all 15 aspects of security is beyond the scope of this thesis. Moreover, it would be more prudent to focus on those aspects that are particularly impacted by the canal’s construction. More relevant, then, is Maier’s broader definition that national security “is best described as a capacity to control those domestic and foreign conditions that the public opinion of a given community believes necessary to enjoy its own self-determination or autonomy, prosperity, and wellbeing.”<sup>58</sup> The first premise of national security being the capacity to control conditions is particularly useful, as it implies that this capacity can be affected by domestic or foreign actors, or by the strategic environment. The second premise of “autonomy, prosperity, and wellbeing” alludes to the diplomatic and political security, economic security, and physical security of a state. Put another way, national security is the ability of a state to pursue its strategic objectives with autonomy, without fear of coercion.

Within the Singaporean context, Vasu and Loo identify two broad Singaporean national security interests: the protection of Singapore’s sovereignty and the maintenance

---

<sup>57</sup> Prabhakaran Paleri, *National Security: Imperatives and Challenges* (Tata: McGraw-Hill, 2008): 66.

<sup>58</sup> Charles S. Maier, “Peace and security for the 1990s” (unpublished paper, MacArthur Fellowship Program, Social Science Research Council, 1990), 5.

of public order.<sup>59</sup> The understanding of the term “public order” is straightforward enough, but the term sovereignty requires further explanation. Here, the understanding of “sovereignty” is a Westphalian one, as set forth in Chapter 1, Article 2 of the UN Charter:

Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.<sup>60</sup>

Blending this with Maier’s earlier definition, “sovereignty” for Singapore is therefore her degree of autonomy to pursue strategic interests in the political, diplomatic, and economic domains.

Summarising this definitional section, national security for Singapore would therefore have two aspects: (1) the ability to pursue her strategic interests without fear of coercion; and (2) the ability to maintain public order. This was put succinctly by founding Prime Minister Lee Kuan Yew, who said in a press conference that besides physical security, “there are other aspects of security which are equally pertinent in the long run: your economic viability, the capacity of your political structure to withstand pressures of a social, cultural, or whatever nature. It is a multi-coloured question.”<sup>61</sup>

---

<sup>59</sup> Vasu and Loo, “National Security and Singapore: An Assessment,” 22.

<sup>60</sup> United Nations, “Charter of the United Nations,” accessed 8 September 2019, <https://www.un.org/en/sections/un-charter/chapter-i/index.html>.

<sup>61</sup> National Archives of Singapore, “Transcript of a Press Conference given by the Prime Minister, Mr. Lee Kuan Yew, Hyderabad House, New Delhi on 3rd September 1966,” accessed 29 October 2019, <http://www.nas.gov.sg/archivesonline/data/pdfdoc/lky19660903c.pdf>.

### Section 3: The Founts of Power for Small States

Having established the two overarching themes of national security in the Singaporean context, this section now establishes the framework around which Chapter 4's analysis will be built. Here, an understanding of the sources of power for small states is critical—an analysis of how these sources are affected will enable an assessment of the Kra Canal's impact on Singapore's security. This is only applicable to the first part of the definition of national security—that of the idea of sovereignty—and not the second part on the maintenance of public order. In particular, Tom Long's work in this field is especially relevant, as he examines how small states gain power beyond what their physical size would typically justify, which would be especially relevant to the Singaporean context.

Long argues against the conventional wisdom that small states have limited influence on the world stage especially when it comes to dealing with great powers, as this logic is based on a “military oriented, resource-based conception of ‘compulsory power’.”<sup>62</sup> Indeed, given the new world order brought about by the “de-colonisation, de-polarisation, democratisation, deregulation and digitalisation,”<sup>63</sup> the “conceptualization of both power and the small state are open to reinterpretation.”<sup>64</sup> Long instead posits that

---

<sup>62</sup> Tom Long, “Small States, Great Power? Gaining Influence Through Intrinsic, Derivative, and Collective Power,” *International Studies Review* 19, no. 2 (2017): 186, accessed 25 March 2020, <https://doi.org/10.1093/isr/viw040>.

<sup>63</sup> Alan K. Henrikson, “A Coming ‘Magnesian’ Age? Small States, the Global System, and the International Community,” *Geopolitics* 6, no. 3 (2001), 65-71, accessed 25 March 2020, <https://doi.org/10.1080/14650040108407729>.

<sup>64</sup> Long, “Small States, Great Power?,” 193.

small states can leverage three forms of power—particular-intrinsic, derivative, and collective power—to gain influence in international relations. This allows small states to compensate for their deficiencies in the traditional resource- and military-based forms of power, and instead “specialize in how they employ their resources and relationships” with great powers or other small states.<sup>65</sup>

According to Long, intrinsic power stems from a state’s intrinsic possessions, for example that of population, territory, GDP, and military strength. While small states typically lack such elements of intrinsic power relative to their larger peers, they instead may leverage “*particular* forms of intrinsic power.” Such particular-intrinsic power comes from control of strategic resources (for example, oil) or strategic geographic locations. These in turn may give states greater agency in international organisations (institutional power) and in its bilateral or multilateral relationships with bigger powers (structural power).<sup>66</sup> A state’s identity can also be a powerful source of particular-intrinsic power—Long raises the examples of Scandinavian countries that have developed a reputation for promoting “international norms on mediation of conflicts and sustainable development,” and Qatar which has “developed an identity as a hub for globalisation, as the center of communications, air travel, and financial networks.”<sup>67</sup>

Small states may also employ derivative power by influencing great powers to act in ways that promote their interests—in a way, small states “act as the proverbial tail that

---

<sup>65</sup> Long, “Small States, Great Power?,” 186-187.

<sup>66</sup> *Ibid.*, 194-195.

<sup>67</sup> *Ibid.*, 196.

wags the dog.”<sup>68</sup> Derivative power can be cultivated through social relations, ideological, strategic, or material means, all of which make the relationship between the client and patron state valuable. In this way, “clients—not just the patron—define the relationship.”<sup>69</sup> Wielding derivative power enhances a small state’s influence on the world stage through the power “borrowed” from their patron states, allowing the small state to “pursue and perhaps accomplish major objectives that could otherwise be beyond its grasp,” though this potentially comes at a cost of reduced control over outcomes.<sup>70</sup> Long raises the example of US support of Taiwan and Israel as examples of states who have gained derivative power facilitated by “the United States’ open, pluralistic, foreign policy decision-making process.”<sup>71</sup>

Small states can also form relationships with other non-great powers to gain collective power. Groupings of small states can come together to form larger organisations, which, when acting in concert in negotiations with a larger state, collectively give the small states greater influence and bargaining power. Also, small states often join global or regional inter-governmental organisations (IGOs), as these organisations provide them a “seat at the table” and a sovereign vote that may be equivalent to the vote of larger states, through which they can exercise agency in international affairs. Long raises the example of Singapore, which plays an outside role in

---

<sup>68</sup> Long, “Small States, Great Power?,” 196.

<sup>69</sup> *Ibid.*, 197.

<sup>70</sup> *Ibid.*, 197-198.

<sup>71</sup> *Ibid.*, 196-198.

the Association of Southeast Asian Nations (ASEAN). Besides simply being part of these organisations, small states also make it a point to “walk the talk” by making considerable contributions in international matters, such as foreign aid or peacekeeping missions. These lend credibility and therefore enhance small states’ influence in global collective organisations.<sup>72</sup>

In concert, these three forms of power give small states greater influence than their size would otherwise suggest. Analysing the effect that the Kra Canal has on Singapore’s ability to wield such powers will form the backbone of Chapter 4’s analysis.

#### Section 4: Subsidiary Research Areas

##### Singapore’s Geopolitical Realities

This section reviews previous studies conducted on the Kra Canal’s potential impact on Singapore. As much of the available literature focuses on the canal’s potential economic impacts, further research on the potential security impacts is necessary, which Chapter 4 will provide.

##### The Kra Canal’s Potential Impact on Singapore

Recent opinion columns and blog entries have postulated that the construction of the Kra Canal could potentially divert 30 percent of shipping traffic away from the Straits of Malacca, and therefore have a significant impact on Singapore’s economic prosperity.<sup>73</sup> Others have instead stated that the presence of unparalleled infrastructure in

---

<sup>72</sup> Long, “Small States, Great Power?,” 198-200.

<sup>73</sup> See Willow Ivy Rose, “What is the Kra Canal? Thai/Chinese Weapon against Singapore?” *Medium*, 11 March 2018, accessed 23 January 2020, <https://medium.com/@willowivyrose/what-is-the-kra-canal-thai-chinese-weapon-against->

Singapore with regards to oil refining and storage, shipbuilding and ship-repairing, and transshipment would mitigate the impact that the canal would have.<sup>74</sup> To establish the veracity of this figure and determine if it is unnecessarily alarmist, a review of academic studies on the topic is necessary.

One of the earliest studies into the Kra Canal's potential impact on Singapore was conducted by William J. Ronan in 1938, on the back of speculation of Japanese interest in building the canal in the 1930s. Even in this early study, Ronan made clear the potentially significant economic and strategic impact that the Kra Canal would have on British colonial interests in Singapore. Commercially, as a primarily entrepot-based trading port, Singapore would have been "cut off from the main routes of world trade and probably would be reduced to a third-class port," since ships utilising the canal would accrue "a saving of about two days for faster steamers on the Europe-Far East run, and even more for slower cargo ships."<sup>75</sup> Strategically, Singapore afforded the British Empire control over the bottle-neck in trade routes around the Malaysian Peninsula. With the construction of the Kra Canal, the strategic value of Singapore as a strongpoint would be

---

singapore-bdbaf47ab88b; Dezan Shira and Associates, "Kra Canal Project Revisited as part of China's Maritime Silk Road," *ASEAN Briefing*, 11 September 2017, accessed 23 January 2020, <https://www.aseanbriefing.com/news/2017/09/11/kra-canal-project-revisited-part-chinas-maritime-silk-road.html>.

<sup>74</sup> Tom Pepinsky, "Does the Kra Canal Threaten Singapore?" *Tom Pepinsky* (blog), 3 October 2016, accessed 23 January 2020, <https://tompepinsky.com/2016/10/03/does-the-kra-canal-threaten-singapore/>.

<sup>75</sup> Ronan, "The Kra Canal: A Suez for Japan?," 411.



eroded, and Singapore itself might even be cut off from its sea lines of communications to the rest of the empire by a hostile fleet using the canal.<sup>76</sup>

In 1973, with the Thai Government announcing its intent to conduct a feasibility study of the canal, Singapore's Institute of Southeast Asian Studies' Patrick Low and Yue-Man Yeung undertook an economic-focused study of the Kra Canal's impact on Singapore. Analysing statistics of shipping traffic passing through Singapore, Low and Yeung concluded that the Kra Canal would divert no more than 10 percent of Singapore's shipping, hence the economic impact would be "predictably small."<sup>77</sup> This conclusion was based on the trend that trade in Singapore was decreasingly entrepot-focused, and that the young country's accelerating industrialisation had resulted in an expansion of industrial imports meant for the Singaporean local market. Singapore had also planned to modernise her port facilities later in the 1970s, including the implementation of a full-scale containerisation programme. Additionally, Singapore was also establishing herself as a major hub for shipbuilding and ship-repairing. In combination, these factors would solidify her lead in international shipping and trade, thereby mitigating the effect of the Kra Canal on Singapore's trade, as "much of international shipping would continue to call at Singapore."<sup>78</sup>

After Low and Yeung's quantitative study in the 1970s, the only other quantitative study of the Kra Canal's economic impact was an Institute of Developing

---

<sup>76</sup> Ronan, "The Kra Canal: A Suez for Japan?," 412.

<sup>77</sup> Low and Yeung, *The Proposed Kra Canal*, 30.

<sup>78</sup> *Ibid.*, 19-20, 30.

Economies discussion paper by Ching-mu Chen and Satoru Kumagai. In the study, Chen and Kumagai employ the Institute of Developing Economies' Geographical Simulation Model (IDE-GSM) to analyse how the Kra Canal would affect shipping distances between various destinations, and subsequently derive the economic impact on Southeast Asian countries and their trading partners. Even in the worst-case scenario, Chen and Kumagai estimate that the canal would cause a 0.8 percent reduction in Singapore's GDP, amounting to US\$7bn.<sup>79</sup> One key assumption used in the study, as acknowledged by the authors themselves, is that ship traffic will select the shortest route available in their transit between destinations. This means the omission of potential “network effects”—that is, the potential for shipping traffic to call at selected ports due to their advantageous logistics facilities despite longer transit distances.<sup>80</sup> As such, one could expect that the negative effect on Singapore's GDP would be mitigated by its status as a premier logistics hub in the region, as Low and Yeung had highlighted earlier.

Indeed, other authors have also highlighted the effect that Singapore's developed infrastructure would have on mitigating the Kra Canal's impact on Singapore. Raymon Krishnan and Bhargav Srinagesh, in a 2017 research piece for the Asian Trade Centre, argue that even if the Kra Canal offers infrastructure of a high enough standard to compete with Singapore, “physical infrastructure alone will not be enough to displace Singapore from its prime position.” They posit that Singapore's “hard” infrastructure is

---

<sup>79</sup> Ching-mu Chen and Satoru Kumagai, “Economic Impacts of the Kra Canal: An Application of the Automatic Calculation of Sea Distances by a GIS,” IDE Discussion Paper No. 568, Institute of Developing Economies, March 2016, 20, accessed 23 January 2020, <http://hdl.handle.net/2344/1529>.

<sup>80</sup> *Ibid.*, 23.

complemented with its excellent “soft” infrastructure—the supporting technological, financial, legal, banking and other mechanisms—vitaly necessary to support trade.<sup>81</sup> Peng Er Lam, in a study of the Kra Canal’s impact on key stakeholders in the region, echoes the view that such “soft” infrastructure is equally important to Singapore’s attractiveness as a trading port as its available physical infrastructure. Lam quotes Prime Minister Lee Hsien Loong’s response in a 2015 radio interview on the Kra Canal, where Lee compared Singapore’s ability to maintain its status as the premier regional air hub despite the superior geographic position of Thailand. This, attributes Lee, was due to the “high standards of efficiency” achieved by Changi Airport.<sup>82</sup>

In summary, this subsection found that existing literature has predicted that the construction of a Kra Canal today would have a relatively small economic impact on Singapore. This was primarily due to the shift away from entrepot-focused trade, and the development of trade-related “hard” and “soft” infrastructure that is predicted to mitigate the degree of trade diversion due to shortened shipping routes that the canal offers. As for the canal’s expected geopolitical impact, only Ronan’s 1938 work indicates that the value of Singapore as a strongpoint for the British Empire would have been eroded should the Kra Canal have been dug by the Japanese during the interwar period. There has, in general, been a lack of dedicated study of the geopolitical impact the canal would have on Singapore. This necessitates a further discussion of the determinants of Singapore’s

---

<sup>81</sup> Raymon Krishnan and Bhargav Sriganesh, “One Belt One Road – Opportunities and Risks for Singapore,” Singapore: Asian Trade Centre, 22 September 2017, 7-8, accessed 26 January 2020, <https://ssrn.com/abstract=3048113>.

<sup>82</sup> Lam, “Thailand’s Kra Canal Proposal and China’s Maritime Silk Road,” 10.

geopolitical strength, which will be provided in Chapter 4, so that an analysis on the Kra Canal's impacts on these factors can be analysed.

### Chinese Geopolitical Interests in the Kra Canal

Existing literature on the proposed Chinese funding of the Kra Canal provides some brief analysis of the geopolitics of this move. However, none of this analysis addresses the unique implications of Chinese funding on Singapore. This thesis aims to fill that gap.

This subsection is split into two parts. It is important to first establish the degree to which China depends on the Malacca Straits, as a backdrop upon which Chinese interest in the Kra Canal can be appreciated. Next, an overview of China's BRI project allows the reader to situate the Kra Canal as part of this larger effort and therefore better understand the geopolitical impact of the canal project.

#### Chinese Dependence on the Straits of Malacca

The rapid expansion of the Chinese economy has brought with it increased trade flows and an increased reliance on strategic lines of communications, both overland and oversea. From 2000 to 2017, the Chinese economy grew at a compound annual growth rate (CAGR) of 14.5 percent per year.<sup>83</sup> Over the same period, China's total trade grew from a value of US\$474bn to US\$4,107bn, representing a CAGR of 13.5 percent per

---

<sup>83</sup> International Monetary Fund, "World Economic Outlook Database," July 2019, accessed 22 November 2019, <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx>.

year.<sup>84</sup> In line with her phenomenal growth, China's demand for imported raw materials, in particular oil, has concomitantly increased. In 2010, China surpassed USA as the largest consumer of energy in the world,<sup>85</sup> and today remains the second largest consumer of oil in the world.<sup>86</sup> Thus, the importance of trade routes to China cannot be understated—they represent a central and strategic concern for the Chinese government.

China's maritime trade routes are particularly critical, transporting over 90 percent of its merchandise trade and 95 percent of its oil and gas imports.<sup>87</sup> As imports are slated to grow from just over half of China's oil consumption in 2014 to an estimated 80 percent by 2030, these trade routes become even more important for the sustenance of the Chinese economy.<sup>88</sup> Therefore, Chinese interest in the Kra Canal must be appreciated within this larger backdrop, and in particular, in the context of the Belt and Road Initiative (BRI).

---

<sup>84</sup> World Integrated Trade Solution, The World Bank, "China Trade Statistics: Exports, Imports, Products, Tariffs, GDP and Related Development Indicator," accessed 22 November 2019, <https://wits.worldbank.org/CountryProfile/en/CHN>.

<sup>85</sup> Spencer Swartz and Shai Oster, "China Tops U.S. in Energy Use," *The Wall Street Journal*, 18 July 2010, accessed November 22, 2019, <https://www.wsj.com/articles/SB10001424052748703720504575376712353150310>.

<sup>86</sup> U.S. Energy Information Administration, "What Countries Are the Top Producers and Consumers of Oil?" 6 November 2019, accessed November 22, 2019, <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>.

<sup>87</sup> Sloan, "The geopolitics of China and the Pacific pivot," 197.

<sup>88</sup> Aaron L. Friedberg, *Beyond Air-Sea Battle: The Debate over US Military Strategy in Asia* (London: Routledge [for the International Institute of Strategic Studies], 2014), 106.

Geoffrey Sloan details the growing Chinese maritime interests, and China's strategic moves to protect its interests in key trade routes. Critical to China's maritime trade is the Straits of Malacca. It represents the shortest route for trade between China and the Middle East and westwards towards Europe. In 2012, the Straits carried 80 percent of Chinese oil imports, and this continues to grow today.<sup>89</sup> However, the Straits also represents a worrying geographical choke point for burgeoning Chinese trade. Sloan highlights two of China's key concerns with regards to the Straits: security of shipping and vulnerability to foreign interference.

First, security of shipping through the Straits of Malacca is inextricably tied to its geographical features. The Straits become tremendously narrow and shallow heading southwards towards Singapore, reaching its narrowest traversable point of just 1.7 miles across at the Phillips Channel,<sup>90</sup> with depths as shallow as 27 metres (90 feet).<sup>91</sup> The sheer volume of shipping passing through the third busiest trading route in the world constricted into such a narrow corridor has resulted in threats to the security of shipping through the Straits of Malacca. The confluence of these two factors is best represented on a map—Illustration 1 (on page 120) shows the convergence of shipping from Europe, Africa, and the Middle East through the narrow Straits. There remains a high risk of

---

<sup>89</sup> George Friedman, "There Are 2 Choke Points That Threaten Oil Trade between the Persian Gulf and East Asia," *Business Insider*, April 18, 2017, accessed November 23, 2019, <https://www.businessinsider.com/maps-oil-trade-choke-points-person-gulf-and-east-asia-2017-4>.

<sup>90</sup> Sloan, "The geopolitics of China and the Pacific pivot," 209.

<sup>91</sup> Encyclopedia Britannica, "Strait of Malacca," 20 June 2019, accessed 23 November 2019, <https://www.britannica.com/place/Strait-of-Malacca>.

navigational accidents with 60 occurring in 2015 and more expected as traffic increases. This is exacerbated by the occasional haze from forest fires that reduces visibility, and adverse weather during monsoon periods.<sup>92</sup> The spectre of piracy also remains, though incidents have fallen significantly since their peak in the 2000s thanks to combined anti-piracy efforts by Indonesia, Malaysia and Singapore.<sup>93</sup>

Second, Sloan highlights that the US Navy has a high presence in the region and could exercise sea control and denial over the Straits, potentially interdicting Chinese trade as a tool of coercion.<sup>94</sup> Ian Storey and Aaron Friedberg concur with this assessment. Storey frames the situation as China's "Malacca Dilemma", and traces the issue back to November 2003, when then-Chinese President Hu Jintao said that control of the Strait by "certain major powers" could lead to strangulation of China's energy imports, thereby presenting a national security crisis.<sup>95</sup> Friedberg explains that such an indirect approach to coerce China exploits her growing energy import dependence by blockading the vital choke points of the Straits of Malacca, Sunda Straits, and Lombok

---

<sup>92</sup> Krishnadev Calamur, "High Traffic, High Risk in the Strait of Malacca," *The Atlantic*, August 23, 2017, accessed November 23, 2019, <https://www.theatlantic.com/international/archive/2017/08/strait-of-malacca-uss-john-mccain/537471/>.

<sup>93</sup> For peak piracy statistics, see Peter J. Rimmer and Paul T.W. Lee, "Repercussions of Impeding Shipping in the Malacca and Singapore Straits," *Journal of International Logistics and Trade* 5, no. 1 (2007): 11. For recent trends in piracy in the Straits, see Min Zhang Lim, "More piracy, robbery cases in Malacca and Singapore straits in 2017, as in rest of Asia," *The Straits Times*, 16 January 2018, <https://www.straitstimes.com/singapore/more-piracy-robbery-cases-in-malacca-and-singapore-straits-in-2017-as-in-rest-of-asia>.

<sup>94</sup> Sloan, "The geopolitics of China and the Pacific pivot," 209.

<sup>95</sup> Storey, "China's 'Malacca Dilemma'."

Straits. This would impose “painful pressure” on China, which “could have a far-reaching and potentially devastating impact on its economy, social stability, and war-making capacity”. Friedberg highlights a flurry of commentary on the issue in the wake of Hu’s 2003 refrain as well as subsequent planned and real investments in infrastructure to bypass the Straits of Malacca as evidence of China’s concern over this “Dilemma.”<sup>96</sup> Advocates of this approach believe that it draws on the US comparative advantage of naval superiority, while avoiding direct confrontation within range of Chinese anti-access/area-denial (A2/AD) capabilities. They also argue that such an approach would be less escalatory and more readily reversible, thus making it an attractive alternative to direct conflict.<sup>97</sup>

#### China’s Approach to solving its “Malacca Dilemma”

It is for precisely the two reasons detailed above that the Straits represents a significant strategic vulnerability for China. Sloan sums it up well when he describes the Straits as China’s primary “geopolitical pivot” in Asia.<sup>98</sup> In response, China has taken proactive measures to reduce its exposure to the “Malacca Dilemma”. China’s three-pronged approach, as summarised by Storey, includes: (1) reducing import dependence by improving energy efficiency and developing alternative sources of power, as well as diversifying energy import sources; (2) investment in infrastructure that allows oil imports to bypass the Straits; and (3) investing in her naval capabilities to better secure

---

<sup>96</sup> Friedberg, *Air-Sea Battle*, 106-107.

<sup>97</sup> *Ibid.*, 107.

<sup>98</sup> Sloan, “The geopolitics of China and the Pacific pivot,” 209-210.



her maritime trade routes.<sup>99</sup> The focus of this thesis will be on the second of the three solutions, and centres on the BRI.

The development of so-called “amphibian ports” in the Indian Ocean region is key to this approach. These ports would connect Chinese oil and trade from sea lanes through overland infrastructure such as pipelines, rail and road links, and sometimes air links into southern and western China, thereby giving them their “amphibian” nature. They hold tremendous strategic value by providing an alternate route for oil and gas directly from the Indian Ocean to China, allowing her to circumvent the potential security challenges associated with the Straits of Malacca. Two large infrastructure projects exemplify China’s strategy in the Indian Ocean region: the Pakistani port of Gwadar, and the Burmese port of Kyaukpyu.<sup>100</sup>

Gurmeet Kanwal’s March 2018 report for the Center for Strategic and International Studies (CSIS) on Pakistan’s Gwadar Port provides a comprehensive and up-to-date brief on Chinese investments in Gwadar. Gwadar acts as the “gateway” to the US\$62bn China-Pakistan Economic Corridor (CPEC), which links the Indian Ocean to Kashgar in China’s westernmost Xinjiang province through oil pipelines and transport infrastructure, with complementary power plants and industrial zones planned.<sup>101</sup>

Additional rail links have also been planned which would dramatically enhance the

---

<sup>99</sup> Storey, “China’s ‘Malacca Dilemma’,” 6.

<sup>100</sup> Sloan, “Pacific pivot,” 210.

<sup>101</sup> Gurmeet Kanwal, “Pakistan’s Gwadar Port: A New Naval Base in China’s String of Pearls in the Indo-Pacific,” CSIS Briefs, Center for Strategic and International Studies, 2018, 3, accessed 27 November 2019, [https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180717\\_Kanwal\\_PakistansGwadarPort.pdf](https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180717_Kanwal_PakistansGwadarPort.pdf).

transport links between the Middle East and western China, which Sloan claims would represent a “geopolitical revolution.”<sup>102</sup> The cooperative CPEC is viewed as a win-win situation for both countries. China stands to gain a boost to its slowing economy, as the majority of construction work has been conducted by Chinese companies with Chinese labour.<sup>103</sup> Additionally, to recover the capital invested, the China Overseas Port Holding Company (COPHC) would receive 91 percent of port and terminal operations revenue, and 85 percent of free zone revenue from the project.<sup>104</sup> Strategically, besides mitigating her reliance on the Straits of Malacca as an energy lifeline, the port could also offer the People’s Liberation Army Navy (PLAN) a base of operations, allowing China to extend its influence in the Indian Ocean region.<sup>105</sup> On Pakistan’s side, besides the significant infrastructural development that the project offers, Gwadar port brings with it much-needed handling capacity for sea-borne trade, as the only other commercial ports of Karachi and Qasim are already operating at full capacity.

The second of China’s major amphibian port projects in the Indian Ocean region is the Burmese port of Kyaukpyu. Many developments in Kyaukpyu mirror those of Gwadar, from the port’s amphibian nature to the Chinese firms contracted for its construction. Development includes the construction of a US\$7.3bn deep-water port,

---

<sup>102</sup> Sloan, “Pacific pivot,” 212.

<sup>103</sup> Adnan Aamir, “Just who will the China-Pakistan Economic Corridor really benefit?” *South China Morning Post*, September 13, 2017, accessed November 27, 2019, <https://www.scmp.com/comment/insight-opinion/article/2110802/just-who-will-china-pakistan-economic-corridor-really>.

<sup>104</sup> Kanwal, “Pakistan’s Gwadar Port.”

<sup>105</sup> *Ibid.*, 4.

US\$2.7bn industrial area in the surrounding Special Economic Zone (SEZ), and an accompanying US\$1.5bn oil and natural gas pipelines that runs from the port to Kunming in southern China. The port and SEZ are currently being built by subsidiaries of China's CITIC Group Corporation, and in return, CITIC would earn the right to run the project for 50 years with a potential extension to 75 years.<sup>106</sup>

Key to China's interest in Kyaukpyu are the oil and gas pipelines—upon their completion in April 2017, the pipelines were reportedly able to transport 22 million barrels of oil per year, which represents 6 percent of China's 2016 oil imports.<sup>107</sup> A proposed China-Myanmar Economic Corridor was also agreed upon during a meeting between the two countries' heads of government in December 2017, which would likely include road and rail links between Kyaukpyu and Kunming, further complementing the port project.<sup>108</sup> The project also includes an upgrade to the airport on Ramee Island, upon which Kyaukpyu is located.<sup>109</sup> In conjunction with these transport links, Kyaukpyu would not only relieve China's reliance on the Straits of Malacca for energy imports, but also provide a major alternate hub for Chinese trade. Instead of the traditional route of

---

<sup>106</sup> Gregory Poling, "Kyaukpyu: Connecting China to the Indian Ocean," in *China's Maritime Silk Road: Strategic and Economic Implications for the Indo-Pacific Region*, Center for Strategic and International Studies, April 4, 2018, accessed December 3, 2019, <https://amti.csis.org/kyaukpyu-china-indian-ocean/>.

<sup>107</sup> Ibid.

<sup>108</sup> Yuichi Nitta, "Myanmar and China to Cooperate on Economic Corridor," *Nikkei Asian Review*, 2 December 2017, accessed 3 December 2019, <https://asia.nikkei.com/Politics-Economy/International-Relations/Myanmar-and-China-to-cooperate-on-economic-corridor?page=1>.

<sup>109</sup> Ibid., 214.

shipping goods through Shanghai, the Economic Corridor would provide trade access direct to the Indian Ocean, conferring savings in transport costs and thus improving competitiveness of Chinese exports.<sup>110</sup> Additionally, the geostrategic value of Kyaukpyu and other Burmese ports to the Chinese cannot be ignored—back in May 2011, Myanmar and China discussed the provision of docking facilities for the PLAN in Myanmar, with the aim of providing PLAN protection for its investments in Kyaukpyu and supporting Chinese naval activities in the Indian Ocean.<sup>111</sup>

While development in both ports began before the BRI was announced, their value must be understood within the larger context of the BRI. By creating alternative land and sea routes to bypass the Straits of Malacca chokepoint, China is moulding the geopolitical realities in the Indian Ocean and the Southeast Asian region, allowing strategic diversification of her trade routes. Critical to this approach is the Chinese financing of these infrastructure and facilities, allowing her to gain economic leverage over recipient countries, which China could use to gain political or economic concessions.<sup>112</sup> In doing so, China is reducing her vulnerability to an approach of strangulation by her potential adversaries.<sup>113</sup>

---

<sup>110</sup> Nitta, “Myanmar and China to Cooperate on Economic Corridor,” 214.

<sup>111</sup> Wai Moe, “Thein Sein Tackles Chinese Navy Issue,” *The Irrawaddy*, 25 May 2011, accessed 3 December 2019, [https://www2.irrawaddy.com/article.php?art\\_id=21361](https://www2.irrawaddy.com/article.php?art_id=21361).

<sup>112</sup> Poling, “Kyaukpyu: Connecting China to the Indian Ocean.”

<sup>113</sup> Sloan, “The geopolitics of China and the Pacific pivot,” 217.

Amphibian ports may help China alleviate its Malacca Dilemma, but Peng Er Lam similarly notes that these by themselves are insufficient to completely solve it.<sup>114</sup> In addition to these amphibian ports, Storey highlights the Kra Canal as the “most fanciful proposal” to alleviate its Malacca Dilemma.<sup>115</sup> While Storey in 2006 found that Chinese interest in the project had diminished due to cost and political concerns, developments since then, as outlined in the first section of this chapter, have shown a resurgence in interest in more recent times. Robert Parra Sanchez’s thesis on the geopolitical implications of canals succinctly explains the attractiveness of such a monumental undertaking. Sanchez writes that as shipping through natural *chokepoints* such as straits are prone to being blockaded by rival states, the construction of canals then establishes a *breathing point* to relieve that potential threat. “Therefore,” according to Sanchez, “having control over a canal, or a strong presence in a region that has a canal, adds to the power of a state.”<sup>116</sup>

Joseph V. Micallef’s and Peng Er Lam’s works highlight the geopolitical gains to be had by China. They posit that a Chinese-funded and therefore Chinese-controlled Kra Canal would afford the Chinese navy the ability to transfer forces rapidly between the Indian Ocean and the South China Sea, giving them significant advantages over US naval

---

<sup>114</sup> Lam, “Thailand’s Kra Canal Proposal and China’s Maritime Silk Road,” 5.

<sup>115</sup> Storey, “China’s ‘Malacca Dilemma’,” 5.

<sup>116</sup> Sanchez, “The Strategic and Geopolitical Implications of Canals,” 2.

forces in the region.<sup>117</sup> Lam further adds that the Chinese-funded construction of the canal “would solidify China’s power and influence in the Southeast Asian region.”<sup>118</sup>

In summary, this subsection first established the criticality of the Straits of Malacca to China, especially to her economic growth and energy security. As such, security of China-bound trade through this geographical chokepoint is of key interest to China. This forms a “Malacca Dilemma,” where trade routes through the Straits could be held at ransom, in particular by the USA. One of the solutions to this dilemma is the massive investments in improving infrastructure that allows Chinese oil imports and trade to bypass the Straits of Malacca chokepoint. Particularly significant projects include the amphibian ports of Gwadar and Kyaukpyu, which, while reducing Chinese reliance on the Straits of Malacca, also expand Chinese interests west of the Malay Peninsula into the Indian Ocean region. It is also within this frame that a Chinese-financed Kra Canal could potentially be constructed. The Canal would not only provide a solution to the dilemma, but also serve to bolster burgeoning Chinese influence in the Southeast Asian region.

#### Religious Dimensions of the Thai Separatist Conflict, and Potential for Contagion

The large majority of existing literature on the Kra Canal has cited the Thai government’s concerns regarding the separatist movement in southern Thailand as a key obstacle to the Kra Canal’s construction.<sup>119</sup> However, none of the literature explores this

---

<sup>117</sup> Micallef, “The Geopolitics of the Kra Canal,”; Lam, “Thailand’s Kra Canal Proposal and China’s Maritime Silk Road,” 9.

<sup>118</sup> Lam, “Thailand’s Kra Canal Proposal and China’s Maritime Silk Road,” 5.

<sup>119</sup> See for example Sulong, “The Kra Canal and Southeast Asian Relations,” 116; Storey, “Thailand’s Perennial Kra Canal Project: Pros, Cons, and Potential Game

claim in much depth; only Rini Suryati Sulong provides a brief analysis of how the canal's construction would affect the conflict. Sulong states that the ongoing separatist conflict in southern Thailand is seen as a political risk factor that could spread across the 400-mile border into Malaysia. She further emphasises that the development of the Kra Canal would create a physical divide that cuts off the Malay-Muslim majority provinces from the rest of the country, thus "encouraging separatists to break off the region south of this man-made barrier."<sup>120</sup> Besides Sulong's work, none of the literature provides a critical assessment on the likely effects of the canal's construction on the separatist conflict.

Given this lack of analysis, then, further analysis of the potential for the conflict to cross international borders as a result of the canal's construction would be necessary to assess the likelihood of contagion to Singapore. This subsection thus reviews the history of the Thai separatist movement in southern Thailand, with a focus on its religious dimensions. This review of history provides the material necessary for Chapter 4's analysis into the likelihood of an uptick in religiously-motivated violence in Singapore as a result of the Kra Canal's construction.

#### Origin and Trajectory of the Separatist Movement in Southern Thailand

In a review of the landscape of terrorism in Southeast Asia, Jörn Dosch states that terrorist violence in the region, while oft characterised for their radical Islamic nature and

---

Changers," *ISEAS Perspective*, no. 76 (24 September 2019), accessed 9 January 2020, [https://www.iseas.edu.sg/images/pdf/ISEAS\\_Perspective\\_2019\\_76.pdf](https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_76.pdf).

<sup>120</sup> Sulong, "The Kra Canal and Southeast Asian Relations," 116-118.

growing international dynamic, have distinctly local and predominantly ethnic roots that has largely avoided association with the international radical Islamist terrorist movement. Specific to southern Thailand, he states that the roots of the conflict lie in “clashes of identity in the nation-building process.”<sup>121</sup> Here, he refers to conflicting conceptions of nationality between the local population and that of the government, especially in the four southernmost provinces of Satun, Pattani, Yala, and Narithiwat, where “some 76 percent of the population are Muslims (but only 4.6 percent of the total population of Thailand adhere to the Islamic faith).”<sup>122</sup> According to Dosch, the local identity is forged upon three main pillars which serve to accentuate the Malay-Muslim identity of the people. These are: (1) the population’s historical roots in the Kingdom of Pattani and the “belief in its traditional virtues and greatness;” (2) the population’s Malay ethnic identity and its use of the Malay dialect Yawi, reinforced by economic and kinship ties which span across the Malaysia-Thailand border; and (3) the population’s Islamic religious orientation.<sup>123</sup> This, claims Dosch, conflicts with the three aspects of Thai identity in an almost antithetical comparison: “*Chat*, or “nation” (speaking Thai as the manifestation of membership in the Thai nation), *satsana*, or “religion” (being Thai as being Buddhist), and *phra mahakrasat*, or “the king” (devotion to the monarchy).”<sup>124</sup> These differences in

---

<sup>121</sup> Jörn Dosch, “Security and the Challenge of Terrorism,” in *The Changing Dynamics of Southeast Asian Politics* (Boulder, CO: Lynne Rienner Publishers, 2007), 83.

<sup>122</sup> *Ibid.*

<sup>123</sup> *Ibid.*, 83-84.

<sup>124</sup> *Ibid.*, 84.



the ethno-religious dimensions between the central Thai identity and that of the Malay-Muslim populace in the four southern provinces provided the fundamental motivation behind the separatist movement.

Dosch then reviews the history of the separatist conflict in Thailand's south. He traces the roots of the conflict to the political assimilation of the Kingdom of Pattani into Thailand, and to two events in particular. First, the 1832 conquest of the Kingdom of Pattani by the King of Siam, and second, the Anglo-Siamese treaties of 1904 and 1909 which determined the national boundaries between Siam and colonial Malaya. These events brought the predominantly Malay-Muslim population in the Pattani region under Thai sovereignty, marking the beginning of the separatist movement.<sup>125</sup>

Dosch segments the separatist movement into four phases. In the first phase, former royals and religious leaders of the Kingdom of Pattani led rebellions to recapture the authority of deposed Malay sultans. The second phase, starting in 1938, saw an emergence of separatist organisations and the upsurge of separatist violence in response to the coming to power of the ultranationalist Phibun regime, which attempted to enforce cultural assimilation of minorities into the mainstream Thai identity.<sup>126</sup> Some of these organisations, such as the Pattani National Liberation Front (BNPP) and the Pattani United Liberation Organisation (PULO), are still active to this day. The third phase, beginning in the 1980s and lasting until the early 2000s, saw the conflict cool somewhat when the Thai government made concessions to Malay-Muslim interests in the south,

---

<sup>125</sup> Dosch, "Security and the Challenge of Terrorism," 85-86.

<sup>126</sup> *Ibid.*, 86.

including providing the community greater political representation. However, separatist violence erupted once again in 2004 with a raid on an army depot, marking the beginning of the fourth phase that still prevails today.<sup>127</sup>

Researcher S. P. Harish of the Institute of Defence and Strategic Studies (IDSS) in Singapore, writing in 2006, similarly reflects the original local roots of the separatist conflict in southern Thailand. Similar to Dosch, Harish highlights the differences in the ethnic Thai and Malay identities in the region as a root cause of the conflict. In particular, he identifies two particular factors that accentuated ethnic differences driving the conflict. First, the rise in Malay nationalism in Southeast Asia, especially in the wake of World War II and second, government policies on language and education that were perceived by the Malay community to have encroached on their cultural identity.<sup>128</sup>

Harish then seeks to explain the shift in character of the conflict that began in the final quarter of the 20th Century from a predominantly ethnic-based one towards one based upon religious differences. He identified this to be due to the “interplay and manipulation of the ethnic Malay and Thai identity on the one hand and the religious Islamic and Buddhist identity on the other.”<sup>129</sup>

Harish notes four key driving factors for this shift. First, fearing that rising Malay nationalism would exacerbate ethnic differences driving the conflict, the Thai

---

<sup>127</sup> Dosch, “Security and the Challenge of Terrorism,” 86-87.

<sup>128</sup> S. P. Harish, “Changing conflict identities: The case of the Southern Thailand discord,” IDSS Working Paper Series, S. Rajaratnam School of International Studies, Singapore, 2006, 9-10, accessed 9 January 2020, <https://www.rsis.edu.sg/rsis-publication/idss/107-wp107-changing-conflict-iden/#.XptfT8hKjIU>.

<sup>129</sup> *Ibid.*, 2.

government implemented policies aimed at suppressing the ethnic Malay identity of the populace. In particular, all Muslims in Thailand were denoted as “Thai Muslim,” emphasising the Thai identity, but inadvertently widening the religious cleavage. Second, Malaysia had failed to substantively support separatist insurgent groups, thus reducing the ethnically-based motivations behind the conflict. Third, more Thai Muslim students began to pursue Islamic education in the Middle East, accentuating the Islamic religious identity within the community. This was triggered primarily by a restrictive education policy, named the “Pondok<sup>130</sup> Educational Improvement Program,” implemented by the Thai government beginning in the 1960s. This was aimed at the secularisation of the curriculum in the *pondoks*, which led to the “decline of Pattani’s position as a centre for Islamic education” and therefore the increased numbers of students pursuing further religious education in the Middle East.<sup>131</sup> At the same time, a worldwide Islamic resurgence and an increase in financial aid for Islamic education from the Middle East and international Islamic organisations contributed to the increase in interest in pursuing Islamic higher education, especially in the Middle East. Fourth, perceptions of the conflict have taken on a more religious tinge in the wake of the 9/11 attacks, even though “no definite links with external terror groups have surfaced.”<sup>132</sup> As the ethnic motivations behind the conflict began to lose steam in the final quarter of the 20th Century, these drivers set the conditions for groups such as the PULO, BNPP and the

---

<sup>130</sup> A *pondok* is an Islamic religious school in the Malay-majority provinces of southern Thailand.

<sup>131</sup> Harish, “Changing conflict identities,” 11-12.

<sup>132</sup> *Ibid.*, 15-16.

Gerakan Mujahideen Islam Pattani (GMIP) to incorporate Islamic rhetoric to sustain support for the separatist cause.<sup>133</sup>

In summary, Dosch's and Harish's work showed that the separatist conflict in the southern provinces of Thailand has, at the fundamental level, local and ethnic roots. Harish then showed that the character of the conflict became increasingly centred on religion as a direct result of repressive Thai policies in the region. This understanding of the history behind the conflict will enable a more robust assessment of the Kra Canal's impact on the separatist conflict in Chapter 4.

#### Section 5: Lessons from the Suez and Panama Canals

Given the possibility of a Chinese-funded Kra Canal, studying the geopolitical impacts of previous foreign-financed canal projects, namely the Suez and Panama canals, is informative. Here, Robert Parra Sanchez's thesis on "The Strategic and Geopolitical Implications of Canals" summarises three key geopolitical findings regarding the construction of canals of relevance to this thesis. First, both the Suez and Panama canals were financed and built by foreign powers who possessed the "industrial or economic means" and the strategic impetus to build these canals, instead of by the nations that the canals passed through.<sup>134</sup> This reliance on external financing constrained foreign policy for the recipient countries. Second, canals form part of "the larger economic strategies of their founding countries."<sup>135</sup> This not only includes the actual economic benefits derived

---

<sup>133</sup> Harish, "Changing conflict identities," 11.

<sup>134</sup> Sanchez, "The Strategic and Geopolitical Implications of Canals," 38.

<sup>135</sup> Ibid.

from canal operations and the economic activity from the surrounding economic zones, but also the efficiencies gained from global supply chains and trade networks. The United Kingdom's control over the Suez was a case in point: the canal had tremendous strategic value in the global supply chain between her far-flung colonies.<sup>136</sup> Third, canals have significant strategic value both in peace and war. By "their altering of geography, their ownership by a power, and their attraction of attention to their region, canals introduce a new asset of power, and can invite their use of force as well as be used to augment the use of force."<sup>137</sup>

Lessons learned from these case studies would be similarly applicable to the Kra Canal, albeit to perhaps a lesser extent as the distance saved by the Kra is only a fraction of that of the Suez or Panama canals. Nonetheless, these insights are invaluable in understanding the impact that the Kra Canal would have on the contemporary geopolitics of the region.

### Summary

This chapter first provided a historical review of Kra Canal developments from its initial conception in 17th Century Thailand until the present day. It also provided a brief review of key characteristics of the canal. Following that, the second section established a working definition of national security for this thesis. Blending academic definitions of the term and an empirical understanding of its application in the unique Singaporean context, the definition used in this thesis would therefore be: (1) Singapore's ability to

---

<sup>136</sup> Sanchez, "The Strategic and Geopolitical Implications of Canals," 39.

<sup>137</sup> Ibid.

pursue her strategic interests without fear of coercion; and (2) Singapore's ability to maintain public order. The third section on the sources of power for small states introduced Tom Long's framework on particular-intrinsic, derivative, and collective power as key sources of power for small states, and provides the framework for Chapter 4's analysis. The fourth section then reviewed available literature pertaining to the three secondary research questions of this thesis. Finally, the fifth section provided a brief review of the lessons from the existing Suez and Panama canals, and in particular identified that such canals yield significant strategic value to powers that control them. Together, the material in this chapter should provide the basis upon which Chapter 4's analysis will be built.

## CHAPTER 3

### RESEARCH METHODOLOGY

This thesis set out to answer the question, “What impact would the establishment of the Kra Canal have on the national security of Singapore?” An overall assessment would be derived from answering three SRQs, namely: (1) what geopolitical repercussions would the Kra Canal have on Singapore; (2) what are the unique security implications of a Chinese-funded Kra Canal on Singapore; and (3) would the construction of the Kra Canal intensify the terrorist threat to Singapore? The third SRQ is further broken into two further TRQs: (3a) would separatist violence in southern Thailand intensify and become internationalised as a result of the Kra Canal’s construction; and (3b) would extremist elements in Singapore support the separatist cause, and what implications would there be for Singapore’s security? With these questions in mind, Chapter 2 provided a definition of national security in the Singaporean context that serves as a criterion with which to answer the research questions. It then reviewed the body of literature surrounding each of the SRQs, and showed that there has been little research in this niche topic area. This chapter moves on to outline the methodology employed to evaluate the impact that the Kra Canal would have on Singapore’s security.

This thesis employs a qualitative approach, evaluating each SRQ in turn to provide an overall assessment of the impact that the Kra Canal will have on Singapore’s security. The assessment will be based on the two facets of national security in the Singaporean context, as established in the discussion in Chapter 2. The two facets are: (1) the ability to pursue her strategic interests without fear of coercion; and (2) the ability to maintain public order. The first facet is a question of sovereignty, and as such applies to

SRQs 1 and 2 which deal with Singapore's capacity to make decisions independent of external influence. The second facet is a more traditional understanding of "security"—that of physical security—and as such applies to SRQ 2 which deals with Singapore's vulnerability to potential terrorist attacks.

In its analysis, this thesis will also draw on the historical examples of the Suez and Panama Canals. The trajectory of developments in these case studies can provide indications as to the likely implications of the Kra Canal's construction. In the course of this research, no surveys or interviews will be conducted.

### Risk Management as a Framework for Analysis

This thesis adapts the US Army's Risk Management process as detailed in the US Army's Army Techniques Publication 5-19 (ATP 5-19) as a framework for analysis. The risk management process is particularly relevant here, as this thesis deals primarily with identifying future hypothetical threats to Singapore's security. It provides a structured framework through which these threats can be identified and their associated level of risk can be assessed.

The process involves five steps, which are: (1) identify hazards; (2) assess hazards to determine risk; (3) develop controls and make risk decisions; (4) implement controls; and (5) supervise and evaluate.<sup>138</sup> Steps 1 and 2 are the *risk assessment* steps which aim to identify hazards and classify them according to the level of risk assessed, whilst Steps

---

<sup>138</sup> Headquarters, Department of the Army (HQDA), Army Techniques Publication (ATP) 5-19, *Risk Management* (Washington, DC: Government Printing Office, 21 August 2006), 1-3, [https://cgsc.blackboard.com/bbcswebdav/library/Library%20Content/Master%20Library/ATP/ATP\\_5-19\\_Ch1\\_8Sep14.pdf](https://cgsc.blackboard.com/bbcswebdav/library/Library%20Content/Master%20Library/ATP/ATP_5-19_Ch1_8Sep14.pdf).



3 to 5 are the *risk management* steps where potential mitigation measures are identified. In its assessment of the impact of the Kra Canal on Singapore’s security, this thesis focuses primarily on Steps 1 and 2 of the risk management process. It will also briefly cover Step 3 by suggesting some potential mitigation measures and policy implications for Singapore in Chapter 5. In doing so, it also suggests ways in which Singapore could benefit from the Kra Canal’s construction. Steps 4 and 5 deal with the execution and assessment of risk mitigation measures, which are not applicable due to the hypothetical nature of the scenario and hence will not be covered. A more detailed description of the application of each step to this thesis follows.

### Identifying Hazards

Step 1 of the process involves the identification of hazards to Singapore’s security. The risk management process defines “hazards” as “condition[s] with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation.”<sup>139</sup> The factor of “mission degradation” is particularly applicable here—the “mission” is one of maintaining Singapore’s security. Therefore, the concept of “hazards” in the risk management process will be adapted in this thesis to refer to potential developments regarding the Kra Canal that would have an impact on Singapore’s security. Chapters 1 and 2 have already identified and elaborated on potential developments that may impact Singapore’s security, and have organised these hazards into the three SRQs detailed above.

---

<sup>139</sup> HQDA, ATP 5-19, 1-3.

## Assessing Risk

Having identified potential sources of hazards, Step 2 then moves on to assess the level of risk posed by each hazard. The risk management process measures risk as a composite of the “probability and severity of loss linked to hazards.”<sup>140</sup> Probability is defined as “the likelihood an event will occur,” and is measured on five levels: frequent, likely, occasional, seldom, or unlikely. Severity is defined as “the expected consequences of an event in terms of injury, property damage, or other mission-impairing factors,” and is measured on four levels: catastrophic, critical, moderate, or negligible.<sup>141</sup> Specific definitions of these levels are provided in Table 1.

---

<sup>140</sup> HQDA, ATP 5-19, 1-6.

<sup>141</sup> *Ibid.*, 1-6.

| Probability |  | Severity     |   |
|-------------|--|--------------|---|
| Level       | Definition   | Level        | Definition  |
| Frequent    | Harmful occurrence known to happen continuously, regularly, or inevitably because of exposure                        | Catastrophic | Death, unacceptable loss or damage, mission failure, or the loss of unit readiness  |
| Likely      | Harmful occurrence expected to happen several or numerous times—the event commonly happens because of exposure       | Critical     | Severe injury, illness, loss or damage; significantly degraded unit readiness; or significantly degraded mission capability |
| Occasional  | Harmful occurrence is expected to happen sporadically or intermittently because of exposure                          | Moderate     | Minor injury, illness, loss, or damage; degraded unit readiness; or degraded mission capability                             |
| Seldom      | Harmful occurrence resulting from exposure is infrequent—the event is remotely possible and could occur at some time | Negligible   | Minimal injury, loss, or damage; little or no impact to unit readiness; little or no impact to mission capability           |
| Unlikely    | Harmful occurrence resulting from exposure is possible but improbable  |              |   |

Source: Headquarters, Department of the Army, Army Techniques Publication 5-19, *Risk Management* (Washington, DC: Government Printing Office, 21 August 2006), 1-7 - 1-9.

Estimates of the probability and severity associated with a hazard are then composited in the Risk Assessment Matrix to determine the resultant level of risk, measured on four levels: extremely high, high, medium, or low. The Risk Assessment Matrix is included in Table 2 below.

|   |     | Probability |        |            |        |          |
|---|-----|-------------|--------|------------|--------|----------|
|   |     | Frequent    | Likely | Occasional | Seldom | Unlikely |
| Severity  |     | A           | B      | C          | D      | E        |
| Catastrophic  | I   | EH          | EH     | H          | H      | M        |
| Critical  | II  | EH          | H      | H          | M      | L        |
| Moderate  | III | H           | M      | M          | L      | L        |
| Negligible  | IV  | M           | L      | L          | L      | L        |
| Legend: EH – Extremely High Risk H – High Risk M – Medium Risk L – Low Risk |     |             |        |            |        |          |

Source: Headquarters, Department of the Army, Army Techniques Publication 5-19, *Risk Management* (Washington, DC: Government Printing Office, 21 August 2006), 1-7.

Risk assessment represents the bulk of the analysis in this thesis, and will be presented in Chapter 4. Each SRQ will be examined in turn, and each hazard posed will be assessed for an estimated probability of occurrence and associated severity of impact expected. While ATP 5-19's definitions for the five probability levels are directly applicable to this thesis's analysis, those of the severity levels will need to be adapted for use in the context of the Kra Canal's impact on Singapore's security. Recalling the definition of national security in the Singaporean context, severity would be determined by the impact that each identified "hazard" would have on Singapore's ability to pursue her strategic interests without fear of coercion and her ability to uphold public order within the country. The modified definitions of severity levels used in this thesis are included in Table 3.

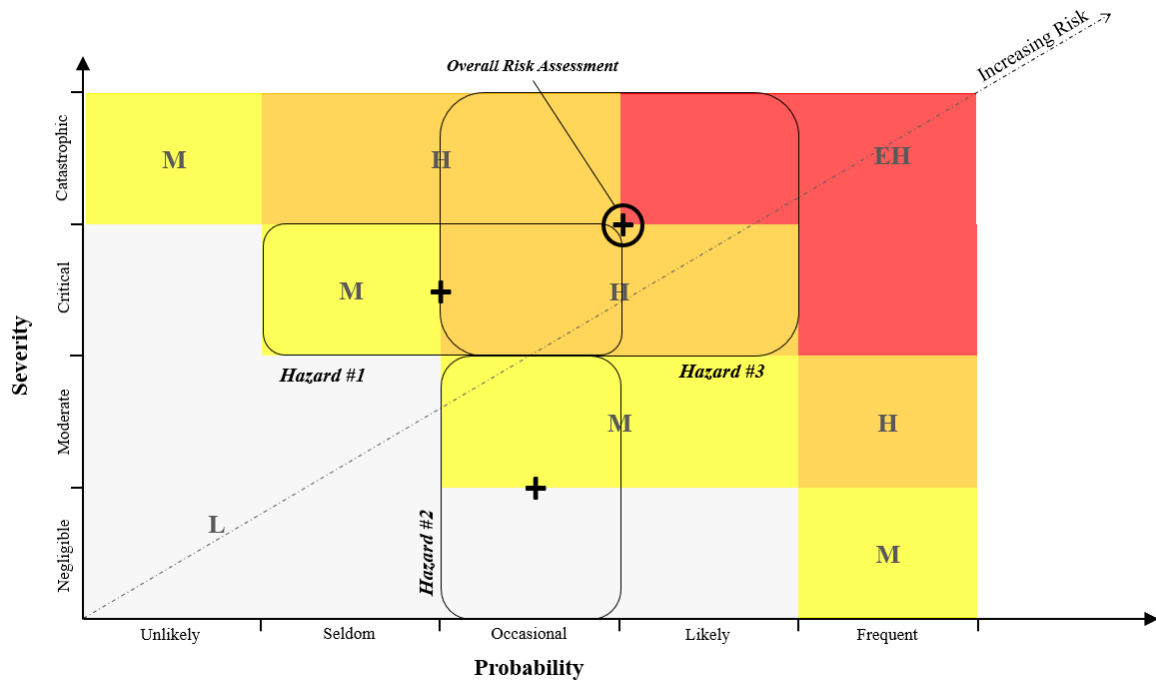
| Probability |  | Severity     |   |
|-------------|--|--------------|---|
| Level       | Definition   | Level        | Definition  |
| Frequent    | Harmful occurrence known to happen continuously, regularly, or inevitably because of exposure                        | Catastrophic | Complete loss of ability to protect sovereignty or public order. Inability to independently pursue foreign policy goals. Existential physical threat to nation.   |
| Likely      | Harmful occurrence expected to happen several or numerous times—the event commonly happens because of exposure       | Critical     | Significant loss of ability to uphold sovereignty or public order. Significant difficulty in pursuing foreign policy goals. Major loss of life/property damage    |
| Occasional  | Harmful occurrence is expected to happen sporadically or intermittently because of exposure                          | Moderate     | Some loss of ability to uphold sovereignty or public order. Minor difficulty in pursuing foreign policy goals. Some loss of life/ property damage                 |
| Seldom      | Harmful occurrence resulting from exposure is infrequent—the event is remotely possible and could occur at some time | Negligible   | Minimal loss of ability to uphold sovereignty or public order. Maintains ability to pursue most if not all foreign policy goals. Threat to life/property minimal. |
| Unlikely    | Harmful occurrence resulting from exposure is possible but improbable  |              |   |

*Source:* Definitions adapted by author using information from Headquarters, Department of the Army, Army Techniques Publication 5-19, *Risk Management* (Washington, DC: Government Printing Office, 21 August 2006), 1-7 - 1-9.

At this juncture, it must also be acknowledged that the risk assessment process is not without its flaws. Risk assessment is inherently subjective—there could be varied interpretations of the probability of an adverse event occurring and the severity of harm linked to each event. The assessments derived in this thesis will be based on current information available and the author’s interpretation of that information; future research in this field may differ based on new information or differing interpretations. In its analysis, therefore, this thesis is not constrained to providing a definitive single-level estimate of probability and severity for each SRQ, so as to account for the inherent

subjectivity of the process. As such, assessments for each hazard will be presented in the form of ranges that represent estimated levels based on best-case and worst-case scenarios.

The risk assessment for each individual hazard within the framework of the three SRQs will then be represented graphically. Figure 2 below provides an example of a potential risk management chart. The estimated range of probability and severity for each hazard is represented in the form of a “box” on the chart, and a centre-point plotted for each hazard representing the risk assessment estimate for each of the SRQs. The stepwise progression of risk levels in the chart is also notable. While a hazard with a probability of “Frequent” and severity of “Negligible” and another hazard with a probability of “Unlikely” and severity of “Catastrophic” result in the same level of “Medium” risk, the nature of those risks and measures associated with mitigating them will be materially different.



|                  | Assessed Severity     | Assessed Probability |
|------------------|-----------------------|----------------------|
| <b>Hazard #1</b> | Critical              | Seldom-Occasional    |
| <b>Hazard #2</b> | Negligible-Moderate   | Occasional           |
| <b>Hazard #3</b> | Critical-Catastrophic | Occasional-Likely    |

Figure 2. Risk Assessment Example

Source: Created by author.

The thesis will then determine an overall risk estimate for the Kra Canal’s impact on Singapore’s security. In doing so, this thesis will provide a conservative estimate by adopting the most severe risk assessment amongst the three SRQs. This approach is advantageous as utilising the worst-case estimate would allow Singapore to be best prepared for the impact of the canal’s construction. This approach also avoids any potential subjectivity that would be involved in “weighting” the risk estimates of each SRQ to generate a weighted composite risk estimate. In the example figure above, the

risk assessment estimate for Hazard #3 would be taken as the overall risk assessment estimate, as it represents the most severe risk estimate amongst the three hazards.

Having detailed the methodology for analysis, the rest of this chapter covers the application of the risk management process to each of the SRQs.

### SRQ 1: Geopolitical Repercussions for Singapore

The *hazard* identified in this SRQ is the reduction in Singapore's geopolitical influence as a result of the Kra Canal's construction. In line with the definition established earlier, an assessment of the geopolitical repercussions of the Kra Canal on Singapore would be based upon the expected impact on Singapore's ability make independent foreign policy decisions. Therefore, this assessment is best established under the framework of Singapore's foreign policy approach.

This analysis begins by assessing the *probability* that the construction of the Kra Canal would affect Singapore's relative geopolitical importance in the region, given the presence of an alternative shorter trade route through the canal. It focuses on the likelihood that Singapore's ability to maintain her foreign policy approach amidst these novel conditions would be adversely affected. Subsequently, it assesses the hazard's *severity* by exploring the ability of Singapore's foreign policy institutions to protect and uphold her diplomatic agenda despite the potential challenges posed by the canal's construction. Throughout, the analysis will employ Tom Long's framework on sources of power for small states as a basis upon which these assessments can be drawn.



### SRQ 2: Unique Security Implications of a Chinese-Funded Kra Canal

The *hazard* identified in SRQ 2 is the potentially increased coercion that China could exercise in its dealings in the region and with Singapore, given its reduced reliance on the Straits of Malacca as a result of the Kra Canal's construction. Analysis of the *probability* of increased Chinese coercion will focus on determining the pattern of Chinese behaviour in previous infrastructure projects, and whether such a pattern is likely to continue in the case of the Kra Canal. The *severity* of impact will depend on how exactly China is likely to employ her strengthened geopolitical position to coerce regional states and Singapore to act in ways that better support Chinese interests.

### SRQ 3: Potential for Contagion of Separatist Violence

The *hazard* identified in SRQ 3 is the potential for the separatist conflict to spread beyond the borders of Thailand and into Singapore. The *probability* of this occurring depends first on the propensity for the separatist leaders to "internationalise" the conflict, and second on the extent to which extremist elements in Singapore are likely to support the conflict should it become internationalised. Analysis of the *severity* of this hazard centres on the potential scale of the terrorist threat and the ability of Singaporean intelligence and counterterrorism agencies to handle these threats.

### Conclusion

This chapter has set the stage for Chapter 4 by detailing the risk management process to be used in this thesis's analysis. It clearly laid out the identified hazards for each SRQ, then described how Chapter 4 would assess the probability and severity associated with each hazard to determine the level of risk posed to Singapore's security.

## CHAPTER 4

### ANALYSIS

This chapter is divided into three sections. The first section explores Singapore's foreign policy approach in depth, which is fundamental to the rest of the chapter's analysis. The second section analyses available data to answer the three SRQs, namely: (1) what geopolitical repercussions would the Kra Canal have on Singapore; (2) what are the unique security implications of a Chinese-funded Kra Canal on Singapore; and (3) would the construction of the Kra Canal intensify the terrorist threat to Singapore? It utilises the risk assessment methodology as described in Chapter 3 to determine the probability and severity of the hazards to Singapore's security in each of the respective SRQs. Subsequently, the third section represents the results derived from each SRQ graphically and provides an overall assessment of the risk to Singapore's security. This allows the chapter to answer the primary research question of "What impact would the establishment of the Kra Canal have on the national security of Singapore?"

Throughout this chapter, "national security" in the Singaporean context, as established in Chapter 2, will be defined by two aspects: (1) the ability to pursue her strategic interests without fear of coercion; and (2) the ability to maintain public order. As discussed in Chapter 2, the second part on maintenance of public order is straightforward, dealing primarily with the physical security of the nation. The first part, on the other hand, requires further exploration of Singapore's foreign policy approach given her unique geopolitical context. This exploration provides the background upon which an analysis of the Kra Canal's impact on Singapore's sovereignty can be conducted.

## Section 1: Singapore's Foreign Policy Approach

Singapore's foreign policy approach is fundamentally shaped by her unique geopolitical context. Here, the most significant characteristic is Singapore's immutable status as a small state. This is the fundamental premise that defines the starting point for Singapore in her quest for sovereignty. Three key traits can be derived from this reality. First, as a small state, simply by virtue of its small physical size, Singapore is intrinsically irrelevant—founding Prime Minister Lee Kuan Yew once said that “small island states are a political joke.”<sup>142</sup> Singapore's former Permanent Secretary at the Ministry of Foreign Affairs and former Ambassador-at-Large, Bilahari Kausikan, states that while small states enjoy traditional artefacts of sovereignty such as “a seat at the UN, a flag, [and] a national anthem,” their “autonomy and their ability to carve their own destiny is, more often than not, severely compromised” due to their small size.<sup>143</sup> Second, as a small state, Singapore intrinsically has less autonomy and influence in international affairs,<sup>144</sup> and as such faces natural challenges in implementing independent foreign policy. Third, Singapore is inherently vulnerable to global events, particularly so because of her inter-

---

<sup>142</sup> Bilahari Kausikan, “The Sovereignty of Small States,” Singapore Perspectives Lecture Series, Institute of Policy Studies, 26 January 2015, accessed 29 October 2019, <https://www.ipscommons.sg/sp2015-speech-by-ambassador-bilahari-kausikan/>.

<sup>143</sup> Bilahari Kausikan, “Why Small Countries should not Behave like a Small Country,” *Singapore Platform for East-West Dialogue* (blog), Ministry of Foreign Affairs, Singapore, 11 October 2017, accessed 29 October 2019, <https://blogs.ntu.edu.sg/paralimes/2018/03/26/bilahari-smallcountries/>.

<sup>144</sup> Laurent Goetschel, ed., *Small States inside and outside the European Union: Interests and Policies* (Norwell: Kluwer Academic Publishers, 1998), 14-15.

connected nature and the increasingly globalized world.<sup>145</sup> *Ceteris paribus*, a global event would affect a small country much more significantly than it would a large one.

Singapore's small state status also holds three significant implications that define its approach to foreign policy. First, as a small state, Singapore's security hinges upon maximising the number of friendly nations and minimising adversaries.<sup>146</sup> This serves two interests: first, to "be as independent of foreign defence assistance as possible,"<sup>147</sup> and second, to gather more bargaining power to pursue its interests in conjunction with groupings of like-minded countries.<sup>148</sup>

Second, given that small states are inherently irrelevant, Singapore must engineer her own relevance that is "created by human endeavour, and having been created, preserved by human endeavour."<sup>149</sup> This underpins her ability to uphold her sovereignty and to maximise her number of friends. This continued relevance is particularly important to Singapore as it makes "other countries have an interest in our continued survival and prosperity as a sovereign and independent nation."<sup>150</sup>

---

<sup>145</sup> Cheng Guan Ang, "Singapore's Conception of Security," in *Perspectives on the Security of Singapore: The First 50 Years*, eds. Barry Desker and Cheng Guan Ang (Singapore: World Scientific, 2016), 11.

<sup>146</sup> *Ibid.*, 4.

<sup>147</sup> Yusof bin Ishak, "Yang Di-Pertuan Negara's Speech," First Session of the Legislative Assembly, 8 December 1965, accessed 29 October 2019, [https://sprs.parl.gov.sg/search/topic?reportid=004\\_19651208\\_S0005\\_T0015](https://sprs.parl.gov.sg/search/topic?reportid=004_19651208_S0005_T0015).

<sup>148</sup> Ang, "Conception," 10.

<sup>149</sup> Kausikan, "Sovereignty."

<sup>150</sup> Prime Minister's Office, Singapore, "Speech by Mr Lee Kuan Yew, Minister Mentor, at the S. Rajaratnam Lecture, 09 April 2009, 5:30pm at Shangri-La Hotel,"

Third, as a small state, Singapore has less room to manoeuvre in the international system, and is vulnerable to threats to its territorial security and political security.<sup>151</sup> As such, Singapore depends on, and therefore must support, a rules-based international order to protect her interests. Current Prime Minister Lee Hsien Loong stated that “words and treaties . . . mean everything to us. [Singapore] cannot afford to have international relations work on the basis that might is right. If rules do not matter, then small states like Singapore will have no chance of survival.”<sup>152</sup> Without a functioning rules-based international order, especially one that recognises the sovereignty of countries no matter their size, Singapore would be unable to independently execute policy without fear of coercion from larger and more powerful states. This has meant that on occasion, Singapore was compelled to adopt a position contrary to that of even a close international partner of great power status such as the USA. This was exemplified by Singapore’s vote in the General Assembly resolution criticising the 1983 American invasion of Grenada.<sup>153</sup> Though this approach sometimes strains relations between Singapore and her partners, it is necessary as the alternative to a rules-based international order is one where

---

accessed 29 October 2019, <https://www.pmo.gov.sg/Newsroom/speech-mr-lee-kuan-yew-minister-mentor-s-rajaratnam-lecture-09-april-2009-530-pm-shangri>.

<sup>151</sup> Andrew T.H. Tan, “Singapore’s Survival and its China Challenge,” *Security Challenges* 13, no. 2 (2017): 13, accessed 29 October 2019, <https://www.jstor.org/stable/26457716>.

<sup>152</sup> Prime Minister’s Office, Singapore, “National Day Rally 2016 Speech by Prime Minister Lee Hsien Loong,” 21 August 2016, accessed 29 October 2019, <https://www.pmo.gov.sg/Newsroom/national-day-rally-2016>.

<sup>153</sup> Michael Leifer, *Singapore’s Foreign Policy: Coping with Vulnerability* (London: Routledge, 2000), 98.

small states have little room to pursue their own sovereignty. This is embodied in Thucydides' cautionary note, which is often repeated in foreign policy circles in Singapore, "Right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must."<sup>154</sup>

These three foreign policy implications provide the basis for measuring the impact of the Kra Canal's construction on Singapore's sovereign ability to pursue her strategic interests. With these in mind, the discussion now turns to SRQ-specific analysis and risk assessment.

## Section 2: SRQ-Specific Risk Assessment

### Geopolitical Repercussions of the Kra Canal on Singapore

The construction of the Kra Canal could conceivably result in a reduction of Singapore's geopolitical strength, as the Straits of Malacca would no longer be the single most important maritime chokepoint in the Southeast Asian region. To assess the plausibility of this claim, an understanding of the sources of Singapore's geopolitical strength is first required. The overall analysis the Kra Canal's impact on Singapore's geopolitical strength will depend on of how each of these factors are impacted.

Andrew Tan states that Singapore's geopolitical importance is underpinned by "its strategic location astride the Strait of Malacca, the busiest waterway in the world, and the fact that it is an important global financial centre, and also has one of the largest ports

---

<sup>154</sup> See, for example, Kishore Mahbubani, "Qatar: Big Lessons from a Small Country," *The Straits Times*, 1 July 2017, <https://www.straitstimes.com/opinion/qatar-big-lessons-from-a-small-country>; Tommy Koh, "The Great Powers and the Rule of Law," *The Straits Times*, 22 July 2016, <https://www.straitstimes.com/opinion/the-great-powers-and-the-rule-of-law>.

in the world. More significantly, despite its small size, Singapore punches above its weight diplomatically.”<sup>155</sup> Quoting Singapore’s foreign minister S. Rajaratnam in 1965, Tan posits that Singapore’s strategic location attracts the interest of great powers, “Singapore itself by virtue of its location has attracted the attention of nations who wished to dominate Southeast Asia.”<sup>156</sup> This view is echoed by Eric Frécon, who argues that Singapore’s strategic geographical location contributed significantly to her status as a regional power. In particular, Frécon identifies that Singapore’s location makes it a “first-choice bridgehead” for great powers who “seek control of the seas via the control of communications routes and straits.”<sup>157</sup> This in turn guides the brand of foreign policy practiced by Singapore—that of maximising the number of friends, and positioning advantageously amidst great power politics in the region.<sup>158</sup>

Tan’s and Frécon’s works show that while geography is central to Singapore’s geopolitical importance, it is by itself only one part of the whole, and that Singapore’s astute foreign policy approach is also critical in building Singapore’s geopolitical strength. The work of Michael Leifer, an academic who wrote prolifically about Singapore’s foreign policy, provides a more in-depth exploration of this foreign policy

---

<sup>155</sup> Tan, “Singapore’s Survival and its China Challenge,” 11.

<sup>156</sup> *Ibid.*, 13.

<sup>157</sup> Eric Frécon, “Indonésie et Singapour: destins géoéconomiques parallèles de deux potentielles puissances sud-est asiatiques (Indonesia and Singapore: parallel geoeconomic destinies of two potential Southeast Asian powers),” *Hérodote* 151, no. 4 (2013): 154-155, accessed 26 January 2020, <https://www.cairn.info/revue-herodote-2013-4-page-148.htm>

<sup>158</sup> *Ibid.*

approach. Leifer characterises Singapore’s foreign policy as a conventionally realist one, quoting a 1984 speech by future Prime Minister Lee Hsien Loong that “the world of states shares many characteristics with the world of beasts,” and that “goodwill alone is no substitute for astute self-interest.”<sup>159</sup> In the context of great power competition in the region, Singapore’s foreign policy was anchored on the “considered judgement that security and material well-being depend ultimately on the workings of the balance of power.”<sup>160</sup> Quoting PM Lee in the same speech, he elaborates that this approach leverages “the competing interests of several big powers in a region, rather than on linking the nation’s fortunes to one overbearing partner.” The presence of multiple “big powers” checks the influence of each other power, preventing dominance over the region and thus allowing “small states to survive in the interstices between them.”<sup>161</sup> Leifer also notes that this approach has its drawbacks, as recognised by PM Lee, “The equilibrium is a dynamic and possibly unstable one, and may be upset if one power changes course and withdraws. Nor can a small state manipulate the big powers with impunity. The most it can hope to do is to influence their policies in its favour.”<sup>162</sup>

At the same time, however, the practice of the “balance of power” approach has not been purely “mechanical . . . based solely on responding and adjusting to the indices of military strength through changing alignments in the promiscuous manner of

---

<sup>159</sup> Leifer, *Singapore’s Foreign Policy*, 98.

<sup>160</sup> *Ibid.*

<sup>161</sup> *Ibid.*

<sup>162</sup> *Ibid.*, 98.



eighteenth-century Europe.”<sup>163</sup> As with much of Singapore’s other policies, pragmatism reigns supreme: “the attitude to the regional balance . . . has consistently been one of discrimination. At issue has not been how to counter each and every potential and actual hegemon but whether or not such a hegemon is likely to be a benign or malign factor affecting Singapore’s interests.”<sup>164</sup> To that end, Singapore has consistently courted the USA to remain consistently engaged in the region. See Seng Tan argues that despite political differences between both countries—the US as the “world’s foremost liberal democracy,” and Singapore as “an ‘enlightened’ illiberal nation”—the congruence of beliefs in “market capitalism, stability and access within the global commons, rule of law, and the like” has motivated Singapore to keep the US engaged and committed to stability in the Asia Pacific region.<sup>165</sup> In turn, an interested and engaged USA would “[keep] the region stable, enabling Singapore to freely pursue its interests.”<sup>166</sup>

### Probability Assessment

The construction of the Kra Canal would irreversibly change the geography of maritime routes through the Southeast Asian region. More importantly, it would change the relative geopolitical importance of Singapore in the region, as the Straits of Malacca would no longer be the single most important chokepoint through which the majority of

---

<sup>163</sup> Leifer, *Singapore’s Foreign Policy*, 99.

<sup>164</sup> *Ibid.*

<sup>165</sup> See Seng Tan, “America the Indispensable: Singapore’s View of the United States’ Engagement in the Asia-Pacific,” *Asian Affairs: An American Review* 38, no. 3 (2011), 156, accessed 28 March 2020, <https://doi.org/10.1080/00927678.2011.581600>.

<sup>166</sup> *Ibid.*

the region's trade flows. William J. Ronan's observations in 1936 still hold true today: a Kra Canal bypassing the strategic choke point at Singapore would reduce the utility of Singapore's strategic position in southeast Asia, and therefore reduce its value as a strategic partner in the region.<sup>167</sup> Fitting this within Long's framework of the sources of power for small states, by undermining the strategic geographical location of Singapore, the Kra Canal is likely to reduce Singapore's particular-intrinsic power. This reduction in particular-intrinsic power can be expected to hurt Singapore's bargaining position in its international relationships, hence compromising her ability to pursue her strategic interests freely.

Next, by the Kra Canal's alteration of regional geography, Singapore will no longer remain the sole "first-choice bridgehead" in the region for external powers or international organisations. As a result of the Kra Canal's construction, Singapore's *relative* relevance in the region is likely to be diluted, while Thailand's relative geopolitical importance in the region burgeons. This is likely to have implications for the Great Power balance in the region—to quote a managing director of the Italian-Thai Development PLC at a meeting with senior advisors of the Royal Thai Navy, the Kra Canal would signify "the crucial power play in this part of the world, especially between US and China."<sup>168</sup> China and the US will likely seek to re-allocate investments and

---

<sup>167</sup> Ronan, "The Kra Canal: A Suez for Japan?" 412.

<sup>168</sup> "Kra Canal to have huge security and social implications," *The Nation Thailand*, June 8, 2015, accessed 29 March 2020, <https://www.nationthailand.com/business/3026184>.

adjust their military and diplomatic posture to account for Thailand's upscaled geopolitical role in the region.

The US in particular is likely to view the canal's construction as an impetus to revitalise the drifting US-Thai alliance, as the relationship in recent years has suffered from a lack of shared strategic interests, occasional coups which weakened Thai democracy, and deepening ties between Beijing and Bangkok.<sup>169</sup> This would be especially true in the case where construction is financed by China, as the US would seek to counterbalance the increased Chinese influence in the country. Additionally, given the US Indo-Pacific Command's (USINDOPACOM) vision of a "free and open Indo-Pacific,"<sup>170</sup> the US would likely move to foster closer partnership with Thailand to ensure that the canal remains open as an international waterway. This is similar to US Africa Command's (USAFRICOM) partnership with Egypt to secure the Suez against threats from the Islamic State of Iraq and the Levant-Sinai Province (ISIL-SP), and the US Navy's protection of Panama against Colombia's attempt to retake the territory in the early 1900s.<sup>171</sup> Thus, with the need to watch two potential chokepoints in the region instead of just the one, the US would likely have to reallocate resources away from

---

<sup>169</sup> Zachary Abuza, "America should be realistic about its alliance with Thailand," *War on the Rocks*, January 2, 2020, accessed 30 March 2020, <https://warontherocks.com/2020/01/america-should-be-realistic-about-its-alliance-with-thailand/>.

<sup>170</sup> U.S. Department of Defense, *Indo-Pacific Strategy Report* (Washington DC: U.S. Department of Defense, June 1, 2019), 3, accessed 30 March 2020, <https://media.defense.gov/2019/Jul/01/2002152311/-1/-1/1/departments-of-defense-indo-pacific-strategy-report-2019.pdf/>.

<sup>171</sup> Sanchez, "The Strategic and Geopolitical Implications of Canals," 12-13; 30.

Singapore. This would dilute the derivative power afforded to Singapore by its close strategic partnership with the US.

Overall, the construction of the Kra Canal will result in a fundamental change to regional geography, and therefore undermine Singapore's particular-intrinsic power and derivative power due to her reduced geopolitical relevance. Therefore, the probability of the Kra Canal impacting Singapore's security is assessed to be "Likely."

### Severity Assessment

The degree to which Singapore's ability to pursue its own sovereign foreign policy interests is diminished depends on how severely her particular-intrinsic power and derivative power are diminished by the Kra Canal's construction.

Long's discussion on particular-intrinsic power gives substantial credit to a state's identity as a source of that power.<sup>172</sup> States that are able to build a strong reputation in niche roles create particular-intrinsic power for themselves that is independent of their natural intrinsic endowments. As former Ambassador-at-Large Bilahari Kausikan put it, without any natural resources and a small land area, Singapore had to create her own relevance that is "created by human endeavour, and having been created, preserved by human endeavour."<sup>173</sup> Kausikan adds that this relevance, having been created, must be sustained by extraordinary success, as a basis for other states to be interested in Singapore's continued survival and success:

A small state cannot be only ordinarily successful. If we were no different from our neighbourhood, why should anyone want to deal with us rather than our larger

---

<sup>172</sup> Long, "Small States," 196.

<sup>173</sup> Kausikan, "Sovereignty."

neighbours who, moreover, are well endowed with natural resources? To be relevant, we have to be extraordinary. Being extraordinary is a strategic imperative.<sup>174</sup>

Therefore, while Singapore's strategic position is likely to be undermined by the canal's excavation, this is likely to be mitigated significantly by Singapore's unique identity as a world-class diplomatic, financial and business, and trading hub.

Astute execution of foreign policy has created a niche role for Singapore in the diplomatic realm. In particular, her adoption of a non-aligned foreign policy approach has scored some big wins in the diplomatic arena, as argued by Ankit Panda in a piece explaining Singapore's disproportionate influence on the world stage. With its even-handed and neutral foreign policy stance, Singapore has been the location of choice for high-stakes diplomatic summits, such as the 2015 meeting between Taiwanese President Ma Ying-jeou and Chinese President Xi Jinping, the first-ever meeting between a Chinese leader and a Taiwanese President, as well as the Trump-Kim Summit in 2018, the first-ever meeting between the leaders of the US and North Korea.<sup>175</sup>

On the world stage, Singapore has taken the lead in international multilateral organisations as well. In 1992, Singapore led the establishment of the Forum of Small States (FOSS) at the United Nations, which consisted of 108 countries with populations of 10 million or less. Singapore's leading role in establishing the FOSS showed, according to Kausikan, that her "international identity and relevance is something more

---

<sup>174</sup> Kausikan, "Sovereignty."

<sup>175</sup> Ankit Panda, "Singapore: A Small Asian Heavyweight," Council on Foreign Relations, 26 June 2018, accessed 23 October 2019, <https://www.cfr.org/background/singapore-small-asian-heavyweight>.

than only our UN vote . . . and that is why we were able to establish FOSS in the first place.” Later in 2005, Singapore, together with Brunei, Chile, and New Zealand, spearheaded the initial negotiations for the Trans-Pacific Partnership, which in 2017 was signed with 11 other countries.<sup>176</sup> Besides contributing to Singapore’s reputation as a niche interlocuter of diplomatic affairs, these multilateral partnerships also add to Singapore’s collective power through banding together with other states with similar interests.

Singapore has also been recognised in the region as a leading financial and business hub, and in 2018 was touted as the top Asian location for multi-national corporations (MNCs) to set up their regional headquarters.<sup>177</sup> This has been credited to Singapore’s openness to trade, ease of doing business, relatively low corporate taxes, high degree of innovation, and skilled workforce.<sup>178</sup> Krishnan and Srinagesh noted the role of Singapore’s “soft” infrastructure—her strong financial, legal, and banking system—in mitigating the impact of the Kra Canal to trade traffic through Singapore.

---

<sup>176</sup> Ministry of Foreign Affairs and Trade, New Zealand, “Brunei Darussalam, Chile, New Zealand and Singapore conclude negotiations on a Trans-Pacific Strategic Economic Partnership Agreement,” Joint Press Statement from Brunei Darussalam, Chile, New Zealand and Singapore Ministers, 3 June 2005, accessed 30 March 2020, <https://web.archive.org/web/20060907090445/http://www.mfat.govt.nz/tradeagreements/ranspacepa/transpaceppress.html>.

<sup>177</sup> “Singapore beats Hong Kong as top Asian location for MNC headquarters,” *Singapore Business Review*, 6 February 2018, accessed 30 March 2020, <https://sbr.com.sg/markets-investing/news/singapore-beats-hong-kong-top-asian-location-mnc-headquarters>.

<sup>178</sup> “Why Singapore is the gateway to ASEAN,” *Hawksford*, 4 September 2018, accessed 30 March 2020, <https://www.hawksford.com/knowledge-hub/2018/singapore-as-a-gateway-to-asean>.

These same structures also make it unlikely that the Kra Canal's construction will cause Thailand to supplant Singapore as the leading financial and business hub in the region. This strong reputation protects Singapore's particular-intrinsic power—larger powers will continue to be interested in Singapore's continued security and survival, in order to profit from growing business and trade linkages with the country.

In terms of derivative power, while the Kra Canal will likely divert US attention and resources to Thailand, there may in fact be an *increase* in overall US engagement in the region, given their continued desire to maintain a “free and open Indo-Pacific,” especially if the canal's construction is funded by China. David Lai's metaphor of using the game *Go* to analyse US-China interactions is useful here. In the game of *Go*, players seize strategic positions on the gameboard that allow them to gain spatial “spheres of influence”, seeking to maximise the area under their control.<sup>179</sup> Each player is obliged to meet the opponent's move with a counter-move, lest the opponent's position be solidified early thus making further friendly actions less effective in future. In this way, a Chinese strategic “incursion” into Thailand with the funding of the Kra Canal will invite a counter-move from the US, seeking to counterbalance increased Chinese influence in the region. Two potential scenarios could play out here. In the best case, the increased US presence is likely to enhance Singapore's security, as the US would be more vested in the peace and security of the region. It would also act to curb China's efforts to adversely affect the rules-based international order within the region, hence benefitting a small state

---

<sup>179</sup> David Lai, “China's Strategic Moves and Counter-Moves,” *Parameters* 44, no. 4 (2014): 12, accessed 30 March 2020, <https://search-proquest-com.proxy.lib.sg/central/docview/1665220241/fulltextPDF/AA2A8A9402064805PQ/1?aaccountid=12691>.

like Singapore. In the worst case, the increased presence on both sides might lead to increased friction and therefore a higher likelihood of conflict breaking out in the region. While a full analysis on the effects of this posture shift of both Great Powers is outside the scope of this thesis, the resultant increase in US presence in the region is most likely to enhance regional security—open conflict is unlikely as both Great Powers have much to gain economically from regional peace.

In summary, though the construction of the Kra Canal is likely to adversely affect Singapore’s security by undermining her particular-intrinsic and derivative power, the impact is likely to be mitigated by Singapore’s ability to create her own relevance in the diplomatic, financial, and business domains, as well as the increased presence of the US in the region. As such, the assessed impact of the Kra Canal’s construction is assessed to range from “Negligible” in the best case to “Moderate” in the worst-case.

#### Unique Security Implications of a Chinese-Funded Kra Canal

A Chinese-funded Kra Canal would yield unique security implications for Singapore. In particular, China’s propensity to circumvent the current rules-based international order, as demonstrated in the ongoing South China Sea disputes, presents a direct threat to Singapore’s security. This section assesses the probability and severity of that threat.

#### Probability Assessment

An analysis of similar Chinese-funded infrastructure projects in other nations is useful in assessing the probability of Chinese funding of the Kra Canal presenting a threat to Singapore’s security. Such an approach has been labelled by commentators as “debt



diplomacy,” where “China’s efforts to use its Belt and Road Initiative to broaden its geopolitical and economic clout risk saddling developing countries with unsustainable debt while increasing their dependency on China.”<sup>180</sup> Many of the recipients of Chinese lending are developing countries that lack the financial means necessary to repay these debts. China’s less-than-transparent lending terms further add to those risks. When recipient countries fail to meet their debt obligations, China leverages those obligations to “convert its economic access into political and strategic influence,” resulting in “a loss of strategic assets, major hurdles to economic development, and a loss of sovereignty.”<sup>181</sup> This is in direct contrast to the “Paris Club” group of donor nations, which have committed to providing “sustainable repayment solutions” and “appropriate debt relief” for debtor nations, a stark contrast to Chinese predatory lending practices.<sup>182</sup>

The so-called “debt diplomacy” approach has already compromised the sovereignty of several recipient states. Perhaps the most high-profile case is that of Hambantota port in Sri Lanka, as previously highlighted in Chapter 1. Plying Sri Lanka’s former president Mahinda Rajapaksa with election funding in 2015, China saddled Sri Lanka with \$12.3 billion of loans.<sup>183</sup> When these debt obligations could not be met, Sri Lanka was forced to sign over a 99-year lease of the port, which could potentially serve

---

<sup>180</sup> Mark Green, “China’s Debt Diplomacy,” *Foreign Policy*, 25 April 2019, accessed 4 April 2020 <https://foreignpolicy.com/2019/04/25/chinas-debt-diplomacy/>.

<sup>181</sup> *Ibid.*

<sup>182</sup> *Ibid.*

<sup>183</sup> “China’s Belt and Road Initiative: Too Much of a Good Thing?” *Asia Sentinel*, 9 July 2018, accessed 4 April 2020, <https://www.asiasentinel.com/p/china-belt-road-initiative-too-much-good-thing>.

as a base for Chinese naval forces just off the coast of India.<sup>184</sup> Djibouti has faced similar circumstances, with largely Chinese-driven public debt rising to 80 percent of GDP. US Agency for International Development’s (USAID) Administrator Mark Green argued that the fact that China’s first overseas military base was established in Djibouti was a matter of “consequence, not a coincidence.”<sup>185</sup>

The Chinese vision of a modern day “Maritime Silk Road” as part of the BRI makes it even more likely that China would move to expand its geopolitical influence and degree of control over Thailand and the Kra Canal, once it is built. The canal would complement her chain of ports running from the Suez to Southeast Asia—the so-called “String of Pearls” as represented in Figure 3 below—by enabling the Chinese navy a higher degree of control over a crossing into the Indian Ocean as compared to the Straits of Malacca. This allows China to better secure her strategic interests across the rim of the Indian Ocean, which is imperative given the increasing importance of China’s amphibian ports of Gwadar and Kyaukpyu, as explained in Chapter 2.

---

<sup>184</sup> Green, “China’s Debt Diplomacy”.

<sup>185</sup> *Ibid.*

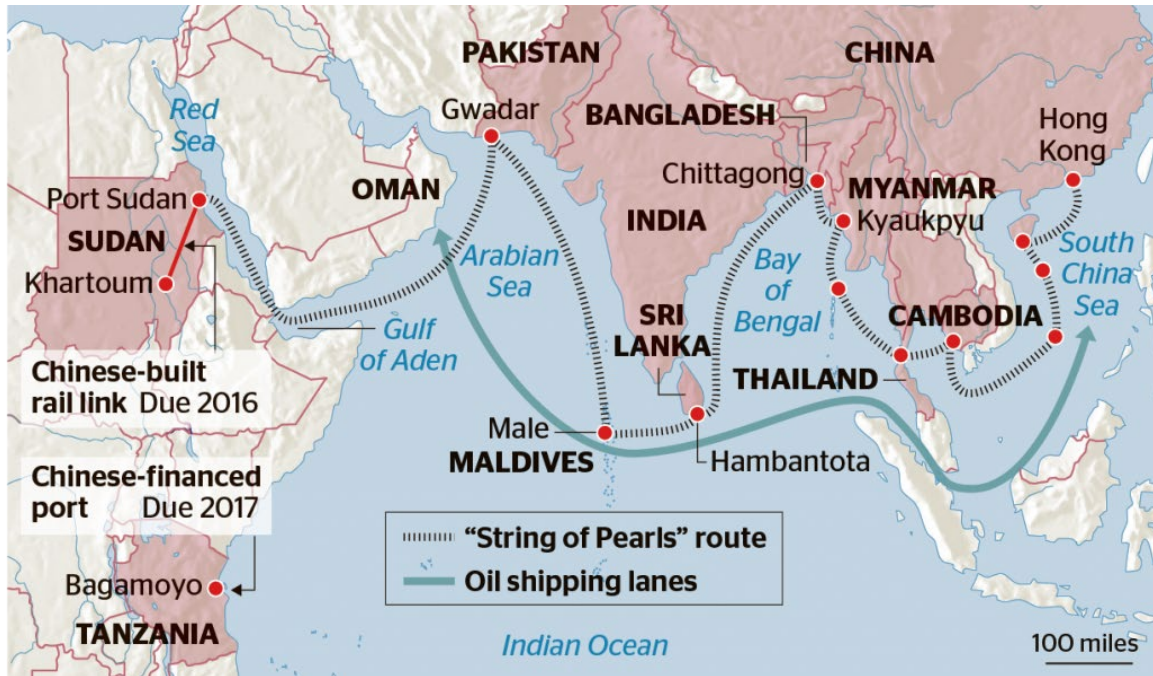


Figure 3. China's "String of Pearls" Ports

Source: Khmer Times, "China to speed up construction of new Silk Road: Xi," 7 November 2014, accessed 25 March 2020, <https://www.khmertimeskh.com/52437/china-to-speed-up-construction-of-new-silk-road-xi/>.

A study of the Suez and Panama canals further reinforces the likelihood that China would exploit its control over the Kra Canal to gain geopolitical advantages in the region. The fact that straits and canals are considered by international law to be international waterways have not precluded patron nation dominance over their operations. For example, the Suez Canal in the late 1800s was "subject in certain respects to the provisions of the French code and in others to Egyptian ordinances and Turkish regulations," and its operations were in fact "independent of international control."<sup>186</sup>

<sup>186</sup> Halford L. Hoskins, "The Suez Canal as an International Waterway," *The American Journal of International Law* 37, no. 3 (Jul 1943): 373-374, accessed 25 March 2020, <https://www.jstor.org/stable/2192719/>.

The Panama and proposed Nicaragua Canals provide a more recent and perhaps even closer comparison, given that China had planned to finance the Nicaragua Canal's construction. Discussions on the canal's construction began in 2012 and initial work followed, but the project fizzled out in 2018. While financial setbacks plagued the canal's main investor, leading to delays in the project, the "nail in the coffin" was Nicaragua's adoption of a position counter to China's One-China policy. Specifically, Nicaragua had facilitated Taiwan's incorporation into international agreements by recognising Taiwan, and in doing so, "undermine[d] some if not all Chinese enthusiasm for having Nicaragua as a strategic partner in Central America."<sup>187</sup> Conversely, Panama in 2017 cut diplomatic ties with Taiwan, which was once its ally. The timing of this move is strategic—given that the Nicaraguan canal could "seriously disrupt the economy of Panama, it was a strategic choice to break ties with its ally in exchange for economic favor from the Chinese."<sup>188</sup>

The recent case studies of recipient countries highlighted above clearly demonstrate China's employment of infrastructure projects and debt diplomacy to gain geopolitical advantages. China's expansionary presence in the Indian Ocean region only increases the impetus for a Chinese-controlled waterway between the Indian Ocean and the South China Sea, thus allowing them to circumvent their Malacca Dilemma. As such, the assessed probability of a Chinese-funded Kra Canal adversely affecting Singapore's security is assessed to be "Likely." While compromised Thai sovereignty may not

---

<sup>187</sup> Sanchez, "The Strategic and Geopolitical Implications of Canals," 16.

<sup>188</sup> Ibid., 16-17.

directly affect Singapore's security, the next subsection on the severity of the threat illustrates two mechanisms through which this might happen.

### Severity Assessment

How does China flexing her strengthened economic leverage in Thailand and the larger region affect Singapore's strategic interests? This subsection analyses two ways in which expanded Chinese geopolitical influence compromises Singapore's ability to make her own sovereign decisions: through undermining ASEAN unity, and through a more assertive approach to bilateral relations with Singapore.

Tom Long argues that collective power can be a significant source of power for small states. Of all the international governmental organisations that Singapore belongs to, perhaps none are more critical to steering regional peace, security, and prosperity than ASEAN. The collective power wielded by 10 states in a region of strategic geography—through which a large proportion of world trade traverses and within which five of the top-20 largest drivers of global GDP growth are situated<sup>189</sup>—gives ASEAN states considerably more influence in negotiations with other larger states than if they were to act alone. Professor Tommy Koh, a Singaporean diplomat and international lawyer, wrote that ASEAN allowed Singapore to establish partnerships with major powers from around the world, and that “without ASEAN, none of the 10 member states would be able to attract the leaders of the most important countries of the world to meet annually with

---

<sup>189</sup> “ASEAN pushing global GDP growth,” *The ASEAN Post*, 23 October 2019, accessed 5 April 2020, <https://theaseanpost.com/article/asean-pushing-global-gdp-growth>.

them.”<sup>190</sup> Koh also notes that ASEAN plays a central role in maintaining regional peace. The organisation’s support for the international rule of law has led to a regional culture of “consultation, mutual accommodation, and cooperation,” which has led to the peaceful resolution of disputes amongst its members.<sup>191</sup>

However, increasing Chinese influence over individual member countries has begun to strain ASEAN unity in key areas of strategic interest to China, such as the South China Sea territorial disputes and water-related tensions regarding the Mekong River Delta. In particular, the “ASEAN Way” of decision-making—a *modus operandi* of consultation and consensus decision-making—has made it difficult for ASEAN members to unanimously agree on these contentious issues due to China’s coercive influence. Nations receiving Chinese economic assistance have in fact “found themselves in economic thrall to China that has been extended to political thrall.”<sup>192</sup> For example, Cambodia and Laos have taken pro-China stances especially in the South China Sea disputes, due to their dependence on Chinese economic assistance.<sup>193</sup> That Cambodia in 2012 blocked the issuing of a joint communiqué at the conclusion of the ASEAN Regional Forum, the first such case in ASEAN’s 45-year history at that time, stands as

---

<sup>190</sup> Tommy Koh, “Why ASEAN is good for Singapore,” *The Straits Times*, 9 January 2018, accessed 5 April 2020, <https://www.straitstimes.com/opinion/why-asean-is-good-for-singapore>.

<sup>191</sup> *Ibid.*

<sup>192</sup> Pookaman, “Thailand’s Kra Canal: Economic and Geopolitical Implications.”

<sup>193</sup> Yukako Ono and Jun Suzuki, “ASEAN may partially dump its rule-by-consensus principle,” *Nikkei Asian Review*, 14 November 2017, accessed 5 April 2020, <https://asia.nikkei.com/Economy/ASEAN-may-partially-dump-its-rule-by-consensus-principle>.

testament to China's growing clout in the region.<sup>194</sup> As Singapore's ex-Foreign Minister K. Shanmugam said,

An ASEAN that is not united and cannot agree on a Joint Communiqué will have difficulties in playing a central role in the region. If we cannot address major issues affecting or happening in our region, ASEAN centrality will be seen as a slogan without a substance. Our ability to shape regional developments will diminish.<sup>195</sup>

In this way, Singapore's collective power will be diminished as ASEAN unity would be further threatened by China's significant economic leverage over Thailand.

Next, Chinese control over the Kra Canal would also adversely affect Singapore's bargaining position in bilateral arrangements with China. The analysis in SRQ 1 demonstrated how Singapore's particular-intrinsic power would be reduced by the construction of the Kra Canal. Control of the Kra Canal solves China's Malacca Dilemma, thus worsening Singapore's bargaining power in the relationship; China would be able to employ a more coercive approach towards Singapore at a lower cost. To understand the extent of this threat, a more detailed analysis of the China-Singapore bilateral relationship is necessary.

Andrew Tan writes that China and Singapore have enjoyed a close bilateral relationship since diplomatic relations were first established in 1990. This is especially in

---

<sup>194</sup> Luke Hunt, "ASEAN Summit Fallout Continues," *The Diplomat*, 20 July, 2012, accessed 5 April 2020, <https://thediplomat.com/2012/07/asean-summit-fallout-continues-on/>.

<sup>195</sup> Ministry of Foreign Affairs, Singapore, "MFA Press Release: Transcript of Minister for Foreign Affairs K Shanmugam's reply to Parliamentary Questions and Supplementary Questions, 13 August 2012," accessed 5 April 2020, [https://www.mfa.gov.sg/Overseas-Mission/ASEAN/Press-Statements-Speeches/2012/08/press\\_20120813](https://www.mfa.gov.sg/Overseas-Mission/ASEAN/Press-Statements-Speeches/2012/08/press_20120813).

the economic domain—China is in fact Singapore’s largest trading partner.<sup>196</sup> However, relations have cooled since 2010 for various reasons, of which the South China Sea issue has been particularly thorny for both countries.

Tan posits that the China-Singapore relationship is fundamentally shaped by the fact that Singapore is a majority Chinese country with three-quarters of the population being ethnically Chinese, and hence has “affinities of race, language, and culture with China.”<sup>197</sup> From China’s perspective, this comes with it an expectation for Singapore to act in favour of China’s interests. On the other hand, Singapore has made deliberate efforts not to overly emphasise her “Chineseness,” given her geopolitical context of its location in the middle of a Muslim-dominated region with strong anti-Chinese sentiments.<sup>198</sup> Singaporean leaders have thus taken decisions consistent with her own interests, even when facing pressure from larger countries or even world superpowers.<sup>199</sup> Bilahari Kausikan reflects this sentiment in a 2015 speech, stating:

As the only Chinese-majority country in South-east Asia, it could pose special challenges for Singapore. Already, Chinese diplomats and officials too often refer to Singapore as a ‘Chinese country’. We politely, but firmly, tell them that they are mistaken. And we will continue to do so. But the implications are worth pondering.<sup>200</sup>

---

<sup>196</sup> Tan, “Singapore’s Survival and Its China Challenge,” 19.

<sup>197</sup> *Ibid.*, 12.

<sup>198</sup> *Ibid.*, 13-14.

<sup>199</sup> *Ibid.*, 16-17.

<sup>200</sup> Kausikan, “The Sovereignty of Small States.”



Kausikan, in a later talk in 2017, expounded on the Chinese perspective by emphasising China's "identity of being a civilisational state," with the view that the greater Chinese nation should support Chinese interests.<sup>201</sup> Kausikan highlights the title of a speech made by President Xi Jinping in 2014 during a Beijing conference involving overseas Chinese business associations—*The Great Rejuvenation of the Chinese Nation is of Importance to all Chinese*.<sup>202</sup> This is particularly pertinent to Singapore, as the "Chinese Nation" referred to here includes the overseas Chinese diaspora.

As China moved towards a more assertive foreign policy stance, conflicts of interest between the two countries have begun straining ties. This is particularly so as Singapore consistently insists on a rules-based international order, as highlighted in the first section of this chapter. Tan also identifies Singapore's particularly close relationship with the USA as a source of irritation for China.<sup>203</sup> Where Singapore moved in ways that did not support Chinese interest, as Ja Ian Chong notes, Chinese Internet commentary and op-eds have criticised Singapore as *wangben* ("forgetting its origins") and *hanjianguo* ("a country of Han traitors").

This dynamic between Singapore and China was viscerally demonstrated when Singapore openly criticised China's aggressive foreign policy stance in the South China Sea territorial disputes. Tan notes that events in 2016 represented a pivotal shift in bilateral relations between both countries, beginning with the rejection of China's claims

---

<sup>201</sup> Kausikan, "Why Small Countries should not behave like Small Countries."

<sup>202</sup> *Ibid.*

<sup>203</sup> Tan, "Singapore's Survival and Its China Challenge," 25.

in the South China Sea by the Permanent Court of Arbitration in The Hague. From July to August 2016, Singaporean political leaders, including then-Foreign Minister Vivian Balakrishnan and Prime Minister Lee Hsien Loong then spoke out publicly on the issue, emphasising the need for the issue to be settled in accordance to international law, and thereby speaking out against China's interests in the issue.<sup>204</sup>

September 2016 then saw a high-profile “war of words” between Singapore’s ambassador to Beijing and the editor-in-chief of the pro-Chinese Communist Party (CCP) Chinese tabloid newspaper, the Global Times. This was triggered when the newspaper published an article alleging that Singapore had wanted to raise the arbitration ruling on the South China Sea issue at the Non-Aligned Movement (NAM) Summit held in Venezuela that month.<sup>205</sup> The spat then culminated in a scathing article by the Global Times, which not only called out Singapore for moving against Chinese interests in the South China Sea ruling, but which also revisited other recent instances where Singapore had taken positions contrary to Chinese interests. This included blaming Singapore for directly influencing USA into implementing its Pacific pivot strategy, for accusing China of interfering in the Association of Southeast Asian Nations’ (ASEAN) internal affairs during the South China Sea dispute, and for questioning China’s ability to manage the Severe Acute Respiratory Syndrome (SARS) epidemic back in 2003. Notably, the article’s opening paragraph ends with the sentence, “The Chinese people must recognise

---

<sup>204</sup> Tan, “Singapore’s Survival and Its China Challenge,” 24.

<sup>205</sup> Laura Zhou, “China’s Foreign Ministry Joins War of Words against Singapore over South China Sea Dispute,” *South China Morning Post*, 27 September 2016, accessed 4 December 2019, <https://www.scmp.com/news/china/diplomacy-defence/article/2023080/china-wades-singaporean-envoys-media-dispute>.

a reality, that although Singapore shares both language and race with China, she is in fact an independent country with her own stand, and that she will not stand on China's side simply because of blood relations.”<sup>206</sup>

Even more pertinently, the article postulates that the key reason for Singapore's seemingly pro-US and anti-China stance on the South China Sea issue is Singapore's dependence on the Malacca Straits for its trade and economic prosperity, and concomitantly its reliance on US naval presence to ensure freedom of navigation in the region. The article also notes that 80 percent of the ships passing through the Straits of Malacca belong to China, and concludes with a review of China's reported participation in the Third Klang Port and Kra Canal projects as a means of undermining Singapore's geostrategic position. By developing a third port in Port Klang in western Malaysia, the article claims that China could reduce its reliance on Singapore for its ships passing through the Straits of Malacca. Additionally, it also claims that the potential development of the Kra Canal would render the Straits of Malacca “useless.” According to the article, this would deal a fatal blow to both the USA and Singapore—USA would stand to lose regional influence and control, which is an outcome that Singapore would be loath to see. The rhetoric in the article tends to be rather overbearing, with its claims of the utility of the Third Klang Port and Kra Canal seemingly skewed towards giving its domestic Chinese audience the confidence that China had the means to counter Singapore's

---

<sup>206</sup> Chi Yang Li, “新加坡亲美遏华声势为何高涨？三大原因看清其面目 (Three Reasons which Explain Singapore's Pro-U.S. and Anti-China Sentiment),” 凤凰网 IFENG.COM, 30 September 2016, accessed 4 December 2019, [http://news.ifeng.com/a/20160930/50049864\\_0.shtml](http://news.ifeng.com/a/20160930/50049864_0.shtml). Quote translated from Simplified Chinese by this thesis's author.

leverage if it wanted to. Nonetheless, it does belie a conception that China's growing strength and reduced reliance on Singapore can enable the employment of coercion as a way to pursue its interests.<sup>207</sup>

Unfortunately for Singapore, the dispute did not end with simply a war of words. As Tan traces, about two months after the *Global Times* article was published, China impounded nine of the Singapore Armed Forces' (SAF) infantry fighting vehicles in Hong Kong, in transit while on the way back from military exercises in Taiwan. China used the incident to protest military ties between Singapore and Taiwan—as renowned Chinese political and military commentator Song Zhong Ping put it in a television interview, the vehicles would only be returned if Singapore acceded to China's conditions, which included honouring the 'One China' policy and severing military cooperation with Taiwan. Song also added that China had previously accepted this arrangement between Singapore and Taiwan in the 1970s due to the US backing of Singapore, and due to China's relatively weak economy. However, as “times are different now,” Song said that Singapore should “assess the changing situation and react accordingly. If [Singapore wanted] the vehicles back, [she] must answer to the two conditions [that China had] laid out.”<sup>208</sup>

---

<sup>207</sup> Li, (Three Reasons which Explain Singapore's Pro-U.S. and Anti-China Sentiment).”

<sup>208</sup> IFENG.COM. “Considerations behind arranging for the return of fighting vehicles.” 鳳凰頻頻. Video, You Tube, 10 January 2017. Accessed December 5, 2019. <https://www.youtube.com/watch?v=fU75O9iI3vg>.

Besides impounding the military vehicles, China also excluded Singapore's Prime Minister from the high-profile Belt and Road Forum for International Cooperation in May 2017, instead inviting Singapore's Minister for National Development instead.<sup>209</sup> These served to send a strong message that China could and would punish those who spoke up against their interests, even a country with as close economic ties as Singapore.

The South China Sea saga indicates that China has no qualms in using diplomatic and economic coercion to press its agenda. Tan outlines three potential ways in which China could affect Singapore's security. First, with her increasing presence and influence in the South China Sea, China could interfere with Singapore's trade, which would be especially harmful given Singapore's trade-dependent economy.<sup>210</sup> Second, as demonstrated in the 2016-2017 spat over the South China Sea, China could use coercion and subversion against Singapore if Singapore acted contrary to Chinese interests. Tan raised an incident in August 2017 when a Chinese academic based in a Singaporean university was expelled for "allegedly working to influence Singapore's foreign policy and public opinion at the behest of foreign intelligence agencies."<sup>211</sup> Third, China's aggressive foreign policy stance and emphasis to establishing bilateral agreements with individual countries within ASEAN has resulted in the erosion of ASEAN unity; this has already been highlighted above.<sup>212</sup>

---

<sup>209</sup> Tan, "China Challenge," 26.

<sup>210</sup> *Ibid.*, 23.

<sup>211</sup> *Ibid.*, 28.

<sup>212</sup> *Ibid.*, 24-25.

Given these previous instances of increased Chinese assertiveness, the geopolitical implications of a Chinese-funded Kra Canal should therefore be of particular concern to Singapore. With a Chinese-controlled Kra Canal, China would not only be able to eliminate its dependence on the Straits of Malacca, but would also be able to turn the tables on Singapore by potentially holding freedom of navigation ransom on *both* sides of Peninsular Malaysia. Given the “String of Pearls” developing in the Indian Ocean region, with Maritime Silk Road ports reaching from Djibouti to Kyaukpyu in Burma, China could easily justify increasing her naval presence in the Indian Ocean region. This could be characterised ostensibly as freedom of navigation operations or perhaps even counter-piracy patrols, especially since China had previously participated in Combined Task Force 151 (CTF-151) patrols off the Horn of Africa. An established Chinese naval presence in the Indian Ocean region could then be easily construed as an implied threat and thus a tool of coercion. As with the Malacca Dilemma, no *actual* threat is required to achieve the desired geopolitical effect—simply the *perception* or *implication* of a threat is sufficient to affect the geopolitical calculus of target states. Overall, a Chinese-funded and therefore Chinese-controlled Kra Canal would increase China’s particular-intrinsic power while decreasing that of Singapore’s, therefore worsening Singapore’s bargaining position in bilateral matters. If today China is already increasingly assertive towards Singapore, even with Singapore’s particular-intrinsic power over crucial SLOCs, one would then expect that coercion would only increase in the newfound geopolitical reality of a Chinese-controlled Kra Canal.

In conclusion, a Chinese-funded Kra Canal would increase Chinese political and economic leverage over Thailand and Singapore. This enhanced position of strength

would threaten ASEAN unity, which is critical to continued regional peace and security. Singapore's bargaining position in the bilateral relationship would also be worsened, thus making her more vulnerable to Chinese coercion. As a result, Singapore's ability to pursue its own sovereign strategic goals without coercion would be threatened, especially in issues with strong Chinese interest. Therefore, the severity of the threat to Singapore's security from a Chinese-funded Kra Canal is assessed as "Moderate."

### The Kra Canal's Impact on the Terrorist Threat to Singapore

As described in Chapters 1 and 2, the Thai government has often rejected proposals for the Kra Canal's construction due to the fear of emboldening the separatist conflict in southern Thailand. Given that extremist elements within Singapore's Muslim population have sympathised and joined up with foreign terrorist causes in the past, contagion of the separatist cause could potentially threaten Singapore's national security. As noted in Chapter 2, however, there is little critical assessment on the likely impact of the Kra Canal's construction on the separatist conflict. This subsection aims to fill that gap in literature by assessing risk of an increased terrorist threat to Singapore associated with the Kra Canal's construction.

#### Probability Assessment

The probability of contagion of the separatist cause to Singapore depends on two factors, as defined by the two TRQs: (1) the probability of the separatist cause to be internationalised; and (2) the probability of extremist elements in Singapore executing acts of terrorism locally in support of that cause. An assessment of each aspect follows in turn.

On the probability of the internationalisation of the separatist cause, Chapter 2 highlighted research by Jörn Dosch and S. P. Harish that found that the character of the conflict had shifted from its predominantly local and ethnic roots towards an increasing emphasis on the religious dimension. This trend led to increasing fears that the conflict would become internationalised through a process of “Al-Qaidaization”, and as a result spread beyond the borders of Thailand.<sup>213</sup>

Yet, despite the transformation of the conflict to take on more religious undertones, academics and research groups alike have been clear in their assessment that separatist groups have deliberately avoided being associated with the international radical Islamic jihadist movement. Dosch, writing in 2007, noted that the extent of “Al-Qaidaization” of the conflict had been overstated by contemporary literature. The reality instead was that traditional separatist organisations opted to exclude themselves from the global radical Islamic cause, and rejected Al-Qaeda’s help where it was offered.<sup>214</sup>

The International Crisis Group (ICG) echoed Dosch’s view in a research report published in end 2017. The report argued that despite frequent media reports and observer commentaries on increasing transnational terrorist influence on the separatist conflict in southern Thailand, there was “no evidence of any association between Malay-Muslim insurgents and foreign jihadists,” and that the militant separatist organisations have been “anxious to avoid association” with foreign jihadist terrorist groups.”<sup>215</sup>

---

<sup>213</sup> Dosch, “Security and the Challenge of Terrorism,” 112.

<sup>214</sup> Ibid.

<sup>215</sup> International Crisis Group, *Jihadism in Southern Thailand: A Phantom Menace*, Report no. 291 (Bangkok/Brussels: International Crisis Group, 2017), 1, 11,



Central to this argument is the distinct differences between the concepts of “jihad” and “jihadism.” While the south Thailand separatist movement has been characterised as a jihad by local militants, it remains a “nation-oriented” jihad, with the primarily nationalist ends of pursuing self-determination in the Malay-Muslim majority provinces. This is distinct from the brand of Salafi-jihadism, which rejects the concept of the nation-state and is aimed at establishing an Islamic caliphate, promoted by international terrorist groups such as al-Qaeda, Islamic State in Iraq and Syria (ISIS) and their affiliates.<sup>216</sup>

Given the “parochial” nature of the separatist movement’s aims, leaders of militant organisations in the region recognised that association with the jihadist ideologies of ISIS or al-Qaeda would be self-defeating, undermine the legitimacy of their cause, and erode the international support so necessary to the ultimate goal of self-rule.<sup>217</sup> The ICG report notes that, “a senior Barisan Revolusi Nasional (BRN) member recalled being approached by three Jemaah Islamiyah (JI) members during a sojourn in Indonesia in 2006. He turned down their request to go to Patani and an invitation to meet JI leader Abu Bakar Bashir. He said, ‘Our field of struggle is different from theirs.’”<sup>218</sup>

That being said, both Dosch and the ICG report identified potential conditions under which an internationalisation of the conflict would become more likely. Dosch argued that if the security situation in the region continued to deteriorate, Al-Qaeda or

---

accessed 10 January 2020, <https://www.crisisgroup.org/asia/south-east-asia/thailand/291-jihadism-southern-thailand-phantom-menace>.

<sup>216</sup> Ibid., 1-2.

<sup>217</sup> Ibid., 18-19.

<sup>218</sup> Ibid., 4.

their Southeast Asian offshoot terrorist organisation JI could seize the opportunity to deepen ties with separatist organisations in southern Thailand, thus influencing the conflict. This could be exacerbated by the presence of poor, unemployed, and disenfranchised people amongst the population, who are particularly susceptible to recruitment into radical Islamist causes.<sup>219</sup>

Similarly, the ICG report cautions against complacency on the part of the Thai government, warning that a protraction of the conflict would lead to increased polarisation. This would increase the risk of contagion to other parts of Thailand or Southeast Asia, and create ripe opportunities for exploitation by transnational jihadist organisations. It identifies two potential factors that might enable jihadist influences to make inroads into the conflict. First, a protracted conflict increases the risk that individual Malay-Muslims might be radicalised by online jihadist propaganda. The report argues that the Malay-Muslim populace of southern Thailand is particularly vulnerable to radicalisation due to their lack of knowledge about radical Islamic causes. Local religious leaders and educators have failed to adequately address issues concerning jihadism, due to a fear of government reprisals for merely bringing up such topics. As a result, young Malay-Muslims might interpret restrictive Thai policies in the region within the frame put forth by ISIS. Second, a protracted conflict might breed a “sense of hopelessness” among Malay Muslims or potentially result in the state employing more repressive tactics to suppress separatist organisations. These could cause existing militant groups, which currently eschew jihadism, to splinter into smaller groups, possibly along generational

---

<sup>219</sup> International Crisis Group, *Jihadism in Southern Thailand*, 4.

lines. Such splinter groups might find jihadism a more attractive form of resistance and therefore resort to more extreme violence to pursue their ends. Such a possibility is enhanced by a risk of contagion from ISIS supporters that operate over the porous borders in Malaysia.

It is clear from the above evidence that, given the aversion of the separatist organisations towards the international radical Islamic jihadist movement, the conflict in southern Thailand is unlikely to be internationalised. Even if the separatist movement were to be emboldened as a result of the Kra Canal's construction, the local separatist movement is unlikely to seek affiliation with international extremist jihadist causes, hence the conflict is unlikely to spread beyond southern Thailand. This, however, is not a given—should the conflict become protracted, or should Thai authorities continue to tighten restrictive policies in the restive southern region, the jihadist rhetoric would become increasingly attractive, increasing the likelihood of internationalisation.

The internationalisation of the conflict in southern Thailand would, however, not be sufficient to threaten Singapore's security on its own. For this to happen, elements within Singapore would have to sympathise with and execute acts of terrorism locally in support of that cause. An assessment of the probability of this materialising follows.

It is important to first establish the motivations for terrorist groups to attack Singapore. Rohan Gunaratna's work tracing developments in the terrorist threat landscape in Singapore since her founding in 1965 is useful here, and he identifies Singapore as a particularly ripe target for terrorism. In justifying plots to attack Singapore, terrorist groups have cited the integral role of Singapore's intelligence and counterterrorism agencies in combating regional terrorist groups. During a raid on a JJ

safe house, security agencies found a handwritten letter from operational leader Noordin M. Top identifying Singapore as a target as “Singapore was drinking the blood of the Muslims.”<sup>220</sup> JI leaders had also planned to hijack and crash an airplane into Singapore’s airport in response to arrests in Singapore that significantly disrupted the group’s operations.<sup>221</sup> Singapore’s close ties to Israel and the US also legitimises it as a target for attacks—this is especially so given Singapore’s contributions to the international coalition fighting ISIS.<sup>222</sup>

Having established the drivers that make Singapore a prime terrorist target, the discussion now turns to determining the probability of Singaporeans sympathising with and executing terrorist activities in support of the separatist cause in southern Thailand. To date, and congruent with the predominantly local nature of the separatist conflict, only one radicalised Singaporean has been known to attempt to join the separatist movement in southern Thailand.<sup>223</sup> This singular case is insufficient for an assessment of the probability that Singaporeans would support the separatist cause. Further analysis would have to be done by proxy, through understanding the drivers behind the radicalisation of Singaporeans by other terrorist organisations in the past.

---

<sup>220</sup> Gunaratna, “The Changing Terrorist Threat Landscape in Singapore,” 236.

<sup>221</sup> *Ibid.*, 235.

<sup>222</sup> *Ibid.*, 239, 249.

<sup>223</sup> Rachel Chang, “Singaporean who attempted to join Thai insurgents detained under ISA,” *The Straits Times*, 12 September 2013, accessed 28 March 2020, <https://www.straitstimes.com/singapore/singaporean-who-attempted-to-join-thai-insurgents-detained-under-isa>.

Of particular relevance here is an analysis of Singaporeans' past support for the Moro Islamic Liberation Front (MILF) in Philippines. Similar to the separatist conflict in southern Thailand, the MILF's secessionist agenda is predominantly local, with the primary goal of establishing an independent Islamic state for the Moro peoples of Philippines. Zachary Abuza, writing in 2005, notes that Singaporeans who supported MILF primarily did so through fund-raising for the organisation, with five Singaporeans arrested prior to 2005 for their support of MILF. Of note, four of these five Singaporeans were affiliated with a Singaporean JI cell.<sup>224</sup> Given that the number of MILF militants 2000s was estimated at around 10,000 members,<sup>225</sup> the fact that only five Singaporeans directly supported MILF, and even then, only through fund-raising and not direct involvement in fighting, indicates a relatively low level of support amongst Singaporeans for the organisation's cause. Additionally, it seems like a key driver for these individuals to support MILF was through their affiliation with JI, which had earlier developed ties with the MILF in the 1990s. Independent of this link to JI, there is no compelling evidence of strong support from Singaporeans for MILF's predominantly local cause.

On the other hand, radicalised Singaporeans' support of the JI and ISIS causes have garnered significantly more attention due to the scale and extent of their involvement. Rohan Gunaratna's work identifies five particular types of threats to

---

<sup>224</sup> Zachary Abuza, "The Moro Islamic Liberation Front at 20: State of the Revolution," *Studies in Conflict and Terrorism* 28, no. 6 (January 2005): 465. Accessed 28 March 2020. <https://doi.org/10.1080/10576100500236881>.

<sup>225</sup> National Consortium for the Study of Terrorism and Responses to Terrorism, "Moro Islamic Liberation Front (MILF)," 19 April 2015, accessed 28 March 2020, <https://www.start.umd.edu/baad/narratives/moro-islamic-liberation-front-milf>.

Singapore posed by terrorism inspired by these causes: (1) home-grown terrorism from self-radicalised cells and individuals; (2) IS sharing expertise with or funding pro-IS groups to mount attacks; (3) foreign fighter returnees with the expertise of mounting attacks; (4) creating the nuclei of new threat groups; and (5) IS fledgling external wing conducting attacks.<sup>226</sup> In the contemporary context, Gunaratna posits that the primary threat is that posed by the return of fighters who had travelled to fight in conflict theatres overseas, bringing with them the “motivation, skills, and networks” that “threaten domestic, regional, and global security.”<sup>227</sup> This is not a new phenomenon either—since 1985, Singaporeans have joined up as foreign fighters as part of overseas terrorist causes, in Pakistan and Afghanistan against the Soviets, in Malaysia and Indonesia against Christians, and most recently in the Philippines against the Philippine government forces and Christians.<sup>228</sup> This demonstrated the potential for some Singaporeans to be influenced and radicalised by extremist terrorist ideology, to the extent that they “supported, participated, and advocated agendas by the MILF, ASG, JI, AQ, and now IS.”<sup>229</sup>

While there has been no successful terrorist attack within Singapore in the post-9/11 era, Gunaratna raises several examples showing that the threat is still present and real. He segments the threat of terrorism in Singapore into two phases, the first being an

---

<sup>226</sup> Gunaratna, “The Changing Terrorist Threat Landscape in Singapore,” 249.

<sup>227</sup> *Ibid.*, 230.

<sup>228</sup> *Ibid.*, 232.

<sup>229</sup> *Ibid.*, 231. The abbreviations refer to the Moro Islamic Liberation Front, Abu Sayyaf Group, Jemaah Islamiyah, Al-Qaeda, and Islamic State.

al-Qaeda-centric phase, and the second being an IS-centric phase which the country is still currently in.<sup>230</sup> The most notable terrorist plot during the first phase was the JI embassies attack plot. In 1997, JI operatives surveyed 70-80 targets in Singapore, amongst which Al-Qaeda selected four for an attack—the US and Israeli embassies, and the Australian and British High Commissions. Other targets surveyed by JI included key infrastructure, such as the Sembawang Wharves and Changi Naval Base, used by the US Navy, the American School, commercial buildings used by American companies, Changi Airport, the headquarters of the Ministry of Education and the Ministry of Defence, and the pipelines carrying water from Malaysia to Singapore. Of the six tonnes of TNT ordered, JI had already taken delivery of 1.2 tonnes of TNT, detonators and detonating cord in Malaysia.<sup>231</sup> The attacks were planned to be launched around end-2001 to mid-2002, but were eventually foiled by Singaporean authorities in December 2001.

With the rise of ISIS in the mid-2010s, the attention of regional terror groups shifted towards the Middle East, with two dozen regional terror groups supporting ISIS from late 2013 onwards.<sup>232</sup> This resulted in several thousand Southeast Asians being influenced by ISIS/IS ideology, and amongst them, a few hundred travelling to Syria and Iraq to fight for ISIS.<sup>233</sup> Within Singapore itself, Singaporeans had accessed ISIS propaganda online, and some had also travelled to fight for ISIS-driven causes in the

---

<sup>230</sup> Gunaratna, “The Changing Terrorist Threat Landscape in Singapore,” 232, 241.

<sup>231</sup> *Ibid.*, 233-234.

<sup>232</sup> *Ibid.*, 241.

<sup>233</sup> *Ibid.*, 243.

Levant, as well as in the Philippines. Gunaratna thus argues that in this new phase, the threat to Singapore’s security is twofold—potential attacks launched by returning foreign fighters on the one hand and radicalised Singaporeans and residents on the other.<sup>234</sup>

It is also notable that, with the rise of ISIS since 2014, the number of Singaporeans detained under the Internal Security Act (ISA) has risen substantially. The ISA gives the government executive power to enforce preventive detention or restriction orders against individuals deemed to pose threats to Singapore’s internal security. From 2014-2017, 14 radicalised Singaporeans were detained or put under restriction orders, as compared to 11 such cases from 2007-2014. This periodisation of the ISA detentions falls neatly into Gunaratna’s segmentation of the terrorist threat into the earlier al-Qaeda-centric phase and then the IS-centric phase, and demonstrates the effectiveness of the aggressive ISIS online propaganda campaign. An article in Singapore’s national newspaper *The Straits Times* in 2017 provides a comprehensive review of cases of radicalised individuals linked to ISIS. These individuals were radicalised by extremist propaganda through three broad channels: “social media posts and online material; radical preachers—online and over the radio; and ‘influencers’ or radicalised persons who win over others to their point of view.”<sup>235</sup>

A review of the individual cases, summarised in Tables 4 and 5 in Appendix A, shows just how effective the extremist propaganda put out by ISIS and ISIS-related

---

<sup>234</sup> Gunaratna, “The Changing Terrorist Threat Landscape in Singapore,” 245.

<sup>235</sup> Zakir Hussain, “How 15 Singaporeans were radicalised by ISIS ideology,” *The Straits Times*, 16 July 2017, accessed 28 March 2020, <https://www.straitstimes.com/singapore/radicalised-in-singapore>.



groups has been. In particular, these individuals believed in the use of religion to justify violence against non-Muslims and the establishment of an Islamic caliphate to replace the democratic system. Inspired by radical messages from these sources, these individuals planned to support ISIS by financing ISIS and ISIS-related organisations, travelling to Syria to join ISIS in fighting, or even conducting attacks locally by assassinating the President and Prime Minister of Singapore.<sup>236</sup> The frequency of detentions is also notable, especially in the ISIS-centric phase, and shows the persistent nature of the threat; even after ISIS had lost most of its territory in 2019, individuals in Singapore continued to be radicalised by their online propaganda.

On balance, elements within the Singaporean populace are more likely to be radicalised by extreme rhetoric associated with international jihadist movements, as evidenced by the effectiveness of Al-Qaeda and ISIS propaganda through the various channels as detailed above. Individuals radicalised by such strong rhetoric would be more likely to actively engage in fighting in conflict areas overseas, or plan to conduct attacks locally in support of those causes. In comparison, a localised conflict such as that involving the MILF in Philippines is unlikely to radicalise large numbers of Singaporeans, nor is it likely that Singaporeans will be sufficiently motivated to participate physically in fighting either in conflict theatres overseas or through conducting attacks locally.

As argued earlier, the separatist conflict in southern Thailand is unlikely to be associated with international Islamic jihadist movements, thus making it highly unlikely

---

<sup>236</sup> Hussain, “How 15 Singaporeans were radicalised by ISIS ideology.”

that Singaporeans would be heavily involved in the separatist cause. This would represent the best-case, and most likely, scenario. The worst-case scenario, on the other hand, could see separatist organisations turn to extremist international jihadist groups for assistance should the conflict protract or should Thai authorities impose further restrictive policies in southern Thailand. In such a scenario, given the previous instances of radicalisation of Singaporeans or Singapore-based residents by al-Qaeda and ISIS propaganda, it would be more likely for individuals within Singapore to become radicalised and act to support the separatist Thai movement, either abroad or at home. Therefore, the assessed probability of the Kra Canal's construction resulting in an intensification of the terrorist threat in Singapore is assessed to range from "Unlikely" in the best-case to "Occasional" in the worst-case.

#### Severity Assessment

In the event that the separatist conflict does spill beyond the southern Thailand region into Singapore, an assessment of the severity of the threat will be based on scale and expected impact to Singapore. These depend on the expected number of radicalised individuals and the ability of counterterrorist agencies to interdict these threats before they manifest as actual attacks.

Drawing on the analysis of Singaporeans radicalised by al-Qaeda, JI, and ISIS propaganda presented earlier, the potential scale of radicalisation in Singapore is expected to be small. Given that Singapore has a substantial Muslim minority, forming

14 percent<sup>237</sup> of the population of 5.85 million people, or about 800,000 Muslims, the relatively low number of detentions and restriction orders issued per year implies that radicalisation is sporadic amongst Singaporean Muslims. Additionally, the vast majority of Singapore's Muslim population is Sunni, with only one percent being Shi'ite Muslims.<sup>238</sup> This would conceivably make them more vulnerable to radicalisation by the brand of radical Salafi-Jihadist ideology promulgated by al-Qaeda, JI, and ISIS, as these ideologies are linked to Sunni Islam. Yet, the relatively low number of radicalised individuals in Singapore do not seem to reflect such a propensity.

Singapore's ability to curb radicalisation can be credited to several strict regulations that have prevented the encroachment of radical ideologies within the local Muslim community. Islamic religious education practiced within Singapore has to be accredited under the Asatizah Recognition Scheme (ARS), which is administered by Islamic Religious Council of Singapore (MUIS).<sup>239</sup> The ARS was launched in 2005 to "enhance the standing of religious teachers (*asatizah*) and serve as a credible source of reference for the Singaporean Muslim community," with the recognition that "in modern, multi-racial and multi-religious Singapore, . . . our religious teachers should guard against

---

<sup>237</sup> Department of Statistics, "Highlights of General Household Survey 2015," accessed 28 March 2020, [https://www.singstat.gov.sg/-/media/files/visualising\\_data/infographics/ghs/highlights-of-ghs2015.pdf](https://www.singstat.gov.sg/-/media/files/visualising_data/infographics/ghs/highlights-of-ghs2015.pdf).

<sup>238</sup> Syed Farid Alatas, "Singapore Muslim leaders must tackle rise of anti-Shi'ism hate speech," *The Straits Times*, 26 August 2017, accessed 28 March 2020, <https://www.straitstimes.com/opinion/spore-muslim-leaders-must-tackle-rise-of-anti-shiism-hate-speech>.

<sup>239</sup> Majlis Ugama Islam Singapura, "Asatizah Recognition Scheme," accessed 29 March 2020, <https://www.muis.gov.sg/ARS-and-IECP/About>.

the taking root of problematic ideologies and practices.”<sup>240</sup> In 2019, a Singaporean freelance religious teacher was struck off from the ARS for “propagating beliefs promoting violence and views,”<sup>241</sup> demonstrating the strict enforcement of the scheme.

In addition to regulating Islamic education locally, Singapore’s Infocomm Media Development Authority (IMDA) also censors online sources of extremist propaganda. Its Internet Code of Practice prohibits material that “glorifies, incites or endorses ethnic, racial or religious hatred, strife or intolerance.” In 2016, Singapore took swift action to ban an ISIS-linked newspaper published in Indonesia within a month of its launch, as the paper “distort[ed] Islamic teachings to call on readers to commit violence, seek martyrdom and kill disbelievers and Muslims who oppose ISIS.”<sup>242</sup> Similar action was taken in 2017 when four books were banned for their extremist content upon recommendation by MUIS.<sup>243</sup> In conjunction, the ability for Singapore’s government and religious authorities to regulate Islamic education domestically and restrict the inflow of foreign extremist propaganda limits the extent to which radicalisation can take root within Singapore.

---

<sup>240</sup> Ibid.

<sup>241</sup> Hariz Baharudin, “Former religious teacher and student placed on Restriction Order under ISA,” *The Straits Times*, 16 January 2019, accessed 29 March 2020, <https://www.straitstimes.com/singapore/former-freelance-religious-teacher-and-student-placed-on-restriction-order-under-isa>.

<sup>242</sup> “ISIS-linked newspaper banned in Singapore,” *The Straits Times*, 23 July 2016, accessed 29 March 2020, <https://www.straitstimes.com/singapore/isis-linked-newspaper-banned-in-singapore>.

<sup>243</sup> Yuen-C Tham, “4 books banned in Singapore for extremist content: MCI,” *The Straits Times*, 30 October 2017, accessed 29 March 2020, <https://www.straitstimes.com/politics/four-books-banned-for-extremist-content>.

Besides curbing the rate of radicalisation locally, these same regulations also make it difficult for radicalised individuals to form large groups to plan and coordinate attacks, as it would be difficult to find like-minded individuals within the community. Notably, from the compilation of detained individuals done earlier, the only mass arrests of groups of radicalised individuals were that of the JI members from 2001-2002 and the ISIS-linked Bangladeshi group in 2017. The remaining detainees only managed to associate with small groups of radicalised individuals that numbered no more than four or five members.

In addition, Singapore's counter-terrorism agencies have a proven track record of being able to interdict radicalised individuals and groups before they execute terrorist acts on Singaporean soil. Excellence in this field has been driven by the concern that "race and religion [is] the country's 'most visceral and dangerous fault line,'" <sup>244</sup> and "that a 'single flashpoint' such as a terrorist attack could destroy decades of harmony building efforts." <sup>245</sup> To that end, Singapore has implemented a holistic counterterrorism approach that spans multiple fields.

First, Singapore's counterterrorism agencies' considerable powers of surveillance and detention have allowed them to "detect, deter, and disrupt threats" before they

---

<sup>244</sup> Prime Minister's Office, "National Day Rally 2009 Speech by Prime Minister Lee Hsien Loong," 16 August 2009, accessed 29 March 2020, <https://www.pmo.gov.sg/Newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2009-speech-english>.

<sup>245</sup> Hearn Yuit Gavin Chua, "Singapore's Approach to Counterterrorism," *CTC Sentinel* 2, no. 12 (December 2009), accessed 29 March 2020, <https://ctc.usma.edu/singapores-approach-to-counterterrorism/>.

materialise.<sup>246</sup> Here, Singapore’s ability to monitor internet traffic is decisive. While news reports on detentions of radicalised individuals omit details of how the government had obtained information leading to their arrests, they consistently highlight that these individuals had accessed extremist propaganda through online sources. Legislation such as the Computer Misuse and Cybersecurity Act allows the government to “compel organisations to do pre-emptive surveillance,” leaving “online services and Internet Service Providers (ISPs) . . . at the mercy of the government.”<sup>247</sup> External reports also support the position that Singapore actively employs online and physical surveillance measures on a wide scale. The Facebook Transparency Report’s “Government Requests for User Data” dataset reveals such surveillance activities in action, noting that Singapore made 315 requests for user data in 2019 which, on a per capita basis, ranks it 11 out of 251 countries included in the report.<sup>248</sup> Privacy International’s 2015 report entitled *The Right to Privacy in Singapore* noted that “Singapore has a well-established, centrally controlled technological surveillance system designed to maintain social order and protect national interest and national security,” and that this system included the use of “CCTV, drones, internet monitoring, access to communications data, mandatory SIM card registration, identification required for registration to certain website [sic], to use of

---

<sup>246</sup> US Department of State (DoS), *Country Reports on Terrorism 2017 – Singapore*, 19 September 2018, accessed 31 March 2020, <https://www.refworld.org/docid/5bcf1f8213.html>.

<sup>247</sup> Terence Lee, “Singapore an advanced surveillance state, but citizens don’t mind,” *Tech in Asia*, 25 November 2013, accessed 31 March 2020, <https://www.techinasia.com/singapore-advanced-surveillance-state-citizens-mind>.

<sup>248</sup> Facebook, “Government Requests for User Data,” Facebook Transparency Report, accessed 31 March 2020, <https://transparency.facebook.com/>.

big data analytics for governance initiatives including traffic monitoring.”<sup>249</sup> While these surveillance measures no doubt raise significant privacy concerns, the same measures also give confidence that developing threats within Singapore would be interdicted before they actually manifest.

Second, Singapore has focused extensively on building social resilience and community engagement as a tool to “detect and prevent disruptions to a nation’s security, and where necessary, to absorb shocks and bounce back into a functioning condition after a crisis as quickly as possible.”<sup>250</sup> The Ministry of Home Affairs consistently exhorts the population to exercise vigilance, and in 2016 launched the SGSecure movement to “build the resilience of our community and a call to action to everyone in our multi-racial, multi-religious society to come together to safeguard Singapore and our way of life.” When announcing detentions of radicalised individuals, the Ministry also consistently reminds members of the public of their critical role in providing early warning of potential radicalisation, as “family members, friends, colleagues and employers are best placed to notice possible signs of radicalisation.”<sup>251</sup> The government also makes concerted public engagement efforts to raise awareness on terrorism. For example, the military and

---

<sup>249</sup> Privacy International, *The Right to Privacy in Singapore*, Universal Periodic Review Stakeholder Report: 24th Session, Singapore, June 2015, accessed 31 March 2020, [https://privacyinternational.org/sites/default/files/2017-12/Singapore\\_UPR\\_PI\\_submission\\_FINAL.pdf](https://privacyinternational.org/sites/default/files/2017-12/Singapore_UPR_PI_submission_FINAL.pdf).

<sup>250</sup> Chua, “Singapore’s Approach to Counterterrorism,” 21.

<sup>251</sup> Ministry of Home Affairs, “Detention of Three Radicalised Indonesian Nationals Under the Internal Security Act,” Press Release, 23 September 2019, accessed 31 March 2020, <https://www.mha.gov.sg/newsroom/press-release/news/detention-of-three-radicalised-indonesian-nationals-under-the-internal-security-act>.

internal security agencies periodically conduct counterterrorism exercises under the Exercise Northstar series. Noting that “civilians must have seen the terrorists moving through the streets carrying their equipment” during the 2008 Mumbai attacks, Prime Minister Lee Hsien Loong said that such exercises to raise awareness would ensure that “civilians would immediately notify authorities if such an event were to occur in Singapore.”<sup>252</sup>

Third, understanding that transnational terrorism requires assistance beyond her own borders, Singapore has actively advocated for and participated in international counterterrorism cooperation initiatives. In doing so, Singapore has “not only cooperated and collaborated with . . . regional and international partners,” but also “shared [her] resources and knowledge to create a strong regional counterterrorism environment.”<sup>253</sup> Singapore fostered close counterterrorism cooperation ties with the US, Australia, and Japan, especially since these nations share congruent security interests in the region.<sup>254</sup> For her efforts, the US Department of State lauded Singapore as a “committed, active, and effective counterterrorism partner in 2017.”<sup>255</sup> Fostering open cooperation and reciprocal intelligence sharing has led to enhanced counterterrorism capabilities locally

---

<sup>252</sup> Chua, “Singapore’s Approach to Counterterrorism,” 23.

<sup>253</sup> Rohan Gunaratna, “Sustaining the War on Terrorism: Singapore’s International Counterterrorism Cooperation,” *RSIS Commentaries*, no. 139 (25 July 2013): 1, accessed 31 March 2020, <https://www.rsis.edu.sg/rsis-publication/icpvtr/2027-sustaining-the-war-on-terroris/>.

<sup>254</sup> Andrew T.H. Tan, “Singapore’s Cooperation with the Trilateral Security Dialogue Partners in the War Against Global Terrorism,” *Defence Studies* 7, no. 2 (June 2007): 204-205, accessed 31 March 2020, <https://doi.org/10.1080/14702430701338015>.

<sup>255</sup> DoS, *Country Reports on Terrorism 2017 – Singapore*.



and in the region. Malaysia's arrest of over three dozen terrorists has been credited to close cooperation between both countries, and Singapore has also received reciprocal assistance from the Malaysian Special Branch in its regional counterterrorism efforts.<sup>256</sup>

As a result of Singapore's robust approach to counterterrorism, potential threats that might otherwise have manifested have instead resulted in preventive detentions and restriction orders issued under the ISA. Together, with the considerable measures to prevent self-radicalisation in Singapore, it would be difficult for radicalised individuals to successfully travel overseas to conflict theatres or conduct large-scale attacks locally in support of terrorist causes, thus this threat is unlikely to severely threaten Singapore's ability to maintain public order. As a result, the expected level of severity is assessed to be "Negligible."

### Section 3: Overall Risk Assessment

Compositing the probability and severity assessments for each SRQ allows us to arrive at the individual risk assessment estimates for each SRQ. These are represented in Figure 4 below. In line with the conservative estimate approach that this thesis aims to provide (as described in Chapter 3), the overall risk assessment estimate is equivalent to the risk estimate for SRQ 2. Put another way, the unique implications of a Chinese-funded Kra Canal for Singapore would pose the most significant risk to her security out of the three hazards identified. While Singapore has the ability to mitigate the diminished geopolitical influence (SRQ 1) and the threats to her physical security posed by transnational terrorism (SRQ 3), she is less able to mitigate the consequences of coercion

---

<sup>256</sup> DoS, *Country Reports on Terrorism 2017 – Singapore*, 1-2.

from China (SRQ 2). The overall risk assessment for the Kra Canal’s impact on Singapore’s security is therefore estimated as “Medium.”

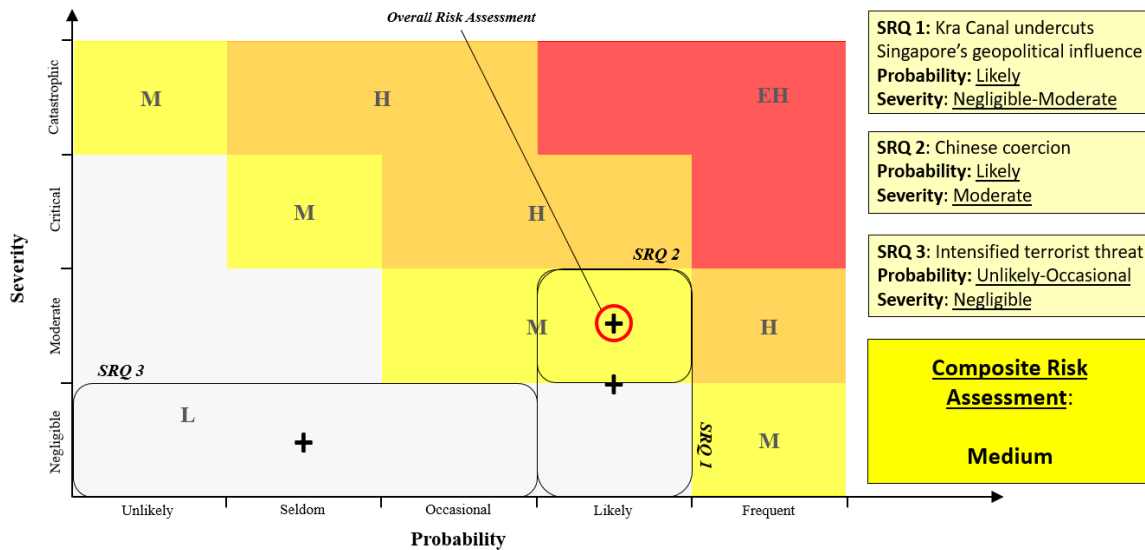


Figure 4. Overall Risk Assessment

Source: Created by author.

What does this mean for Singapore? Going back to the definition of national security in the Singaporean context, the Kra Canal’s construction is expected to predominantly impact Singapore’s sovereignty, with little impact to Singapore’s physical security and her ability to maintain public order. In particular, Singapore’s foreign policy approach may no longer be as practicable in a new geopolitical reality where her particular-intrinsic, collective, and derivative powers are reduced. Coercion from China would most likely increase, and Singapore will also find that her bargaining position in foreign policy matters might be affected. While tangible, however, the impact will certainly not be existential, and would largely be felt when tackling issues that are of

particular interest to China. In addition, Singapore's established identity as a diplomatic, financial and business, and trading hub will mitigate some of her lost power on the international stage, as she continues to engineer her own relevance going forward into the future.

### Summary

This chapter set out to analyse the risks posed by the Kra Canal's construction to Singapore's security. Using Tom Long's framework of small state power, it was found that by undermining Singapore's relative advantages granted by her fortuitous geographical position, the Kra Canal would erode her particular-intrinsic, collective, and derivative power. This diminished power would therefore worsen Singapore's bargaining position in her bilateral and multilateral relationships. In terms of physical security, regional conflict in southern Thailand is unlikely to become internationalised as separatist organisations are unlikely to associate themselves with international jihadist movements. Even if they do, Singapore's proven robust counterterrorism approach is able to mitigate the risk to physical security posed.

As a whole, therefore, the construction of the Kra Canal is assessed to pose a medium risk to Singapore's security. While Singapore's sovereign ability to pursue her own strategic interests will be affected, this is likely to be limited to issues of particular interest to China. In other areas, while Singapore's bargaining position may be weakened, her ability to create her own relevance and therefore bolster her particular-intrinsic power would mitigate the impact of the Kra Canal's construction.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

Singaporean textbooks often credit her strategic location along one of the world's busiest trade routes as the key driving factor for her early success as an entrepot trading hub. It therefore comes as no surprise that the British in 1800s-1900s moved to prevent the construction of the Kra Canal, as the canal would significantly undermine the value of their Crown Colony in Singapore. Since Singapore's independence, though, she has diversified her economy away from trade, building a strong reputation as a financial and business hub. Accordingly, scholars and commentators have recognised that the construction of the Kra Canal today would no longer constitute an existential threat to Singapore's economy. Less clear, however, are the security and geopolitical implications that the Kra Canal would have on Singapore.

This thesis thus set out to fill that gap in the literature by assessing the risks posed by the Kra Canal in three areas: its potential to undermine Singapore's geopolitical strength, increase coercion by China, and intensify the terrorist threat to Singapore. Employing the US Army's Risk Management process as a framework for analysis, it assessed the probability and severity associated with each of these hazards, and provided an overall risk assessment estimate for the expected impact of the Kra Canal on Singapore's security. In terms of the impact to Singapore's sovereign ability to make her own strategic decisions free of coercion, this thesis analysed the impact the Kra Canal would have on Singapore's particular-intrinsic, derivative, and collective power. In terms of physical security, this thesis analysed the likelihood of the separatist conflict in

southern Thailand spreading to Singapore, and the ability of Singaporean authorities to counter potential terrorist threats.

Overall, this thesis assessed that the construction of the Kra Canal would pose a medium risk to Singapore's security. The most significant risk is likely to be posed by increased Chinese coercion. Given that a Chinese-funded Kra Canal would likely mean a Chinese-controlled Kra Canal, this would allow China to overcome the Malacca Dilemma and weaken Singapore's bargaining position in the relationship. This risk is especially pertinent given China's propensity to coerce smaller states such as Cambodia and Laos to adopt Chinese-leaning stances in their conduct of foreign policy, thereby undermining ASEAN unity and eroding it as a significant source of Singapore's collective power. 2016's South China Sea saga, where China took punitive measures in retaliation for Singapore's speaking out against Chinese territorial grabs in the region, is indicative of how China is likely to use its strengthened position to the detriment of those who would act in ways that do not support her interests. These actions have threatened the rules-based international order that is central to Singapore's foreign policy approach and her security, and offer a glimpse of potential Chinese coercion should China control the Kra Canal.

This thesis also found that Singapore's geopolitical advantages afforded by its strategic position will likely be eroded by the construction of the Kra Canal, thus hurting Singapore's particular-intrinsic power. It would also affect the regional Great Power balance as the US would seek to potentially re-allocate resources to Thailand in order to counter increased Chinese influence in the country and to bolster its drifting alliance. However, Singapore would likely be able to mitigate the erosion of its particular-intrinsic

and derivative power by continuing to build on its strong identity as a leading diplomatic, finance and business, and trading hub in the region. Singapore's strong "soft" infrastructure also makes it difficult to completely supplant it as a regional leader in these fields.

Finally, an analysis of the separatist conflict in Thailand's southern provinces showed that it was unlikely for the conflict to be internationalised, due to the aversion of separatist organisations towards radical jihadist movements. Even if the conflict begins to take on a more radical tone, experience from previous radical terrorist movements such as that of Al-Qaeda and ISIS predicts that only a small number of Singaporeans would become radicalised. Even then, law enforcement and counterterrorism agencies have proved their ability to interdict these individuals before any significant attack can actually be carried out. As such, the construction of the Kra Canal is not expected to pose a large terrorism risk to Singapore.

### Policy Implications

These findings yield several policy implications for Singapore. First, it is evident that the construction of the Kra Canal will hurt Singapore both economically and diplomatically, though there are several mitigating factors that limit the damage. Singapore should therefore find ways to actively participate and share in the potential profits of the Kra Canal project to offset some of these losses. This would also allow Singapore to diversify further away from Straits of Malacca-based trade as an engine of economic growth. For example, Singapore's sovereign wealth funds could invest in the Kra Canal's surrounding SEZ, much like how Singapore invested in the flagship developments of Tianjin Eco-City and Suzhou Industrial Park in China. This is also

reminiscent of how the British Empire adapted to the construction of the Suez Canal when in its early years. Initially, the British objected to the canal's construction as it would threaten their monopoly over the trade route from Europe to Asia around the Cape of Good Hope. Eventually though, Prime Minister Disraeli in 1875 purchased for the United Kingdom 176,602 shares in the Suez Canal Company at the cost of four million pounds, yielding tremendous profits for the nation.<sup>257</sup> In a similar way, Singapore could turn a potential threat to its strong geographical position into a potentially profitable enterprise.

Second, it is clear that a Chinese-funded Kra Canal would likely result in a substantial increase in Chinese influence in Thailand and the greater Southeast Asian and Indian Ocean region. Chapter 4's analysis makes it clear that such influence could be wielded to threaten ASEAN unity and Singapore's foreign policy sovereignty, especially given China's track record of policies that are contrary to the rules-based international order. If the Kra Canal were ever to be built, Singapore should actively promote a multilateral financing model to prevent any single hegemon from having undue influence and control over the canal. On the surface, a possible option could be one of ASEAN financing of the project, however this might be difficult given the vastly unequal resources that the various economies in ASEAN possess and due to China's influence over Cambodia and Laos. A more plausible option would perhaps involve other nations such as South Korea and Japan that would also benefit from a shortened route from the Indian Ocean to the South China Sea.

---

<sup>257</sup> Halford L. Hoskins, "Suez Canal Problems," *Geographical Review* 30, no. 4 (October 1940): 667-669, accessed 25 March 2020, <https://www.jstor.org/stable/210540>.

Third, to reduce the likelihood of the separatist conflict southern Thailand spreading beyond the country's borders, Singapore could encourage Thailand to adopt a more reconciliatory approach in handling the conflict. As opined by various researchers, a protraction of the conflict or an adoption of repressive policies would increase the appeal for separatists to associate with radical jihadist movements, thereby increasing the likelihood of the conflict becoming internationalised. Singapore could share her expertise in rehabilitating radicalised individuals, which has been considered as the "gold standard" for terrorist rehabilitation.<sup>258</sup> This would aid in arresting any potential radicalisation in southern Thailand before it spreads further, thereby reducing the probability of contagion across country borders. In terms of prevention, Singapore should maintain close international counterterrorism cooperation links, and in particular seek early warning on emerging links between Thai separatist organisations and international jihadist movements.

#### Way Ahead for Future Research

Given that the Kra Canal has remained in the realm of possibility for the past three and a half centuries, it therefore comes as no surprise that little research has been done on the topic. More recently, with the increase in interest surrounding the topic and the increasing congestion in the Straits of Malacca, construction of the canal has become

---

<sup>258</sup> Nurfilzah Rohaidi, "Exclusive: Can Singapore really rehabilitate terrorists?" *GovInsider*, 5 April 2017, accessed 14 April 2020, <https://govinsider.asia/security/laptops-containing-millions-of-hong-kong-voters-personal-data-stolen/>.



an increasingly plausible scenario. As such, we would likely see a concomitant increase in academic interest surrounding this topic.

This thesis has served as a starting point for research into the geopolitical impacts of the Kra Canal, but its scope has been largely Singapore-centric. While some attention was paid to the implications for larger powers, such as US and China, the scope of this thesis has precluded a dedicated study of how the Great Power balance in the region might be affected by the canal's construction. Given that the Indo-Pacific region is set to be one of the world's major engines of economic growth in the coming few decades, future studies into the economic and geopolitical impacts of the canal on the Great Power balance in the region is warranted.

Further study into the geopolitical impact of the canal's construction on Thailand is also necessary, especially if it should be Chinese-funded. This would put Thailand in an especially uncomfortable position between both the US and China, given its longstanding alliance with the US.

## ILLUSTRATIONS

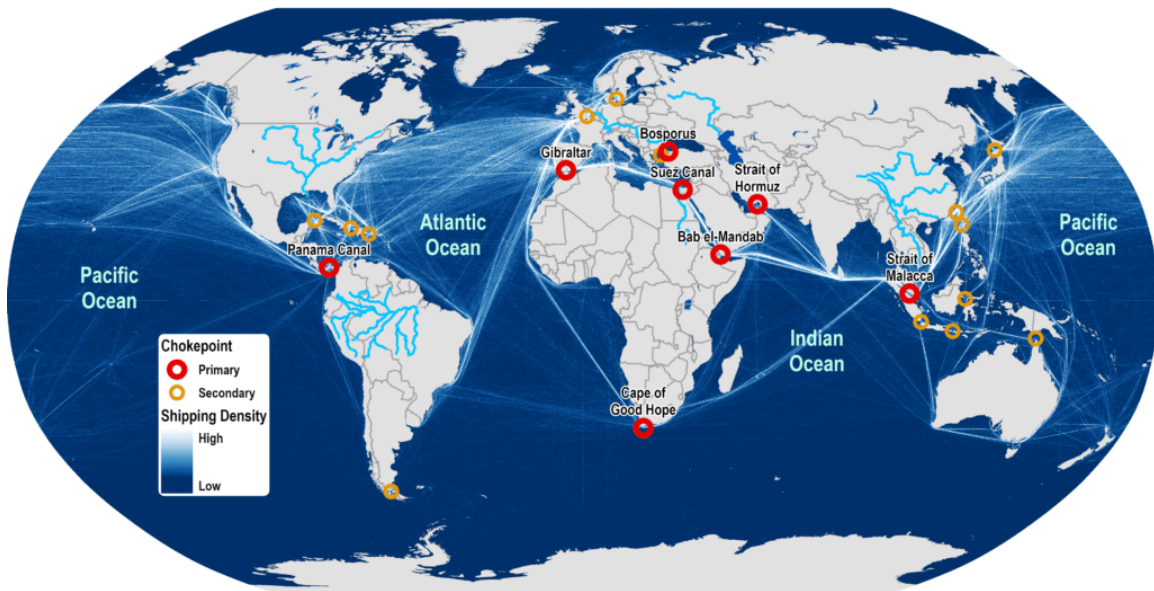


Figure 5. Map of World Trading Routes

*Source:* Jean-Paul Rodrigue, “Domains of Maritime Circulation,” *Geography of Transport Systems*, accessed 12 April 2020, [https://transportgeography.org/wp-content/uploads/Map\\_Maritime-Circulation.pdf](https://transportgeography.org/wp-content/uploads/Map_Maritime-Circulation.pdf); Shipping Density Data from National Center for Ecological Analysis and Synthesis, “A Global Map of Human Impacts to Marine Ecosystems.”

## GLOSSARY

Casus belli. An event or action that justifies or allegedly justifies a war or conflict.<sup>259</sup>

Ceteris paribus. Holding all other things constant.

Entrepot. An intermediary centre for trade and transshipment, where goods are primarily imported, stored and traded, usually to be exported again.<sup>260</sup>

---

<sup>259</sup> Merriam-Webster, “Casus Belli,” accessed 25 March 2020, <https://www.merriam-webster.com/dictionary/casus%20belli>.

<sup>260</sup> Merriam-Webster, “Entrepot,” accessed 25 March 2020, <https://www.merriam-webster.com/dictionary/entrep%C3%B4t>.

APPENDIX A

DETENTIONS OF RADICALISED INDIVIDUALS IN SINGAPORE

UNDER THE INTERNAL SECURITY ACT

| Table 4. Detentions of Radicalised Individuals in Singapore<br>(al-Qaeda/JI-centric Phase, 2001-2014) |                          |                    |                                 |                   |             |                                   |   |   |                                      |
|---|--------------------------|--------------------|---------------------------------|-------------------|-------------|-----------------------------------|---|---|--------------------------------------|
| Date of Detention   | Nationality              | Sex/Age            | Source of Radicalisation        |                   |             | Terrorism-Related Actions         |   |   |                                      |
|   |                          |                    | Social media/<br>online content | Radical preachers | Influencers | Fund-raising/<br>material support | Planned/<br>actual travel to<br>conflict theatres | Planned to<br>conduct attacks in<br>Singapore | Spread pro-<br>terrorist<br>messages |
| Dec 01  | 13 x mostly Singaporeans | M, 29-51           | JI members                      |                   |             |                                   | ✓   | ✓   |                                      |
| Aug 02  | 18 x mostly Singaporeans | M,                 | 17 x JI / 1 x MILF members      |                   |             |                                   | ✓   | ✓   |                                      |
| Oct 03  | Singaporean              | M, 20              |                                 |                   | ✓           |                                   | ✓   |   |                                      |
|   | Singaporean              | M, 20              |                                 |                   | ✓           |                                   | ✓   |   |                                      |
| Feb 06  | Singaporean              | M, 45              |                                 | ✓                 |             |                                   | ✓   | ✓   |                                      |
| Feb 07  | Singaporean              | M, 28 <sup>A</sup> | ✓                               |                   |             |                                   | ✓   |   |                                      |
| 2008  | Singaporean              | M, 26              | ✓                               |                   |             |                                   | ✓   |   | ✓                                    |
|   | Singaporean              | M, 26              | ✓                               |                   |             |                                   | ✓   |   |                                      |
| Nov 09  | Unknown                  | M, age unknown     | Unknown                         |                   |             | Unknown                           |   |   |                                      |
| Apr 10  | Singaporean              | M, 20 <sup>B</sup> | ✓                               | ✓                 |             |                                   | ✓   |   | ✓                                    |
| Mar 12  | Singaporean              | M, 43              | Unknown                         |                   |             |                                   | ✓   | ✓   |                                      |
| Jun 12  | Singaporean              | M, age unknown     |                                 |                   |             |                                   | ✓   |   |                                      |
| Oct 12  | Singaporean              | M, 33 <sup>A</sup> | ✓                               |                   |             |                                   | ✓   |   |                                      |
| Mar 13  | Singaporean              | M, 25*             | ✓                               |                   |             |                                   | ✓   |   |                                      |
| Nov 13  | Singaporean              | M, 24              |                                 |                   | ✓           |                                   |   | ✓   | ✓                                    |

<sup>A,B</sup> – Repeat detentions tagged accordingly  
\* — Asyrani Hussaini was the only known Singaporean to have attempted to join the southern Thailand separatist movement.  
Note: This table excludes individuals placed under Restriction Orders (RO).

Table 5. Detentions of Radicalised Individuals in Singapore (ISIS-Centric Phase, 2014-Present)

| Date of Detention | Nationality       | Sex/Age            | Source of Radicalisation    |                   |             | Terrorism-Related Actions     |  |   |                               |
|-------------------|-------------------|--------------------|-----------------------------|-------------------|-------------|-------------------------------|--|---|-------------------------------|
|                   |                   |                    | Social media/online content | Radical preachers | Influencers | Fund-raising/material support | Planned/actual travel to conflict theatres | Planned to conduct attacks in Singapore | Spread pro-terrorist messages |
| Apr 15            | Singaporean       | M, 19              | ✓                           |                   |             |                               | ✓  | ✓                                       | ✓                             |
|                   | Singaporean       | M, 17              | No details provided         |                   |             |                               |  |   |                               |
| Jul 15            | Singaporean       | M, 51              | ✓                           | ✓                 |             |                               | ✓  | ✓                                       |                               |
| Jul 15            | Singaporean       | M, 29              | ✓                           |                   |             |                               | ✓  |   | ✓                             |
| Aug 15            | Singaporean       | M, 18              | ✓                           |                   |             |                               | ✓  |   | ✓                             |
| Jan 16            | 27 x Bangladeshis | M, 25-40           |                             | ✓                 |             | ✓                             | ✓  |   |                               |
| Jul 16            | Singaporean       | M, 27 <sup>B</sup> | ✓                           | ✓                 |             |                               | ✓  |   |                               |
| Jul 16            | Singaporean       | M, 44              | ✓                           | ✓                 |             |                               |  |   | ✓                             |
| Aug 16            | Singaporean       | M, 50              | ✓                           | ✓                 |             |                               | ✓  |   |                               |
|                   | Singaporean       | M, 33              | ✓                           | ✓                 |             |                               | ✓  |   |                               |
| Jun 17            | Singaporean       | F, 22              | ✓                           |                   |             |                               | ✓  |   | ✓                             |
| Jun 17            | Singaporean       | M, 24              | ✓                           |                   |             |                               | ✓  |   |                               |
| Nov 17            | Singaporean       | F, 38              | ✓                           |                   |             |                               | ✓  |   |                               |
|                   | Singaporean       | M, 25              |                             | ✓                 |             |                               | ✓  |   | ✓                             |
| Feb 18            | Singaporean       | M, 33              |                             | ✓                 |             |                               |  | ✓                                       | ✓                             |
| May 18            | Singaporean       | M, 27              |                             | ✓                 |             |                               | ✓  |   |                               |
| Sep 18            | Singaporean       | M, 33              |                             | ✓                 |             |                               |  |   | ✓                             |
| Feb 19            | Singaporean       | M, 48              |                             |                   | ✓           | ✓                             | ✓  |   | ✓                             |
|                   | Singaporean       | M, 28              |                             |                   | ✓           |                               |  |   |                               |
| Jun 19            | Singaporean       | M, 40              |                             | ✓                 |             |                               | ✓  |   |                               |
| Jul 19            | Singaporean       | M, 47              | ✓                           | ✓                 |             | ✓                             |  |   |                               |
|                   | Singaporean       | M, 36              | ✓                           | ✓                 |             | ✓                             | ✓  |   |                               |
| Sep 19            | Indonesian        | F, 36              | ✓                           |                   |             | ✓                             |  |   | ✓                             |
|                   | Indonesian        | F, 33              | ✓                           |                   |             | ✓                             |  |   | ✓                             |
|                   | Indonesian        | F, 31              | ✓                           |                   |             | ✓                             |  |   | ✓                             |
| Feb 2020          | Singaporean       | M, 17              | ✓                           |                   |             |                               |  |   | ✓                             |

<sup>A,B</sup> – Repeat detentions tagged accordingly

\* — Asyrani Hussaini was the only known Singaporean to have attempted to join the southern Thailand separatist movement.

Note: This table excludes individuals placed under Restriction Orders (RO).

Source: Data for Table 4 and Table 5 derived from: Rachel Chang, “Self-radicalised Singaporeans who were previously detained,” *The Straits Times*, 29 May 2015, accessed 29 March 2019, <https://www.straitstimes.com/singapore/self-radicalised-singaporeans-who-were-previously-detained>; Danson Cheong, “Radicalised female infant care assistant from PCF Sparkletots detained under ISA for pro-ISIS activities,” *The Straits Times*, 12 June 2017, accessed 29 March 2019, <https://www.straitstimes.com/singapore/radicalised-female-infant-care-assistant-from-pcf-sparkletots-detained-under-isa-for-pro>; Danson Cheong, “Two Singaporeans, including a housewife, detained under ISA for terror-related activities,” *The Straits Times*, 9 November 2017, accessed 29 March 2019, <https://www.straitstimes.com/singapore/two-singaporeans-one-a-woman-detained-under-isa-for-terror-related-activities>; Ministry of Home Affairs Singapore, “Detention and Releases under the Internal Security Act: Order of Detention Issued against Zulfikar Shariff,” 29 July 2016, accessed 29 March 2019, <https://www.mha.gov.sg/newsroom/press-release/news/detention-and-releases-under-the-internal-security-act>; Muhammad Haniff Hassan and Tuty Raihanah Mostarom, *A Decade of Combating Radical Ideology: Learning from the Singapore Experience (2001-2011)*. RSIS Monograph no. 20 (Singapore: S. Rajaratnam School of International Studies, 2011), accessed date, <https://www.rsis.edu.sg/wp-content/uploads/2000/01/Monograph20.pdf>; Zakir Hussain, “Singaporean businessman, who funded ISIS fighter, and his friend detained under ISA,” *The Straits Times*, 15 February 2019, accessed 29 March 2019, <https://www.straitstimes.com/singapore/two-radicalised-singaporeans-detained-under-internal-security-act-for-involvement-in>; Ministry of Home Affairs Singapore, “Issuance of Order of Detention and Restriction Order Under The Internal Security Act,” 20 June 2017, accessed 29 March 2019, <https://www.mha.gov.sg/newsroom/press-release/news/issuance-of-order-of-detention-and-restriction-order-under-the-internal-security-act>; Min Kok Lee, “27 radicalised Bangladeshis arrested in Singapore under Internal Security Act: MHA,” *The Straits Times*, 20 January 2016, accessed 29 March 2019, <https://www.straitstimes.com/singapore/courts-crime/27-radicalised-bangladeshis-arrested-in-singapore-under-internal-security-act>; Adrian Lim, “2 radicalised Singaporeans who intended to join ISIS in Syria detained under ISA,” *The Straits Times*, 25 July 2019, accessed 29 March 2019, <https://www.straitstimes.com/politics/2-radicalised-singaporeans-who-intended-to-join-isis-in-syria-detained-under-isa>; Yan Lian Lim, “2 Singaporeans planning to join ISIS detained, 2 others on Restriction Orders: MHA,” *The Straits Times*, 19 August 2016, accessed 29 March 2019, <https://www.straitstimes.com/singapore/2-singaporeans-planning-to-join-isis-detained-2-others-on-restriction-orders-mha>; Yan Lian Lim, “51-year-old Singaporean man deported from Turkey and detained for trying to join ISIS,” *The Straits Times*, 28 July 2015, accessed 29 March 2019, <https://www.straitstimes.com/singapore/51-year-old-singaporean-man-deported-from-turkey-and-detained-for-trying-to-join-isis>; Yan Liang Lim, “Man detained again, restrictions for teen,” *The Straits Times*, 30 July 2016, Accessed 29 March 2019. <https://www.straitstimes.com/singapore/man-detained-again-restrictions-for-teen>; Yan Liang Lim, “Singaporean Zulfikar Mohamad Shariff, 44, detained under ISA for promoting violence and ISIS, radicalising others,” *The Straits Times*, 29 July 2016, accessed 29 March 2019, <https://www.straitstimes.com/singapore/44-year-old-singaporean-detained-under-isa-for-promoting-violence-and-isis>

radicalising; Yan Liang Lim, “Two Singaporeans detained for making plans to travel to Syria to join ISIS,” *The Straits Times*, 30 September 2015, accessed 29 March 2019, <https://www.straitstimes.com/singapore/courts-crime/two-singaporeans-detained-for-making-plans-to-travel-to-syria-to-join-isis>; Today, “Mas Selamat’s son detained for two years,” 9 January 2014, accessed 29 March 2019, <https://www.todayonline.com/singapore/mas-selamats-son-detained-two-years>; Bei Yi Seow, “Parking warden who was radicalised online detained under Internal Security Act,” *The Straits Times*, 11 May 2018, accessed 29 March 2019, <https://www.straitstimes.com/singapore/parking-warden-who-was-radicalised-online-detained-under-internal-security-act-mha>; Bei Yi Seow, “Self-radicalised Malaysian man with access to Changi Airfreight Centre arrested and repatriated: MHA,” *The Straits Times*, 9 February 2018, accessed 29 March 2019, <https://www.straitstimes.com/singapore/self-radicalised-msian-man-with-access-to-changi-airfreight-centre-arrested-and>; Al Jazeera, “Singapore arrests Indonesian domestic workers for ‘funding’ ISIL,” 24 September 2019, accessed 29 March 2019, <https://www.aljazeera.com/news/2019/09/singapore-detains-indonesian-domestic-workers-funding-isil-190924060952889.html>; CNN, “S’pore arrests ‘future’ JI leaders,” 18 December 2003, accessed 29 March 2019, <https://www.cnn.com/2003/WORLD/asiapcf/12/18/singapore.arrests.reut/>; Yee Lin Tan, “Mas Selamat bin Kastari,” National Library Singapore, accessed 29 March 2019, [https://eresources.nlb.gov.sg/infopedia/articles/SIP\\_1602\\_2009-10-31.html](https://eresources.nlb.gov.sg/infopedia/articles/SIP_1602_2009-10-31.html); Yuen-C. Tham, “Radicalised Singaporean engineer detained under Internal Security Act,” *The Straits Times*, 12 September 2018, accessed 29 March 2019, <https://www.straitstimes.com/politics/radicalised-singaporean-engineer-detained-under-internal-security-act>; Yuen-C. Tham, “Three radicalised persons dealt with under ISA,” *The Straits Times*, 26 June 2019, accessed 29 March 2019, <https://www.straitstimes.com/singapore/three-radicalised-persons-dealt-with-under-isa>; AsiaOne, “Two senior JI members detained under ISA,” 11 October 2012, accessed 29 March 2019, <https://www.asiaone.com/print/News/Latest%2BNews/Singapore/Story/A1Story20121011-377048.html>; Yahoo! Newsroom, “Two persons detained in S’pore for terrorism activities,” 11 October 2012, accessed 29 March 2019, <https://www.yahoo.com/lifestyle/two-persons-detained-in-s-pore-for-terrorism-activities-.html>; Siew Ying Wong, “2 Singaporean youths radicalised by ISIS arrested, one of them detained for planning terror attacks,” *The Straits Times*, 27 May 2015, accessed 29 March 2019, <https://www.straitstimes.com/singapore/2-singaporean-youths-radicalised-by-isis-arrested-one-of-them-detained-for-planning-terror>.

## BIBLIOGRAPHY

- Aamir, Adnan. "Just who will the China-Pakistan Economic Corridor really benefit?" *South China Morning Post*, 13 September 2017. Accessed 27 November 2019. <https://www.scmp.com/comment/insight-opinion/article/2110802/just-who-will-china-pakistan-economic-corridor-really>.
- Abdul Rahman, Noorul Shaiful Fitri, Nurul Haqimin Mohd Salleh, Ahmad Fayas Ahmad Najib, and Venus Y.H. Lun. "A Descriptive Method for Analysing the Kra Canal Decision on Maritime Business Patterns in Malaysia." *Journal of Shipping and Trade* 1, no. 1 (2016): 13. Accessed 25 January 2020. <https://doi.org/10.1186/s41072-016-0016-0>.
- Abi-habib, Maria. "How China Got Sri Lanka to Cough Up a Port." *The New York Times*, 25 June 2018. Accessed 17 September 2019. <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>.
- Abuza, Zachary. "America should be realistic about its alliance with Thailand." *War on the Rocks*, 2 January 2020. Accessed 30 March 2020. <https://warontherocks.com/2020/01/america-should-be-realistic-about-its-alliance-with-thailand/>.
- . "The Moro Islamic Liberation Front at 20: State of the Revolution." *Studies in Conflict and Terrorism* 28, no. 6 (January 2005): 453-479. Accessed 28 March 2020. <https://doi.org/10.1080/10576100500236881>.
- Alatas, Syed Farid. "Singapore Muslim leaders must tackle rise of anti-Shi'ism hate speech." *The Straits Times*, 26 August 2017. Accessed 28 March 2020. <https://www.straitstimes.com/opinion/spore-muslim-leaders-must-tackle-rise-of-anti-shiism-hate-speech>.
- Ang, Cheng Guan. "Singapore's Conception of Security." In *Perspectives on the Security of Singapore: The First 50 Years*, edited by Barry Desker and Cheng Guan Ang, 3-19. Singapore: World Scientific, 2016.
- "Asean Nations Fail to Reach Agreement on South China Sea." *BBC News*, July 13, 2012. <https://www.bbc.com/news/world-asia-18825148> (accessed December 5, 2019).
- "ASEAN pushing global GDP growth." *The ASEAN Post*, 23 October 2019. Accessed 5 April 2020. <https://theaseanpost.com/article/asean-pushing-global-gdp-growth>.
- Baharudin, Hariz. "Former religious teacher and student placed on Restriction Order under ISA." *The Straits Times*, 16 January 2019. Accessed 29 March 2020. <https://www.straitstimes.com/singapore/former-freelance-religious-teacher-and-student-placed-on-restriction-order-under-isa>.



- Bateman, Sam, Joshua Ho, and Mathew Mathai. "Shipping Patterns in the Malacca and Singapore Straits: An Assessment of the Risks to Different Types of Vessel." *Contemporary Southeast Asia* 29, no. 2 (2007): 309-32. Accessed 7 January 2020. [www.jstor.org/stable/25798833](http://www.jstor.org/stable/25798833).
- Billington, Michael O. "Kra Canal, One of LaRouche's 'Great Projects', Is Back on the Agenda." *Executive Intelligence Review* 38, no. 34 (September 2, 2011): 17-19. Accessed 20 September 2019. [https://larouchepub.com/eiw/public/2011/eirv38n34-20110902/17-19\\_3834.pdf](https://larouchepub.com/eiw/public/2011/eirv38n34-20110902/17-19_3834.pdf).
- bin Ishak, Yusof. "Yang Di-Pertuan Negara's Speech." First Session of the Legislative Assembly. 8 December 1965. Accessed 29 October 2019. [https://sprs.parl.gov.sg/search/topic?reportid=004\\_19651208\\_S0005\\_T0015](https://sprs.parl.gov.sg/search/topic?reportid=004_19651208_S0005_T0015).
- Bos, Lieke. "Why Is China Playing Hardball with Singapore?" *The Diplomat*, December 14, 2016. <https://thediplomat.com/2016/12/why-is-china-playing-hardball-with-singapore/>.
- Calamur, Krishnadev. "High Traffic, High Risk in the Strait of Malacca." *The Atlantic*, 23 August 2017. Accessed 23 November 2019. <https://www.theatlantic.com/international/archive/2017/08/strait-of-malacca-uss-john-mccain/537471/>.
- "Canal Conundrum." *Indo-Pacific Defense Forum*, January 28, 2019. <http://apdf-magazine.com/canal-conundrum/>.
- Chang, Rachel. "Singaporean who attempted to join Thai insurgents detained under ISA." *The Straits Times*, 12 September 2013. Accessed 28 March 2020. <https://www.straitstimes.com/singapore/singaporean-who-attempted-to-join-thai-insurgents-detained-under-isa>.
- Chen, Ching-mu, and Satoru Kumagai. "Economic impacts of the Kra Canal: An application of the automatic calculation of sea distances by a GIS". IDE Discussion Paper No. 568, Institute of Developing Economies, Japan External Trade Organization (JETRO), 2016. Accessed 23 January 2020. <http://hdl.handle.net/2344/1529>.
- Chiew, Hui Min. "Renewed Hype over China-Thai Canal Project: 5 Things about the Kra Canal." *The Straits Times*, 21 May 2015. Accessed 28 October 2019. <https://www.straitstimes.com/asia/se-asia/renewed-hype-over-china-thai-canal-project-5-things-about-the-kra-canal>.
- "China's Belt and Road Initiative: Too Much of a Good Thing?" *Asia Sentinel*, 9 July 2018. Accessed 4 April 2020. <https://www.asiasentinel.com/p/china-belt-road-initiative-too-much-good-thing>.

- “China Builds up Strategic Sea Lanes.” *The Washington Times*, 17 January 2005. Accessed 21 September 2019. <https://www.washingtontimes.com/news/2005/jan/17/20050117-115550-1929r/>.
- Chong, Ja Ian. “Diverging Paths? Singapore-China Relations and the East Asian Maritime Domain.” The National Bureau of Asian Research, April 26, 2017. <https://www.nbr.org/publication/diverging-paths-singapore-china-relations-and-the-east-asian-maritime-domain/>.
- Chua, Hearn Yuit Gavin. “Singapore’s Approach to Counterterrorism.” *CTC Sentinel* 2, no. 12 (December 2009). Accessed 29 March 2020. <https://ctc.usma.edu/singapores-approach-to-counterterrorism/>.
- Counter Extremism Project. “Thailand: Extremism & Counter-Extremism.” March 21, 2019. <https://www.counterextremism.com/countries/thailand>.
- Crispin, Shawn W. “A man, a plan, a canal...Thailand?” *Axis of Logic*, 1 February 2018. Accessed 28 October 2019. [http://axisoflogic.com/artman/publish/Article\\_78703.shtml](http://axisoflogic.com/artman/publish/Article_78703.shtml).
- Department of Statistics Singapore. “Highlights of General Household Survey 2015.” Accessed 28 March 2020. [https://www.singstat.gov.sg/-/media/files/visualising\\_data/infographics/ghs/highlights-of-ghs2015.pdf](https://www.singstat.gov.sg/-/media/files/visualising_data/infographics/ghs/highlights-of-ghs2015.pdf).
- Dosch, Jörn. “Security and the Challenge of Terrorism.” In *The Changing Dynamics of Southeast Asian Politics*, 71-115. Boulder, CO: Lynne Rienner Publishers, 2007.
- Encyclopædia Britannica. “Strait of Malacca.” 20 June 2019. Accessed 23 November 2019. <https://www.britannica.com/place/Strait-of-Malacca>.
- Facebook. “Government Requests for User Data.” Facebook Transparency Report. Accessed 31 March 2020. <https://transparency.facebook.com/>.
- Fox, Jonathan. “Is Ethnoreligious Conflict a Contagious Disease?” *Studies in Conflict & Terrorism* 27, no. 2 (2004): 89–106.
- Frécon, Eric. “Indonésie et Singapour: destins géoéconomiques parallèles de deux potentielles puissances sud-est asiatiques (Indonesia and Singapore: parallel geoeconomic destinies of two potential Southeast Asian powers).” *Hérodote* 151, no. 4 (2013): 148-163. Accessed 26 January 2020. <https://www.cairn.info/revue-herodote-2013-4-page-148.htm>
- Friedberg, Aaron L. *Beyond Air-sea Battle: The Debate over US Military Strategy in Asia*. London: Routledge [for the International Institute for Strategic Studies], 2014.

- Friedman, George. "There Are 2 Choke Points That Threaten Oil Trade between the Persian Gulf and East Asia." *Business Insider*, 18 April 2017. Accessed November 23, 2019. <https://www.businessinsider.com/maps-oil-trade-choke-points-person-gulf-and-east-asia-2017-4>.
- Goetschel, Laurent, ed. *Small States Inside and Outside the European Union: Interests and Policies*. Norwell: Kluwer Academic Publishers, 1998.
- Graham, Euan. *Japan's Sea Lane Security, 1940-2004 a Matter of Life and Death?* Abingdon: Routledge, 2006.
- Green, Mark. "China's Debt Diplomacy." *Foreign Policy*, 25 April 2019. Accessed 4 April 2020. <https://foreignpolicy.com/2019/04/25/chinas-debt-diplomacy/>.
- Gunaratna, Rohan. "The Changing Terrorist Threat Landscape in Singapore." In *Perspectives on the Security of Singapore: The First 50 Years*, edited by Barry Desker and Cheng Guan Ang, 229–252. Singapore: World Scientific, 2016.
- . "Sustaining the War on Terrorism: Singapore's International Counterterrorism Cooperation." *RSIS Commentaries*, no. 139 (25 July 2013): 1. Accessed 31 March 2020. <https://www.rsis.edu.sg/rsis-publication/icpvtr/2027-sustaining-the-war-on-terroris/>.
- Hand, Marcus. "Exclusive: Malacca Straits VLCC Traffic Doubles in a Decade as Shipping Traffic Hits All Time High in 2017." *Seatrade Maritime*, 19 February 2018. Accessed 15 September 2019. <https://www.seatrade-maritime.com/news/asia/exclusive-malacca-straits-vlcc-traffic-doubles-in-a-decade-as-shipping-traffic-hits-all-time-high-in-2017/>.
- Harish, S. P. "Changing Conflict Identities: The Case of the Southern Thailand Discord." IDSS Working Paper Series, S. Rajaratnam School of International Studies, Singapore, 2006. Accessed 9 January 2020. <https://www.rsis.edu.sg/rsis-publication/idss/107-wp107-changing-conflict-iden/#.XptfT8hKjIU>.
- Headquarters, Department of the Army. Army Techniques Publication 5-19, *Risk Management*. Washington, DC: Government Printing Office, August 21, 2006. [https://cgsc.blackboard.com/bbcswebdav/library/Library%20Content/Master%20Library/ATP/ATP\\_5-19\\_Ch1\\_8Sep14.pdf](https://cgsc.blackboard.com/bbcswebdav/library/Library%20Content/Master%20Library/ATP/ATP_5-19_Ch1_8Sep14.pdf).
- Henke, Uwe Parpart. "The Kra Canal: Gateway to Asia's Development." *FUSION* 6, no. 2 (July-August 1984): 22-25. Accessed 20 September 2019. <http://wlym.com/archive/fusion/fusion/19840708-fusion.pdf>.
- Henrikson, Alan K. "A Coming 'Magnesian' Age? Small States, the Global System, and the International Community." *Geopolitics* 6, no. 3 (2001): 49-86. Accessed 25 March 2020. <https://doi.org/10.1080/14650040108407729>.

- Hoskins, Halford L. "The Suez Canal as an International Waterway." *The American Journal of International Law* 37, no. 3 (July 1943): 373-385. Accessed 25 March 2020. <https://www.jstor.org/stable/2192719/>.
- . "Suez Canal Problems." *Geographical Review* 30, no. 4 (October 1940): 665-671. Accessed 25 March 2020. <https://www.jstor.org/stable/210540>.
- Hunt, Luke. "ASEAN Summit Fallout Continues." *The Diplomat*, 20 July 2012. Accessed 5 April 2020. <https://thediplomat.com/2012/07/asean-summit-fallout-continues-on/>.
- Hussain, Zakir. "How 15 Singaporeans were radicalised by ISIS ideology." *The Straits Times*, 16 July 2017. Accessed 28 March 2020. <https://www.straitstimes.com/singapore/radicalised-in-singapore>.
- IFENG.COM. "Considerations behind arranging for the return of fighting vehicles." 鳳凰頻頻. Video, You Tube, 10 January 2017. Accessed December 5, 2019. <https://www.youtube.com/watch?v=fU75O9iI3vg>.
- International Crisis Group. *Jihadism in Southern Thailand: A Phantom Menace*. Report no. 291. Bangkok/Brussels: International Crisis Group, 2017. Accessed 10 January 2020. <https://www.crisisgroup.org/asia/south-east-asia/thailand/291-jihadism-southern-thailand-phantom-menace>.
- International Monetary Fund. "World Economic Outlook Database." July 2019. Accessed November 22, 2019. <https://www.imf.org/external/pubs/ft/weo/2019/01/weodata/index.aspx>.
- "ISIS-linked newspaper banned in Singapore." *The Straits Times*, 23 July 2016. Accessed 29 March 2020. <https://www.straitstimes.com/singapore/isis-linked-newspaper-banned-in-singapore>.
- Kanwal, Gurmeet. "Pakistan's Gwadar Port: A New Naval Base in China's String of Pearls in the Indo-Pacific". CSIS Briefs. Center for Strategic and International Studies, 2018. Accessed 27 November 2019. [https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180717\\_Kanwal\\_PakistansGwadarPort.pdf](https://csis-prod.s3.amazonaws.com/s3fs-public/publication/180717_Kanwal_PakistansGwadarPort.pdf).
- Kaur, Karamjit. "Vessel Movements in Singapore, Malacca Straits Set to Rise 50% by 2030." *The Straits Times*, 25 September 2018. Accessed 15 September 2019. <https://www.straitstimes.com/singapore/transport/vessel-movements-in-singapore-malacca-straits-set-to-rise-50-by-2030>.
- Kausikan, Bilahari. "The Sovereignty of Small States." Singapore Perspectives, Lecture Series, Institute of Policy Studies. 26 January 2015. Accessed 29 October 2019. <https://www.ipscommons.sg/sp2015-speech-by-ambassador-bilahari-kausikan/>.

- . “Why Small Countries should not behave like a Small Country.” *Singapore Platform for East-West Dialogue* (blog). Ministry of Foreign Affairs, Singapore, October 11, 2017. Accessed 29 October 2019.  
<https://blogs.ntu.edu.sg/paralimes/2018/03/26/bilahari-smallcountries/>.
- Kinder, Ivica. “Strategic implications of the possible construction of the Thai Canal.” *Croatian International Relations Review* 13, no. 48/49 (2007): 109-118.
- Koh, Tommy. “The Great Powers and the Rule of Law.” *The Straits Times*, 22 July 2016.  
<https://www.straitstimes.com/opinion/the-great-powers-and-the-rule-of-law>.
- . “Why ASEAN is good for Singapore.” *The Straits Times*, 9 January 2018.  
 Accessed 5 April 2020. <https://www.straitstimes.com/opinion/why-asean-is-good-for-singapore>.
- “Kra Canal to have huge security and social implications.” *The Nation Thailand*, 8 June 2015. Accessed 29 March 2020.  
<https://www.nationthailand.com/business/30261841>.
- Krishnan, Raymon, and Bhargav Sriganesh. *One Belt One Road – Opportunities and Risks for Singapore*. Singapore: Asian Trade Centre, 22 September 2017.  
 Accessed 26 January 2020. <https://ssrn.com/abstract=3048113>.
- Lai, David. “China’s Strategic Moves and Counter-Moves.” *Parameters* 44, no. 4 (14, 2015): 11-25. Accessed 30 March 2020. <https://search-proquest-com.proxy.lib.sg/docview/1665220241?accountid=12691>.
- Lam, Peng Er. “Thailand’s Kra Canal Proposal and Chinas Maritime Silk Road: Between Fantasy and Reality?” *Asian Affairs: An American Review* 45, no. 1 (February 2018): 1-17. Accessed 16 September 2019.  
<https://doi.org/10.1080/00927678.2017.1410403>.
- Lee, Terence. “Singapore an advanced surveillance state, but citizens don’t mind.” *Tech in Asia*, 25 November 2013. Accessed 31 March 2020.  
<https://www.techinasia.com/singapore-advanced-surveillance-state-citizens-mind>.
- Leifer, Michael. *Singapore’s Foreign Policy: Coping with Vulnerability*. London: Routledge, 2000.
- Li, Chi Yang. “新加坡亲美遏华声势为何高涨？三大原因看清其面目 (Three Reasons which Explain Singapore’s Pro-U.S. and Anti-China Sentiment).” 凤凰网 IFENG.COM, 30 September 2016. Accessed 4 December 2019.  
[http://news.ifeng.com/a/20160930/50049864\\_0.shtml](http://news.ifeng.com/a/20160930/50049864_0.shtml) (accessed December 4, 2019).

- Lim, Min Zhang. "More piracy, robbery cases in Malacca and Singapore straits in 2017, as in rest of Asia." *The Straits Times*, 16 January 2018. Accessed 23 November 2019. <https://www.straitstimes.com/singapore/more-piracy-robbery-cases-in-malacca-and-singapore-straits-in-2017-as-in-rest-of-asia>.
- Long, Tom. "Small States, Great Power? Gaining Influence Through Intrinsic, Derivative, and Collective Power." *International Studies Review* 19, no. 2 (2017): 185-205. Accessed 25 March 2020. <https://doi.org/10.1093/isr/viw040>.
- Low, Patrick, and Yue-man Yeung. *The Proposed Kra Canal: A Critical Evaluation and its Impact on Singapore*. Field Report Series No. 2. Singapore: Institute of Southeast Asian Studies, 1973.
- Mahbubani, Kishore. "Qatar: Big Lessons from a Small Country." *The Straits Times*, 1 July 2017. <https://www.straitstimes.com/opinion/qatar-big-lessons-from-a-small-country>.
- Maier, Charles S. "Peace and security for the 1990s." Unpublished paper, MacArthur Fellowship Program, Social Science Research Council, 1990.
- Majlis Ugama Islam Singapura. "Asatizah Recognition Scheme." Accessed 29 March 2020. <https://www.muis.gov.sg/ARS-and-IECP/About>.
- "Major Breakthrough on Kra Canal Potential." *LaRouchePAC*, 17 January 2017. Accessed 28 October 2019. <https://larouchepac.com/20170117/major-breakthrough-kra-canal-potential>.
- Maritime and Port Authority of Singapore. "Singapore's 2016 Maritime Performance." 11 January 2017. Accessed 17 September 2019. <https://www.mpa.gov.sg/web/portal/home/media-centre/news-releases/detail/05460688-fe49-42e7-9740-4ce88b157b46>.
- Mellor, William. "European Business Joins China in Pushing \$28bn Thai Canal." *Nikkei Asian Review*, 11 September 2017. Accessed 28 October 2019. <https://asia.nikkei.com/Politics-Economy/Economy/European-business-joins-China-in-pushing-28bn-Thai-Canal>.
- . "Influential Thais in Push for Kra Canal Project." *Nikkei Asian Review*, 7 August 2017. Accessed 28 October 2019. <https://asia.nikkei.com/Economy/Influential-Thais-in-push-for-Kra-Canal-project2>.
- Menon, Rhea. "Thailand's Kra Canal: China's Way Around the Malacca Strait." *The Diplomat*, 9 April 2018. Accessed 28 October 2019. <https://thediplomat.com/2018/04/thailands-kra-canal-chinas-way-around-the-malacca-strait/>.

- Merriam-Webster. "Casus Belli." Accessed 25 March 2020. <https://www.merriam-webster.com/dictionary/casus%20belli>.
- . "Entrepot." Accessed 25 March 2020. <https://www.merriam-webster.com/dictionary/entrep%C3%B4t>.
- Micallef, Joseph V. "The Geopolitics of the Kra Canal." *Military.com*, 4 October 2017. Accessed 15 September 2019. <https://www.military.com/daily-news/2017/10/04/geopolitic-kra-canal.html>.
- Ministry of Foreign Affairs Singapore. "MFA Press Release: Transcript of Minister for Foreign Affairs K Shanmugam's reply to Parliamentary Questions and Supplementary Questions, 13 August 2012." Accessed 5 April 2020. [https://www.mfa.gov.sg/Overseas-Mission/ASEAN/Press-Statements-Speeches/2012/08/press\\_20120813](https://www.mfa.gov.sg/Overseas-Mission/ASEAN/Press-Statements-Speeches/2012/08/press_20120813).
- Ministry of Foreign Affairs and Trade, New Zealand. "Brunei Darussalam, Chile, New Zealand and Singapore conclude negotiations on a Trans-Pacific Strategic Economic Partnership Agreement." Joint Press Statement from Brunei Darussalam, Chile, New Zealand and Singapore Ministers, 3 June 2005. Accessed 30 March 2020. <https://web.archive.org/web/20060907090445/http://www.mfat.govt.nz/tradeagreements/transpacepa/transpacepress.html>.
- Ministry of Home Affairs, Government of Singapore. "Detention of Three Radicalised Indonesian Nationals Under the Internal Security Act." Press Release, 23 September 2019. Accessed 31 March 2020. <https://www.mha.gov.sg/newsroom/press-release/news/detention-of-three-radicalised-indonesian-nationals-under-the-internal-security-act>.
- Moe, Wai. "Thein Sein Tackles Chinese Navy Issue." *The Irrawaddy*, 25 May 2011. Accessed December 3, 2019. [https://www2.irrawaddy.com/article.php?art\\_id=21361](https://www2.irrawaddy.com/article.php?art_id=21361).
- National Archives of Singapore. "Television Interview with the Prime Minister, Mr. Lee Kuan Yew, by Three Foreign Press Correspondents, Mr. Creighton Burns of the Melbourne Age, Mr. Nihal Singh of the Statesman of India, and Mr. Dennis Bloodworth of the London Observer, recorded at the Studios of Television Singapura on 28th July, 1966." Accessed 29 October 2019. <http://www.nas.gov.sg/archivesonline/data/pdfdoc/lky19660728.pdf>.
- . "Transcript of a Press Conference given by the Prime Minister, Mr. Lee Kuan Yew, Hyderabad House, New Delhi on 3rd September 1966." Accessed 29 October 2019. <http://www.nas.gov.sg/archivesonline/data/pdfdoc/lky19660903c.pdf>.

- National Consortium for the Study of Terrorism and Responses to Terrorism. "Moro Islamic Liberation Front (MILF)." 19 April 2015. Accessed 28 March 2020. <https://www.start.umd.edu/baad/narratives/moro-islamic-liberation-front-milf>.
- Ngui, Yew Kit Clarence. "Kra Canal (1824-1910): The Elusive Dream." *Akademika* 82, no. 1 (2012): 71-80. Accessed 20 September 2019. [https://www.researchgate.net/publication/277868620\\_Kra\\_Canal\\_1824-1910\\_The\\_Elusive\\_Dream](https://www.researchgate.net/publication/277868620_Kra_Canal_1824-1910_The_Elusive_Dream).
- Nitta, Yuichi. "Myanmar and China to Cooperate on Economic Corridor." *Nikkei Asian Review*, 2 December 2017. Accessed 3 December 2019. <https://asia.nikkei.com/Politics-Economy/International-Relations/Myanmar-and-China-to-cooperate-on-economic-corridor?page=1>.
- Norman, Gary. "The Oil Canal That May Never Be." OilPrice.com, 15 March 2018. Accessed 7 January 2020. <https://oilprice.com/Energy/Energy-General/The-Oil-Canal-That-May-Never-Be.html>.
- Nyabiage, Jevans. "Are Chinese Loans Putting Africa on the Debt-Trap Express?" *South China Morning Post*, 28 July 2019. Accessed 19 September 2019. <https://www.scmp.com/news/china/diplomacy/article/3020394/are-chinese-infrastructure-loans-putting-africa-debt-trap>.
- Ono, Yukako and Jun Suzuki. "ASEAN may partially dump its rule-by-consensus principle." *Nikkei Asian Review*, 14 November 2017. Accessed 5 April 2020. <https://asia.nikkei.com/Economy/ASEAN-may-partially-dump-its-rule-by-consensus-principle>.
- Paleri, Prabhakaran. *National Security: Imperatives and Challenges*. Tata: McGraw-Hill, 2008.
- Panda, Ankit. "Singapore: A Small Asian Heavyweight." Council on Foreign Relations, 26 June 2018. Accessed 23 October 2019. <https://www.cfr.org/background/singapore-small-asian-heavyweight>.
- Pepinsky, Tom. "Does the Kra Canal Threaten Singapore?" *Tom Pepinsky* (blog), 3 October 2016. accessed 23 January 2020. <https://tompepinsky.com/2016/10/03/does-the-kra-canal-threaten-singapore/>.
- Poling, Gregory. "Kyaukpyu: Connecting China to the Indian Ocean." In *China's Maritime Silk Road: Strategic and Economic Implications for the Indo-Pacific Region*. Center for Strategic and International Studies, April 4, 2018. Accessed 3 December 2019. <https://amti.csis.org/kyaukpyu-china-indian-ocean/>.



- Pookaman, Pithaya. "Thailand's Kra Canal: Economic and Geopolitical Implications." *Asia Sentinel*, 22 August 2018. Accessed 15 September 2019. <https://www.asiasentinel.com/econ-business/thailand-kra-canal-economic-geopolitical-implications/>.
- Prime Minister's Office, Singapore. "National Day Rally 2009 Speech by Prime Minister Lee Hsien Loong." 16 August 2009. Accessed 29 March 2020. <https://www.pmo.gov.sg/Newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2009-speech-english>.
- . "National Day Rally 2016 Speech by Prime Minister Lee Hsien Loong." 21 August 2016. Accessed 29 October 2019. <https://www.pmo.gov.sg/Newsroom/national-day-rally-2016>.
- . Speech by Mr Lee Kuan Yew, Minister Mentor, at the S. Rajaratnam Lecture, 09 April 2009, 5:30pm at Shangri-La Hotel. Accessed 29 October 2019. <https://www.pmo.gov.sg/Newsroom/speech-mr-lee-kuan-yew-minister-mentor-s-rajaratnam-lecture-09-april-2009-530-pm-shangri>.
- Privacy International. *The Right to Privacy in Singapore*. Universal Periodic Review Stakeholder Report: 24th Session, Singapore, June 2015. Accessed 31 March 2020. [https://privacyinternational.org/sites/default/files/2017-12/Singapore\\_UPR\\_PI\\_submission\\_FINAL.pdf](https://privacyinternational.org/sites/default/files/2017-12/Singapore_UPR_PI_submission_FINAL.pdf).
- "Proposed Kra Canal Not Priority Project for Thai Govt." *The Straits Times*, 12 February 2018. Accessed 28 October 2019. <https://www.straitstimes.com/asia/se-asia/proposed-kra-canal-not-priority-project-for-thai-govt>.
- Rimmer, Peter J., and Paul T.W. Lee. "Repercussions of Impeding Shipping in the Malacca and Singapore Straits." *Journal of International Logistics and Trade* 5, no. 1 (2007): 7–26. Accessed 23 November 2019. <https://doi.org/10.24006/jilt.2007.5.1.001>.
- Rodrigue, Jean-Paul. "Domains of Maritime Circulation," *Geography of Transport Systems*, accessed 12 April 2020, [https://transportgeography.org/wp-content/uploads/Map\\_Maritime-Circulation.pdf](https://transportgeography.org/wp-content/uploads/Map_Maritime-Circulation.pdf).
- Rohaidi, Nurfilzah. "Exclusive: Can Singapore really rehabilitate terrorists?" *GovInsider*, 5 April 2017. Accessed 14 April 2020. <https://govinsider.asia/security/laptops-containing-millions-of-hong-kong-voters-personal-data-stolen/>.
- Romm, Joseph J. *Defining National Security: The Nonmilitary Aspects*. New York: Council on Foreign Relations Press, 1993.
- Ronan, William J. "The Kra Canal: A Suez for Japan?" *Pacific Affairs* 9, no. 3 (1936): 406–15. Accessed 20 September 2019. <https://doi.org/10.2307/2750653>.

- Rose, Willow Ivy. "What is the Kra Canal? Thai/Chinese Weapon against Singapore?" *Medium*, 11 March 2018. Accessed 23 January 2020. <https://medium.com/@willowivyrose/what-is-the-kra-canal-thai-chinese-weapon-against-singapore-bdbaf47ab88b>.
- Rouillard, Megan, and Asuka Saito. "Building the Kra Canal and Southeast Asian Development." *Executive Intelligence Review* 40, no. 40 (11 October 2013): 16–24. Accessed 20 September 2019. [https://larouche.pub.com/eiw/public/2013/eirv40n40-20131011/16-24\\_4040.pdf](https://larouche.pub.com/eiw/public/2013/eirv40n40-20131011/16-24_4040.pdf).
- Sanchez, Robert Parra. "The Strategic and Geopolitical Implications of Canals." Thesis, California Maritime Academy, 2019. Accessed 28 March 2020. [http://dspace.calstate.edu/bitstream/handle/10211.3/209759/Robert\\_Sanchez-18784\\_Robert\\_Sanchez\\_RS\\_Capstone\\_151893\\_1109757060.pdf](http://dspace.calstate.edu/bitstream/handle/10211.3/209759/Robert_Sanchez-18784_Robert_Sanchez_RS_Capstone_151893_1109757060.pdf).
- Shira, Dezan, and Associates. "Kra Canal Project Revisited as part of China's Maritime Silk Road." *ASEAN Briefing*, 11 September 2017. Accessed 23 January 2020. <https://www.aseanbriefing.com/news/2017/09/11/kra-canal-project-revisited-part-chinas-maritime-silk-road.html>.
- "Singapore beats Hong Kong as top Asian location for MNC headquarters." *Singapore Business Review*, 6 February 2018. Accessed 30 March 2020. <https://sbr.com.sg/markets-investing/news/singapore-beats-hong-kong-top-asian-location-mnc-headquarters>.
- Sloan, Geoffrey R. "The Geopolitics of China and the Pacific Pivot." In *Geopolitics, Geography, and Strategic History*, 189–221. London: Routledge, 2017.
- Stockholm Peace Research Institute. "SIPRI Military Expenditure Database." Accessed 8 September 2019. <https://www.sipri.org/databases/milex>.
- Storey, Ian. "China's 'Malacca Dilemma'." *China Brief* 6, no. 8 (2006): 4–6. Accessed 16 September 2019. <https://jamestown.org/program/chinas-malacca-dilemma/>.
- . "Thailand's Perennial Kra Canal Project: Pros, Cons, and Potential Game Changers." *ISEAS Perspective*, no. 76 (24 September 2019). Accessed 9 January 2020. [https://www.iseas.edu.sg/images/pdf/ISEAS\\_Perspective\\_2019\\_76.pdf](https://www.iseas.edu.sg/images/pdf/ISEAS_Perspective_2019_76.pdf).
- Sulong, Rini Suryati. "The Kra Canal and Southeast Asian Relations." *Journal of Current Southeast Asian Affairs* 31, no. 4 (2012): 109–125. Accessed 15 September 2019. <https://doi.org/10.1177/186810341203100405>.
- Swami, Praveen. "Fears rise in India as China pushes plan for canal to reshape Indian Ocean." *Business Standard*, April 6, 2018. Accessed 28 October 2019. [https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034\\_1.html](https://www.business-standard.com/article/economy-policy/china-pushes-plan-for-canal-to-reshape-indian-ocean-118040600034_1.html).

- Swartz, Spencer, and Shai Oster. "China Tops U.S. in Energy Use." *The Wall Street Journal*, 18 July 2010. Accessed November 22, 2019.  
<https://www.wsj.com/articles/SB10001424052748703720504575376712353150310>.
- Tan, Andrew T.H. "Singapore's Cooperation with the Trilateral Security Dialogue Partners in the War Against Global Terrorism." *Defence Studies* 7, no. 2 (June 2007): 193-207. Accessed 31 March 2020.  
<https://doi.org/10.1080/14702430701338015>.
- . "Singapore's Survival and Its China Challenge." *Security Challenges* 13, no. 2 (2017): 11–31. Accessed 29 October 2019.  
<https://www.jstor.org/stable/26457716>.
- Tan, See Seng. "America the Indispensable: Singapore's View of the United States' Engagement in the Asia-Pacific." *Asian Affairs: An American Review* 38, no. 3 (2011): 156-171. Accessed 28 March 2020.  
<https://doi.org/10.1080/00927678.2011.581600>.
- Teo, Cheng Wee. "China not involved in Kra canal work." *The Straits Times*, 20 May 2015. Accessed 25 January 2020. <https://www.straitstimes.com/asia/east-asia/china-not-involved-in-kra-canal-work>.
- "Thai Prime Minister Launches Kra Canal Study." *Executive Intelligence Review* 30 (October 2018). Accessed 28 October 2019.  
[https://larouchepub.com/pr/2018/181030\\_launch\\_kra\\_study.html](https://larouchepub.com/pr/2018/181030_launch_kra_study.html).
- Tham, Yuen-C. "4 books banned in Singapore for extremist content: MCI." *The Straits Times*, 30 October 2017. Accessed 29 March 2020.  
<https://www.straitstimes.com/politics/four-books-banned-for-extremist-content>.
- "Time to revisit canal project." *Bangkok Post*, 20 January 2020. Accessed 25 January 2020. <https://www.bangkokpost.com/opinion/opinion/1839359/time-to-revisit-canal-project>.
- Trading Economics. "Singapore Military Expenditure." Accessed 8 September 2019.  
<https://tradingeconomics.com/singapore/military-expenditure>.
- United Nations. "Charter of the United Nations." Accessed 8 September 2019.  
<https://www.un.org/en/sections/un-charter/chapter-i/index.html>.
- US Department of Defense. *Indo-Pacific Strategy Report*. Washington, DC: U.S. Department of Defense, June 1, 2019. Accessed 30 March 2020.  
<https://media.defense.gov/2019/Jul/01/2002152311/-1/-1/1/department-of-defense-indo-pacific-strategy-report-2019.pdf/>.

- US Department of State. *Country Reports on Terrorism 2017 – Singapore*. 19 September 2018. Accessed 31 March 2020. <https://www.refworld.org/docid/5bcflf8213.html>.
- US Energy Information Administration. “What Countries Are the Top Producers and Consumers of Oil?” 6 November 2019. Accessed 22 November 2019. <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>.
- . “World Oil Transit Chokepoints.” Accessed 15 September, 2019. <https://www.eia.gov/beta/international/regions-topics.php?RegionTopicID=WOTC>.
- Vasu, Norman, and Bernard Loo. “National Security and Singapore: An Assessment.” In *Perspectives on the Security of Singapore: The First 50 Years*, edited by Barry Desker and Cheng Guan Ang, 21-43. Singapore: World Scientific, 2015.
- Voytenko, Mikhail. “Kra Canal Project and unbiased approach.” *Fleetmon*, 20 November 2017. Accessed 7 January 2020. <https://www.fleetmon.com/maritime-news/2017/20547/kra-canal-project-and-unbiased-approach/>.
- “Why Singapore is the gateway to ASEAN.” *Hawksford*, 4 September 2018. accessed 30 March 2020. <https://www.hawksford.com/knowledge-hub/2018/singapore-as-a-gateway-to-asean>.
- The World Bank. “Trade (% of GDP).” Accessed 16 September 2019. <https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS>.
- World Integration Trade Solution, The World Bank. “China Trade Statistics: Exports, Imports, Products, Tariffs, GDP and Related Development Indicator.” Accessed November 22, 2019. <https://wits.worldbank.org/CountryProfile/en/CHN>.
- Zhou, Laura. “China’s Foreign Ministry Joins War of Words against Singapore over South China Sea Dispute.” *South China Morning Post*, 27 September 2016. Accessed December 4, 2019. <https://www.scmp.com/news/china/diplomacy-defence/article/2023080/china-wades-singaporean-envoys-media-dispute>.