

Travail de Maturité

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Mrs. Charlotte Kupferstein

Could the example of the Gotthard Base Tunnel inspire Thailand to reshape the future of Southeast Asia?



Sources: <https://www.thelocal.ch/20141212/gotthard-base-tunnel-set-to-open-in-2016>, last consulted March 28th, 2019.
<http://apdf-magazine.com/canal-conundrum/>, last consulted March 25th, 2019

SUMMARY

This work establishes a parallel between the Gotthard Base Tunnel and the Kra Canal. It analyses the success of the former and ponders on the lessons that could then be taken from its success story, before applying them to the Kra Canal, a controversial project that would relieve the congestion of the Malacca Strait.

In this research we have justified the comparison of these two projects by first establishing their common points. Indeed, both projects have an analogous purpose: they contribute to ease the strain on existing systems and act as a cohesive factor in their respective environments. Both also faced similar challenges, which include overcoming conflicting interests in the project, protecting the environment and finding ways to raise important funds.

Then, we have seen precisely how the success of the NRLA, and notably the Gotthard Base Tunnel, was achieved, focusing especially on the key determinants that could then be linked with the Kra Canal. We then considered the limits of this comparison, by looking in more detail at the factors differentiating both projects, which include security, or geopolitical issues, as well as the framework conditions surrounding each one.

This, however, does not mean the comparison holds no value. It is true that the surface factors such as stability and economic development of the country, or the country's politics which can impact the project's financing, are different in Thailand and in Switzerland.

However, lessons learned from the Gotthard can easily be applied to the Kra canal. The interview I conducted of Adolf Ogi allowed me to place the latter in a new perspective. He insisted on the idea, essential in his eyes for the NRLA, that a project needs to consider every party involved. Today, oppressed minorities such as the Malay insurgents in the south of Thailand don't seem to be considered, contributing to discredit the feasibility of the Kra Canal.

The idea that “windows of opportunities” exist, and that they must be exploited, is also a point that could hold a lot of value for the Kra Canal. A project linking East and West through the Thai Peninsula, in whatever form it may materialize, could be Thailand’s best chance to establish itself as an Asian power, and decisions must be taken quickly, as the window for such a project may close at any given moment.

[386 words]

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INTRODUCTION

Finding ways to defeat natural barriers has been a quest of Humanity since the dawn of its existence. Whether it was finding ways through rivers, seas, and oceans, or mastering movement through mountains, deserts, or even the skies, we have always tried to connect with one another, and trade has been a trademark of mankind for now around 150 000 years.

One of the most effective barriers nature has set up has been the Alps, and the hunt for an effective path through it has been troubling Europeans since the 13th century. The incredibly sharp peaks and the treacherous landscapes have made it close to impossible to engineers for many years. Today, however, high-speed trains containing tons of merchandise pass through them each day, notably thanks to one of the most ambitious projects of the XXth century. The New Railway Link through the Alps (NRLA), has revolutionized transportation in and around the Alps, and its central component, the Gotthard Base Tunnel, is a resounding success story that dealt with its many challenges expertly.

Another path mankind has tried to unlock for millennia is the link between the East and the West. The historic Silk Road, some 2000 years ago, remains one of the greatest successes of our species. Today, Thailand holds the key to one of the most used trade routes in the world. The Kra Canal, or Thai Canal, is a 350-year-old idea of passing through the Kra Isthmus to free up trade through the Malacca Strait, contributing to linking the East and West even further. The project, however, has been delayed for over a third of a millennium, due to issues with engineering, the environment, and perhaps even the security and sovereignty of Thailand.

When I first learned about the Kra Canal, I was immediately interested. My Thai roots, as well as my interest in geopolitics led to me looking more into the little-known canal, which I first heard of from my grandfather, a university professor in Thailand. As I learned more about the subject, I started to draw a parallel with the

Gotthard Base Tunnel, and to see if this comparison has solid grounds, I increased my research. Quickly, I noticed that the comparison could actually be drawn on several levels, both in what they wanted to achieve and in what they had to face. Following the success that the Swiss had, I asked myself the question: could the example of the Gotthard Base Tunnel inspire Thailand to build the Kra Canal Project, and thus reshape the future of Southeast Asia?

I proceeded with an analysis by comparison. If one could establish their likeness, what values could the success story of the Gotthard transmit to the Kra Canal? To answer this question, my research was concentrated around newspaper articles, as well as studies on related subjects. I also tried contacting numerous actors involved in both projects, including Moritz Leuenberger, as well as journalists and politicians who have spoken for or against both projects, however I was not able to receive positive answers. Only one person agreed to answer my questions, and not the least knowledgeable on the issue: Adolf Ogi, the former Swiss Federal Councilor and Transport minister who carried out the NRLA in the early 1990s. His input and comments have helped me decipher parts of the problematical question by enlightening new aspects of the issue, as well as giving me interesting takeaways from



Figure 1: a picture of my interview with Mr. Ogi

his experience as a politician working on a large-scale project.

This Travail de Maturité is divided in two sections: the first compares the two projects focusing notably at what they were set out to achieve, and then what challenges they faced, while the second will first look at the Gotthard's successes, and then at how and when the comparison stops. Several annexes are included at the end, in order to have a better global understanding of the situation.

I. COULD THERE BE A PARALLEL BETWEEN THE KRA CANAL AND THE GOTTHARD BASE TUNNEL?

1. TWO PROJECTS, AN ANALOGUOUS PURPOSE

a. EASING THE STRAIN ON EXISTING SYSTEMS

Today, Southeast Asia is one of the most dynamic regions in the world. The Malacca Strait is one of the most used maritime routes in the world, with 16 million

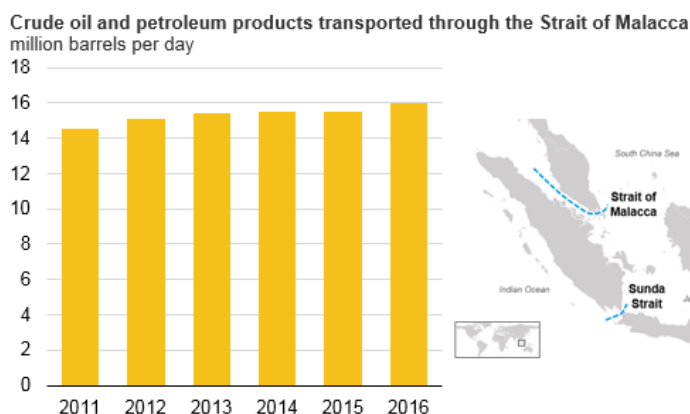


Figure 2: crude oil and petroleum products passing through the Malacca Straits, from 2011-2016

barrels per day passing through in 2016¹. It is also “one of the most vital sea lines of communication in the world, constituting the principal passage from the Indian Ocean to the South China Sea. More than 30% of the world’s seaborne trade passes through this narrow 500 nautical-mile-long waterway². Apart from serving the strategic needs of the riparian states [Indonesia, Malaysia and Singapore], China, Japan, and South Korea are reliant on this strategic waterway for their supplies, especially energy”³.

Demand in the region has also been on the rise and it is estimated that the Malacca Strait will become saturated by 2020, when their capacity of 122 640 vessels

¹ [figure 2] <https://www.eia.gov/todayinenergy/detail.php?id=32452>, last consulted March 18th, 2019.

² [figure 3] <https://www.firstpost.com/india/thailands-kra-canal-project-is-chinas-masterplan-to-secure-beijings-interests-assert-influence-in-asean-indian-ocean-region-4420647.html>, last consulted Mar, 2018.

³ HAMZAH, B.A. “Alleviating China’s Malacca Dilemma”, *Institute for Security & Development Policy*, March 13th, 2017 <http://isdip.eu/alleviating-chinas-malacca-dilemma/>, last consulted March 18th, 2019.

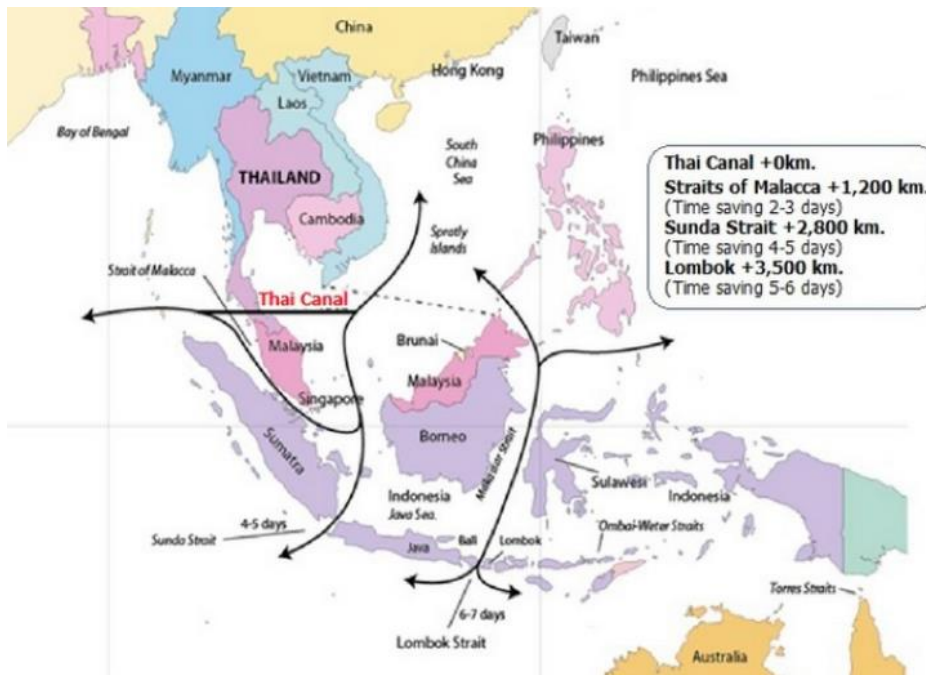


Figure 3: highlighting the distance and time the Kra Canal could save to ships travelling through the Malacca Straits and its current alternatives, the Sunda and Lombok Straits.

per year⁴ is surpassed by global demand. Should the Strait reach its maximum capacity, nearly half of the world's shipping fleet would need to be rerouted around Indonesia, through the Sunda Strait or the Lombok Strait, which would “tie up global shipping capacity, add

to shipping costs, and potentially affect energy prices”⁵.

Switzerland was in a similar situation. Where the Kra Canal would strive to free up access through Southeast Asia, the Gotthard Base Tunnel would strive to free up the Alps. The mountain range being in the center of Europe made it a key axis for trade. In the 1990s, with the rise of the EU, European trade developed significantly, which strained existing transport infrastructure through the Alps. Austria, France, and Switzerland were all tasked with remediating this

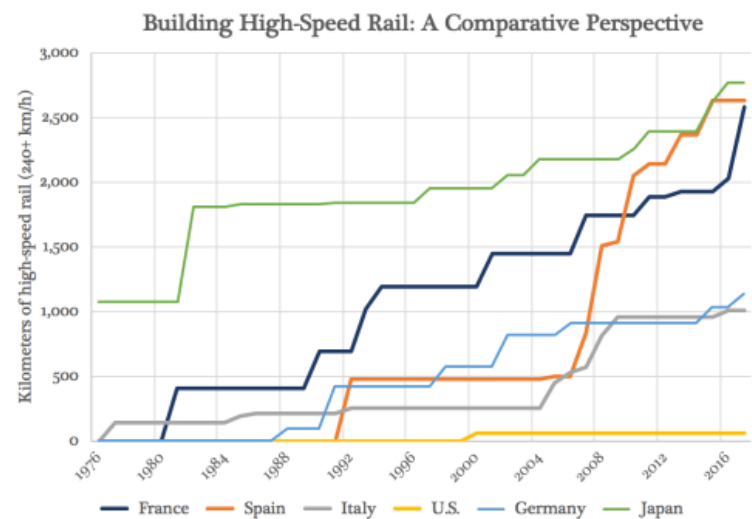


Figure 4: High-speed rail in various countries around the world since 1976

⁴ POOKAMAN, Pithaya “Thailand’s Kra Canal: Economic and Geopolitical Implications”, *Asia Sentinel*, July 17th, 2018 <https://www.asiasentinel.com/econ-business/thailand-kra-canal-economic-geopolitical-implications/>, last consulted November 26th, 2018.

⁵ <https://www.eia.gov/todayinenergy/detail.php?id=32452>, last consulted March 18th, 2019.

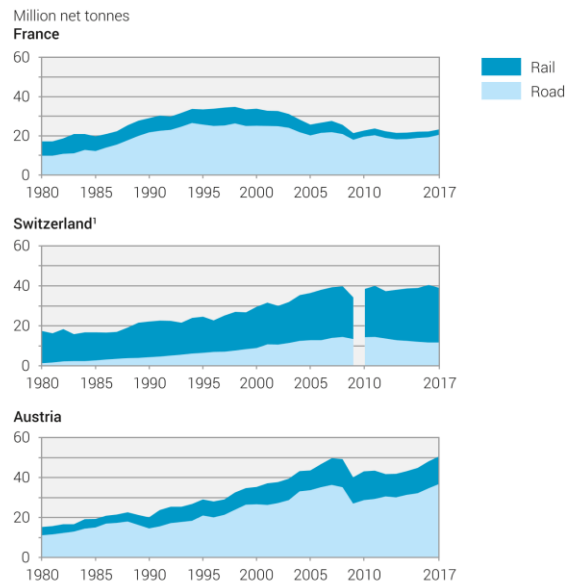
problem⁶. “Politically, we [the Swiss] were under pressure, we had no choice. It was either the new motorway, which the population would never have approved, or we modernize our railway”⁷, said Adolf Ogi. He added that they were trying to build a “modern system and the modern system was not the road, it was a railway”⁸.

The Gotthard Base Tunnel that followed helped to free up passage through the Alps, with the Swiss taking the initiative ahead of its neighbors, and today “the Gotthard is the most important alpine transit route for rail traffic”⁹.

The question is, will Thailand do the same and take the driver’s seat in a quickly-developing Southeast Asia?

Transalpine goods traffic volumes

Mt. Cenis/Fréjus–Brenner alpine arc



¹ Change of method for roads transport: As of 2010, control station data from the performance-related heavy vehicle fee are used (until 2009: data were taken from the Swiss automatic road traffic counts).

Source: FOT, FEDRO – Transalpine goods transport

© FSO 2018

Figure 5: a comparison between road and rail transportation through the Alps; 1980-2017

⁶ [figure 4] FREEMARK, Yonah, “A generational failure: As the U.S. fantasizes, the rest of the world builds a new transport system”, *The Transport Politic*, July 1st, 2017, <https://www.thetransportpolitic.com/2017/07/01/a-generational-failure-as-the-u-s-fantasizes-the-rest-of-the-world-builds-a-new-transport-system/>, last consulted march 28th, 2019.

⁷ All quotes by Adolf Ogi throughout this project will be, unless cited otherwise, from our interview of March 19th, 2019.

⁸ [figure 5] <https://www.bfs.admin.ch/bfs/en/home/statistics/mobility-transport/goods-transport/transalpine.assetdetail.6706922.html>, last consulted March 28th, 2019.

⁹ RAAFLAUB, Christian, “Gotthard line changes from asset to weak spot”, *Swissinfo*, June 24th, 2012, https://www.swissinfo.ch/eng/transit-axis_gotthard-line-changes-from-asset-to-weak-spot/32944640, last consulted March 28th, 2019.

b. BECOMING A COHESIVE FACTOR

Europe is one of the most prosperous areas in the world and has a very active trade system. Transnational movement is almost unrestricted, and the European Union is a symbol of the unity of the continent. However, European integrity is threatened by Great Britain's ongoing move to exit the EU, leading to rising anti-

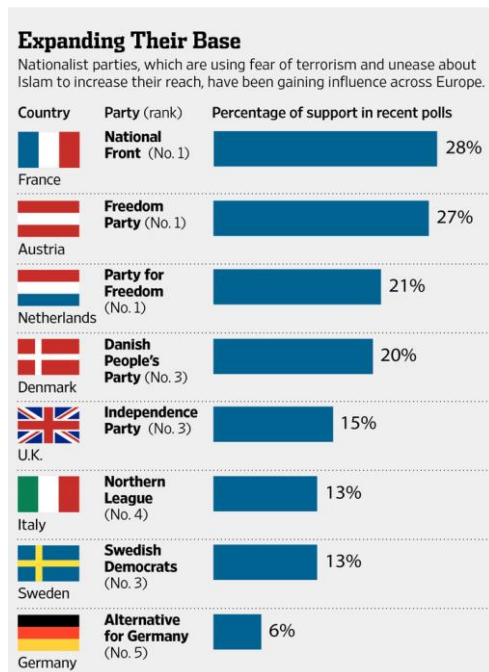


Figure 6: the caption reads: "Nationalist parties, which are using fear of terrorism and unease about Islam to increase their reach, have been gaining influence across Europe"

European movements, as well as the still-existing tensions linked to the refugee crisis, and rising nationalist sentiments¹⁰, especially in Italy and France.

It is now more important than ever to focus on keeping our Europe united, and projects such as a tunnel connecting the North and South of the continent are important in this effort. The European Union (or ECSC¹¹ as it was first named) was formed with the idea that the "merging of economic interests would help raise standards of living and be the first step towards a more united Europe"¹². In the words of the Schuman Declaration (1950), "Europe will not be made all at once, or according to a

single plan. It will be built through concrete achievements which first create a de facto solidarity"¹³. In this context, it is undeniable that the Gotthard Base Tunnel is a step in the right direction. In the words of Johann Schneider-Ammann, the tunnel

¹⁰ [figure 6] KARNITSCHNIG, Matthew; TROIANOVSKI, Anton; GROSS, Jenny "Europe's Anti-Immigrant Parties Stand to Gain Ground in Wake of Paris Attacks", *The Wall Street Journal*, January 16th, 2015 <https://www.wsj.com/articles/europes-anti-immigrant-parties-stand-to-gain-ground-in-wake-of-paris-attacks-1421371307>, last consulted on Nov 26, 2018.

¹¹ The European Coal and Steel Community was an idea presented by French foreign minister Robert Schuman which proposed to pool coal and steel production, which would, according to him, make war between France and Germany "not merely unthinkable, but materially impossible".

¹² https://europa.eu/european-union/about-eu/symbols/europe-day/schuman-declaration_en, last consulted Mar 18th, 2019.

¹³ Ibid.

was a “giant step for Switzerland but equally for our neighbors and the rest of the continent”¹⁴.



Figure 7: Picture from a trip following the opening ceremony for the Gotthard. (from left: former Italian Prime Minister Matteo Renzi, ex-Swiss Federal President Johann Schneider-Ammann, German Chancellor Angela Merkel and ex-French President François Hollande

Southeast Asia has been working toward peace and stability for a long time. ASEAN, founded in 1967, despite its relative success in bringing peace to the region, has often been criticized due to an incapacity of member states to “think and act collectively”¹⁵, and as the only other regional economy of its kind, alongside the EU, it has huge potential to develop the economies of its member countries. However, it has lacked incisiveness when it mattered, and tensions still exist to this day.

Historical border disputes, such as Tibet or Kashmir, opposing commercial interests with the presence of the United States¹⁶ have been causes of tensions in the

¹⁴ [figure 7] https://www.alptransit-portal.ch/en/events/ereignis/high-profile-guests-at-the-opening-ceremony/?no_cache=1&cHash=3ee0ae9210dad6e0fb8f852b8fb7c94c, last consulted March 28th, 2019.

¹⁵ TAN, Eugene, “After 50 years, does ASEAN still matter?”, *The South China Morning Post*, December 26th, 2017, <https://www.scmp.com/week-asia/politics/article/2124258/after-50-years-does-asean-still-matter>, last consulted March 28th, 2019.

¹⁶ FISCHER, Max; CARLSEN, Audrey “How China Is Challenging American Dominance in Asia”, *The New York Times*, March 9th, 2019, <https://www.nytimes.com/interactive/2018/03/09/world/asia/china-us-asia-rivalry.html>, last consulted 17 March 2019.

region for years, with the South China disputes being called “a severe test to ASEAN’s unity”¹⁷. Additionally, China’s “Belt and Road Initiative”, linked to its “Malacca Dilemma”¹⁸ has sparked much controversy and concerns around the balance of power in Asia¹⁹.

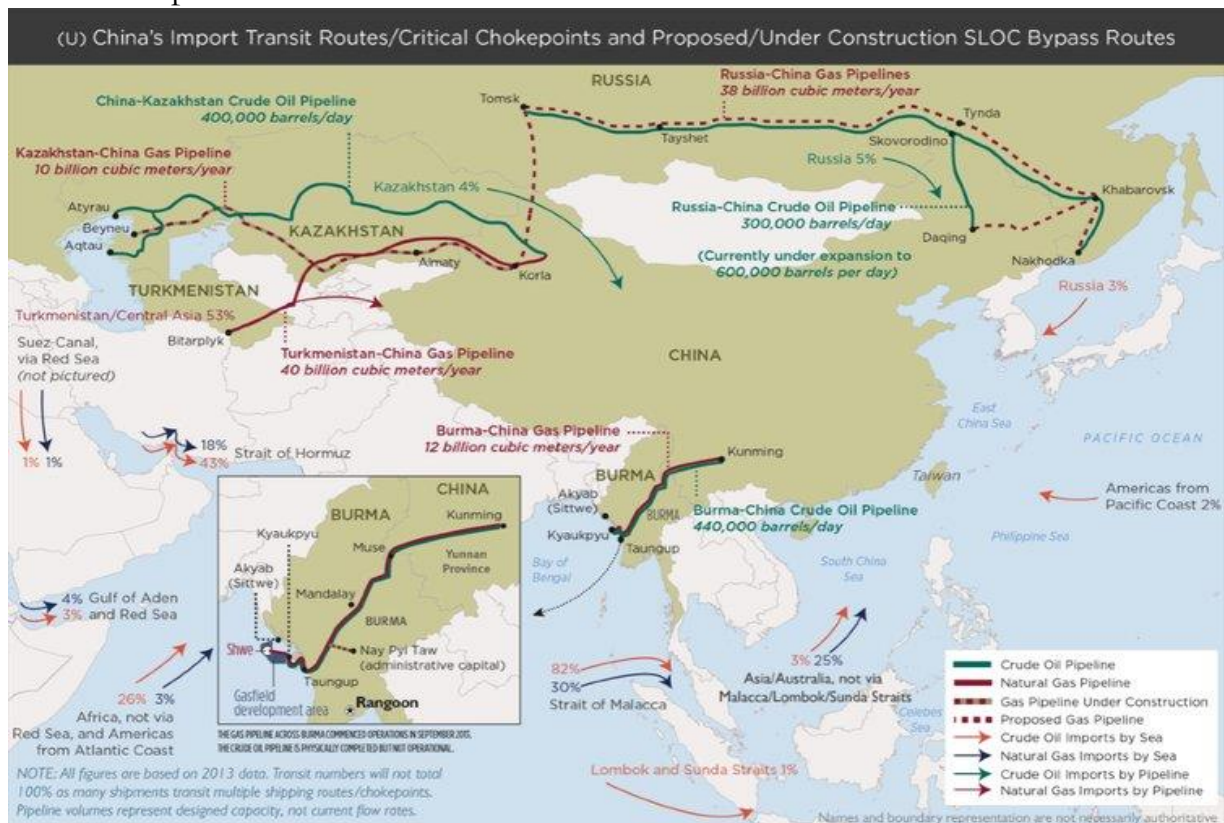


Figure 8: a report by the United States department of defense shows the routes of Chinese imports and exports. It is important to note that roughly 82% of China’s oil imports pass through the Malacca Strait.

The Kra canal would play an important role in establishing peace, if done carefully²⁰. A well-managed project of its kind could grow the regional economy and could play a role in balancing power in Asia. A Kra Canal funded entirely by China²¹, however, would have the opposite effect, and possibly deteriorate relations between Thailand and Singapore, Malaysia, and Indonesia, as well as developing concerns for the balance of power in Asia.

¹⁷ TAN, Eugene, op. cit.

¹⁸ [figure 8] BENDEN, Jeremy; ROSEN, Armin “This Pentagon map shows what's really driving China's military and diplomatic strategy”, *Business Insider*, May 13th, 2019 <https://www.businessinsider.com/this-map-shows-chinas-global-energy-ties-2015-5?r=US&IR=T>, last consulted 12 February 2019.

¹⁹ See annex 2: the Belt and Road Initiative, and annex 3: the Malacca Dilemma.

²⁰ Through cooperation from all ASEAN countries, with diverse funding (see point I.2.b.).

²¹ See point I.2.b.



Figure 9: stunning landscapes bring tourists to the Alps from all over Europe

Historically, times of economic stability are characterized by peace, general happiness and better relations between countries. Most tensions and problems tend to resolve themselves when the economy is healthy. Projects such as the Gotthard Base Tunnel

favor trade, which develops regional economy, and also promotes the development of a local economy through tourism, for example. After the opening of the Gotthard Base Tunnel, there has been an important rise in tourism²² (7.7% in 2017) in the canton of Ticino, which is now easily accessible thanks to the tunnel, the cantons of Lucerne and Uri benefited from it as well, as the number of Italian tourists has risen significantly. There are now direct and daily trips between Frankfurt, Milan, Zurich, and Venice, meaning that the Gotthard tunnel is also playing an important role in intercontinental North-South traffic.

Strengthening economic ties between countries is possibly the most efficient way to unite them, and the Gotthard Tunnel plays an important role in that. According to Roman Marti, the SBB spokesman of German-speaking Switzerland since 2008, “[the Gotthard Tunnel] is not only about transportation, it’s also a cultural exchange, it brings regions together”²³.

²² [figure 9] <https://www.myswitzerland.com/en-ch/gottardo.html>, last consulted November 26th, 2018.

²³ <https://www.youtube.com/watch?v=vad0Bito66I>, documentary on the Gotthard Base Tunnel from 2016 by discovery channel, last consulted January 8th, 2019.

The Kra canal could have much the same effects. According to analyst Avery Poole, important diversity among member states with regard to economic development exist within ASEAN. GDP per capita varies greatly from Singapore to Myanmar, for example. The Kra Canal could help balance

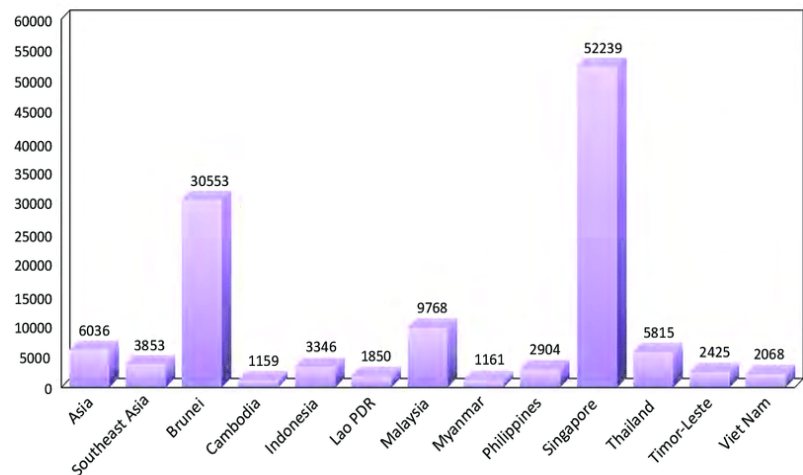


Figure 10: average GDP per capita by country in Southeast Asia

economic growth in Southeast Asia. Important quantities of cargo would be redirected to an area which is much poorer than the region around Singapore. Both Thailand and its neighboring countries²⁴ would benefit from increased attention around their borders.



Figure 11. the geographical proximity of Myanmar, Cambodia and Vietnam to the canal site, and how the formation of port cities along the southern borders of these countries seems logical on the long run.

This project would spur economic development in Cambodia, Myanmar, Vietnam, and Thailand²⁵. It could be the first step in emulating the development of the four Asian Tigers, which is the popular name given to Hong Kong, South Korea, Singapore, and Taiwan following their rapid industrialization and very high growth rate from the 1960s until shortly before 2000.

²⁴ [figure 10] https://www.researchgate.net/figure/GDP-per-capita-in-US-Dollars-in-Southeast-Asia-35_fig1_323571686, last consulted on March 17th, 2019.

²⁵ [figure 11] SHIMADA, Gaku “Kra Isthmus shortcut would mean big shifts in Southeast Asia” *Nikkei Asian Review*, June 25 2015 <https://asia.nikkei.com/Economy/Kra-Isthmus-shortcut-would-mean-big-shifts-in-Southeast-Asia>, last consulted March 22nd, 2019.

2. TWO PROJECTS, SIMILAR CHALLENGES

a. OVERCOMING CONFLICTING INTERESTS

The Kra Canal has been debated for centuries, and today the debate is ever fiercer, with the dimension of the Belt and Road Initiative (BRI)²⁶, which aims to bring China closer to the rest of the world through an intricate system of

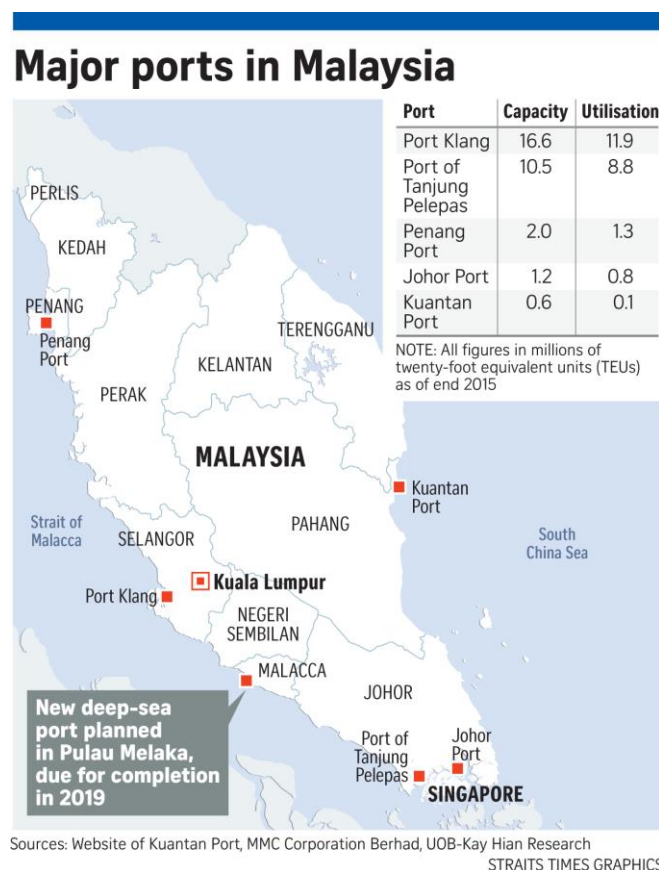


Figure 12: major ports in Malaysia are all concentrated in the Malacca Strait.

along with Indonesia and Malaysia²⁷, whose importance as trade hubs would be negatively impacted by the project.

There is fear that if the Kra Canal is built against the will of these states, the integrity of ASEAN will be challenged, and it is widely believed that "unless the

transportation, both maritime and land-based. While the Kra Canal has not officially been named as part of the BRI, it is largely speculated that China has heavy interest in the project, as it would offer an invaluable solution to China's Malacca Dilemma, which some say is the very reason the BRI was started in the first place. In fact, Chinese interest is so great that they would reportedly be prepared to fund the entire project.

However, the Kra Canal faces fierce opposition from Singapore,

²⁶ See annex 2: The Belt and Road Initiative.

²⁷ [figure 12] <https://www.straitstimes.com/asia/se-asia/malacca-harbour-plan-raises-questions-about-chinas-strategic-aims>, last consulted March 30th, 2019.

Chinese business community in Southeast Asia achieves a consensus, no plan for development of the Kra Isthmus will come to pass"²⁸.

Reaching a consensus on the project is paramount to the canal's success. Firstly, there is the ASEAN dimension, which has been the foundation to peace in Southeast Asia. Secondly, there is a need for Thailand to have a multilateral agreement to fund the project, instead of a Chinese-funded one²⁹. Thirdly, cohesion and stability³⁰ in Southeast Asia is not yet stable and established, like it was in Europe in the 1990s, and it is critical that the Kra Canal be a project that brings the region together, instead of breaking it apart.

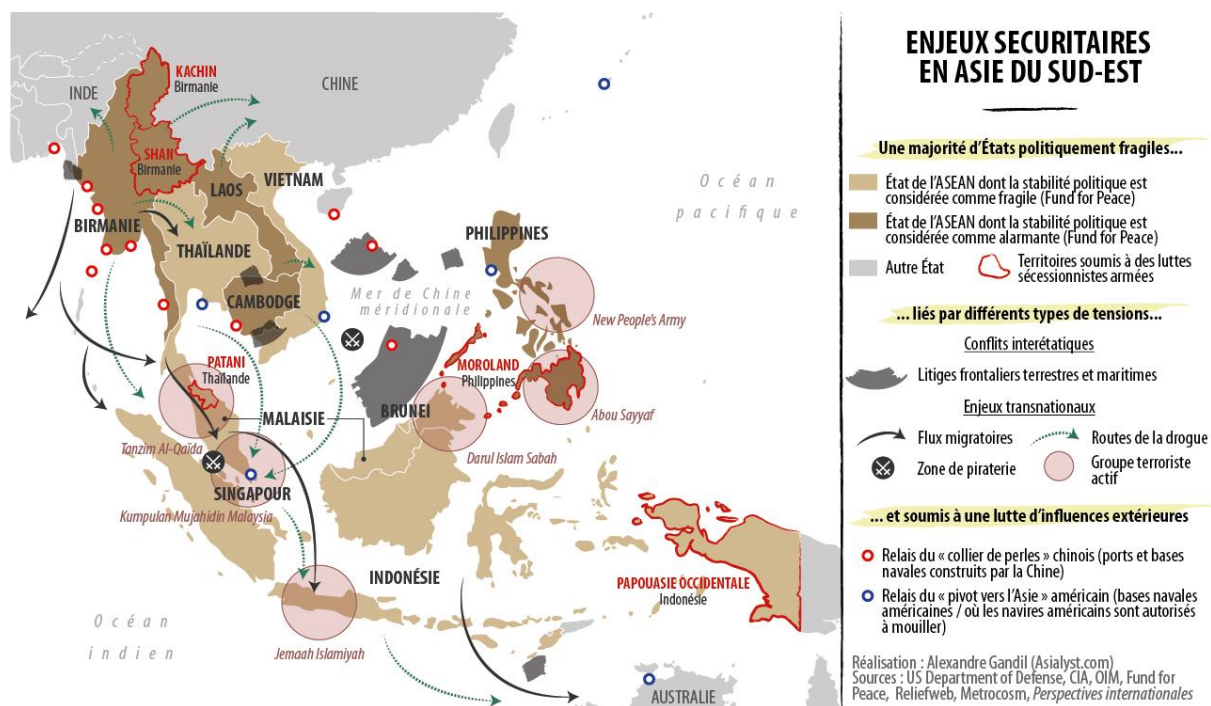


Figure 13: This graphic shows how despite the advantages of ASEAN, the region remains fragile.

Back in the 1990s, in Switzerland, the task was not any easier. While Europe had agreed that there needed to be developments to Transalpine transportation, there was disaccord on whether the tunnels would be rail or road-based. European ministers of transportation were in favor of a road tunnel, but in Switzerland it was

²⁸ SHIMADA, Gaku "Kra Isthmus shortcut would mean big shifts in Southeast Asia" *Nikkei Asian Review*, June 25 2015 <https://asia.nikkei.com/Economy/Kra-Isthmus-shortcut-would-mean-big-shifts-in-Southeast-Asia>, last consulted March 22nd, 2019-

²⁹ See point I.2.b

³⁰ [figure 13] <https://asialyst.com/fr/2015/12/24/communaute-de-l-asean-quel-modele-d-integration-pour-l-asie-du-sud-est/carte-asean-facteurs-tension-securite-politique/>, last consulted March 30th, 2019.

believed that rail would be better. Environmental arguments were key, as a rail tunnel would be much more favorable with the Alpine landscape. It was also the will of the Swiss people to reduce transalpine road transportation, as seen by the 1994 Alpine

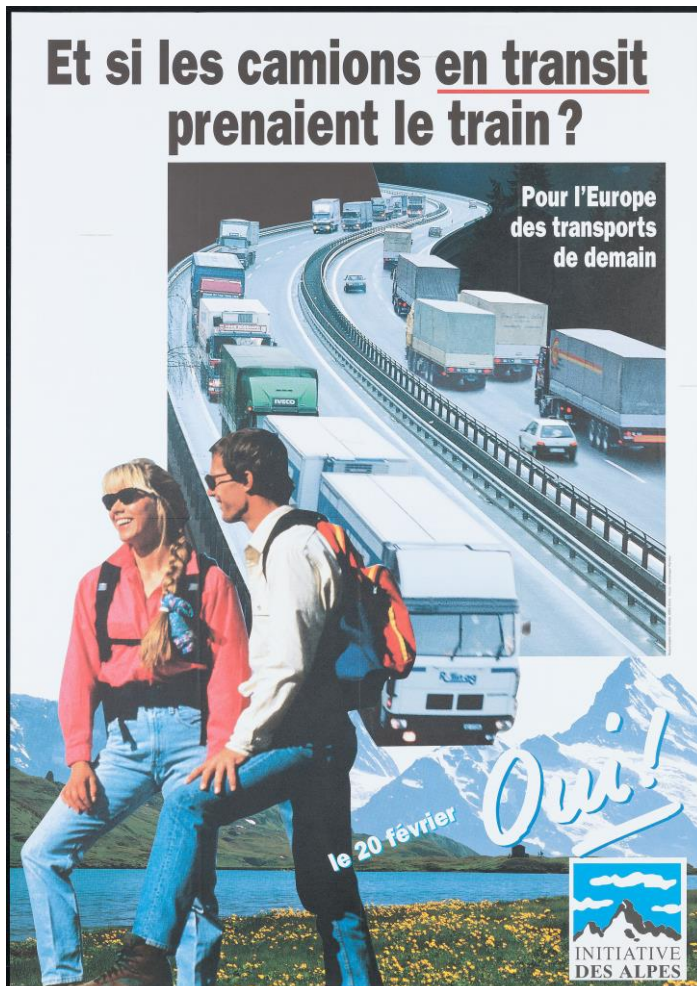


Figure 14: The Alpine Initiative aimed to stop road transportation through the Alps in favor of rail.

Initiative³¹. In order to hold the Swiss position, Adolf Ogi said in an interview with the RTS³² that “[he] went 37 times to foreign countries to tell my colleagues that [the Swiss] would not build a highway, but that [the Swiss] would instead do the NRLA. [he] also invited all transport ministers to Switzerland for a demonstration”. The job of convincing them was to him the “hardest case of [his] career”.

³¹ [figure 14] <https://www.alptransit-portal.ch/en/overview/politics/events/ereignis/yes-to-the-alps-initiative/>, last consulted March 30th, 2019.

³² <https://www.rts.ch/info/suisse/7727652-insomnie-et-acrobatie-en-helicoptere-comment-ogi-a-defendu-le-gothard.html>, last consulted March 17th, 2019.

b. FUNDING

Funding is probably the most controversial topic regarding the Kra Canal. The project is estimated to cost upwards of \$30 billion, with the creation of an economic zone³³ around the canal that would include building cities and artificial islands. This would be necessary in order to develop infrastructure in the area, which at the moment is close to non-existent. As stated earlier, Xi Jinping's government is widely considered to be open to funding



Figure 16: location of the economic zones expected to be built in parallel with the canal.

most of the \$30 billion necessary for the Kra Canal. However, China's track record with large loans is shady at best³⁴, and many believe that Thailand could lose its territorial sovereignty if the Kra Canal is Chinese-funded. In addition to this, countries are increasingly wary of Chinese investments, as China has often shown



Figure 15: picture of the Hambantota port, that China now holds on a 99-year lease.

its intent to use any financial leverage to its advantage³⁵. “In country after country, where China loaned money to governments for [large-scale infrastructure projects], China ends up controlling the natural

assets and a chunk of the country's sovereignty. China loaned billions of dollars to

³³ [figure 15] <https://www.tcijthai.com/news/2015/08/english/5762>, last consulted March 30th, 2019.

³⁴ See annex 2: The Belt and Road Initiative.

³⁵ [figure 16] <https://www.bbc.com/news/world-asia-40761732>, last consulted March 30th, 2019.

Djibouti, for example, and then used this leverage to lease land for a military base there”³⁶.

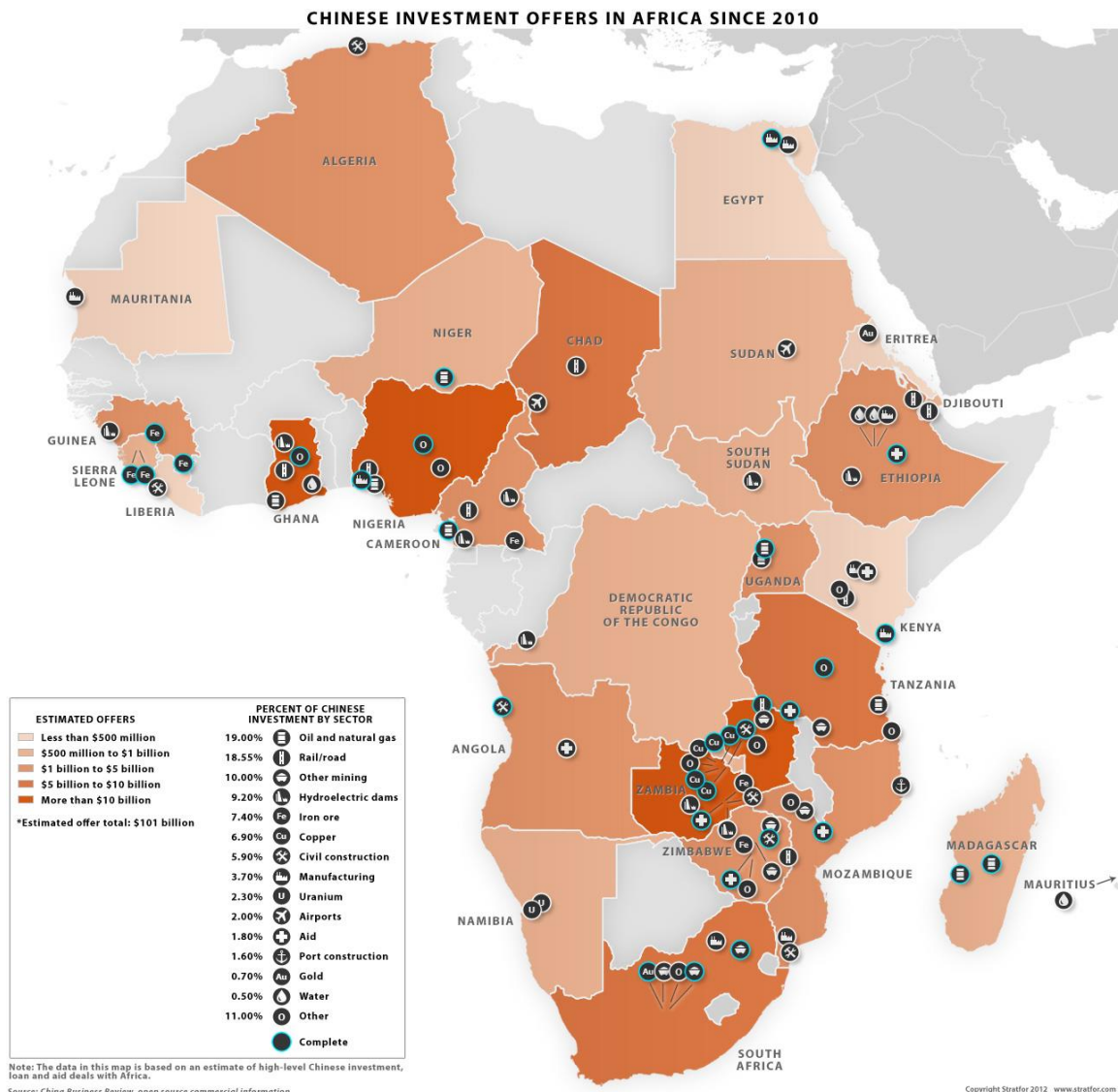


Figure 17: Africa has received over a hundred billion dollars of Chinese investments. These figures are likely to have inflated even more since this 2016 graphic.

There is fear among the international community that most foreign Chinese investments aim at increasing Chinese military influence in faraway areas, notably in Africa³⁷, and South America, which have received hundreds of billions of dollars of investments from China, and the Middle Kingdom has had precedent of using this financial leverage to serve their military ambitions.

³⁶ <http://apdf-magazine.com/canal-conundrum/>, last consulted March 25th, 2019.

³⁷ [figure 17] <http://www.chinaafricarealist.com/2016/02/chinese-mining-projects-in-africa-is-it.html>, last consulted March 30th, 2019.

The Kra Canal is a project that would potentially free China from its Malacca Dilemma. Should history repeat itself, and China gain control over parts of Thailand, the balance of power in Asia could be severely damaged.

There are also concerns of the high costs, with leading analysts suggesting that more cost-effective alternatives should be considered as well. Such alternatives could be for example a land bridge over the Kra Isthmus.

The NRLA was projected to cost around 20 billion CHF in 1992. Such a huge amount required creative thinking and tough negotiations. Indeed, parts of the government, chief of which was Otto Stich, the Finance minister at the time, were thoroughly opposed to the projects, due to high costs and the fact that the French and the Austrians were planning similar projects³⁸.

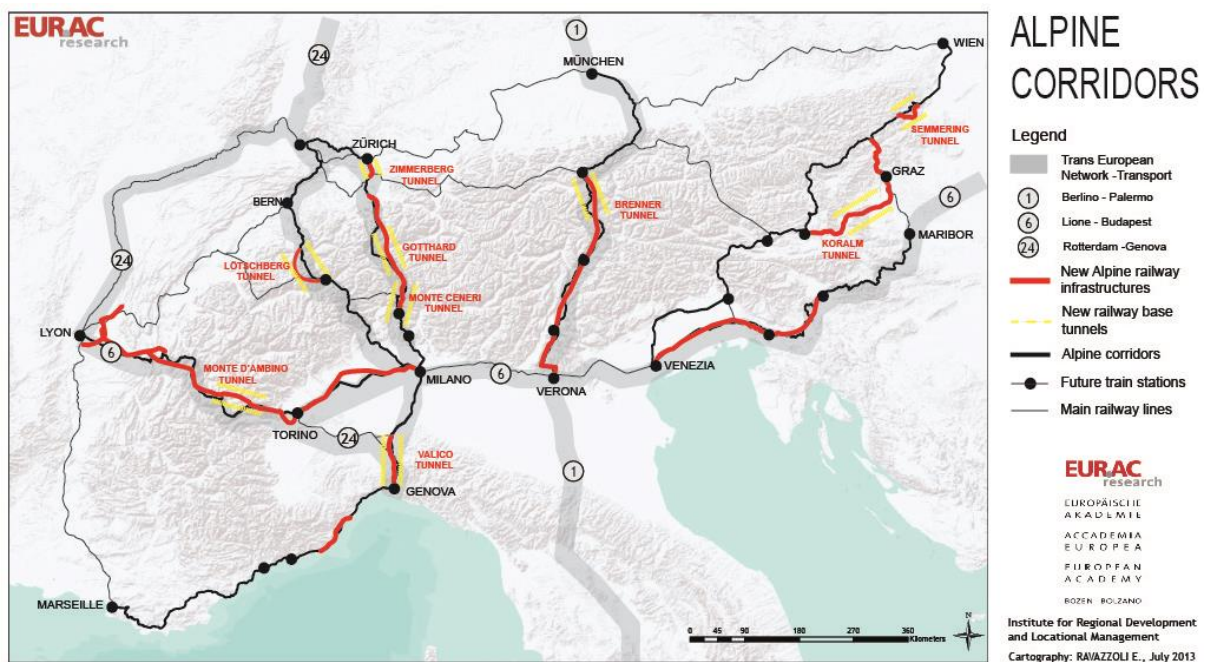


Figure 18: current and planned transalpine routes.

However, through numerous referendums held in the 1990s, it was to be established that this project would be funded by the users of the road themselves. The tax on heavy vehicles (“Loi fédérale concernant une redevance sur le trafic des poids lourds liée aux prestations”³⁹) of 1998 proved to be the best solution, as it

³⁸ [figure 18] <http://www.eurac.edu/en/research/mountains/regdev/projects/Pages/New-Geography-of-the-Alps-Map-of-the-Alpine-Corridors.aspx>, last consulted March 30th, 2019.

³⁹ DELGRANDE, Marina ; LINDER, Wolf, “Analyse des votations fédérales du 27 septembre 1998”, last consulted March 21st, 2019.

eventually funded two-thirds of the entire NRLA project. The Alpine Initiative of 1994 outlined the funding policy of the project: “the fund [of the NRLA project] is to be fed by two thirds of the revenues of the kilometer-based HGV tax, the tax on petrol, VAT and credits from the capital market”⁴⁰.

High costs were certainly less problematical for the Swiss Confederation than they are today for Thailand, considering the important discrepancies in the economic development of these two countries. However, Switzerland’s creative way of funding the rail by the road could definitely prove to be a source of inspiration for the Thai, who are looking to solve the Kra Canal conundrum.

c. ENVIRONMENT

The Swiss landscapes are known throughout the world. They present some of the world’s most stunning views. This is preserved notably thanks to the Swiss policy of being as environmentally friendly as possible. The Swiss were in fact ranked first in the world in the “Environmental Performance Index”⁴¹. This can partially be explained by the Swiss transportation policy. The Swiss focus on rail transport,

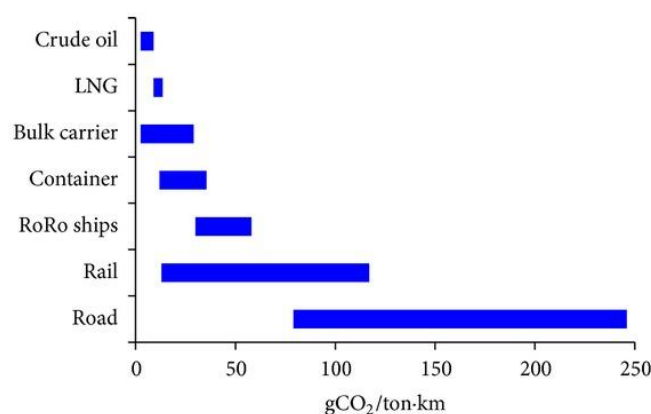


Figure 19: a comparison of different modes of transportation regarding grams of CO₂ emissions per ton of merchandise carried per kilometer

which is overall more environmentally friendly than road⁴² and try to preserve the landscapes wherever possible. The polluter-payer principle is also widely used in Switzerland and was a key point in funding the Gotthard, for example with the tax on heavy vehicles mentioned previously.

⁴⁰ <https://www.alpeninitiative.ch/en/about-us/article-on-the-protection-of-the-alps/>, last consulted March 21st, 2019.

⁴¹ <https://epi.envirocenter.yale.edu/epi-country-report/CHE>, last consulted March 28th, 2019.

⁴² [figure 19] [https://www.researchgate.net/figure/Ship-CO₂-emissions-comparison-to-rail-and-road_fig1_260431867](https://www.researchgate.net/figure/Ship-CO2-emissions-comparison-to-rail-and-road_fig1_260431867), last consulted March 30th, 2019.

However, when the European version of the project was proposed, much alarm rang with the Swiss, who wanted to limit road transportation and willed to be as environmentally-friendly as possible. In 1994, the Alpine Initiative was adopted with 52% of the votes and stated that “it [would not be] permitted to increase the capacity of transalpine roads. Instead, transalpine freight traffic must be transported by rail”⁴³. So, when it became clear that the project would in fact be a railway tunnel, the Swiss population deeply supported the project, and even when the project needed increased funding in 1998, it was largely approved.

The Kra Canal is also facing important environmental challenges. Indeed, the canal would have to be wide enough to accommodate for current ships⁴⁴. This means a likely width of 400-450 meters, a depth of around 25 meters. In addition to having coastal impacts on the Gulf of Thailand and the Andaman



Sea, the current plans for the canal⁴⁵ could have impacts on “water masses circulation, saltwater encroachment into mainland, effect of sedimentation from canal construction, destruction of coral reef, algae and seagrass, mangrove forest intrusion”⁴⁶.

Figure 20: A ship going through the Panama Canal

⁴³ <https://www.alpeninitiative.ch/en/about-us/article-on-the-protection-of-the-alps/>, last consulted March 21st, 2019.

⁴⁴ [figure 20] <http://www.stormgeo.com/solutions/shipping/ship-routing/articles/the-panama-canal/>, last consulted March 30th, 2019.

⁴⁵ [figure 21] POOKAMAN, Pithaya “Thailand’s Kra Canal: Economic and Geopolitical Implications”, *Asia Sentinel*, July 17th, 2018 <https://www.asiasentinel.com/econ-business/thailand-kra-canal-economic-geopolitical-implications/>, last consulted March 23rd, 2018.

⁴⁶ <https://www.tcijthai.com/news/2015/08/english/5762>, last consulted March 30th, 2019.



Figure 21: this map shows the most likely plan (9A) for the Kra Canal, given current analysis

In times where environmental concerns are gaining momentum among voters, especially toward the young population, the project, which aims to be a visionary and long-term solution to transportation in Southeast Asia suddenly seems like it could lose the support of the population if a greener alternative is not found.

II. COULD THE GOTTHARD BASE TUNNEL SOLVE THE KRA CANAL DILEMMA?

1. WHAT WENT RIGHT FOR THE GOTTHARD BASE TUNNEL

a. A WINDOW OF OPPORTUNITY

The Gotthard Base Tunnel can be regarded as a resounding success. “We did the entire thing [the NRLA] with no financial scandal, no construction scandal, and we did it on time” said Adolf Ogi, “with 63.6% of the population voting in favor”. These are rare sights in politics. A project, which would largely be paid with extra taxes, which is worth 20 billion francs, that would not be finished for close to 20 years, and close to two-thirds of the Swiss voters voted “yes”.

These numbers will seem baffling to many, but Adolf Ogi has had his say about the reason behind the success of the Gotthard: “In politics, there are windows of opportunity, and there was an opportunity to build this tunnel through the Alps”⁴⁷. In other words, everything was right for the project to go through. The population was supportive, because it wanted to see a transition from road to rail transportation through



Figure 22: At the voting weekend in 1992. The Ticino council of state Enzo Respini, federal councilor Adolf Ogi and state councilor Dick Marty in the Espo Centro in Bellinzona, where Ogi spoke to the local and regional authorities on the construction of the NRLA.

⁴⁷ [figure 22] <https://www.bluewin.ch/de/leben/lifestyle/adolf-ogi-ich-weinte-20-mal-im-bundesratsbuero-56543.html>, last consulted March 30th, 2019.

the Alps. The Swiss government and the European Union were in favor, because there was a need for development in transalpine transportation. The Italians and the French were also planning to go through the Alps, and this was the reason behind the reluctance of Ogi's predecessor, Leon Schlumpf, to go ahead with the project. However, where Schlumpf saw a barrier, Ogi saw an opportunity instead: "I realized that now, the window was open for the tunnels!"

The question now comes. Is the window open for the Kra Canal? Is it the right time, right now? We will look at it both ways. On one hand, the Malacca Strait is set to be saturated within five to ten years, meaning that passage will be slowed and possibly increase in price. The Chinese are in the process of solving their Malacca Dilemma and it is possible that within ten to twenty years they may not need passage through Thailand at all, having found alternatives such as a system of pipelines and transportation through land. They could then be not only disinterested in funding parts of the project, but opposed to it, as it would rival its own infrastructure. On the other hand, it may be too late to build a canal. Indeed, many would consider canals to be a "XIXth century project", rather than a forward-thinking one. It is probable that canals will simply not be "up to date" with transportation demands for the next 20, 50, or 100 years. Additionally, the Kra Canal would not immediately benefit the Thai, rather would help Southeast Asia on the long term. With nationalism still common in Thailand, would the people really want such a project?

b. VISION AND COURAGE

The NRLA is a project that will outlast generations. It is probable that an alternative won't be needed in the foreseeable future and beyond, and the vision of the project is not to be understated. In addition to being a cohesive factor in Europe⁴⁸, the project also helps to bring Switzerland itself closer together. An important argument for Adolf Ogi⁴⁹ was “to have better opening to Wallis or



Figure 23: The presentation of the NRLA in 1990.

in the Alps, for example, and transportation is very important. This is why it was important to build two tunnels (the Lötschberg and the Gotthard) through the Alps”⁵⁰, and this is why in every project, “as a minister of transportation, you have to think and see how transportation is developing in the next 50 to 100 years, so that you don’t queue up at the motorway, leading to losing time, and money”.

However, to bring this vision to reality, “a fighter was needed”, according to Adolf Ogi. From the moment that he decided of the location of these tunnels, he knew: “now I have to fight, during my time in the office, I have to bring this idea through”, and fight he did. He was the one tasked with persuading the European ministers of the project, which were not in favor of a rail tunnel through the Alps: “I went to the capitals of Europe and tried to persuade! But I couldn’t persuade, I

“Ticino”. This is because “Switzerland is a country of four different languages, four different cultures, 26 cantons, and 2500 communities, and we live in peace and freedom since 1848, which is a world record. It is possible because we treat minorities well.

We don’t forget people who live

⁴⁸ See point I.1.b.

⁴⁹ [figure 23] <https://www.bluewin.ch/de/leben/lifestyle/adolf-ogi-ich-weinte-20-mal-im-bundesratsbuero-56543.html>, last consulted March 30th, 2019.

⁵⁰ [figure 24] Ibid.

couldn't touch their hearts. So, I had to change tactics. I asked every minister of transportation to come to Switzerland and showed them that it was impossible to expand the motorway. I showed them the Church, in Wassen [a municipality in Uri], to persuade them, and to those that didn't believe, I put them on a helicopter, on the north side of the Eiger, and said that it would not be possible to build a



Figure 24: Federal councilors Flavio Cotti, Adolf Ogi, vice-chancellor Achille Casanova and federal councilor Jean-Pascal Delamuraz informing the press of the construction of the Swiss railway alpine transversal the NRLA in Bern.

was effective, and this is how they accepted our new philosophy of transportation”. In the end, he was successful, but this was only achievable thanks to a long-term vision from the Swiss people and government, coupled with a will to follow through with it.

In Thailand, many people would need to be convinced, and the Kra Canal question could benefit from someone who truly embodies the project, in much the same way Ogi embodied the NRLA.

2. IS THE KRA CANAL STILL THE BEST OPTION TODAY?

The Kra Canal and the Gotthard Base Tunnel may have more in common than meets the eye, but the Kra Canal maintains several distinct differences which could heavily influence its fate.

Firstly, is the simple fact that Thailand is not as economically developed or as stable as Switzerland⁵¹. Corruption scandals⁵² in Thailand and uncertainty over the next government, compared to political stability since 1848 in Switzerland, is a demonstration of the different framework conditions of each project.

Secondly, is the dimension of China and the Belt and Road Initiative. Indeed, Chinese investments in foreign countries have inspired many scholars, military officials, and journalists to worry of the actual benefit that any Chinese investments could actually bring to Thailand. A senior Indian naval commander told the *Business*



Figure 25: former Thai prime minister Thaksin Shinawatra (2001-2006) was found guilty of corruption and accused of money laundering and is now living in exile.

Standard in April 2018 that “in theory, the Kra Canal could benefit India and the region by taking pressure off the overcrowded Malacca Strait, [but] in practice, there’s reason to worry about what Chinese involvement in this project will mean for the balance of power in the Indian Ocean”. For the Gotthard it was never a question of if it should be built. However, with the Kra Canal, the question is very relevant to the debate.

⁵¹ As mentioned above, the Thai and Swiss economies aren’t comparable. GDP per capita (\$6595 in Thailand against \$80189 in Switzerland, according to *World Bank* data) and budget are significantly different, and while Switzerland is ranked 2nd in HDI index, Thailand is down at 83rd.

⁵² [figure 25] <https://www.theguardian.com/world/2008/oct/21/thaksin-thailand-corruption>, last consulted March 30th, 2019.

Thirdly, tensions exist between Northern and Southern Thailand. The mostly Buddhist North has long been engaged in a quiet, long-term, but deadly conflict with



Figure 26: the insurgencies in Southern Thailand are a little-talked about conflict between the Thai State and the Malay Muslims.

the Muslim south⁵³. In fact, more than 6 000 people have died since 2004, making it “the world’s third-most intensive insurgency after Iraq and Afghanistan”⁵⁴. In addition, Rhea Menon, a researcher at Carnegie

India, wrote that “the construction of the Kra Canal would further exacerbate the volatile region, creating further divisions within the country”.

There is also the risk that the project could go through without the cooperation of neighboring countries, which would be disastrous for Thailand’s international relations with said countries. Malaysia, Indonesia, and especially Singapore, which according to some estimates could lose up to 50% of their shipping business⁵⁵, and a November 2017 analysis by Stratfor has noted that “Bangkok’s relations with these countries will figure prominently in its decision over whether to follow through with the project”⁵⁶. This all brings food for thought as to answer the question of whether the Kra Canal should exist at all. While it is true that an alternative to the Malacca Strait is necessary, perhaps today’s plans of a canal are simply not optimal to maintain stability. The concept of a trade route through Thailand is geographically speaking the most logical answer to the Malacca problem, but the Kra Canal may not be the exact answer it needs.

⁵³ [figure 26] <https://www.lowyinstitute.org/publications/southern-thailand-conflict-negotiations>, last consulted March 30th, 2019.

⁵⁴ MCCARGO, Duncan, “Thailand’s Two Conflicts”, *Asia Society*, September 2010, <https://asiasociety.org/thailands-two-conflicts>, last consulted March 28th, 2019.

⁵⁵ <http://apdf-magazine.com/canal-conundrum/>, last consulted March 25th, 2019.

⁵⁶ <https://worldview.stratfor.com/article/avoiding-dire-straits-southeast-asia>, last consulted March 25th, 2019.

CONCLUSION

The reasons for the success of the Gotthard Base Tunnel can be summarized in four main points.

The project was a long-term vision centered around the people's needs. This was an important concern for Adolf Ogi who has stated that a Transport minister must look “in the next 50 to 100 years” when thinking of new projects, and what the people's needs could be then.

The project came at the perfect time. There was a window of opportunity, and Switzerland embraced it successfully

The Gotthard Base Tunnel was also a long-term solution, using the latest technology, in a visionary and forward-thinking project that would outlast generations. It looked to solve the problem at hand, going through the Alps quickly and effectively, and changed its transport policy to better fit the problem.

The fourth reason for success is the fact that Switzerland is an extremely stable country, both politically and economically. This has enabled the Confederation to look into itself when funding the project and being non-reliant on foreign powers. Mr. Ogi said that Switzerland “did not go on their knees to Brussels to ask for money”, but that instead “we paid for it”.

The Kra Canal is only feasible today in the role of a complement to the Malacca Strait. By applying what the Gotthard has succeeded with to the case of the Kra Canal, we notice that it would not only be unreasonable economically, but potentially detrimental to peace, stability, and the balance of power in the Eastern world, to go through with the Thai canal project. In addition, a canal is a relatively old concept by today's standards, and can be categorized as something of a XXth, or even XIXth century project, which differentiates it that much more from the Gotthard, which was an ambitious and innovative project.

However, this doesn't mean that the idea of crossing the Thai peninsula is to be discarded. Geographically, it is the most logical path to go through Southeast Asia by sea and it is necessary to world trade that a solution is found.

When the idea was thought of, it was exactly what we praise today in the Gotthard Base Tunnel. A forward-thinking project, ahead of its time, which found a long-term solution to an important existing problem. The idea of a canal has not been revised for close to 350 years and as it is it simply cannot exist. The idea of an infrastructure project guaranteeing the smooth junction between sea and land, such as a land bridge, have been proposed in the past, but never considered. It might be time to revise the idea of the Kra Canal, perhaps by exploiting developing transport technology such as Hyperloop. The Kra Canal may not be the key to the new Silk Road, but it could be the seed of an idea, to forge the future of Southeast Asia.

[4150 words]

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[figure 29] <https://www.quora.com/Why-doesnt-India-want-to-join-Chinas-Silk-Road-projects-that-can-benefit-India-too>, last consulted March 30th, 2019.

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[figure 31] https://en.wikipedia.org/wiki/Thailand#Ayutthaya_Kingdom, last consulted March 30th, 2019.

[figure 32] <https://www.worldatlas.com/as/th/90/where-is-songkhla.html>, last consulted March 30th, 2019.

figure 33] https://en.wikipedia.org/wiki/Anglo-Thai_Peace_Treaty, last consulted March 30th, 2019.

Audio and videos:

<https://www.rts.ch/info/suisse/7727652-insomnie-et-acrobatie-en-helicoptere-comment-ogi-a-defendu-le-gothard.html>, complete interview, last consulted March 17th, 2019.

<https://www.youtube.com/watch?v=vad0Bito66I>, documentary on the Gotthard Base Tunnel from 2016 by discovery channel, last consulted January 8th, 2019.

Full interview with Adolf Ogi (mp3 file):



ANNEXES

1. WHERE IS THE KRA CANAL TODAY?

The Thai and Chinese governments have denied that plans are in motion to build this canal. Indeed, Thai government spokesman Lt. Gen. Sansern Kaewkamnerd has said in February 2017 that “there are still other problems in the area, therefore they must be prioritized,” and the current prime minister Prayut Chan-o-cha has insisted that the government has no policy on the project.

However, according to *The Diplomat*, a memorandum of understanding was signed in May 2015 by Chinese and Thai entities, despite the official position held by the country. It would be the China-Thailand Kra Infrastructure Investment and Development company, based in Guangzhou, China, and Asia Union Group, headed by Chavalit Yongchaiyudh that signed this agreement, which aimed to advance the project. According to media accounts, a feasibility study was made in 2016 and Chinese parties have surveyed the proposed route for the Kra Canal.

Retired Thai generals have created the Thai Canal Association for Study and Development, which is chaired by former Thai Army chief Gen. Pongthep Thesprateep and is leading the movement to make the canal a reality. According to the *Nikkei Asian Review*, the association called for a national committee to consider the Kra Canal, which would find most of its funding through China’s BRI. According to the *Indo-Pacific Defense Forum*, a series of conference in Bangkok and organized by the European Association for Business and Commerce and the Thai-Chinese Cultural and Economic Association, which is speculated to be closely tied to Beijing, held in September 2017 and February 2018 have also contributed to increased talks of the canal.

2. THE BELT AND ROAD INITIATIVE

The “One Belt, One Road Initiative” (or BRI for short) is a plan presented in 2013 by Chinese President Xi Jinping which promises to, at minimum, improve connectivity and infrastructure between China and the rest of Eurasia. It has also developed across oceans with multiple projects in Africa and South America being planned. The project has been branded as the “New Silk Road” by the Chinese

China-Backed Ports

China has helped finance at least 35 ports around the world in the past decade, according to a Times analysis of construction projects.



Figure 27, the caption reads: “China has helped finance at least 35 ports around the world in the past decade, according to a Times analysis of construction projects.”

government and would have a land and a maritime dimension, as shown by the 35 ports⁵⁷ (as of June 25, 2018), which China has at least partially funded.

The Belt and Road Initiative is expected to cost more than \$1 trillion, with both the Chinese state and firms involved. Projects are planned in more than 60

⁵⁷ [figure 27] <https://www.nytimes.com/2018/06/25/world/asia/china-sri-lanka-port.html>, last consulted Mar 11, 2019.

countries, and countries all around the world, from Panama to South Africa, New Zealand and Madagascar have pledged support.

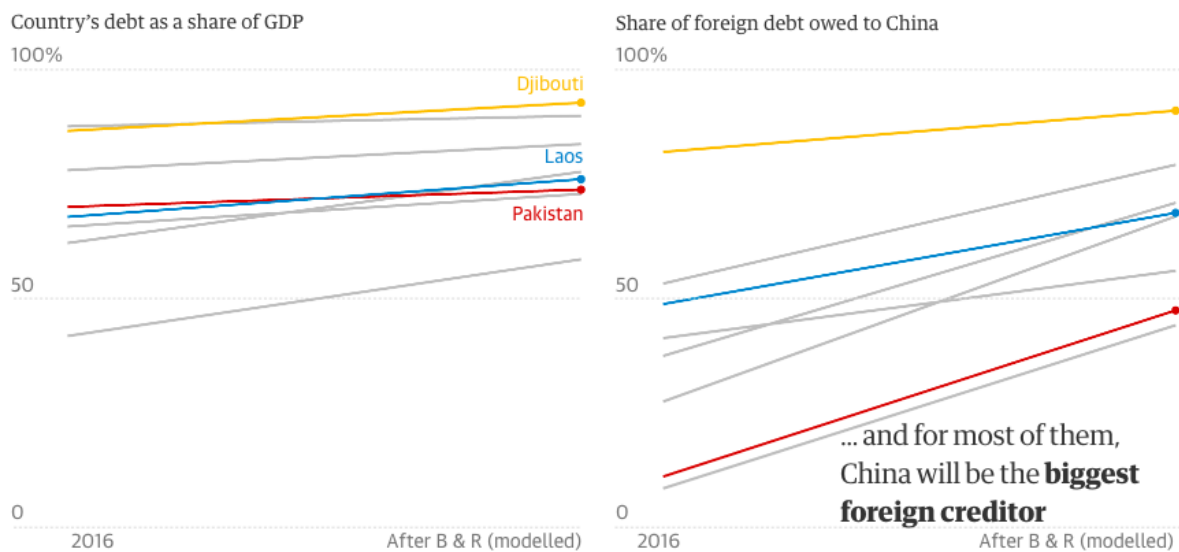


Figure 28: this graphic from The Guardian shows debt levels in Djibouti, Laos, Pakistan, Kyrgyzstan, The Maldives, Mongolia, Montenegro, and Tajikistan before and after the BRI investments.

This however has backfired for some countries⁵⁸. In 2017, Sri Lanka had to hand over an entire port (the Hambantota Port), as well as 15 000 acres of land around it for a duration of 99 years to China on a century-long lease as they owe China almost \$13 billion following a series of loans between 2010 and 2015. This port has given China a strategic foothold some 100 miles off the coast of India. This is unlikely to be an isolated incident, however. According to an analysis by the Center for Global Development, Djibouti, Laos, the Maldives, Mongolia, Montenegro, Pakistan, and Tajikistan could find themselves heavily indebted from the BRI, meaning that China would have a lot of leverage over these countries, expanding their control overseas in what many consider to be a modern version of economic imperialism. This has already happened in Djibouti, where China has used the leverage acquired through the billions loaned to the country to set up a military base on their territory. There is important concern from the international community that the Belt and Road Initiative has a dual purpose, with military in mind. “If it can carry goods, it can carry

⁵⁸ [figure 28] KUO, Lily; KOMMENDA Niko, “What is China’s Belt and Road Initiative?” *The Guardian*, July 30th, 2018, <https://www.theguardian.com/cities/ng-interactive/2018/jul/30/what-china-belt-road-initiative-silk-road-explainer>, last consulted March 30th, 2019.

troops”, says Jonathan Hillman, director of the Reconnecting Asia Project at the Center for Strategic and International Studies in Washington⁵⁹, and there is additional concern about human rights in these projects, with Herbert Wiesner, general secretary of Germany’s PEN Center, saying that they are “left in the ditches by the sides of the New Silk Road”⁶⁰.

In regard to the Kra canal, China and Chinese investors are likely to be eager contributors to the project, which would cost, according to early estimates, upwards of \$30 billion, as well as the creation of a large economic zone which would shoot up prices to upwards of \$60 billion, analysts suggest. Some consider this to be a geopolitical scheme by China to try and bypass Singapore⁶¹, who is generally considered to be in better terms with the White House to counterbalance China’s growing military power⁶².

The initiative has gathered a lot of criticism from scholars, military officials, and government heads abroad, as the initiative has been branded “imperialistic”, and is

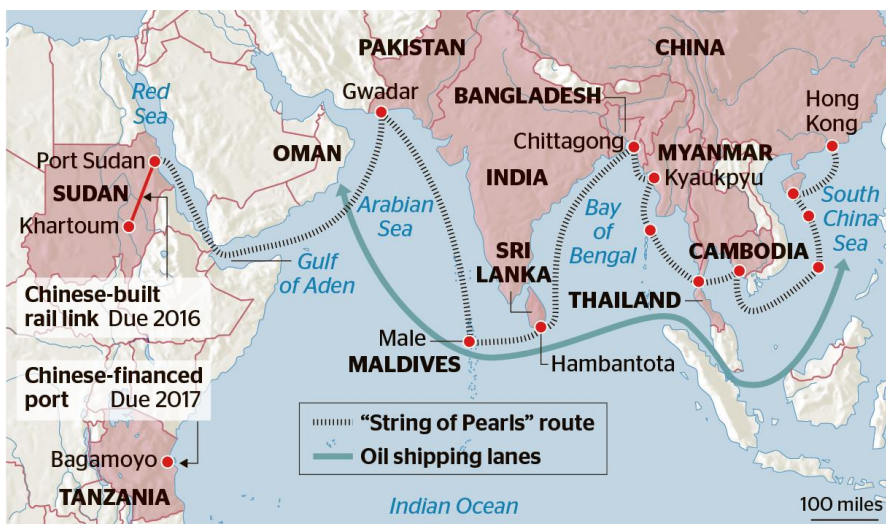


Figure 29: map showing the proposed "string of pearls" route, which is the name given to the hypothetical route China would take to bypass the Malacca Straits. (see annex 3: the Malacca Dilemma) Passage through Thailand is almost necessary for China.

said to have important political and military goals, in addition to the economic goals that Xi Jinping has mentioned. “These experiences [the Hambantota port of Sri Lanka, the military base in Djibouti] should serve as a

warning that the [Belt and Road Initiative] is essentially an imperial project that aims

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ [figure 29] <https://www.quora.com/Why-doesnt-India-want-to-join-Chinas-Silk-Road-projects-that-can-benefit-India-too>, last consulted March 30th, 2019.

⁶² <https://nationalinterest.org/blog/buzz/submarine-invincible-meet-super-sub-headed-chinas-doorstep-45987>, last consulted March 17th, 2019.

to bring to fruition the mythical Middle Kingdom. States caught in debt bondage to China risk losing both their most valuable natural assets and their very sovereignty,” Brahma Chellaney, a professor at the New Delhi-based Center for Policy Research, wrote in a December 2017 article on the Project Syndicate website⁶³. Then-U.S. Secretary of State Rex Tillerson explained on March 6, 2018 that Beijing “encourages dependency using opaque contracts, predatory loan practices, and corrupt deals that mire nations in debt and undercut their sovereignty, denying them their long-term, self-sustaining growth”. This could definitely be a cause of concern for the Kra Canal and may be the reason as to why Thailand has been looking for additional funding with ASEAN countries, as well as with Japan and South Korea.

3. THE MALACCA DILEMMA

Upwards of 80% of China’s oil imports pass through the Malacca Strait⁶⁴. China’s

China Import Countries, 2011

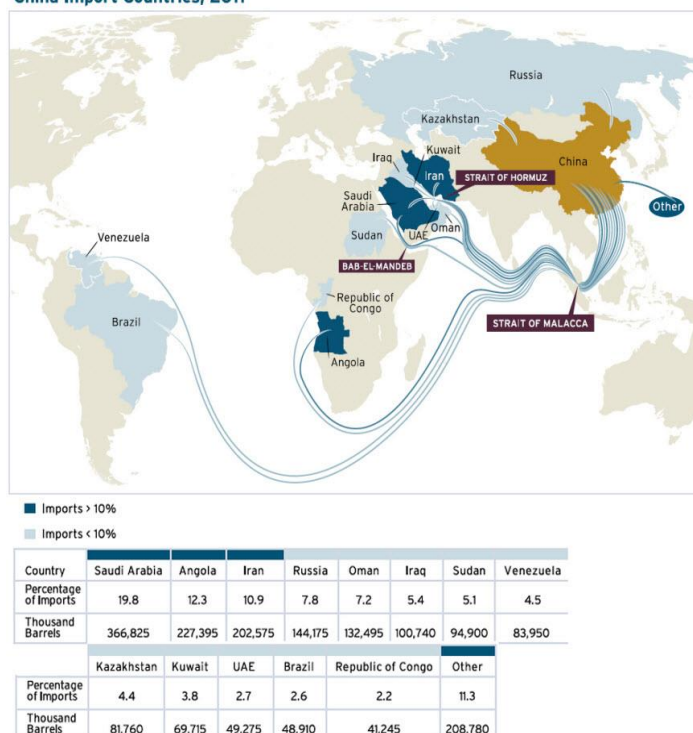


Figure 30: Chinese oil imports, data compiled from the U.S. Energy Information Agency's China Country Report 2012.

dependence on this chokepoint has been troubling it for years, and theoretical routes such as the “String of Pearls”, or the “Belt and Road Initiative” have been touted as possible solutions. Projects through Russia, Kazakhstan, Pakistan, Myanmar and possibly Thailand are expected to be the direction that China takes. A blockade is also an ever-existing worry for Xi Jinping’s government, as it

⁶³ <http://apdf-magazine.com/canal-conundrum/>, last consulted March 24th, 2019.

⁶⁴ [figure 30] UNDERWOOD, Marcia, *Brookings Institute*.

could freeze the country and lead to catastrophic economic losses and could impede China's food and energy security on the long term.

According to an article by the Center for International Maritime Security, "China's economic growth is dependent on the seas, both for receiving energy and other raw materials required for low cost manufacturing, as well as the shipping of finished goods to markets in the U.S., Europe, etc. [...] India has established credible naval presence in the Andaman Sea adjacent to the Strait of Malacca and is partnering with the U.S. and other countries in safeguarding it. [...] Hu Jintao termed this situation "Malacca Dilemma". His successor Xi Jinping resolved to overcome this dilemma by investing in the One Belt, One Road initiative"⁶⁵.

4. THAILAND, A WILL TO CONSERVE TERRITORIAL SOVEREIGNTY, AND NATIONALISM



Figure 31: the different kingdoms quickly united into Siam (now Thailand) once colonial forces came to Asia.

Thailand has never been colonized by a foreign power, largely due to very fast development after the region around it was colonized. Indeed, the kingdoms of Thai ethnicity united under the kingdom of Siam in the XIXth century⁶⁶. The kingdom quickly modernized its army, established a centralized political system with Bangkok as its capital and abolished slavery and prostitution, in the hopes that the European countries would see Thailand as an equal. It was successful, as diplomacy between Great Britain and France with Siam developed through commercial agreements and treaties of friendship. The

⁶⁵ <http://cimsec.org/reinforcing-chinas-malacca-dilemma/28117>, last consulted November 26th, 2018.

⁶⁶ [figure 31] https://en.wikipedia.org/wiki/Thailand#Ayutthaya_Kingdom, last consulted March 30th, 2019.

European powers decided to keep Siam as a neutral buffer state between their colonies, which helped the Siamese keep their sovereignty throughout the colonial era. Today, the Thai people are very proud of their country, and Chulalongkorn, the Siamese king at the time, is remembered as “the Great beloved King”. During WWII, Thailand was invaded by Japan, but due to heavy resistance from a movement called Free Thai, the Allied Powers did not see Thailand as an enemy after the war, meaning that once again, independence was maintained.

However, this pride may have turned sour. Indeed, Thai nationalism is still extremely present nowadays, and this has had tragic consequences in the past, none of which more intense than the Thammasat University Massacre of 1976. Students from the university were protesting against the return of former military dictator Thanom Kittikachorn to Thailand from Singapore. In response, Thai state forces and right-wing paramilitaries “shot, beat, raped and murdered, unarmed students, some as they tried to flee or surrender”⁶⁷ killing, officially, 46 people, although survivors estimate the number to be closer to 100, and injuring 167. They justified their action by labelling the students as actually being Vietnamese, and not Thai, who were actually antimonarchical communists. This terrible event is unfortunately show that strong nationalist thoughts still exist in all of Thailand. However, the elections for the new Thai government, which, at the time of writing, has not taken office yet, will show how and if the Thai have changed.

⁶⁷ SOLOMON, Feliz, “Thailand is Marking the Darkest Day in Its Living Memory, *Time*, October 6th, 2016, <http://time.com/4519367/thailand-bangkok-october-6-1976-thammasat-massacre-students-joshua-wong/>, last consulted March 30th, 2019.

5. HISTORICAL BACKGROUND: KRA CANAL

Almost 350 years ago, during the late Ayutthayan period, the idea of building a trade route to link both coasts of Thailand emerge. The Ayutthayan kingdom, which spanned over a large part of the modern Thai peninsula, was renowned for being open to trade with many European kingdoms, such as France, Spain, and Portugal, with Asian neighbors, Vietnam, and China, as well as with the Persians⁶⁸.

The court of king Narai also had close ties with that of the French king Louis XIV. The story goes that in 1677, the French kingdom and the kingdom of Ayutthaya reach an agreement to inaugurate a trading station in the region of Songkla. The king Narai tasks French engineer Monsieur De Lamar to review the area, with the latter concluding that the existing waterway of Songkla could be adapted to connect the east coast of Thailand with Marid (corresponds more or less to modern-day Myanmar). However, the idea was discarded as it was considered impractical with the technologies available at the time⁶⁹.

The idea was then largely forgotten and was not mentioned until the Rattanakosin period, starting from around 1780, and spanning until the present day. In 1793, accounts were found of an idea from the King's Brother of constructing a waterway in the area to aid troop movement and to reinforce military presence in the region (Thailand and Marid were at war at the time). In the second half of the 19th century, Great Britain and the East India Company ask for permission to build a canal in the Kra Isthmus, which is the narrowest part of the Thai peninsula. However, after review in 1863, the idea is abandoned due to a mountain stretch which reaches 75m above sea level, as well as the large amount of capital involved. The idea persisted, though, and in 1882 the engineer of the Suez Canal, the Frenchman De Lesseps, visits Victoria Point (Kawthoung) in modern-day Myanmar, but King Rama V (Chulalongkorn) does not allow him to investigate in detail, due

⁶⁸ <http://kracanal-maritimesilkroad.com/en/story/history-of-kra-canal/>, last consulted June 3rd, 2018.

⁶⁹ <http://theindependent.sg/the-real-threat-to-spore-construction-of-thais-kra-canal-financed-by-china/>, last consulted March 30th, 2019.

to the King believing that colonial powers are more of a threat than an ally⁷⁰. In 1893, the Franco-Siamese War broke out, which led to the kingdom of Siam being forced to give up parts of its territory to the French. Between 1867 and 1909, Great Britain and France, the two main colonial powers at the time, were in contention for control of Southeast Asia, with Siam being the prime target, as it had the biggest territory and large amounts of natural resources. As a consequence, most of the Siamese territory was distributed between them. However, the kingdom remained



Figure 32: map showing the location of Songkhla, the most likely area for an eventual Kra Canal.

independent and the region of Songkhla⁷¹ (located in the Kra Isthmus) was not seized. The colonial powers soon made sure to suppress economic growth in Siam, and in 1897, a secret agreement was made with Great Britain, which forbade Siam to construct a canal through the Isthmus of Kra without the consent of Great Britain. The agreement also brought exclusive commercial concessions in the area under British control. Notably with Singapore becoming an increasingly important part of Great Britain's influence in Southeast Asia, the latter feared a canal would hinder Singapore's development, a reason still relevant in today's debate.

⁷⁰ http://www.siamese-heritage.org/jsspdf/1961/JSS_053_1e_ThamsookNumnonda_AngloSiameseSecretConvention1897.pdf, last consulted March 30th, 2019.

⁷¹ [figure 32] <https://www.worldatlas.com/as/th/90/where-is-songkhla.html>, last consulted March 30th, 2019.

During WW2, Japan-occupied Thailand was imposed even stricter economic regulations, as well as heavy war reparations. The Anglo-Thai peace treaty of 1946⁷²,



Figure 33: Prince Vivadhanajaya Jayanta signing the Anglo-Thai Peace Treaty in 1946.

article 7⁷³ states that “no canal linking the Indian Ocean and Gulf of Siam shall be cut across Siamese territory without the prior concurrence of the Government of the United Kingdom.” The treaty also demanded Thailand’s surrender of its sovereign rights over production and

export of rice, tin, and rubber, in addition to 1.5 million tons of rice to be made available to the British for free. However, a few months later in 1946, an American called Charles Woodruff Yost managed to pass a new treaty, which this time focused on taking all possible measures to promote and maintain production of rice, as well as facilitating the exportation of surpluses upon an equitable basis. Following the “Development of the Pacific and Indian Ocean Basins” convention held in Bangkok in 1983, with the presence of major institutions such as the Japanese Global Infrastructure Fund (GIF), representatives, engineers and businessmen from all ASEAN countries, the use of PNE’s, or Peaceful Nuclear Explosions, was suggested as the most effective and efficient way to build the canal. The Japanese Mitsubishi corporation (present at the convention of 1983) also renewed interest in the canal during the 1970s, promoting the project as part of their GIF. The program “Plowshare”, lasting from 1961 to 1977, developed techniques for use of nuclear devices for peaceful purposes (e.g.- creating an artificial harbor in Cape Thompson,

⁷² [figure 33] https://en.wikipedia.org/wiki/Anglo-Thai_Peace_Treaty, last consulted March 30th, 2019.

⁷³ Anglo-Thai Treaty (1946), <https://treaties.un.org/doc/Publication/UNTS/Volume%2099/v99.pdf>, article 7, p. 136, last consulted March 30th, 2019.

Alaska). In October 1983, the former Thai minister of communications and Prime minister of Thailand Samak Sundaravej said that “The final impact [of the Kra Canal] will not only be beneficial for Thailand, but also for the region, as well any other country that uses it. We should, therefore, dedicate it to the world.”