

Understanding the Geopolitical Implications of the Chinese Belt and Road Initiative: What are the Consequences for the Geographical Perspective of the 21st Century

Thesis submitted for the degree of Degree of Doctor of Philosophy

Jamie S. Mulholland

Graduate Institute of Political and International Relations November 2021

Abstract

Grygiel states that "geopolitics is an objective reality, independent of state wishes and interests, that is determined by routes and centres of resources," arguing that "human beings have no choice but to adapt themselves to the geographic characteristics of the environment in which they live" (Grygiel, 2006, pp. 5, 24). This thesis rejects the notion that geography is immutable and that geopolitical change is *la longue durée*. Instead, this thesis argues that through harnessing human agency, state intentions and technology, it is possible to change the political and strategic meaning of geography.

This thesis assesses the geopolitical implications of Chinese policy, and attempts to reveal a willingness of the Chinese government to undertake a scale of sustained investment that suggests a complex and consciously held long-term policy. Specifically, it will examine China as a case study that exemplifies the mutability of geopolitical reality by human agency, the components of which could not be justified by the economic elements taken in isolation. All that can be known from this study is their actions. In addition, their intentions can only be inferred from the facts on the ground, the related capabilities associated with their alliances and the expansion of their military capability. China's policies are informed by geostrategy and attempts to alter the geopolitical reality.

Rapid development has resulted in sufficient surplus to afford China's attempt to alter the geopolitical reality, with significant investment in mega infrastructure projects funded through newly created economic centres. Its actions enhance access to resources and soft power on a scale that eclipses past projects that have used big infrastructure as a geopolitical tool, including the Trans-Siberian Railway and the Suez and Panama Canals. This study is significant, as it draws from a broad analysis of Beijing's foreign strategy, that provides a context for understanding its behaviour and intent. It concludes with a grand strategy informed by geopolitics that seeks to enhance access to resources and create new lines of communication to counter potential US containment policies, including sea denial and a challenge to the post-1945 economic order.

Declaration of Original Authorship

I, Jamie Mulholland, confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Signed on the first of November 2021:



Contents

Abstracti				
Declaration of Original Authorshipii				
List of Abbreviationsx				
Chapter 1: Is China attempting to alter the geopolitical reality?1				
Introduction1				
Literature Review				
Conclusion23				
Chapter 2: Methodology24				
Introductions				
Geopolitics				
Ontology and Epistemology				
Methodology				
Assumptions and Limitations				
Conclusion				
Chapter 3: Access to Resources				
Introduction				
Post-War Recovery (1949-1975)49				
Opening Up (1977-2003)59				
Modernisation (2004-2012)62				
Global Ambitions (2013-present)65				
State Aid67				
Sri Lanka67				
Pakistan				

Greece		70
Comparison to US aid		71
Conclusion		72
Chapter 4: Land Lines of Commun	nication (LLOC)	77
Introduction		77
Overview of China's rail system	1	81
1950s-1980s: China's Post War	Recovery	82
The Advent of High-speed Rail	1990s	85
High-speed rail (HSR) in China .		87
Geographical Barrier		90
Tibet, Lhasa		91
Xinjiang		92
China's Global Rail Network		94
China's Domestic Pipelines Net	work	
China's International Pipeline S	trategy	
CPEC and OBOR (BRI): China's f	uture gateways	
Domestic and Regional Security	/	
Conclusion		
Chapter 5: Sea Lines of Communio	cation (SLOC)	
Introduction		
China's Ports		
South China Sea		
China's South China Sea Clair	m	
Mare Clausum (closed sea)		
Nine Dragons		
China's Blue Economic Passage	S	

Indian Ocean	
Africa	147
Conclusion	154
Chapter 6: Conclusion	156
Appendix	175
Chapter 2	
Chapter 3	
Chapter 4	
Chapter 5	219
Bibliography	244
Primary Sources	244
Secondary Sources	249
Books and thesis	249
Articles	
Online	

Maps and Figures

Figure 1 The elements of the geopolitical triangle	29
Figure 2 Grygiel's table of Geography, Geopolitics, and Geostrategy (Grygiel, 2006, p. 23)	29
Figure 3 Four periods of Chinese politics	48
Figure 4 Comparative descriptive framework of US and Chinese foreign aid and official finance a	abroad
(Regilme, et al., 2021, chap. 116)	72
Figure 5 China-Europe Rail Routes and Frequency (2018) (J. E. Hillman, 2018)	98
Figure 6 Opinion poll of China's rise 2011	175
Figure 7 Views of China in 2017	175
Figure 8 European views of China	175
Figure 9 Global views of China	176
Figure 10 Spectrum of Chinese Global Identities	177
Figure 11 AMTI figures tracking Chinese reclamation projects in the South China Sea (AMTI, 201	.7)178
Figure 12 Communist China's Trade with Non-Communist Countries (CIA, 1951, p. 9a)	178
Figure 13 Revised trade figures reflecting China's 1951 foreign trade data (CIA 1951, p.9c)	178
Figure 14 China's trade agreements in 1953 (CIA, 1953a, pp. 1–2)	179
Figure 15 Recorded imports of Communist China from Free World Countries, 1954-56 (CIA, 195	7a, p. 2)
Figure 16 Geographic distribution of the foreign trade of communist China, 1955-56 (CIA, 1957a	a, p. 10)
Figure 17 Diplomatic status of communist China (CIA 1957, p.29)	
Figure 18 1961 grain imports (CIA, 1961, p. 6)	
Figure 19 China's Trade Trends, from 1950-1971 (CIA, 1972, p. 2)	
Figure 20 Japanese imports in 1970 (million USD) (CIA, 1971, p. 12)	
Figure 21 China's Imports of Iron and Steel by county, 1977 (CIA, 1979, p. 7)	
Figure 22 China's Top 10 Trading Partners, 1986 (CIA, 1987, p. 3)	
Figure 23 China – resource imports, 2004-2012 (Connolly, Jääskelä and Merwe, 2013, p. 21)	
Figure 24 China's crude imports, 2011 (Wu, 2012)	
Figure 25 China import countries, 2011 (Jones, Steven and Brien, 2014)	
Figure 26 China's potential resource supply: the case of iron ore, 2010–17 (Mills and Mcnamee,	2012)
Figure 27 China's top crude suppliers 2014 vs 2016 (US DoD, 2016, p. 48, 2017, p. 18)	186

Figure 28 Percentage distribution of Foreign Trade by dollar value (1950, 1955 and 1958) (CIA, 1959, p. 4)
Figure 29 Commodity composition of trade between Communist China and the USSR, 1950, 1956, and
1957 (CIA, 1959, p. 9)
Figure 30 Dollar Value of the Foreign Trade of Communist China 1950-58 (CIA, 1959, p. 5)188
Figure 31 Percentage distribution of the Foreign Trade of Communist China 1950-58 (CIA, 1959, p. 6) 188
Figure 32 Ship arrivals in communist China 1954-1957 (CIA, 1957a, p. 23)
Figure 33 The Foreign trade of communist China in 1955 (CIA, 1957b, p. 23)189
Figure 34 Key Economic Series, 1952-1970 (CIA, 1971, p. 5)
Figure 35 China's major trade partners, 1971-1966 (CIA, 1972, p. 14)
Figure 36 Commodity Composition of trade, 1966-1971 (CIA, 1972, p. 15)
Figure 37 China: Commodity Composition of Imports 1966-1971 (CIA, 1980, p. 5)191
Figure 38 Commodity Composition of Trade in 1971 (CIA, 1972, p. 4)
Figure 39 Commodity Composition of Trade with Non-Communist Countries 1971 (CIA, 1980, p. 5) 192
Figure 40 China's imports 1977-1979 (CIA, 1980, p. 6)193
Figure 41 Chinese imports by area and end of use, 1979-1984 (CIA, 1985)
Figure 42 US-China Trade, 1971-1984 (CIA, 1985)195
Figure 43 Chinese Imports, FOB, by Area and Country, 1982-1984 (CIA, 1985)
Figure 44 China's natural gas imports by source 2006-2013 (Dunn, 2014)
Figure 45 China's crude oil imports by source, 2013 (EIA, 2014b)197
Figure 46 China's crude oil imports by source, 2014 (EIA, 2015, p. 11)
Figure 47 Infrastructure and dam projects in the Mekong (Chen and Stone, 2013, p. 10)198
Figure 48 Railway Business Mileage from National Bureau of Statistics of China [table] (NBS, 2017) 199
Figure 49 Railway Business Mileage from National Bureau of Statistics of China [graph] (NBS, 2017)200
Figure 50 China's infrastructure financing in Africa (Dollar, 2016, p. 56)
Figure 51 Chinese Transportation networks from the 1950s to 1970s (Fan, 2009)
Figure 52 Cumulative length of track201
Figure 53 Comparison of Eurasian Transportation Routes (Frese, 2019)
Figure 54 Six Rail Speed upgrade in 1997–2007 (Lim et al., 2016, p. 218)
Figure 55 Major International Pipeline Projects as of 2011 (Shaofeng, 2011, p. 611)
Figure 56 Collection of Operational and planned oil and natural gas pipelines (Liu, Yamaguchi and
Yoshikawa, 2017)

Figure 57 China's overland transport to Europe (Lim et al., 2016; Embury-Dennis, 2017)2	205
Figure 58 China's high-speed rail corridors2	205
Figure 59 China's major LNG import terminals (current and proposed) (EIA, 2015, p. 30)2	206
Figure 60 Existing and planned gas pipelines in China (Ming, Ximei and Yulong, 2014)2	207
Figure 61 China's infrastructure investment in African railways2	208
Figure 62 China's infrastructure projects in Pakistan2	209
Figure 63 China's International Pipelines2	210
Figure 64 The Myanmar-China energy pipeline and West-East gas pipeline (Liu, Yamaguchi and	
Yoshikawa, 2017)2	11
Figure 65 The Myanmar-China energy pipeline (Liu, Yamaguchi and Yoshikawa, 2017)2	211
Figure 66 China's Trans-Asian Railway Network (UN ESCAP, 1999, p. 2)	212
Figure 67 Map of a proposed trans-Africa highway network (Staden, 2018)2	212
Figure 68 Trans-Siberian Railway map (Trans-Siberian Rail Routes, 2018)2	213
Figure 69 Communist China railroads and selected roads, June 1961 ('Communist China Railroads and	
Selected Roads)2	13
Figure 70 Key domestic Oil and Natural Gas Pipelines (EIA, 2014a, p. 23)2	214
Figure 71 China's import transit routes/critical chokepoints and proposed/under construction SLOC	
bypass routes (US DoD, 2010)2	215
Figure 73 From US-DOD: China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US	
DoD, 2012)	16
Figure 74 China's Energy Import Transit Routes (US DoD, 2017, p. 44).	217
Figure 75 Monographic Study on Transport Planning 2014-2030 (CPEC, 2017a)2	218
Figure 76 The Expeditions of Zheng he 1405-1433 (Levathes, 1997, p. 5)2	219
Figure 77 Container traffic through Chinese owned or invested ports (Kynge et al., 2017)2	219
Figure 78 China defence spending has increased rapidly since 2000 (Kynge et al., 2017)2	220
Figure 79 China and Hong Kong port activity 2008-2014. Source UNCTAD (Bland, 2016)2	
Figure 79 China and Hong Kong port activity 2008-2014. Source ONCTAD (Bland, 2010)	220
Figure 80 Volume of handled goods in China from 2008 to 2016, by port type (in billion metric tons)	220
Figure 80 Volume of handled goods in China from 2008 to 2016, by port type (in billion metric tons)	221
Figure 80 Volume of handled goods in China from 2008 to 2016, by port type (in billion metric tons) (Statista, 2017)	221 221

Figure 84 Hong Kong's Re-export growth and Mainland China's export growth. Source: CEIC (Hong Kong
et al., 2003)
Figure 85 The expansion of trade between Hong Kong and China (Ash and Kueh, 1993, p. 714)
Figure 86 Domestic exports and imports between Kong and China (Song, 2002, p. 101)225
Figure 87 Container traffic in the port of Hong Kong (Song, 2002, p. 102)
Figure 88 South China Sea charts, Secretariat of Government of Guangdong Province. January, 1947
(Wikimedia, 2008)
Figure 89 China's claimed territorial waters, disputer regions (Hill, 2012)
Figure 90 1958 Diplomatic note from Pham Van Dong to Zhou Enlai
Figure 91 Chinese investment in foreign ports is speeding up (Kynge et al., 2017)229
Figure 92 China's 'dual use' commercial and naval ports (Kynge et al., 2017)
Figure 93 Maritime transportation routes of China's oil imports
Figure 94 China's Energy Import Transit 2011 (Moore, 2014)231
Figure 95 China's global port (Kynge et al., 2017)232
Figure 96 China's import countries, 2011 (Dews, 2014)233
Figure 97 Four Phases of China's Development234
Figure 0.8 The Cwader project and its international (Carver, 2006, p. 8)
Figure 98 The Gwadar project and its international (Garver, 2006, p. 8)
Figure 99 'String of pearls' ports (Khmer Times, 2014)
Figure 99 'String of pearls' ports (Khmer Times, 2014)235
Figure 99 'String of pearls' ports (Khmer Times, 2014)
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238Figure 104 Economic corridors and passages under OBOR (Brennan, 2017)239
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238Figure 104 Economic corridors and passages under OBOR (Brennan, 2017)239Figure 105 A comparison of two shipping routes for the Asia-Europe trade (Rahman, Saharuddin and
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238Figure 104 Economic corridors and passages under OBOR (Brennan, 2017)239Figure 105 A comparison of two shipping routes for the Asia-Europe trade (Rahman, Saharuddin and Rasdi, 2014)240
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238Figure 104 Economic corridors and passages under OBOR (Brennan, 2017)239Figure 105 A comparison of two shipping routes for the Asia-Europe trade (Rahman, Saharuddin and240Figure 106 Minimum sea-ice extent from 1980 to 2016 (The Economist, 2017c)241
Figure 99 'String of pearls' ports (Khmer Times, 2014)235Figure 100 China's investments in Africa (Robert D. Kaplan, 2016)236Figure 101 Overseas military bases in Djibouti (Allison, 2018)237Figure 102 China's first overseas military bases (Chan, 2018)237Figure 103 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)238Figure 104 Economic corridors and passages under OBOR (Brennan, 2017)239Figure 105 A comparison of two shipping routes for the Asia-Europe trade (Rahman, Saharuddin and240Figure 106 Minimum sea-ice extent from 1980 to 2016 (The Economist, 2017c)241Figure 107 Arctic map of UNCLOS claims (The Economist, 2014b)241

List of Abbreviations

A2/D2	Anti-Access/Area Denial
ACD	Asia Cooperation Dialogue
ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AMTI	Asia Maritime Transparency Initiative
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BCIMEC	Bangladesh-China-India-Myanmar Economic Corridor
BCM	Billion cubic metres
BRI	The Belt and Road Initiative
BRIC	Brazil, Russia, India and China
BRICS	Brazil, Russia, India, China and South Africa
ССР	Chinese Communist Party
CCWAEC	China-Central and West Asia Economic Corridor
CICPEC	China-Indo-China Peninsula Economic Corridor
CIPS	Cross-border Interbank Payment System
CMREC	China-Mongolia-Russia Economic Corridor
CNAPS	China National Advanced Payment System
CPEC	China-Pakistan Economic Corridor
CPPCC	The Chinese People's Political Consultative Conference
СРТРР	Comprehensive and Progressive Agreement for Trans-Pacific Partnership

- CNOOC China National Offshore Oil Corporation
- CNPC China National Petroleum Corporation
- CPC Communist Party of China
- CSIS Center for Strategic and International Studies
- DFID Department for International Development
- EBRD European Bank for Reconstruction and Development
- EEU Eurasian Economic Union
- EEZ Exclusive Economic Zone
- EIA Energy Information Administration
- ESPO East Siberia-Pacific Ocean crude oil pipeline
- ETIM East Turkestan independence movement
- FDI Foreign Direct Investments
- FYP Five-Year Plan
- GMS Greater Mekong Subregion
- HSR High-Speed Rail
- IAE International Energy Agency
- IFC International Financial Corporation
- IMF International Monetary Fund
- IR International Relations
- ISIS Islamic State of Iraq and Syria
- LNG Liquid Nitrogen Gas
- OBOR One Belt, One Road
- MDB multilateral development bank

MSRI	Maritime Silk Road Initiative
NDB	New Development Bank
NELB	New Eurasian Land Bridge
NEP	Northeast Passage
NPC	The National People's Congress
NWP	Northwest passage
OBOR	One Belt One Road
ODF	Official Development Finance
PLA	People Liberation Army
PLAN	People's Liberation Army Navy
PPI	Private Participation in Infrastructure
PRC	People's Republic of China
PWC	PricewaterhouseCoopers
REE	Rare Earth Elements
SCO	Shanghai Cooperation Organisation
SCS	South China Sea
SLOC	Sea Lines of Communication
SOE	State-Owned Enterprise
SREB	Silk Road Economic Belt
SWF	sovereign wealth funds
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TAR	Trans-Asian Railway
TIP	Turkestan Islamic Party

xii

- TPP Trans-Pacific Partnership
- US United States
- USD American dollars
- WTO World Trade Organization

** all translations from French and Chinese are translated by the author

Chapter 1: Is China attempting to alter the geopolitical reality?

Introduction

China's rise is having a significant effect that extends far beyond the region, with its foreign policy affecting trade, transportation, security and economics on a global scale. As the most populous nation in the world with a rapidly growing economy, China has grown to be the largest energy consumer and producer in the world, with a rapidly increasing demand for crude oil, petroleum and liquid nitrogen gas (LNG) (EIA, 2014a). China's actions outside its borders attracts attention from the United States, namely the United States, which risks the South China Sea shifting from a sphere of influence¹ to a shatter belt² (Kelly, 2016). Recently, some authors have even attempted to place China as a possible candidate for heartland³ possessor (Robbins, 1993). China is investing in new economic centres that favour emerging economies and infrastructure investment, addressing the bias and double standards found in existing institutions (Roberts, Armijo and Katada, 2018, chap. 151).⁴

China has rapidly expanded its sphere of influence, beginning in the South China Sea, the Mekong River and China–Pakistan Economic Corridor (CPEC) (Santasombat, 2015; The Economist, 2016). China's aspirations were unveiled by Xi Jinping in late 2013, in the One Belt One Road (OBOR), later known as the Belt and Road Initiative (BRI) which incorporates multiple existing and proposed economic corridors (Xinhua, 2017a). China's most ambitious megaproject, the new Silk Road, will guide Chinese direct investment and foreign policy for decades, with a completion date of 2049. The OBOR (or BRI) is more

¹ **Spheres of Influence**: A country or region under the domain of an outside adjacent or nearby Great Power that lacks formal authority (Kelly, 2016, p. 185). A rival outside competitor would result in a shatterbelt structure replacing the spheres of influence.

² **Shatterbelt**: Prone to conflict escalation, it is the product of strategic and regional competition along opposing regional alliances. It characterises a regional conflict resulting from both local competition as well as a strategic rivalry between outside Great Nations (Kelly, 1986, p. 176).

³ Heartland: Mackinder's 1904 address describes "a central position within the largest continent exerting pivotal impact outward," a geographic area that once controlled, would allow its possessor to dominate the world (Kelly, 2016). "In 1919 Mackinder identified China as constituting one of two heartlands in the World Island that were of critical importance – the southern and eastern coastlands of Asia. In addition, he argued that China could build a new civilization that would be neither Eastern or Western" (Sloan, 2017, p. 266). Mackinder postulated "China as a potential ultimate 'organizer' of the Heartland" (Mackinder, 1919, p. xxi).

⁴ "The BRICS' shared aversion to U.S. hegemonic practices and Western double standards ranges widely across many policy arenas, from the unilateral use of force and financial sanctions to using informal leverage, bending or skirting the formal rules of international

institutions, or guaranteeing themselves unfair exceptions and privileges" (Katada, Roberts and Armijo, 2017)(Roberts, Armijo and Katada, 2018, chap. 23).

ambitious than the Marshall Plan which included \$13bn in aid between 1948-1951 (\$100bn when adjusted for inflation), though the BRI does not emphasise ideological factors (Shen, 2016; Bin, 2018; The Economist, 2018c).

As China's strategy gains shape, expanding its influence across Eurasia and Africa, it becomes increasingly important to determine if its actions are the result of normal economic development or a guiding strategy. This thesis will address the following research question: Does China's geopolitical strategy exemplify the mutability of geopolitical reality by human agency?

This thesis explores the geopolitical implications of Chinese policies are informed by geostrategy and attempts to alter the geopolitical reality, which are defined as behaviour patterns. As a secondary aim, it hypothesises that geopolitical analysis of Chinese politics will reveal a willingness of the Chinese to undertake a scale of sustained investment that suggests a complex and consciously held long-term policy. The components of which could not be justified by the economic elements taken in isolation. It is expected to reveal a willingness to invest in capacity and networks that have as yet unforeseen strategic advantages.

The term geopolitics is contested. Kelly argues that this topic warrants further exploration, suggesting that "classical geopolitics, in its ontological foundations, assumes that some sort of a common reality does exist and that reality is clear enough so that many of us, author and reader alike, together can visualise and study it, and thus we can design theories of probability about particular likely outcomes" (Kelly 2016, p.10).

This thesis will use key elements that constitute geopolitics to assess China's actions through qualitative analysis, including energy security, access to natural resources, infrastructure projects, port access and the establishment of multilateral development banks to explore their transformative effects on the geopolitical reality, or 'common reality' (Kelly, 2016, p. 16). "Geopolitics is the human factor within geography" (Grygiel, 2006, p. 22). The human factor refers to our capacity for technological innovation, particularly in fields the impact transportation. State Strategy refers to investments in mega infrastructure projects like canals, as well as rail, highway and port projects that connect economic centres and natural resources. Furthermore, it defines strategy as a component element of the synthetic approach of classical geopolitics.

Geopolitics is an interdisciplinary endeavour that can address more fully the intersecting complexities of our current international situation. It encompasses three broad fields of

inquiry: geography, history, and strategy. The geographic component takes into account, first, human factors, such as ethnic settlement patterns and conflict, second, locations that facilitate defence and attack and, third, the territorial presence (or absence) of essential resources and goods that are required for war, such as oil, iron and coal, and food. The historical component addresses trajectories and discontinuities in the arenas of politics, cultures, economics, social relationships, and international affairs. Finally, the strategic component requires an assessment of goals, means, and likely consequences of actions by one's own country, allies, and adversaries undertaken in the midst of conflict, potential or realised. (Hochberg and Sloan, 2017, p. 579)

A change in the geopolitical reality describes the altering of geopolitical factors to the extent that it produces a regional or global effect on geostrategy, and in turn, foreign policy across the region. "Mackinder appreciated that geography alone does not determine human action; rather human actions may, given appropriate technology and imagination, refashion geography in a strategically salient fashion" (Hochberg and Sloan, 2017, p. 581). Three major events have occurred since the midnineteenth century that has changed the geopolitical reality: the opening of the Suez Canal in 1869, the Panama Canal in 1914, and the Trans-Siberian railway initiated in 1904. These examples successfully altered the geopolitical reality in the region, but only account for one constituent element of geopolitics, lines of communication. The Bretton Woods Institutions, which include the World Bank and the International Monetary Fund (IMF), represent an attempt to shape the global economic order through establishing new centres of economic power (Voutsa and Borovas, 2015, p. 38). This thesis defines the geopolitical reality for a given period as the current configuration of geographic and geopolitical features, our current capacity to exploit them, and the resultant strategic value of locations and trade routes. According to Grygiel, Ming China's geostrategy "did not completely reflect the underlying geopolitical situation" which "led to China's fall from its position of power" (Grygiel, 2006, p. 163). He draws similar conclusions from the decline of Venice and the Ottoman Empire. Much has been written on the history of the Chinese empire and of China's rise, but few have written about China's strategy from a comprehensive geopolitical perspective, incorporating the constituent elements of geopolitics (Sloan, 2017, p. 21).

The methodology chapter discusses the relationship between geostrategy and geography in greater detail, as well as how change will be defined, and measures to allow for a comparison of the geopolitical reality for two given periods. The term "geo-strategy" was first used by Frederick L. Schuman in his 1942

article "Let Us Learn Our Geopolitics." It was a translation of the German term "Wehrgeopolitik" as used by German geostrategist Karl Haushofer, Grygiel provides a modern definition (Gyorgy, 1943, p. 347). In order to connect geography and strategy, Grygiel coined the term geostrategy, "the geographic focus of a state's foreign policy, or where a state directs its power" (Grygiel, 2006, p. 36). Jakub Grygiel has written about the geostrategy of Ming China (1364-1644) but has a different understanding of geopolitics. He argues that geopolitics is an objective force that states cannot do anything to change; states must be reactive, yet they are limited by the extent to which they can resist. "Successful states are those that match their geostrategy to the underlying geopolitical reality" (Grygiel, 2006, p. 1). Kaplan, in agreement with Grygiel, suggests that China's rapid resolution of territorial disputes alone constitutes a significant change to the region's geopolitical reality. China has secured its borders and turned its eyes West; it is expanding its trade routes, naval reach and access to resources in other markets.

More importantly, China's future role as a global power is contested (see Figures 5-8); is it regaining its position as a regional power or challenging the US on a global scale? While the first would see China supplanting the US to regain dominant power in eastern Asia, the latter would require a much more substantial advancement in global influence and represent a significant threat to the current status quo. It is understandable that there is disagreement among academics as to China's ambitions, interests and strategy. China's strategy is wrapped up in the puzzle of its national interests and ambitions; does China hold aspirations of superpower status? China acting as a status quo state would involve a strategy of acting within international norms and pursuing interests through existing international institutions.

In contrast, China as a revisionist or non-status quo state would include a strategy to circumvent existing norms and institutions as well as the establishment of new, competing alternatives. Identifying China's interests and its end-game is essential to the regions' economic and strategic security due to the scale of both potential outcomes. It is important for a state's geostrategy to reflect regional changes at the outset, as a response requires adequate investment and support from economic, security, and political infrastructures, including agreements within alliances and international bodies.

As China grows in regional and global influence, questions of its standing as either a status quo or a revisionist state are replaced by those of interests and strategy. Such studies are problematic, due to the state's secretive nature and the dominance of state-owned enterprise (SOE) in relevant sectors. Official figures from Beijing do not compensate for the lack of publicly accessible figures from State-Owned Enterprises (SEOs), as even if access can be negotiated, there are issues of reporting. It is well known

that states have inflated figures reported to Beijing to meet state-mandated quotas. China has acknowledged discrepancies between national and provincial figures, "exaggerations about economic performance did exist in some regions ... In the 1989 inspection, for example, there were over 50,000 violations, and more than 60,000 in both the 1994 and the 1997 inspections" (Cai, 2000, p. 783). The issue of Inflated figures persists even after attempts to address the reliability and accuracy of national statistics with the Chinese Statistical Law enacted in 1983. Discrepancies go beyond variations in calculations, raising concerns about the accuracy and consistency of data. Sets from external sources including the World Bank and National Bureau of Statistics (US) are used address the limitations of Chinese data set, while acknowledging that the use of data across multiple sources raises concerns of consistency due to the method aggregation strategies, and methods of examining discrepancies between sources.

In addition to restrictions to the access of data, official statements reflect the different faces China presents publicly to foreign and domestic audiences, attempting to strike a balance between strong and non-threatening (I. Taylor, 2014). Domestic displays of strength in 2015 include a high-profile military parade,⁵ demonstrations of regional power in the South China Sea and the continuation of land reclamation works (J. Smith, 2015). During this substantial display of force in the '2015 China Victory Day parade,' Xi announced a pledge to reduce Chinese troops by 300,000 (Phillips, 2015).

It can be argued that China's repeated attempts to reshape its image stem from a lack of foreign policy experience, that has resulted in considerable confusion in the literature. Inconsistencies are evident in differences in language used in speeches for domestic and international audiences, especially in relation to Japan and the Philippines. Beijing's 'China Threat' Theory, is an attempt to address what it perceives as an inaccurate media portrayal of China as a threat to global peace and stability in coverage of its economic development and military expansion (Huang, 2009b). As a result, China has changed the language used to appear less threatening, including the shift from "China's peaceful rise" (中国和平崛起) under Hu Jintao to "peaceful development" (中国和平发展) in 2004 (Okuda, 2016). China's use of non-

⁵ The '2015 China Victory Day parade,' was China's first high-profile military parade held in celebration of an occasion other than National Day, the 70th anniversary of it victory over Japan in World War II. It featured 12,000 PLAN troops, more than 1,000 troops from 17 different countries and 850,000 'Citizen Guards'. 30 heads of state, (not including Japan), were treated to an aerial display of 200 jets and bombers in a 'V' formation, matching the display of military technology on the ground, including tanks, amphibious assault vehicles, drones and hundreds of ballistic missiles including the anti-ship "carrier killer," Dongfeng-21D (Asia, 2015; Erickson, 2015; Ripley, 2015).

threatening language contrasts with China's image as a developed power, one that wishes to take America's place in securing the region, and has rapidly expanded the foreign aid it provided to developing nations including Pakistan and Myanmar. China as a developed power presents itself as an economic saviour that weathered the recent financial crisis and offers 'no strings attached' aid (Kitano and Harada, 2016). "China has been less belligerent than leading theories of international relations might have predicted for a state with its characteristics" (Fravel and Fravel, 2017, p. 45). Despite (contestably) possessing a vastly superior naval force, China downplays its naval capabilities as 'bluewater aspirations' in contrast to India's Navy which claims Blue-water capabilities (Singh, 2015). If China wishes to take America's place in the region, it must do so without appearing overly ambitious or assertive as this could, in turn, push its neighbours to strengthen ties with the US.

Historically, when China was the 'Middle Kingdom,' it protected its borders but did not have to consider the threat of balancing. "Defensive realists maintain that the offence–defence balance is usually heavily weighted in the defender's favour, and thus any state that attempts to gain large amounts of additional power is likely to end up fighting a series of losing wars" (Mearsheimer, 2006, p. 76). Accordingly, the recognition of the futility of offence would lead states to pursue a position of balance in power. Through most of its history, China has focused on securing its northern border, for which it constructed the Great Wall.

Furthermore, many foreign observers describe China's international communication and public relation skills as "seriously underdeveloped," especially its capacity to influence opinions beyond its borders, the handling of independent media, single-issue advocacy groups, criticism and negative opinion (Lu, 2009, p. 5). This claim is consistent with Henry Kissinger's assessment that "In comparison to more recent regional contenders for power, China was a satisfied empire with limited territorial ambition" (Kissinger, 2012). Within the context of a returning power-seeking regional support and a reduction in American involvement, its actions appear rational. To reduce its image as a threat, China has taken a number of actions and used appropriate language not to alarm its neighbours. In these instances, China projected the image of a developing power through the acceptance of foreign aid from the US and UK (Howell, 2015).

One example of miscalculated bravado was the Scarborough Shoal standoff in 2012. Chinese state media threatened the Philippines with war, which escalated to a military standoff and China's eventual withdrawal when its bluff was called (Miks, 2017). This use of sabre-rattling was likely intended to distract from domestic issues but ultimately was resolved by a substantial pay-out to the Philippines to

quiet the issue (Holmes, 2012).⁶ China has claimed much of the South China Sea, conducting sea denial and island-building in contested waters while disregarding the jurisdiction of the international tribunal in The Hague (A. Thayer, 2011; Yahuda, 2013; Tiezzi, 2015; Dobell, 2016). Having secured its Northern border, China began securing the rest of its borders (this includes land borders with fourteen neighbours and another eight by sea) and has turned its attention South. "Except in the case of Vietnam, China has tried to stick to its cooperation strategy of settling boundary problems declared by Zhou Enlai at the Bandung Conference in 1955 and has acted as a responsible and disciplined member of the international community and as an observant of its treaty commitments" (Maxwell, 2017, p. 3873). "As a part of this process, China resolved outstanding territorial disputes with Russia, Laos, Vietnam, Kazakhstan, Kyrgyzstan, and Tajikistan and entered into military confidence-building measures with India and the Soviet successor states in Central Asia" (Fravel, 2014, p. 6). "The history of territorial disputes between China and its neighbours to the Northwest and Southeast illustrates the shortcomings of the arguments that China is an expansionist power seeking to regain lost territories" (Ayapbergenovna, 2015, p. 282).

Despite numerous political missteps and miscalculations, China has worked to secure its borders through the successful resolution of border disputes.

Chinese diplomats have been busy in recent years settling remaining border disputes with the Central Asian republics and with its other neighbours (India being a striking exception). While the accords may not be on China's terms, the very fact of such a comprehensive approach from Beijing is an indication of a strong strategic direction. China has signed military agreements with Russia, Kazakhstan, Kyrgyzstan, and Tajikistan. (Kaplan, 2013)

Following the cold war, Sino-Russian bilateral relations significantly improved due to a shared interest in curbing US power, resulting in a Euro-Asian link. "Some 7,000 border disputes, many of them centuries old have been reduced through amicable negotiations to single digits. Russia exports what China badly needs – military hardware and energy resources – while China provides investment and manufacturing products at very competitive prices" (Xiang, 2004). Improving relations along its borders has allowed China to turn its attention South. "The stabilisation of China's land borders may be one of the most important geopolitical changes in Asia of the past few decades" (Grygiel, 2006, p. 170). The geopolitical

⁶ Unfortunately, as a sensitive political issue specific details of the transition of power and the financial agreement between the two states were not made public. Details of the agreement were made known to the author through interviews with Chinese academics, whom provided consistent accounts.

benefits have contributed to near double-digit annual growth in defence spending which has resulted in expanded military capabilities from which "none of its neighbouring states to the south, east or west of China can compete in terms of military power" (Sloan, 2017, p. 236).

"Though China's current borders encompass Manchuria, Inner Mongolia, East Turkestan, and Tibet—all the surrounding plateaus and grasslands, that is—the very economic and diplomatic strategies of China's rulers today demonstrate an idea of China that reaches beyond the territorial extent of even the China of the eighth-century Tang and the eighteenth-century High Qing" (Kaplan, 2013). China, a demographic behemoth with the world's most energetic economy for the past three decades, is, unlike Russia, extending its territorial influence much more through commerce than coercion (Kaplan, 2014).

A geopolitical approach recognises the importance of human agency as an important factor in the study and application of geopolitical theory (Sloan, 2017). "The actual balance of power at any given time is, of course, the product on the one hand of geographical conditions, both economic and strategic, on the other hand, of the relative number, virility, equipment, and organisation of competing peoples" (Mackinder, 1904, p. 437). It brings together all of the constituent elements of geopolitics in a coherent narrative and led to questions of China's role in geopolitical terms. Specifically, what are the strategic implications of China's naval, rail and pipeline expansions in energy security, regional security and access to resources and how does China, as an emerging economic power and the emergence of new economic intuitions, including the AIIB and NDB, affect the existing global order? China's naval expansion is a product of its sea trade and energy security, resulting from concerns of maritime piracy and securing its Sino-Myanmar pipeline to the Indian Ocean. The interconnectivity between transportation, access to resources, economic centres and technology signifies that a study of China's strategy in relation to one or more of these elements would be incomplete without including the others. The study of the various elements of strategy together with location leads to a Geopolitical analysis and a reframing of the research question in geopolitical terms; does China's strategy represent an attempt to challenge the current geopolitical reality and does this exemplify the mutability of geopolitical reality by human agency?

China appears central to global economic and energy sectors, as a major trade partner in all regions of the world, including developing markets. Its recent ASEAN initiatives account for significant regional influence. China's top ten trade partners include US, Hong Kong, Japan, South Korea, Taiwan, Germany, Australia, Malaysia, Brazil and Russia in addition to being the top trading partner of many other nations (World Bank, 2016). China is a major player not only in its region but also in Europe, South America and

Africa. China is diversifying oil imports through a rapid increase in access to new energy markets. "If successful, within a generation China's new "Silk Roads" – land pipelines, together with roads and railways – will transport enough oil and gas to meet the country's import requirements" (Tata, 2017). As a result, its geopolitical importance in global economics and energy security cannot be ignored. It is not unreasonable to suggest that China's strategy is informed by geopolitics, based on its recent efforts to expand upon the elements mentioned previously. The effectiveness of China's actions across each of the elements will demonstrate a concerted effort to alter the geopolitical reality in China's favour through significant investment in lines of communication, access to resources and new economic centres. It will also be argued that these changes exemplify the mutability of geopolitical reality. If China's actions are not properly contextualized, it becomes increasingly problematic to interpret and understand China's actions.

Many parallels can be drawn between India and China; they are both newly formed states that experienced humiliation at the hands of Western colonial powers⁷ and are proud of their long histories. Previously separated by geographic barriers, they are two of the world's largest counties and represent more than one-third of the world's population. India is projected to surpass China's population in 2022, according to the UN (Melorose, Perroy and Careas, 2015). China and India represent half of BRIC, a group of four developing countries with growing economic power. BRIC faired better from the 2008 financial crisis than the developed world; its economic outlook is projected to rival the G7 by 2032 according to Goldman Sachs (O'Neill and Stupnytska, 2009).

Despite commonalities, India remains both apprehensive of China and hesitant to become overly dependent on America, allowing it to play the role of 'big brother'. The view that India has of preeminence in the Indian Ocean is a relatively recent one (Scott, 2006, p. 97). India views itself as the resident power of the Indian Ocean and the pre-eminent power in the region and would be unwilling to concede power to the US. Much like India views the Indian Ocean, China sees itself as the resident power over the South China Sea and wants to regain the position of pre-eminent power (Kalyanaraman, 2013; Brewster, 2017). China never thought of its involvement in the South China Sea in terms of expansion because, in its view, the South China Sea has always belonged to China. It is the regional

⁷ The century of humiliation (百年国耻) refers to the period of intervention and imperialism by Western powers and Japan in China between 1839 and 1949, while India was under British colonial rule (Kaufman, 2010, p. 1). India claims 200 years of British colonial rule ending in 1947 (Tharoor, 2016).

power and, having secured its northern borders; it can turn back to the South and reclaim its position as the pre-eminent power.

Indian scholars that suggest China wishes to grow from a resident stakeholder to a resident and preeminent power but does not hold ambitions of superpower status as understood by the US. In simple terms, China does not appear to be seeking the status of a unipolar power, as seen by its continued support of BRICS, the NDB and its increasing engagement in existing liberal institutions. Resident stakeholder refers to those residing in the region whose interests are affected; resident power includes interests as well as the capabilities to influence the region. "China can only become preeminent if the United States continues to allow its powers of attraction to atrophy" (Armitage and Nye, 2007). This thesis argues that the Belt and Road Initiative (BRI, formerly OBOR) represents an attempt to "boost its construction sector and open new markets for its exports... cement its relationship with countries in the region ... [and] send a message to Europe and the United States that it wants to take its place as the preeminent power in Asia and be treated as an equal by advanced countries of the West" (Djankov and Miner, 2016). An analysis of China's strategy, in contrast to studies of liberal democracy due to the Chinese government's secretive nature and state-owned enterprise (SOE). As China rarely publishes white papers or other documents which would indicate its commitment to a specific strategy or foreign policy, it can only be judged based on its action.

Reading Chinese intentions is difficult, not least due to the lack of data. China believes that it is 'the rising power' and while it believes in 'harmonious development' it will become increasingly forceful as an international player, while playing the long diplomatic game with increasing sophistication. (Development Concepts and Doctrine Center, 2015, p. 34)

Grygiel argues, "the main cause for the academic irrelevance of geography seems to be the tendency to explain political realities only through political variables" (Grygiel, 2006, p. 13). What Grygiel laments is an unwillingness of political scientist to explain political realities through geographical variables. This thesis argues that China's actions can best be explained by examining the relationship between access to resources, lines of communication and economic centres. It will be argued that China is changing the geopolitical reality in a way that has not fully been recognised by the existing literature.

This thesis will use constituent elements of geopolitical theory to understand China's impact in a global sense. These elements consist of economic centres, access to resources, sea and land-based trade

routes with relevant advances in technology to provide an understanding of the changes in the timespace relationship that is being brought about in the specific geographic area.

Literature Review

This literature review will attempt to show how the research question that I will address relates to the existing literature. China's rapid transformation from opening up to economic titan has resulted in a flood of literature that seems to keep pace with its growth.

Jakub Grygiel calls for a revival of classical geography and world history in *'Great Powers and Geopolitical Change'* (2006). The text provides a historical overview of geopolitics from a 'structure of knowledge' perspective, reflects on its decline and proposes a return to a geopolitical framework that follows a tripartite conceptual apparatus of geography, geopolitics and geostrategy to avoid the 'geography is destiny' approach associated with classical theorists Mahan, Mackinder, and Haushofer (Dahlman, 2008, p. 87). Mackinder's geopolitical analysis, although often interpreted in this sense, never interpreted geopolitics as political destiny. The methodology is problematic as none of the three cases selected to highlight the importance of grounding geostrategic decisions in geopolitical reality succeeded in coping with the geopolitical transition of the sixteenth century. Instead, the evidence clearly demonstrated that ideological and epistemological structure questions mitigated against a rapid geostrategic shift (Jasper and Stremlin, 2016, pp. 89–90).

Grygiel suggests that when a state's geostrategy matches the geopolitical environment, it will rise, whereas if it misreading of the underlying geopolitical environment, that state begins to decline as a Great Power (Grygiel, 2006, p. x). This overlooks the possibility of a great state altering the geopolitical environment through the investment of significant economic surplus. Examples of this include Russia's construction of the 9,289kilometre-long Trans-Siberian Railway Network, the US construction of the Panama Canal and China's BRI Eurasian land-sea network.

Martin Jacques provides a well-documented account of China's economic growth in 'When China Rules the World' (2012). He provides eight reasons why western frameworks of politics and economic development do not fit Chinese society and suggests China should be seen as a civilisation and not a nation-state, one that was not the product of recent nation-building exercises and still sees regional relations in terms of a tributary-state system (Jacques, 2012). China holds a strong belief in its uniqueness and that it has no obligation to share power with other institutions. Western perception of China's rise is tainted by a Cold War mentality that expects communist states to either collapse or reform under liberal engagement. China's development is characterised by both developed and developing worlds, and its modernity by the rapid speed of transformation, yet weighted by the fact that half of the population resides in the countryside. Belying expectation, China will be the first global power to rise from the 'wrong side' of the nineteenth century, "a creature of the colonised rather than the colonisers" (Jacques, 2012). While Jacques predicts that China's actions will shape the future experience of the globe, he does not systematically address important issues regarding how China will contain the internal social unrest created by rural to urban mass migration, nor how it will manage conflicts with Taiwan, Hong Kong, and ethnoreligious tensions in Tibet and Xinjiang (Turner, 2010, p. 567).

In 'Emerging China and Critical Geopolitics' (2010), John Agnew argues that "China's rise rather is shaped by a contradictory amalgam of Western-style nationalism and a traditional totalistic conception of world order that is reactive to and dependent on current world politics" (Agnew, 2010, p. 569). Agnew critiques the conventional Western linear geopolitical narrative of China's rise grounded in Confucian intellectual history. He is critical of the view that China is 'just another great power' and that we should expect to see a "translation of economic power into military power and geopolitical influence that characterised previous periods of hegemonic transition" (Agnew, 2010, p. 572). This is important as predictions of increased engagement leading to China's liberalisation have failed. He rejects that notion that all great powers follow the same path, suggesting there may be better ways of thinking about China's contemporary geopolitical situation and that China may bring its own distinctive sensibility of the global political narrative. He describes a wide range of actors that are actively engaged in "constructing narratives about how the past can inform the present and the future in China's relations with the rest of the world" (Agnew, 2012, p. 302).

Aaron L. Friedberg contests prevailing wisdom that a Sino-US confrontation is highly unlikely in '*A Contest for Supremacy*" (2011) (Whibley, 2013, p. 168). He contributes to existing literature on the dynamics of Sino-US relations, analysing the potential of China replacing the United States as the next superpower, how the US should respond in economic and military terms, and the likelihood of war. Friedberg provides a useful overview of the intricacies of Sino-US relations and their foreign policies towards one another, but some of his assertions are problematic. First, the idea that a liberal-capitalist economic framework will result in liberal democratisation and the argument that "democracies don't go to war," associated with Kantian democratic peace theory (Malindog, 2012, p. 450).

Rajeev Chaturvedy and Guy Snodgrass provide a useful overview of China's grand strategy in "*The Geopolitics of Chinese Access Diplomacy*" (Chaturvedy and Snodgrass, 2012). It acknowledges the importance of increasing control of the sea lines and points of strategic egress lines with regards to China's grand strategy and its strategic designs in the Asia-Pacific region in particular. It also recognised early on that China was acting to enhance its geopolitical position through access diplomacy, politics of routes and infrastructure investment. A significant point, as it makes the connection between access to resources, sea lines and infrastructure prior to the announcement of the OBOR the following year. Their conceptual framework states that the key elements of China's grand strategy may be described as follows:

- Acquire "comprehensive national power" (CNP) essential to achieving the status of a "global great power that is second to none";
- Secure global access to natural resources, raw materials, and overseas markets to sustain China's economic
- Pursue "three Ms": military build-up (including a naval presence along the vital sea lanes of communication and maritime chokepoints), multilateralism, and multipolarity; and
- Build a worldwide network of friends and allies through "soft power" diplomacy, trade and economic dependencies via free trade agreements, mutual security pacts, intelligence cooperation, and arms sales. (Chaturvedy and Snodgrass, 2012)

This study argues that China is pursuing maritime control in the South China Sea, but is not seeking the status of a global great power in the traditional sense as hegemony. More importantly, it suggests that China's strategy seeks to sustain economic development and overlooks its influence on the geopolitical reality. While it mentions China's claims to the South China Sea, it does not discuss China's blue water ambitions and port development in the Indian Ocean. Finally, it does not discuss China's African and Eurasian strategy.

David Shambaugh has written multiple books on China's rise. 'Tangled Titans' (2012) conceptualises the US-China relationship and provides cautious predictions of the future. Shambaugh suggests a downturn in Sino-US relations that is reaching an unusual low point and provides five factors, one of which is the influence of geography on Washington's ability to project power in the Asia-Pacific. He argues the Sino-US relations have moved from cooperation to competitive coexistence and that the dynamics of these interactions are influenced by suspicion and misperception on both sides of the Pacific, a disconcerting trend (Shambaugh, 2013, p. 5). "Is China's self-proclaimed peaceful development a threat to the Asia

region and the rest of the world? Many observers on different continents seem to think so, even if they do not say so, mixing mistrust with a subdued appreciation for the benefits from the Chinese presence in their countries" (Jia, 2015, p. 196).

In *'China Goes Global'* (2013), Shambaugh argues that being global does not automatically translate into being a world power. Instead, he calls China a partial power, asserting that at least at present it is not a threat to anyone, a claim he backs at length in statistical detail. He uses China's inadequacies in trade to ease readers apprehension, including that significant trade surplus was predominantly low-grade inexpensive consumer goods and that Tsingtao beer was China's only brand with international recognition. China has come a long way with many of its top brands seeing a global profile rise, including Lenovo, Huawei, Xiaomi, Anker, Haier, Hisense, Oppo, TP-Link, ZTE, TCL, OnePlus, Li-Ning (Mingjie, 2018). China is making headway in electronics, home appliances both developing and developed markets and automakers are turning to developing markets in Asia and Africa (Clover, 2017). While China may still be a partial power, sustained growth, BRI, 'Made in China 2025' and 'go west' strategy bring China closer to claiming the title 'global power'.

'China goes global' analysed China's current global status, now Shambaugh turns to *'China's Future'* (2016). Shambaugh prefaces his book with a question: "whether political democratisation must accompany economic modernisation" (Shambaugh, 2016, p. 10). Central to the book, is the argument that China's future will follow one of four potential pathways: neo-totalitarianism, hard authoritarianism, soft authoritarianism and semi-democracy (Shambaugh, 2016, pp. 2–6). Subsequent chapters paint a picture of China's potential future following each of these paths. He concludes in the final chapter, asking if China, sharing land borders with fourteen neighbours and contested waters with many more, will China be a benign neighbour, or insular and self-occupied or a threatening great power? Understanding China is important as it shapes the context in which its actions are interpreted. According to Shambaugh, China is a 'partial power' showing hubris and excessive nationalism, and the increasing discord and competition that have become the norm of Sino-US relations are "natural and predictable" (Shambaugh, 2016, p. 103).

Shambaugh warns scholars should be vigilant against self-censorship, intimidation and blind acceptance of government narratives, something he suggests colours some of the analysis (Shambaugh, 2016, p. xv). Despite the caveat, and also recognizing the tendency to cherry-pick findings to fit a narrative, when presented with the same facts, scholars will produce varying scenarios. While Shambaugh is rigorous in the navigation of contradictory data and government narratives, some question if his predictions are

overly pessimistic (Rana, 2016, p. 256). A noticeable bias is present in the literature with Western scholars racing to predict the collapse of China, contrasting literature that appraises the decline of America (Ranjan, 2018, p. 94). In the face of the American decline, he claims that China is trying to create a modern economy with a premodern political system (Shambaugh, 2016, p. 22). Shambaugh paints an ominous picture of China's future, in which an economic decline results from 'hard authoritarianism' political system and suggests that innovations and liberalisation will free its markets.

Kerry Brown presents a nuanced view of China's foreign policy goals in 'China's World' (2017). Brown rejects the 'Thucydides Trap⁸,' suggesting the fact that China wants a larger role on the global stage does not equate to a clash with the United States, describing Beijing as realists that understand the cost of a military confrontation. According to Brown, Beijing has divided the globe into four geopolitical 'world of zones' of decreasing importance. The US is Zone One; Asia is Zone Two; the European Union (EU) is Zone Three; and the rest of the world – including Africa, the Middle East, Latin America and the polar caps are Zone Four (Brown, 2017, pp. 75–78). Brown examines China's foreign policy approach to each zone in the following chapters, organised by themes which include US insecurity and mutual dependency. In Zone One, the US is perceived as an economic partner and a strategic rival, particularly US alliances in East Asia and the Pacific Rim. He characterises China as hemmed in on all sides by US allies; diplomatically its friends Russia and North Korea do not reflect positively from a Western perspective and the US in particular. He concludes on a positive note, suggesting that Beijing's has the potential as a 'key shaper' to create a sense of shared future through mutual interest and common policy, shaped by "harmonious, consensual and supported by the rest of the world" (Brown, 2017, p. 212). The strength of Browns arguments is rooted in his reliance on China's previous actions and current behaviours rather than internal behaviour as many others have tried.

Australia, similar to the South China Sea, provides a strategically significant case to study the pull of Sino-US interests. Geopolitical factors have placed Australia between two great powers. Hugh White argues in *'The China Choice'* (2013) for the US to share power with China as part of a "Concert of Asia," with India and Japan to avoid an era of sea-denial. While White looks at how China's rise is undermining the confidence of US allies in the region, Clive Hamilton investigates the Chinese government's influence in Australia. *'Silent Invasion: China's influence in Australia'* (2018) suggests a broad strategy to penetrate

⁸ An apparent tendency towards war when an emerging power threatens to displace an existing great power as a regional or international hegemon (Mohammed, 2018).

strategic industries and gain access and influence over Australian elites through 'sophisticated influence operations' (Hamilton, 2018). These works provide an important case study for Chinese foreign policy and its strategy to influence western governments and counter US influence. Neither of the authors suggests how the case of Australia can be generalised to other regions.

Prior to the announcement of the OBOR initiative in 2013, many scholars were looking at China's engagement in the Mekong region, the South China Sea and the Indian Ocean. China's transformation of the Mekong region is an early example of its efforts to transform the geography of a region through heavy investment in infrastructure, and likely informed China's Eurasian strategy. China altered the waterways, and the region, through the construction of major damming projects that changed the fundamental value of the Mekong waterway from an important source of food and transport to a source of renewable energy. Since 2000, China's neighbours in the Mekong River basin have received an influx of migrants, labourers and investment connected to the construction of a number of large hydroelectric dams, with capacities exceeding 50 MW (Diana, 2015, p. 499; Urban, Siciliano and Nordensvard, 2017, p. 2). China made significant infrastructure investments in rail and roads, altering lines of communication and access to resources to offset the disruption to these waterways resulting from major hydroelectric damming projects.

The 'Impact of China's Rise on the Mekong Region' (2015) is important as it is one of the few scholarly works to explore the nature of Sino–Southeast Asian engagements, presenting an Asian perspective in an area otherwise dominated by American, European and Australian analysts. Yos Santasombat uses a multidisciplinary approach to provide an overview of changing Sino economic and political relations in each of the Mekong countries and China's use of charm offensive and good neighbourliness policy (Santasombat, 2015). It has been criticised on its ethnographic thinness and oversimplified and ideologically biased depiction of Chinese relations with the Greater Mekong Subregion (GMS) countries as well as the appeal of China's soft power projection (Diana, 2015, p. 500; Luong, 2017, p. 316). While the work provides a broad analysis of China's engagement in the Mekong Region, it does not adequately address the role of economic institutions nor does it discuss how China is expanding its strategy across Eurasia and Africa. It would have been useful to draw comparisons between this region and CPEC for example.

In 'Chinese Encounters in Southeast Asia' (2016), Magnus Fiskesjö discusses four major themes: the transformative effect of Chinese migration, trans-border trade, Chinese norm-altering Interventions and what China could mean for its Southeast Asia neighbours. The editor did a good job in summarising

investment and migration in all Southeast Asian countries except Brunei, as well as addressing transnational water governance issues but only briefly covered different theories related to China's global rise (Fiskesjö, 2018, p. 577). While the volume provides a useful overview of China's influences in Southeast Asia from a bottom-up perspective, it does not address China's broader strategy and its implications, instead focusing on border relations.

'The Art of Neighbouring' (2017) investigates the various meanings and modalities of neighbouring across Chinese borders and ask the question, "What does China's rise mean for its immediate neighbours?" (Saxer and Zhang, 2017, pp. 9, 12). It looks at connectivity and cross-border relations at various scales, including the reversal of strategic national positions, mainly through the rise of China to economic dominance, including India and Russia. It attempts to recognise evolving interactions between nations and geopolitical positionalities among other themes but lacks references to Western scholars who have made significant contributions to understanding cross-border relations between China and its neighbours (Sturgeon, 2018, p. 575).

Oliver Hensengerth and his group have written extensively on water governance in the Mekong Basin, including transnational networks (Hensengerth, 2015a, 2015b, 2017). Mekong hydro projects are a vital component of China's energy and its regional relations, but its connection to a broader regional strategy and linkages to the BRI have not been sufficiently explored.

Examination of China's growing presence in the South China Sea and the Indian Ocean are both necessary as they relate to sea lines and the 21st Century New Maritime Silk Road. The "string of pearls" hypothesis which emerged in a report by Booz Allen Hamilton titled *'Energy Futures in Asia'* (2004) commissioned by the US Department of Defence's Office of Net Assessment (MacDonald, Donahue and Danyluk, 2004; Huang, 2009a, p. 65). The hypothesis has since fallen out of favour as a strategic framework owing to a lack of evidence (Brewster, 2014a; Marantidou, 2014; Tiezzi, 2014). *'Revisiting China's 'String of Pearls' Strategy: Places 'with Chinese Characteristics' and their Security Implications'* (2014) and *'Burying China's 'String of Pearls'* (2015) use a comparative approach to assess competing hypothesis of China's overseas port acquisition (Marantidou, 2014; Yung, 2015).

In *'Monsoon'* (2010), Robert Kaplan explores the geopolitical and strategic context of the Indian Ocean Region and regional struggles for influence and power in what has been called *a* "geopolitical primer grounded in first-person travel" (Ejiogu, 2012, p. 124). He suggests that the Indian Ocean has again become a centre of the geopolitical world map and that this power shift and the region's growing importance will lead Sino-US competition of naval power as the limits of Western power become more defined (Ejiogu, 2012; Kustenbauder, 2012). Kaplan suggests that an 'elegant decline' of US naval power in the region can promote Sino-US-Indian relations and redistribute the burdens of peacekeeping, suggesting that China and India currently get a 'free ride' in trade security. Kaplan has put on the mantle of a strategic planner, writing '*Monsoon*' as a roadmap for American foreign policy in the Indian Ocean. "Kaplan undermines his own case about the complex connections that tie the region together and offer promise for a more cooperative global regime... isolating each component and moving pieces around the board – so that the organic unity he so ably describes vanishes" (Kustenbauder, 2012). The results in predictions that are vague and hedged (Arant, 2011, p. 285).

'*Monsoon*', argues that the heart of the geopolitical map was shifting back to the Indian Ocean. In '*Asia's Cauldron*' (2014), he turns to the South China Sea, "as central to Asia as the Mediterranean is to Europe" (Kaplan, 2014). Kaplan adopts an ultra-realist non-moralistic stance on questions of power and diplomacy (Pilling, 2014). "Though China seeks dominance, do not assume it will be unreasonable ... There is nothing unusually aggressive about anything China is doing" (Kaplan, 2014). He suggests that even though China's strength lies on land rather than sea, the stopping power of water⁹ ensures no state will be capable of dominating the region. With the shift to Asia and the declining strength of the US Navy, its interests would be best served by seeking a balance of power. Reflecting on history, Kaplan contends that China's actions are an inevitable consequence of economic growth and that it is not unusual that as a powerful country surrounded by smaller and weaker states, China wants access to the resources and sea lines in the South China Sea, the "demographic cockpit of the globe" (Kaplan, 2014).

Both of Kaplan's books are narrative, laying out the arguments neatly in the first few chapters before veering into his travels in the region. From one book to the next, the geopolitical centres shift instead of connecting China's activities and strategy in the region to provide a broader geopolitical narrative of China's growing naval power and Westward strategy. While the US relies heavily on its Navy, in China, it is the People's Liberation Army which is the dominant force and likely to play a potential prominent role in the regional tension (Kumari, 2014, p. 657). The reality is, as Kaplan noted, China is not 'unusually aggressive' so the emphasis on a naval conflict should be directed at infrastructure investment and new economic centres to increase influence in both regions.

⁹ It is not feasible to hold and defend water in the same way armed forces can hold territory on land.

In contrast to the countless specialists contributing comprehensive analysis of parts of the equation, Bill Hayton provides a complete overview and "long-overdue survey of the gathering storm over the South China Sea" in his book 'The South China Sea: The Struggle for Power in Asia' (2014) (Mathur, 2015, p. 467). While it is important to provide historical context, especially Sino-Viet naval conflict in late 1974 and Spratlys expeditions in 1988 which are frequently overlooked in accounts of the disputed region, in focusing on a rich historical context Hayton fails to connect these issues to recent events beyond the region and China's grand strategy (Mathur, 2015, pp. 468–469; Palmer, 2016, p. 355). In an attempt to strike a balance between covering the different geopolitical components, he fails to demonstrate how China's actions in one area related to its strategy on the whole. Despite trying to create an ultimate guide, Hayton does not connect the region to China's broader geopolitical strategy, lacking any reference to the OBOR or BRI, and only briefly discusses important strategic links to other regions like Africa in a historical context relating to the voyages of Admiral Zheng. In focusing on China's maritime history, Hayton has overlooked how the South China Sea fits into China's strategy for sea lines of communication and the expansion of a blue water navy. More importantly, he does not adequately explain the relationship between the South China Sea and the Indian Ocean as it pertains to sea lines of communication and China's expansion of naval power. This connection is only mentioned once in relation to the movement of US naval warships between the western United States and Asia (Hayton, 2015, p. 214). Beijing has a propensity to test policies and strategies in one region before expanding in scale.

This absence suggests a gap in the literature that this thesis will address, providing a complete overview of China's geopolitical strategy in Eurasia and Africa, examining the geopolitical implications of Chinese policy and identifying a behaviour pattern will reveal that these policies will enable me to suggest the developing strategical political and strategic relevance of certain geographical regions. As a result, most of the historical and background information has been cut from this thesis to allow for greater analysis of recent events and to extend the effect of mounting regional insecurity and naval build-up beyond the region.

In *'The Third Revolution'* (2018), Elizabeth Economy writes about Xi Jinping's call for "rejuvenation of the Chinese nation," which is not inconsistent with prior party leaders as Hu Jintao and Deng Xiaoping both called for "invigoration" through reform (Economy, 2018, p. 5; Saran and Deo, 2018, p. 10). Neither is the practice of rejecting previous paths of reform and opening up as Mao, Hu and Xi have all taken reform in different directions. Economy questions Xi's efforts to position himself as a champion of

globalisation while enacting forms that restrict the free flow of capital, information, and goods into China. Given the recent US trade war, her criticism of Chinese protectionism and evidence of a "smokescreen" for a radical reversal of China's policy does not carry much merit, notably as India is recognized as the most protected member of BRICS (Katada, 2018).

While the literature is largely critical of Chinese-led regional multilateralism associated with a Chinese grand strategy to create a Eurasian order and write global norms (in which the EU and EU write the rules which are seen to unfairly favour the West), Economy is in the far end, falling short of calling for a Soviet-style containment of the China threat to similar to George F. Kennan's call for Soviet containment in 1947 (Sverdrup-Thygeson, Lindgren and Lanteigne, 2017; Iulia Monica, 2018, p. 4). While some scholars are pushing the 'China threat' narrative, it seems clear that Beijing seeks to 'reshape the global order' and does likely pose a geopolitical threat to US interests, exercising power to increase influence and further national interests is hardly a radical strategy as she suggests. Given recent political shifts, a case could be made that China, not the US is promoting globalism and stability, though this falls outside of the scope of the research questions.

In contrast, *'The BRICS and Collective Financial Statecraft'* (2018) provides an arguably more useful, objective and nuanced understanding of China's new economic centres, focusing on BRICS, NDB and AIIB. Cynthia Roberts, Leslie Armijo and Saori Katada propose a less hostile path through engagement, suggesting that the Trump administration pursuit of extreme economic nationalist protectionism is pushing the BRICS, particularly China to reconsider "their position on tolerating the existing 'shackles'" (Roberts, Armijo and Katada, 2018, p. 30). They suggest that the Bretton Woods Institutions, which include the World Bank and International Monetary Fund (IMF) should improve in key areas, including processing time and approval of infrastructure loans to compete with emerging institutions. The NDB and AIIB which were created to address the western bias and growing demand for infrastructure loans in developing countries have since gained top ratings from the 'Big Three' use credit rating bodies (Moody's, Fitch, and Standard & Poor's). The book correctly concludes that China continues to benefit from existing institutions and is unable and unlikely to attempt to replace them. The authors contribute a valuable and detailed understanding of emerging financial institutions that contribute to understanding China's geopolitical strategy and the BRI on the BRI on the traine to the strategy and the BRI initiative.

In *'The new silk road: Xi Jinping's grand strategy for Eurasia'* (2015), Theresa Fallon states that the BRI bridges the division in China foreign policy between its maritime domain and the 'March West' in one

'mega-foreign policy project'. She identifies three 'drivers': energy, security and markets but overlooks China's growing influence in the global economy (Fallon, 2015, p. 140).

Jean-Marc Blanchard and Colin Flint provide an overview of current literature discussing the BRI and dominant geopolitical representations in *'The Geopolitics of China's Maritime Silk Road Initiative'* (2017). It recognises that connectivity and infrastructure projects are integral elements of the new political and economic realities. Blanchard and Flint describe the MSRI as "political-economic project with territorial consequences" ranging from "peaceful collaboration to global conflagration" and suggests that the ranging to agents and motivations make the process of the MSRI unpredictable (Blanchard and Flint, 2017, p. 238). They overlook the strategic role of economic centres like the AIIB and NDB that goes beyond funding BRI infrastructure projects to shape the global economic order through rulemaking. This is very similar to *'Probing China's Twenty-First-Century Maritime Silk Road Initiative (MSRI)'* (2017) which also reviews the literature on the MSRI to highlight narratives surrounding it (Blanchard, 2017).

In 'Silk Roads and Strings of Pearls' (2017), David Brewster suggests that while China's maritime interest in the Indian Ocean is strategically important, new land and sea routes connecting Eurasia will have a greater transformative effect on the region's geopolitical reality.

These new pathways to and across the Indian Ocean are primarily a manifestation of the ongoing strategic and economic integration of much of the Eurasian littoral ...The existence of narrow chokepoints that facilitate control over maritime entry to the Indian Ocean combined with the disconnect between the southern Asian littoral and Eurasian hinterland have given the Indian Ocean the character of a semi-closed strategic space capable of domination by a single naval power. (Brewster, 2017)

Brewster suggests that China's port investment, CPEC and maritime strategy has the potential of making China a resident power in the region, not just an extra-regional power. China's new pathways are changing the geostrategic character of the Indian Ocean as a largely enclosed strategic system dominated by maritime powers. While it offers an interesting discussion of China's maritime strategy and the role of choke points in the region, the geographical scope is limited and does not connect to the broader geographical narrative of the BRI. It does not include access to resources, or the possibility that China is intentionally altering the geopolitical reality of the Indian Ocean.

Brewster examines Sino-Indian relations and shared maritime space in a key strategic region in *'India and China at Sea'* (2018). A wide range of noted strategic analysts from India, China, the United States

and Australia contribute to understanding how the two rising powers perceive their roles in the region and their evolving naval strategies towards each other and clarifying how China's BRI initiative affects the regional balance of power. The book provides a comprehensive assessment of how China's expanding interests accommodate the economic development of the BRICS states. It surveys China's and India's evolving naval strategies as the two emerging major powers of the Indo-Pacific, providing "an excellent resource in understanding the evolving maritime security roles of India and China in the Indo-Pacific" (Brewster, 2018b, p. 182). The wide range of contributors and remarkably different perspectives on the topic identify many strategic blind spots that can lead to increased strategic competition in the maritime domain (Brewster, 2018b, p. 185). *'India and China at Sea'* provides that most comprehensive analysis of Sino-Indian maritime competition today that touches on all of the key themes covered in this thesis.

In 'The One Belt One Road and the Asian Infrastructure Investment Bank' (2018), Kevin Cai suggests that the BRI and AIIB, reflecting China's growing capacity and economy, should be seen as a new round of China's opening policy designed to increase influence in the region and global economy. It aims to "reconfigure the governance structure of the existing international economic order dominated by developed countries, the USA in particular" (Cai, 2018, p. 15). The BRI and AIIB have global implications in economics and politics with the potential in the long term to weaken the Bretton Woods Institutions as they develop into a new framework for economic cooperation. An interesting addition to the literature is the suggestion that regional information technology infrastructure would create an additional channel for exerting influence. The piece provides an informative overview of Beijing's dual initiatives of the BRI and the AIIB but is unable to explore any one aspect in detail.

A growing body of literature supports a hypothesis of geopolitical strategy, suggesting that China is using the BRI and MDBs to absorb economic surplus and domestic overcapacity in industries like steel and manufacturing inputs to create an alternative global order that favours the interests of China and developing BRICS states (*One Belt, One Road — and many questions | Financial Times*, 2017; Roberts, Armijo and Katada, 2018, p. 133). Beijing describes the BRI as an "important growth engine … the most important mid- to long-term strategy to foster China's economic restructuring and boost the country's slowing economic growth" (Qiaoyi, 2015). It would be impossible to isolate a single explanation behind China's BRI mega projects as it is beneficial to a great number of Chinese interests.

There are numerous interpretations of the rationale behind China's "One Belt, One Road" initiative. At one end, OBOR is an economic instrument to vent surplus domestic industrial
overcapacity and shift heavy-polluting industry inland; an energy security project to alleviate China's dependency on the Malacca Strait as its primary corridor for resource imports; an infrastructure program to improve trade connectivity; a commercial initiative to challenge US and Russian operations in Southeast and Central Asia, respectively; and a foreign policy tool to bolster China's global authority. (Raftery, 2017)

One of the characteristics that has emerged from the review of existing literature is that the geographical scope of other works is limited. I contribute a more global holistic view illuminated by the use of classical geopolitics.

Conclusion

A growing body of literature exists on China's rise, and many scholars are looking at the geopolitical implications. However, most only look at one or two elements and focus on a single region or bilateral relations. Some look at China as an institution builder, the maritime silk road,

US/EU/Russia/Indian/Australian relations. Others look at a region or sector: the Mekong River, South East Asia, South China Sea, Indian Ocean, Africa, the Middle East. Few scholars critique the conventional Western linear geopolitical narrative of conventional Sino-centric accounts anchored typically in Confucian intellectual history. The majority of literature coming from China supports Beijing's expanding influence while Western publications tend to focus on how to limit, counter or control China's rise. This thesis will attempt to address this gap by providing a neutral analysis of China's geopolitical strategy the emphasises the relationship between foreign policy and economic development with a broad geographical scope.

The literature review demonstrates a gap in connecting the constituent geopolitical features with China's economic development and grand strategy. Many works looking at geopolitics focus on infrastructure and the BRI, but neglect how changing infrastructure in one region affects China's lines of communication on a global scale. The next chapter will outline how China's policy behaviour demonstrate a complex and consciously held long-term policy which cannot be justified by the economic elements taken in isolation. I will analyse the relationship between China's foreign policy and economic development across four constituent elements of geopolitics.

Chapter 2: Methodology

Introductions

This thesis employs a predominantly qualitative methodology which will be supplemented by quantitative methods wherever relevant. Geopolitics is a synthesis of three disciplines: geography, strategy and history. It aims to identify geographical patterns of history. It is a framework of spatial relations and historical causation. It can be used to visualize the constellation of forces in the present and to imagine the possible patterns of the future

The research question produced two challenges, defining a threshold for geopolitical change and distinguishing between economic development and geopolitical strategy. Mackinder advanced the proposition that great wars were directly or indirectly the consequence of "the uneven distribution of fertility and strategical opportunity upon the face of our globe" (Mackinder, 1919, p. 2). He consequently said: "there is no such thing as equality of opportunity for the nations". This problem Mackinder believed could be guarded against human will. Conversely, states can make a conscious effort to change the geopolitical reality to their advantage by using transport technology, among other factors, to bring about a change to the strategic and political meaning to certain geopolitical locations.¹⁰ The impact of these projects is evident in the lasting impression on geography. These railways and canals continue to shape global trade, and even today colonial railroads continue to define Africa's economic geography (Jedwab, Kerby and Moradi, 2017).

Grygiel argues, "when states take into account the geopolitical situation and pursue a geostrategy that reflects it...they increase and maintain their position of power" (Grygiel, 2006, p. x). In order to evaluate the veracity of Grygiel's assertion, the constituent elements of geopolitics will be covered in a separate chapter: access to new sources of natural resources, land lines of communication, sea lines of communication and new centres of economic power. This thesis will examine China's actions in each of the above areas in an attempt to assess the extent it is changing a 'common reality'. Within these chapters, the thesis will attempt to substantiate several claims.

China's efforts to expand access to resources has resulted in a significant influence in vital resource markets. This is most evident in China's dominance in the global energy market and rare earths, which

¹⁰ Historical examples that qualify include the Trans-Siberian Railway Network (1902), Panama Canal (1914), Suez Canal (1869) and the infrastructure boom in colonial Africa (1852-1920s).

are required to sustain its economic growth. It can be argued that Beijing's strategy has as its objective the intention to consolidate its influence beyond what is required to facilitate normal economic development. China's ability to influence availability and pricing is concerning as a potential threat to the energy security of other states.

China's investment in land lines of communication (LLOC) include roadway, high-speed rail (HSR) and pipeline projects, which may form larger regional development projects such as the China–Pakistan Economic Corridor (CPEC), providing access to sea lanes in the Indian Ocean. Connected infrastructure projects like CPEC and the expansion of rail lines across Europe diversify access to suppliers and shipping routes for natural resources and significantly alter regional and cross-border trade. Efforts to expand connected infrastructure are potentially disruptive to these regions, impacting neighbouring markets along its routes.

Sea-lanes account for the majority of global transport. China's expanding maritime influence, South China Sea claims and improving relations with coastal states from the Indian Ocean to the Gulf of Aden have significant implications for nearly all global trade and the national interests of India and the US.

China is expanding its naval capacity, access to overseas ports and participation in anti-maritime piracy operations. This will increase its reach as a blue water navy and dominance in the South China Sea and the Indian Ocean, allowing China to respond to piracy and other threats beyond its littoral. China is responding to the ability of the US Navy to exercise sea control and sea denial with respect to its sea lines of communication.

China's sustained economic development and the growing importance of emerging markets support China's rise as a new centre of economic power that challenges the current status quo. The viability of these new financial institutions will be examined with regard to their potential capacity to become serious alternatives to existing institutions. China's ability to compete with existing financial institutions will support arguments for China's growing influence as a revisionist power. A detailed analysis across geopolitical factors will assess China's role as, either shaping, abiding or contradictory to the current geopolitical reality.

Geopolitics provides a framework that supports an analysis of state strategy capable of producing meaningful conclusions while negating the inherent obstacles of a study of power structure and leader' bias, as it is impossible to identify actual decision makers and their individual motivations. Kelly identified more than sixty generalisations that fit his definition geopolitical theories, those that fit "the

25

geopolitical model, a model being merely a container for theories that will fit the definition of 'geopolitics'... generalizations that relate to the positional-geographic dimensions of geopolitics ... [and that] each is useful for shedding good insights into foreign affairs policies, actions, and events" (Kelly, 2016).

Grygiel defines geography as "the geological reality of the earth", composed of physical features ranging from topology to climate (Grygiel, 2006, p. ix). The relationship between time and space can change the value of location through a combination of geography and human activity. Geographical features are fixed; however, the human element can fluctuate due to advances in technology "In short, geopolitics is defined by the location of natural and economic resources and the lines of communication linking them. Geostrategy "is a map of sorts, assigning strategic value to places" the describes "where a state directs its military and diplomatic efforts" with consideration for limited resources, "imparting a clear geographic direction to their foreign policy" (Grygiel, 2006, p. x).

Geopolitical methods point toward the description of the constellation of forces which exist or existed at a particular time and within a particular geographical context. Geopolitical frameworks may suggest contemporary and even future significance of the various forces as they play out across specific locations and contexts; they juxtapose the enduring with the ephemeral thereby providing a way of explaining past change and predicting future developments (Sloan, 2017, p. 47).¹¹

This definition places states in a reactive position, with geopolitics acting as an objective force that states cannot do anything to change. This definition of geopolitics is not intended to be deterministic as the key drivers are changes in transport and weapons technology. Kelly (2017) offers an overview of the debate of early and contemporary definitions of geopolitics (see Figure 1and Figure 2). Aron arduously defines it as a blend that "combines a geographical schematization of diplomatic-strategic relations with a geographic-economic analysis of resources, with an interpretation of diplomatic attitudes as a result of the way of life and of the environment" (Schneider, 2013, p. 191) in contrast to Gray's "house with five rooms: geophysical resources; location; human resources – skills and culture; experience – the past,

¹¹ For an in-depth analysis and overview of geopolitical methods and theories, please see the second chapter of *Classical Geopolitics* (Kelly, 2016).

history, legends, myths; and mental cartography. These categories capture the sources of the political implications of geography" (Gray, 2013, p. 125).

Geography does not directly condition strategy; instead, it is refracted through prisms of culture and technology. With respect to the geography of state-formation, the most important paradoxical development of the past century is the rise of transnational ethnic groups and the international flow of commodities, finance and migrants – globalization. Even as the state became the unambiguous sovereign over its domain, ethnic minorities and economic developments, each with their own geographies, called the state's dominance in international relations into question.

A robust analysis of China's geo-strategic thinking and actions must be informed by history and cultural expectations. This is particularly important for understanding variations its strategy in the South China Sea, Indian Ocean, Eurasia and Africa.

Geopolitics

Geopolitics focuses on political power in relation to geographical space, with specific attention to territorial waters and land territory in correlation with diplomatic history. Classical Geopolitics is making a return through the efforts of academics like Phil Kelly and Jakub Grygiel. "Classical geopolitics is the study of the impact or influence on certain geopolitical features – these being positions and locations of regions, states, and resources plus topography, climate, distance, immigration, states' sizes and shapes, demography, and the like – upon states' foreign policies and actions as an aid to statecraft" (Kelly, 2016, p. ix). According to Aron, geopolitics consists of the geographic constant and three variables. "The theory itself is constructed on the basis of geographical design, by the simultaneous consideration of a constant element (the land-sea, continental- seafaring opposition) and of three variable elements (the technique of movement on land and on sea, the population and resources utilizable in the rivalry of nations, and the extension of the diplomatic field" (Aron, 1966, p. 192). Geopolitics provides a suitable framework for understanding China's strategy in Eurasia. China's government is less than transparent, making a study of intent problematic, and as such it is ideal that this framework overlooks these variables in favour of rational choice¹², reducing foreign policymakers to playing rather passive roles with interest instead pertaining to actions and strategies taken by countries themselves as the major performers of the regional and global theatre. Likewise, this thesis will overlook power, prescribing to

¹² However, this is problematic as it overlooks the analytical problem of ethnocentrism and a lack of a cultural and historical understanding.

the notion that connections drawn between geopolitics and realism are false. "power politics" and realpolitik reside within realist framework of international relations and in contrast to geopolitics, which focuses on "states' geographic positions reflective of the term's spatial heritage" (Kelly, 2016, p. viii).

Geopolitics can explain and be the basis of a security policy. That is both its strength and weakness. It is the product of permanent factors and conditions that employ explanatory tools of common sense, examining the behaviour of states to escape study of leaders' biases as motivations (Kelly, 2017, pp. 9– 11). Bias can be disregarded as the framework by-passes the decision-making process entirely. "There is a need for a geopolitical theory that will take into account the structural relations between these first-and second-order powers, and the relationship of states in the international hierarchy to states of lower orders" (Cohen, 1982, p. 223).

Classical Geopolitics has two origin stories; the first arises from the Germanic concern for "scientific law", advocated by Friedrich Ratzel and Rudolf Kjellén (Glassner and Harm de Blij, 1989). The second, "the geostrategic of British and North American interest, depicted geographic placement of states and regions as conditioning foreign affairs actions, with Admiral Alfred Thayer Mahan, Halford Mackinder, and Nicholas Spykman its standard bearers" (Kelly, 2016, p. vii). "Intellectually, [Mackinder's] greatest contribution was to shift the focus of geography from an absolute to a relational concept of space," incorporating changes in technology with human agency, making geography an area of strategy as state actors decide where to project power (Hochberg and Sloan, 2017, p. 580).

Both versions enjoyed respect and consideration by foreign policymakers and scholars" (Kelly, 2016, p. vii). The two paths contribute to the general confusion regarding geopolitics that arises from the lack of a formal definition and is subsequently compounded by its misuse in mainstream media and a false association with realism.



Figure 1 The elements of the geopolitical triangle

Geography, Geopolitics, and Geostrategy						
		Change				
	Level	Type and Cause	Effect			
Geography		Tectonic—de facto constant				
Geopolitics	Systemic	Slow— rise and decline of empires; new transportation and production technologies	Changes in the strategic value of locations, trade routes			
Geostrategy	State	Varied—dependent on the situation on state borders	Success—reflective of geopolitics; failure—nonreflective of geopolitics			

Figure 2 Grygiel's table of Geography, Geopolitics, and Geostrategy (Grygiel, 2006, p. 23)

Phil Kelly has attempted to address the lack of a formal definition within the discipline. Though not definitive, a general agreement seems to be forming in the regards to a definition that tends to include two factors: the geographical placement of states and a corresponding effect on the foreign affairs behaviour. Following a review of existing definitions, Phil Kelly offers a more precise definition; "the study of the impact or influence of certain geopolitical features – these being positions and locations of regions, states, and resources plus topography, climate, distance, immigration¹³, states' size and shapes, demography, and the like – upon states' foreign policies and actions as an aid to statecraft" (Kelly, 2016, p. 23). Having put forth a formal definition he points out two faulty meanings that he believes diminish the legitimacy of the framework. The first is the association with 'power politics' and realism in general. The author agrees that this association adds significant confusion to the application of the framework,

¹³ The movement and placement of people.

as the two are not in agreement. Geopolitics is defined by spatial position in regards to foreign policy, while realism is defined by power and security.

The second, is the use of geopolitics in the contemporary sense, as a synonym for international strategic rivalry. Thus, casting a negative connotation through its association with political and economic turmoil. A better way of understanding the relationships is set out below in a tripartite diagram (Figure 3):

Ontology and Epistemology

Geopolitics as Kelly defines it is more than just a synonym for international strategic rivalry. Although contested, classical geopolitics assumes a 'common reality'¹⁴ exists, visualised with sufficient clarity to allow for study and the design of "theories of probability about particular likely outcomes" (Kelly, 2016, p. 10). The possibility of a common reality is premised on the ability to visualise our environment in a way that is absent of bias and allows for "sufficient practical and objective means for researching this vision of "reality" such that the probability requirement of theory is possible" (Kelly, 2016, p. 16).

Accordingly, this 'common reality' must be visible to a "sufficiently large" group of people with "sufficiently clear probabilities" to allow for an objective approach, derived from "logic, common sense, visualisation, statistical analysis, and rational choice, the measures outlined above" (Kelly, 2016, p. 85). Classical geopolitical theory is dependent on these modernist assumptions to separate one's self from one's visions and view the "actual" or the "outside".

Subsequently, "In its epistemological foundations, the traditional version of geopolitics supports an eclectic methodology for locating these spatial realities, those exerting impacts from an environment that may influence behaviour, in our cases, the positions of states and regions toward conditioning states-persons' foreign policies" (Kelly, 2017, p. 10).

In Kelly's description, the geopolitics provides a container or typology for theories and definitions that fit the traditional geopolitical definition. Unlike a valuable explanatory medium which allows for shifting policies and actions, that classical geopolitics "lacks a dynamic quality; it possesses no moving parts, no connecting areas and lines, no inputs, outputs, and feedback loops" as it is focused on the environments, not the policies themselves (Kelly, 2016, p. 5). Kelly argues that this timeless nature allows for an interpretive study of both the historical and the contemporary.

¹⁴ See full quote on page 1.

Simply put, classical geopolitics focuses upon the structural, international, or strategic levels, and within this broader aspect it involves the study of the impacts of certain geographic features, such as states' and regions' positions and locations, resources, distance, topography, shapes and sizes, and the like, upon states' foreign policies and behaviours as an aid to statecraft and as a source for theory. (Kelly, 2016, p. 8)

Political geography, in contrast emphasizes state policy and geographic features within local political boundaries. Despite areas that overlap, the two are clearly distinct, classical is interested in geopolitics and the international, not political geography or the domestic. Parker offers a unique contribution afforded by this correlating medium:

From a spatial or geocentric viewpoint, the understanding of the whole – what Ritter called Ganzheit – being its (geopolitics) ultimate object and justification. An essential part of it is the examination of the components, but this is basically undertaken for the purpose of reaching a clearer understanding of the whole. Individual states can thus be seen as being the bricks, but it is the patterns and structures which they make in combination which are the principal interests of geopolitical investigation. (Parker, 1985, p. 2)

If we want to go beyond description and understand the practice of foreign policy and subsequent strategy of a state or its leaders then geopolitical theory can be used as a criterion of rationality, contrasting the action which according to theory, would have been logical, with that which has actually occurred. (Parker, 1985, p. 181)

The view of states as rational actors negates the need to examine heads of states, allowing for an understanding of the environment void of the bias and motives of leaders. "In its epistemological foundations, the traditional version of geopolitics supports an eclectic methodology for locating these spatial realities, those exerting impacts from an environment that may influence behaviour, in our cases, the positions of states and regions toward conditioning states-persons' foreign policies" (Kelly, 2016, p. 10).

Classical geopolitics can interpret the past, visualize the present and imagine the future. Of these sources, it can be argued that historical examples offer the most to geopolitical theory: "Past events may offer our best source for finding theories, the events of history as these may correlate placement to action" (Kelly, 2016, p. 10).

The timelessness of classical geopolitics allows for generalisation and theories that hold true for as long as the supporting geopolitical features stand.

Kelly suggests that the possibility of a common reality is dependent on our ability to remove bias from our understanding of geography:

In the first instance, a common reality is possible, resting on the premise that one can visualise our environments void of excessive bias. And in the second, we possess sufficient practical and objective means for researching this vision of "reality" such that the probability requirement of the theory is possible. One's self and one's vision are separated enough so that some amount of generalisation and measurement can be ascertained from what we may visualise "out there." This common reality among individuals can derive through historical example, logic, common sense, visualisation, statistical analysis, and rational choice, the measures outlined above. In either case, the "actual" or the "outside" stages exist and can be seen by significant groupings of persons is sufficiently clear probabilities that will make it possible to utilise objective approaches. Without such modernist assumptions, the formulation, testing, and use of classical geopolitical theory would not be possible. (Kelly, 2016, p. 16)

The term geopolitics originated with Rudolf Kjellén and Friedrich Kjellen more than a century ago and was first practised in the negotiation of access to resources and waterways, maturing over time with foreign policy and military strategy. "Alliances and borders naturally formed astride topographical features of mountains, rivers and oceans and conflicts grew among neighbours over areas with geographic features of strategic importance, including climate, resources, access to centres of trade including highways and waterways as well as the size and shape of neighbouring borders" (Kelly, 2016, p. 16).

These reflections all lead to a summation by Francis Sempa, who portrays these traditions in the following:

Lord Palmerston famously remarked that nations have no permanent friends and no permanent enemies, only permanent interests. Geopolitics helps statesmen determine their country's interests, and helps them distinguish between enduring and transient interests. (Sempa, 2006, p. 7)

32

The United States, for instance, has a rather permanent security strategy of maintaining a favourable balance of power within the rimland of the Eurasian continent, enabled by its marine strength and by bases in certain pivotal areas (Western Europe, Persian Gulf, and Korea/Japan). Its allies and opponents might vary from time to time; yet, North America will continue unrelentingly toward this secure rimland position framed within its advantages of geography. Spykman noted the favourable location and access afforded to the US: "History is made between 25° degrees and 60° degrees north latitude," with the "most favoured state in the world from the point of view of location [being] the United States" (Spykman, 1938, pp. 41–45). Some observers contended that among the larger countries, America is "the most favourably placed on earth in terms of geopolitical advantage" due to a combination of geographical features:

in terms of geopolitical advantage its location in the healthful northern temperate zone but distant from Eurasian power struggles, its isolation in America among smaller and nonthreatening nations, its seafaring island image favoured with good harbours and internal navigable rivers and lakes, its wealth blessed with abundant natural and energy resources, its citizenry enhanced by talented immigrant populations, and its consolidation of an American empire spreading over the rich lands reaching from Atlantic to Pacific Oceans. (Kelly, 2017, p. 77)

Methodology

In order to evaluate the geopolitical implication of Chinese policy geopolitical will be defined as behavioural patterns. Consequently, this thesis will offer a geopolitical analysis of Chinese politics in an attempt to reveal a willingness of the Chinese to undertake a scale of sustained investment in infrastructure projects across Eurasia and Africa that suggests a complex and consciously held long-term policy. The components of which could not be justified by the economic elements taken in isolation. It will highlight patterns of behaviour which indicate a willingness to invest in capacity and networks that have as yet unforeseen positive spinoffs. The analysis of Chinese policy from a geopolitical perspective will support the hypothesis, suggesting that someone directing policy in China is looking at things in much the same way.

Chapters will evaluate Chinese policy in three areas: access to resources, land lines of communication and sea lines of communication. Together, these will support the hypothesis that the Belt and Road Initiative cannot be explained through economic elements and instead supports a complex and consciously held long-term policy guiding China's foreign investment strategy.

33

Assumptions and Limitations

The conclusion will address the original research questions regarding the mutability of geopolitical reality by human agency. This thesis will operate under a number of assumptions inherent to classical geopolitics.¹⁵ (1) In the acceptance of theory in classical geopolitics, a modernist stance is taken in favour of postmodernist, subscribing to the idea that the environment exists independent of the state, within which environmental consistencies can be located. (2) The immediate environment affects a states' behaviour through conditioning its decision-makers to further national interests, relative to ones' location within a region and irrelevant of state size. (3) Notions of value are relative to wealth, positions and location, with various topographical or physical features demonstrating regional traits of pivotal significance, resulting in a variance of importance across regions. (4) The theme of conflict is inherent to geopolitics (Gray, 2005). (5) Most geopolitical based themes persist for some period, irrespective of contemporary issues.

Any attempt to understand China's twentieth-century diplomacy or its twenty-first-century world role must begin—even at the cost of some potential oversimplification—with a basic appreciation of the traditional context. (Kissinger, 2011, p. 3)

Some practical limitations result from China's secretive nature and the extent of its State-owned enterprises that reduce the validity of available sources on Chinese policy, strategy, figures and reports. As such, in some cases, official media sources must be relied on, including state mouthpieces like Xinhua and official government publication on state sites. This is especially the case when references bilateral negotiations and agreements, trade figures, official communications and development initiatives.

As the level-of-analysis is fixed at the strategic level¹⁶ with states primary actors within the geopolitical scene, foreign policy-makers are reduced to passive roles. As such, the focus falls on the actions and strategies taken by states as the major performs of the regional and global theatre.

¹⁵ These are outlines by Philip Kelly in the chapter on Geopolitics assumptions. Not all academics agree in this list or the wording but they appear to be generally accepted in some for across applications of the framework (Kelly, 2016).

¹⁶ Also referred to interchangeably by others as the international or structural.

The geopolitical interests of nations, it may be argued, tend to remain relatively fixed over extended periods of time and reflect certain real or perceived environmental influences, opportunities, and/or constraints of a geopolitical nature. (Gorman, 1982, p. 74)

State actions are key to understanding China's behaviour and strategy. This rests on the assumption that, 'states will perform predictably towards the interests of their nations' (Kelly, 2016, p. 63). This assertion disregards the idiosyncrasies, errors and ambitions of individual leaders. This framework is ill-equipped to face questions of intention that precede and follow strategy.

Those of the classical see themselves as neutral, doing a rather fixed, problem-solving, even common sense and casual application of environmental opportunities and constraints upon foreign and military policies and actions. (Kelly, 2011, p. 36)

Individuals and their inherent subjectivity, including heads of state, are excluded from the nexus, leaving states solely relevant to the systemic interactions among nations and regions of strategic value. This transference is conditional, on the assumption that states are rational actors. That its governing bodies will act in a predictable manner, a performance defined by nations interests, which are largely fixed. As such, this framework is fallible in regards to the idiosyncrasies, errors and ambitions of individuals that may run counter to national interests. The author acknowledges this limitation as inherent to classical geopolitics, as it falls outside of the scope and interests of the framework, and as such cannot be addressed.

Classical geopolitics is concerned with the relation between geographical features and the foreign policy of states. In comparison to the idiosyncrasies of individual state leaders, geopolitical features and state interests are relatively fixed. "Ministers come and go, even dictators die, but mountain ranges stand unperturbed" (Spykman, 1938, pp. 29–30).

The resulting 'level-of-analysis' problem arises from a distinction between a critic of leadership and an emphasis on theory among states as the study of one excludes the other. Unfortunately, this issue lacks a solution as decision-making, and state-centered approaches are incompatible (Kelly, 2016, p. 13).

Nonetheless, Grygiel and Walton call for a return to geography as a common fixture to international relations, declaring that human involvement, that being within Cohen's

development¹⁷ and Seversky's technology,¹⁸ among many similar examples, should not replace the spatial impact that we study in classical geopolitics. (Kelly, 2016, p. 99)

The broad nature of the research question and the lack of transparency in the Chinese government resulted in a number of limitations and constraints. The volume of data in following chapters necessitated concessions for the project to remain manageable, even so, the scope the research expanded considerably through the course of the project. Nevertheless, only a few regions are analysed in detail, based on two criteria: significant infrastructure investment and strategic significance to China's Eurasian strategy and the BRI. Despite the importance of Brazil as a founding member of BRICS and its offshore oil reserves, Latin America was excluded as it does not feature in the BRI and is not central to China's energy security.

Conclusion

Geopolitics offers great explanatory power in regards to China's actions through the framing of geopolitical factors. The strategic component and rationality of the framework lend well to the challenges inherent to studies of China's foreign policy. As this thesis is focused on the strategy of a single nation to expand its geopolitical influence.

Grygiel emphasised aligning the location of where a state wanted to project power with the geopolitical context that it found itself in. Significant separation between the two can lead to a number of undesirable results, as misunderstandings can arise, poor strategic choices, and the potential for avoidable conflict. This is relevant to foreign policy as it pertains to geopolitics, as some of China's actions seem to be at odds with one another. The assumptions of this paper provide an alternative approach; state interests are fixed; states act predictably to promote these interests. China's interests are not fixed that is the problem.

The final chapter will aggregate the finding from the empirical chapters to provide reference points to support an argument of geopolitical change resulting from China's actions. It will bring together the different methodologies in an attempt to construct a narrative of a state that defies Grygiel assumptions of geopolitics as an objective force by acting upon in a way that produces change. It will conclude by

¹⁷ Cohen "used developmental theory to trace the evolution of the world system from its earliest state of atomization through differentiation, specialization and specialized integration" (Efferink, 2015).

¹⁸ Alexander de Seversky's *air-isolationism* posits that states with sufficient economic and technology resources can dominate a region regardless of location or other spatial factors (Seversky, 1950).

suggesting what can be learned for the above analysis from a strategic perspective as well as further areas for exploration that could not be answered within the scope of this thesis.

Chapter 3: Access to Resources

Introduction

Access to resources is one of the constituent elements of geopolitics enabling investment in technology and infrastructure. New financial institutions are created in part to expend surplus labour and steel through infrastructure projects, investing financial reserves to enhance access to resources and markets. Infrastructure investments promote globalisation and economic development, which in turn drives further demand for access to resources. Provided a state has sufficient reserves to invest in one or more of the constituent elements of geopolitics, they can significantly enhance their regional and global influence depending on the scale of the initiative. If the initiative is sufficient in scale and scope, imparting a significant effect across a region, it has the potential of altering the geopolitical reality. China has made substantial infrastructure investment both domestically and abroad in order to increase access to natural resources, particularly energy, are essential for China's continued economic development, which has translated into increased influence in many commodity markets as it has become one of the largest consumers of many natural resources. Enhancing access helps mitigate risks associated with political and market stability, including interference through sanction or other means. This dominance allows it to influence access and pricing in sectors where its market share has grown sufficiently large. Through this chapter it will become clear that China's policies and action that enhance access to resources cannot be explained through short- or medium-term economic advantages.

This thesis argues that access to resources is at the core of China's geopolitical strategy, driving China's opening up, economic development and global strategy. Classical geopolitics enables an assessment of practical conduct

Lines of communication facilitate the transport of resources, which are funded by infrastructure loans through development banks.

Backed by the Chinese government, Chinese companies have been acquiring equity stakes in natural resource companies, extending loans to mining and petroleum investors, and writing long-term procurement contracts for oil and minerals. These activities have aroused concern that China might be "locking up" natural resource supplies, gaining "preferential access" to available output, extending "control" over the world's extractive industries. (Moran, 2010b) A geopolitical framework is appropriate because it incorporates access to resources together with lines of communication. One explanation for China's expanding access to resources is that China has adopted a strategy that attempts to change the geopolitical reality. This would suggest that China's trade agreements and infrastructure investments are essentially an attempt to change the availability, access and value of natural resources. As such, China will attempt to rapidly expand access to all key regions, exceeding the existing demand relative to China's continued economic development. The increase in access will go beyond what is required for normal economic growth, enhancing China's ability to expand its international influence through control of global markets and investing surplus in infrastructure projects across Eurasia and Africa under the One Belt One Road (OBOR), also known as the Belt and Road Initiative (BRI). China's behaviour demonstrates, a desire to expand lines of communication, access to resources and consolidate Beijing's influence as an economic hub through long-term policies that are not justified by the economic elements taken in isolation. This evidence supports a strategy that goes beyond what is required if existing infrastructure and institutions are sufficient to facilitate normal economic development. The majority of evidence will pertain to massive infrastructure projects in Eurasia and Africa and new financial institutions, the majority of which are explicitly linked to the BRI. In reality, if China can finance or build a sufficient network of suppliers and shipping lines, it should be able to exert control over key markets in which it holds a significant consumer market share.

A second explanation is that China's growing interest in access to resources and the necessary lines of communication is an expected result of normal economic development. In this case, the evidence should indicate that expanding access to resources mirror the pace of economic development. Increased access will reflect growing national demand for energy and natural resources required for domestic consumption as well as export industries. In recent years, China's strategy to increase and diversify its access to resources is guided by a core national interest in sustained economic growth to maintain the party's legitimacy, requiring stable access and pricing of energy and natural resources.

Given the nature of state-owned enterprises, it stands to reason that their actions are dictated by state strategy. It is expected that economic development will define China's strategy to enhance access to resources up to the point that supply exceeds demand, at which time strategy will play an increasing role. Strategy will not replace interests of economic development. Instead, continued economic development will support Beijing's expanding global strategy to enhance its influence and access to resources. If China's efforts coincide with its economic development, would it necessitate an attempt to challenge and promote an alternative to the existing global order? Would it not be more beneficial to work through existing liberal institutions if its actions do not aim to exceed the needs of domestic growth?

Liberal theory is rooted in the notion that by strengthening global economic and institutional ties, the prospect of conflict is reduced. Liberals, therefore, believe that the integration of China into the global economy reduces the threat of a belligerent China (Downs, 2004, p. 21). As China increasingly integrates with the rest of the world, China's social systems will also change, tending towards Western-style democracy and liberalism. Economically, China has already embraced capitalism, but politically, China remains staunchly Communist and maintains an abysmal human rights record. Liberal theory suggests that economic and social forces will eventually precipitate political change. It was predicted that economic development would encourage China to engage with liberal institutions. Instead, we see emerging institutional statecraft (G. John Ikenberry and Darren Lim, 2007). This has likely contributed to an increasing tendency for Washington to hedge on its commitment to integrating China and the BRICS as a group into a benevolent and legitimate negotiated liberal order (Roberts, Armijo and Katada, 2018, p. 148).

Western engagement policy with China has failed. In the beginning, China worked to gain support through developing countries, building support in Western institutions like the UN. Today, China has significant influence in these institutions and has created many alternatives which include BRICS, ASEAN, AIIB and BRI. China's growing influence demonstrates a failure on the part of the West to instil Western values on China.

Resources, including gold, oil and rare earth elements, increase the value of land and can be converted into wealth and power. "China is poor in natural resources, the notable exception being rare minerals, and as a consequence has no choice but to look abroad ... In 2010 China accounted for 10% of the world's consumption of crude oil, 43% of zinc, 42% of steel, 44% of iron ore, and 39% of copper" (Jacques, 2012). Advances in technology have not reduced our dependence on natural resources. To the contrary, tech industries require an increasing number of rare earth metals. As a result, the location of natural resources, as well as the political and infrastructure mechanisms required for access, remain a significant component of geopolitics and state strategy.

Historically, access to resources has contributed to the drive of states to colonise other lands. This trend continues today, fuelling conflict and regional instability with the exploitation of minerals in Africa and

40

oil in the Middle East. The 'scramble for Africa' refers to the contemporary development of Africa which is predominantly explained through the influence of Europeans during the colonial period (Acemoglu, Johnson and Robinson, 2001, 2005; Acemoglu and Robinson, 2002; Michalopoulos and Papaioannou, 2016). The pursuit of 'colonial riches' drove colonial ambitions and continues to play a central role in regional tension (Kelly, 2016, p. 156).

This view of resources is echoed in the importance of strategic choke points¹⁹ and port access, which will be discussed in chapters four and five. "Understanding a country's military fuel situation can provide insight into its current and future geopolitical behaviour" (Kelanic, 2013, p. 1). Given China's continued economic growth and its manufacturing-based economy, the strategic importance of access to resources can be seen as the most critical geopolitical element, for which the other constituent elements of geopolitics support. China's economic centres, including the Asian Infrastructure Investment Bank (AIIB), New Development Bank (NDB) and Silk Road Fund provide infrastructure financing for projects that enhance Sea Lines of Communication (SLOC) and land lines of communication (LLOC) that facilitate the transportation of resources.

In some definitions, geography acts as a constant that describes the physical features of a location that combines attributes of topography and natural resources which define to its strategic value (Grygiel, 2006, p. 21). Topography prescribes economic and strategic value regarding defence, proximity to borders, markets and lines of communication. The value of natural resources is relative to human capacity; the ability to access and exploit resources through existing technology. While geography can shape lines of communication by way of barriers, access to sea lines or easily traversed terrain, natural resources (with few exceptions)²⁰ cannot be readily produced nor access negotiated. Forests can be planted and grown over decades, but fossil fuels deposits take considerably longer, most of which predate the dinosaurs by millions of years (DOE, 2016).

¹⁹ Maritime choke points include the Malaccan strait in the Indian Ocean, the Gulf of Hormuz in the Middle-east, the Suez Canal linking the Mediterranean and the Red Sea, the Panama Canal linking the Atlantic with the Pacific Ocean, the Strait of Bosporus (Turkish Strait) linking the Mediterranean Sea to the Black Sea, the three Danish Straits linking the Baltic Sea with the North Sea and the Strait of Bab el-Mandeb forming a gateway for vessels to pass through the Suez Canal, through the east coast of Africa (Bender, 2015).

²⁰ Renewable natural resources include oxygen, fresh water, solar energy and biomass, however with technology this list can be expanded with technology like carbon capture and storage. Forestry and fisheries have become semi-renewable (Gils *et al.*, 2008, p. 543; Hey, Neugebauer and Sadrieh, 2009; World Bank, 2010).

However, the value of these resources is not fixed, as they are defined by scarcity and our ability to exploit them, both in terms of the technology required to access and the benefit they can yield. As nations transition from coal to nuclear and renewable sources of energy, its value drops. Additionally, new technology can raise market prices through increasing demand, such as the increase in battery and fuel cell production needed to power technology ranging from cell phone to electric vehicles, and the production of smartphones which uses 16 of the 17 rare-earth metals (promethium, which is not used is radioactive).²¹

Under certain circumstances, a state is able to alter the constituent elements of geopolitics, either through a significant breakthrough in technology or an incredible amount of investment in infrastructure. Geopolitics refers to the human capacity to exploit geography. This refers to our technological capacity to traverse land and water, tunnel through mountains and the profitable extract carbon fuels through deep sea drilling and fracking. Technology can reduce financial barriers to infrastructure projects as well as lower production costs, increasing the viability of untapped sources. Post-World War II, "advances in military technology stimulated technological innovations in other fields, which led to the enhancement of human capacity to exploit marine resources" (Chang, 2018, p. 152).

Grygiel argues that "when states take into account the geopolitical situation and pursue geostrategy that reflects it—that is, when they control centres of resources and lines of communications—they increase and maintain their position of power" (Grygiel, 2006, p. x). Instead of aligning geostrategy with the geopolitical reality, this thesis will use China as a case study to argue that states with sufficient resources and influence gain the capacity to shape the geopolitical situation. In terms of access to resources, this includes enhancing control of pricing, availability and access to resources. This is evident in China's attempts to control or resources in Africa, as well as establishing an "oil buyers' club" with India to counter OPEC which will be discussed in a later chapter (Chen, 2018).

Political stability is a core value of the Chinese Communist Party (CCP), for which economic growth is used as a tool for legitimacy (Ma, 2009). China's political situation is unique in that leaders run for two terms for a total of ten years, while the party remains a constant with no outside influence in decision making. However, at the same time it lacks legitimacy as none of their leadership have been elected in the democratic sense of the word. This is especially true of the current party leader after removing the

²¹ This is particularly true in the tech industry. More than 70 of the 83 stable (nonradioactive) elements are used in the production of smartphones, representing 84% of all of the stable elements (Rohrig, 2015, pp. 10–11).

term-limit. As a result of the single party system, internal bureaucratic changes do not detract of the evolution of policy or the state's long game. Without the distractions of democratic elections and partisan voting, the state operates in ten-year cycles, known as ten-year plans (TYP). This allows new policies to be trialled within a limited region, prior to adoption at a national level, giving the state a considerable amount of control over production, trade and infrastructure. More recently, China has increased imports of raw materials, while reducing the rate it depletes domestic reserves of natural resources as well as prioritising resource efficiency (West, Schandl and Heyenga, 2013; Narayanan, 2018).

Production and policy control dramatically alter the way China looks at resources. Coal reliance has been significantly reduced following substantial investment in green energy leading to global dominance of renewable energy and technology and China has announced that it is going to stop building coal fired power stations abroad (The Economist, 2018a). The transition from an agrarian to industrial society coupled with population growth has resulted in an insatiable demand for raw materials to support continued economic growth through manufacturing and exports. As a result of manufacturing-led growth, access to resources has become a core strategic concern. Industrialisation has led to energy securitisation, and a growing reliance on imports and diversification in commodities, coinciding with long-term strategic goals. Expanding access to resources helps to stabilise supplies and prices while granting China increasing control over the market necessary for sustained growth and social stability.

China fears the possibility of a US containment strategy (James R. Holmes, 2011; Kai, 2014). China's energy supplies are currently vulnerable to the US Navy through its dependence on Sea Lines of Communication (SLOC), and US controlled maritime choke points, resulting from its reliance on gas and oil fields in the Persian Gulf and Africa as its principal suppliers. "An energy imports cut-off enforced by a naval blockade would trigger a rapid collapse of China's economy and paralyse its military forces, reducing the country to a paper dragon" (Tata, 2017).

According to the 2016 annual report to Congress on China, the Pentagon does not believe China is capable of achieving energy security, "given China's growing energy demand, new pipelines will alleviate only slightly China's maritime dependency ... the sheer volume of oil and liquefied natural gas that is imported ... will make strategic SLOCs increasingly important to China" (US DoD, 2016, p. 47). However, Tata predicts that China will achieve energy security within two decades, bypassing the global maritime commons and America's deterrent strategy through a non-military solution. Once achieved, China's energy lifeline will be beyond American's reach, regardless of its global naval dominance (Tata, 2017).

43

The continued investment in international pipelines suggests that in the near future, China will develop sufficient land routes (including pipelines) to satisfy domestic energy demand in the event of a disruption to sea routes. However, given the volume of cargo that passes through the South China Sea, it would still have an economic impact on sea trade which could be mitigated in part through access to the Indian Ocean and domestic ports in the Pacific. The loss of a US deterrent would be advantageous to Beijing's security interests but has the potential to increase its perception as a threat. "China may no longer be deterred from resorting to military action in support of its proclaimed core interests to force Taiwan reunification, seize the Diaoyu/Senkaku islands from Japan, and enforce its nine-dash maritime boundary in the South China Sea" (Tata, 2017).

Expanding access to natural resources is of strategic value to China for three reasons. First, increasing China's access to resources is vital for ensuring continued economic growth which supports its political stability (Cai, 1999; Bijian, 2005; Zweig and Jianhai, 2005; Chun, 2009). If China's economy falters, the effectiveness of its single-party system will be called into question, threatening the legitimacy of the Chinese Communist Party (CCP). China's political system views stability as a principal concern (Lawrence and Martin, 2013). Second, China's national resources are insufficient to support its industrial complex for an extended period, and it would prefer to exploit the resources of other countries before depleting its own. Third, through direct negotiation and bilateral agreements China can ensure continued access to these resources over the US and other competitors, which is necessary to increase influence of supply and price. China's economy is predominantly manufacturing based and is dependent on guaranteed access. Without this, prices can fluctuate wildly affecting its ability and capacity to export value-added goods and remain competitive in international markets.

Forming an accurate baseline of China's access to resources from 1949 up to the mid-eighties is problematic due to the lack of records on China's part.²²

International trade has been a key engine driving Chinese economic growth in recent decades. Yet, long-term analyses of China's trade are still difficult because the country's trade statistics for the post-war period up to the mid-1980s have many shortcomings, for example, official customs statistics published by the Chinese government during this period,

²² For a more detailed overview of this period in China's history please see the China collection from the CIA and *China: A Country Study* (1998) from the library of congress: https://www.cia.gov/library/readingroom/collection/china-collection

https://www.loc.gov/item/87600493/

if they were published at all, do not provide any breakdown by commodity classification. (Fukao, Kiyota and Yue, 2006)

As China's statistics are unreliable It was necessary to rely on the Library of Congress sources. The China collection and the IEC-R1 series, in particular, are particularly useful in this regard. Data from Fukao's study will support CIA reports, "the statistics for 1952-1964 and 1981-1987 are based on data we purchased from China's National Statistical Bureau" (Fukao, Kiyota and Yue, 2006). Data from the mid-80s onward is readily available from the Commodity Trade Statistics of the United Nations, IEA (world energy outlook), as well as the World Bank (data sets) and accordingly, have been compiled multiple publications.

A CIA report²³ laments that Chinese statistics have remained an issue for the past two decades due to several factors beyond Chinese security considerations. One major issue is an inadequate supply of accurate figures as a result of personal security, "the management of many plants and factories feel that in the long run, it is safer to submit no figures than to risk a possible critical reaction to the reported figures" (Orleans, 1973, p. 6). This issue is compounded by attitudes that statistics are a useless feature of 'economism' and 'profits in command,' which comes from the idea that statistical figures are merely a game with figures, arguing that argue that statistics are useless because "production can be carried out without statistics, and it is success in production that counts" (Orleans, 1973, p. 6).

The evidence in this chapter will support a narrative of China evolving foreign policy in relation to access to resources. In the 1950s China's trade relations were severely restricted by political factors under the leadership of Mao Zedong. Gradually China moved away from its Soviet dependence following economic reform and opening up under Deng Xiaoping from the late 1970s and into the 1980s, establishing diplomatic relations with the US in 1979. During this period China pursued access to Latin America's energy and mineral resources and started its Middle East policy (Zhang, 1999). North American countries, notably Canada played a central role in securing access to natural resource leading up to the 1990s. China began importing petrochemical products in 1993 and crude oil in 1996 and ODI flows from Asia overtook those from North America since the beginning of the 1990s (Zhang, 1999, p. 155; Schuller and Turner, 2005, p. 4).

²³ The Problem of Chinese Statistics (1994) https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a07p_0001.htm

From the 1990s to early 2000 China diversified its strategy to increase access to energy and raw materials in Africa and Latin America in line with domestic demands. "In the period 1997-2001 the share of the two regions taken together grew to around 40%" (Schuller and Turner, 2005, p. 4). From the early 2000s up to 2010 China's strategy to diversify access to resources with a stauncher stance on global affairs, including the formation of BRIC. The thesis will argue that it is during this period In which China exemplifies the mutability of geopolitical reality by human agency that China began to adopt a geopolitical strategy and some began asking if China is attempting to control Natural Resources on a global scale (Moran, 2010b, 2010a, 2010c).

From 2010, China's geopolitical strategy becomes more visible and increasingly involved in Eurasia, Africa and Latin America. It is during this period that sufficient evidence will be found to support the foundation of the hypothesis that will be built upon in later chapters through China's rapid increase in infrastructure investments, increased involvement in the regional issues and the formation of new financial institutions. Finally, it will be suggested that the One Belt One Road (OBOR), later rebranded the Belt and Road Initiative (BRI), aims to enhance China's access and influence to natural resources and markets. This will transform lines of communication and access to resources across Eurasia and Africa.

While other chapters are not divided in this way, it provides a useful overview of China political progression across a range of areas: post-war recovery (Mao), opening up (Deng Xiaoping and Jiang Zemin), modernisation (Hu Jintao and Wen Jiabao) and global ambitions (Xi Jinping). China's leadership is challenging to describe in concrete terms, while leaders officially retire after a decade in power, serving two five terms, they can still control events from behind the scene in the capacity of an advisor in back-door meetings.

Furthermore, the Chinese Communist Party (CCP) is built on internal alliances that can precipitate a rapid change following a transition in leadership based on factional loyalties among three groups: retired leaders, incumbents, and the incoming elite class (Albert and Xu, 2018). This is evident in recent years when Xi Jinping employed an anti-corruption campaign as a political tool to remove opposition and in particular, the case of Bo Xilai (Anderlini, 2017; Gilholm, 2018). The fluidity of rules further complicates any attempt of analysis. "The strict boundaries of 'seven up, eight down' don't exist," said Mr Deng, whose office is headed by one of Mr Xi's top policy advisers. Rather, he said, "retirement rules are 'flexible' and subject to revision as circumstances require" (Wong, 2016a).

Given the closed nature of the Chinese government, it is not possible to identity individual political actors as the central government, rather than individual party members take credit for transformative policies. "History is far too important a matter to be left to former presidents or former premiers" (Hatton, 2013). "Every post-Mao paramount leader has enshrined personalised ideology in the Party's Constitution, with respectively Deng Xiaoping's "Deng Xiaoping Theory" (enshrined in 1997), Jiang Zemin's "Three Represents Theory" (in 2002), and Hu Jintao's "Scientific Concept of Development" (in 2007)" (Zhang, 2011, p. 675).

State control of academics and media result in a lack of verifiable evidence, but it is generally accepted that the transfer of power at the top is a gradual process and that not all leaders hold an equal level of power. The overlapping posts and continued involvement of past leaders cast a long shadow with difficult to define edges. In the case of Jiang Zemin, he remained in charge of China's military in addition to influencing political promotions as "the choice of a successor through consensus within the power elite" (Ding, 2015, p. 50).

		Four Periods of Chinese P	3	1
Period Conditions	Maoist China (1949-1975)	Dengist-Jiangist China (1977-2003)	Hu-Wen China (2004-2012)	Xi Jinping China (2013-)
Politics	Domestic political	Stable autocracy under	Steady authoritarian	Political stability
	upheaval under tense	alleviative Cold War	political system under	through anti-
	Cold war period.	period.	post-Cold War period.	corruption measures
				and growing
				international presence
Economics	Agricultural economy	Economic open-door	Continuing economic	Sustained domestic
	with limited maritime	policy with huge	reformation with rising	growth, strong global
	interests.	maritime interests	economic-energy	presence following
			interests.	financial crisis.
Socio- Social disorderliness		Social reconstruction	The quest for China's	Desire for regional
culture	and cultural revolution.	with a weak ocean	seapower under a	control in South China
		consciousness.	strong oceanic	Sea and presence in
			consciousness.	Indian Ocean
Military	The military doctrine of	People's war under	Local war under high-	5 battle zones replace
	people's war and	modern conditions and	tech and	7 military regions.
	guerrilla warfare with a	limited War. Request	informationalised	Formation of Strategic
	weak and large PLA	for a modernised PLA.	condition. Request for	support forces (SSF)
	ground force.		an advanced PLA.	and counter-terrorism.
		maritime strategic choices		
Maritime	Coastal defence with	Offshore active	Far sea defence with	Island building and
strategy	the concept of People's	defence with the two-	blue—water maritime	port-access, projecting
strategy	war at sea.	island chain strategy.	capabilities.	to Indian Ocean.
Naval	A brown-water navy	A green-water navy	A blue-water navy with	Carriers, ports, nuclear
build-up	with the power	with the power	the power projection	submarines, rocket
build-up	projection range of	projection range of	range of over 400 sea	force and long-range
	below 200 sea miles	over 200 sea miles	miles from the coast.	ballistics and counter
	from the coast.	from the coast.	miles nom the coast.	ballistics.
		onstituent elements of geo	apolitica	buildered
A A				
Access to	Closed / self-sufficient	Net oil exporter until	Increasing dependence	Energy security, rare
resources		1990s, second-largest	on foreign markets.	earth, raw minerals
		net importer of crude		Market control
		and petroleum by		
		2009.		
Land Lines of	domestic	Western China's rail	Ninth Five-year Plan	Pipe-lines and rail
communication		and road system, 1978	(1996–2000), High-	(OBOR)
		Xinjiang–Central Asian,	speed national rail	
		1984 Sino-Soviet.	system (HSR) 2007.	
Sea Lines of	closed	Opening port cities/	Call for sea-power,	Carriers, super-tankers
Communication		(SZE) Shenzhen 1990	expansion and	maritime-piracy
			modernisation of	
			commercial fleets	
	-	China's geopolitical rea	lity	
	Self-reliance,	Realisation of the	Active member of	Following a perceived
Geopolitical	Isolationism and	importance of	existing global order,	decline of western
awareness	nationalist.	globalisation.	avoidance of regional	order, China attempts
			issues.	to alter geopolitical
	1			elements in its favour

Figure 3 Four periods of Chinese politics²⁴

²⁴Adapted from Huang's table which focused on China's maritime strategy (Huang, 2009b).

As a party veteran indicated in late 2002, Jiang and Zeng's personnel reshuffles in the run-up to the Sixteenth Congress would deprive the new party chief of an important means of quickly firming up his grip over the party, government, and army (Lam, 2006, p. 16). "In the Chinese tradition, the most effective way for a newly ensconced supremo to establish himself is through appointments and promotions," the veteran cadre said. "However, since Jiang and Zeng have already filled most of the civilian and military slots with relatively young officials, Hu may have to wait a couple of years or more before he can make another series of appointments." (Shippubg, 2002, p. 39)

It is due to this that Xi Jinping is widely accepted in Western media (including Time, FT and BBC) as the most influential leader since Mao Zedong, with the introduction of 'Xi Jinping Thought' (BBC, 2017; Campbell, 2017b; Hornby and Mitchell, 2017).

China's timeline has been divided into four political periods based on leadership, as seen in Figure 5. While the head of state is not necessarily significant, these changes represent significant shifts in the parties underlying power structure. As these changes are difficult to observe, the focus is instead placed on major changes in policy.

Post-War Recovery (1949-1975)

On October 1, 1949, Chairman Mao Zedong declared, "The Chinese People have stood up!" (中国人民站 起来了) and the People's Republic of China was born (Worden, Savada and Dolan, 1988).

China emerged from its civil war in 1949 with ambitions of rapid industrialisation and modernisation, but a very low base of oil production. In 1959 China's crude oil production stood at 3.73mn tonnes, and it was only in 1963 that it ended a century of dependence on imported oil and oil products. In that year, the Daqing oil field in northeast China produced 4.3m tonnes of crude, making up the bulk of the 6.48m tonnes of nationally produced oil. From the 1950s to the early 1970s, China was self-sufficient in energy, but its relations with other states prevented that self-sufficiency from serving the goal of economic and social development. (Daojiong, 2006, p. 179)

In 1949, it was believed that a Sino-Soviet partnership was not viable and that any Soviet assistance would accompany heavy demands on China. It also noted that it would be essential to secure imports of petroleum and cotton, in addition to railroads, factory and power equipment needed for reconstruction the following year (CIA, 1949). It suggests that post-war, trade with Japan and the US would be a major source of petroleum, with Japan advantaged in terms of transportation cost over other potential

partners. "The CCP's minister of Industry and Commerce in Tientsin suggested resumption of Japan trade in April and Premier Yoshida has repeatedly declared that Japan "will and must" trade with China" (CIA, 1949).

Prior to industrialisation, China was primarily dependent on imports from the US and UK. However, as events unfolded and sanctions increased, China turned to the USSR for support and access to resources before expanding to the Soviet-Bloc. As early as mid-1949, Mao determined that China's foreign policy would be characterized by the fight against imperialism and Soviet cooperation, a policy known as "leaning to one side" (Yang, 2006, p. 63). A CIA report, 'Probable Developments in China,' predicts the effectiveness of trade sanction before the use of trade embargos through the *Trading with the Enemy Act*.²⁵

Communist import requirements provide the US with a possible weapon against Communist China. Depriving the Communists of essential imports would retard the rehabilitation of China and increase the economic difficulties that will confront the CCP. Some essential imports, chiefly petroleum products and items of capital equipment, can be obtain in quantity only from the US and UK. The USSR, without some scarifies in its domestic economy, will be unable to supply many kinds of equipment, will provide inferior goods in other cases. (CIA, 1949)

China's access to resources under Mao Zedong is characterised by its Sino-Soviet relations and its dependence on the Soviet Bloc countries, in particular during periods of increased Western sanctions. Once again, this is a domestic change relating to economic development. China's operated in relative diplomatic isolation from 1949 to 1957 (see Figure 31 and Figure 32 on China's foreign trade), allied with the USSR and Bloc nations, Communist China was polarised against the West (Shambaugh, 2014, p. 59). During this period, only 18 nations recognised the legitimacy of Taiwan, the People's Republic of China (PRC).²⁶

²⁵ "Trading with the Enemy Act (TWEA) of 1917 is a United States law that restricts trade with countries hostile to the nation. The TWEA authorized the use of economic sanctions against foreign nations, citizens and nationals of foreign countries, or other persons aiding a foreign country. The law gives the President the power to oversee or restrict any and all trade between the US and its enemies in times of war. The TWEA delegates to the president powers of economic warfare during a time of war or any other period of national emergency" (US Legal, 2017).
²⁶ Upon establishment, the PRC was recognized by Eastern Bloc countries, Switzerland and Sweden joined the

following year (FDFA, 2017; FMPRC, 2017).

The embargo on China began in 1950, during the Korean War. As a result of sanctions, China turned to the Soviets for support. The Sino-Soviet Treaty of Friendship, Alliance and Mutual Assistance (中苏友好 同盟互助条约), signed in 1950. Contrary to what the US expected, a robust Sino-Soviet relation formed and was instrumental in China's industrialisation and the development of its first five-year-plan (FYP). For figures on the economic relations of Communist China with the USSR from 1950 to 1958 see Figure 29 and Figure 30 on the distribution of trade.

From 1950 to 1951, China imported industrial materials at a reduced cost from the USSR and Satellite countries, including chemicals, dyes and metallic ores (CIA, 1953c, 1953b).²⁷ During this period that total foreign trade increased fourfold; in addition to a trade agreement signed with the USSR in 1950, China also signed agreements with the German Democratic Republic (1950), Czechoslovakia, Poland (1951) and Hungary (1951). The National Import and Export Trade Conference of 1950 approved the formation of international trade syndicates in China, leading to the formation of eleven new trade syndicates in Shanghai by the end of 1951 (CIA, 1953c, p. 2). From 1949 to 1951, Hong Kong grew as a vital trade portal, accounting for approximately two-thirds of China's trade with non-Communist countries.²⁸ During this period China became increasingly dependant on Hong Kong as a strategically located enclave. The lack of publicity for the 1951 figures, in contrast to the previous year, was seen as an "indication of China's economic strength and independence... marked silence suggests that there has been a large increase in imports and a resulting significant import balance" (CIA, 1951, p. 9c). Furthermore, intelligence reports indicate that prices used in the barter trade agreement with communist countries were generally inflated over global prices, with import and export values exaggerated to some extent, indicating the existence of a considerable import balance suggesting substantial Soviet financial assistance (CIA, 1951, p. 9d).

A report published in 1952²⁹ suggests that while Beijing supported Moscow and received substantial economic and military assistance, it maintained a degree of independence in comparison to European satellite states and that Moscow appeared unwilling to exert military means to increase control. In

²⁷ According to CIA summaries of two issues of Ching-chi Chou-pao (The Economic Weekly), China was purchasing soviet products 20-30% and industrial equipment and machinery 30-60% cheaper than US and British-manufactured products (CIA, 1953c, p. 1).

²⁸ With little incentive to evade customs reporting's Hong Kong's trade figures with China are believed to reflect accurately until 1951 with the exception of smuggling (CIA, 1951, p. 9b).

²⁹ National Intelligence Estimate: Relations Between the Chinese Communist Regime and the USSR (NIE-58) (1952).

addition to gaining power in China with little Soviet assistance, Mao Zedong gained recognition in Moscow is an authority in his own right, as a Communist theoretician which resulted in prestige and respect not afforded any other contemporary non-Soviet Communist (CIA, 1952). It was suggested that a number of factors would lead to weakening ties, including Soviet efforts to intensify its control, disputes over assistance, divergent border concerns, and China's efforts to influence Far Eastern 'liberation movements' (CIA, 1952). However, these factors were diminished at the time by ideological ties and the mutual desire for eliminating Western influence in the Far East. Despite the desire for international recognition and a resumption of trade and commerce with the West, it was not believed that Sino-Soviet solidity could be weakened by non-Communist concessions (CIA, 1952).

The orientation of Sino-Soviet trade was accelerating as a result of the Korean war, and the subsequent increase in Western trade controls adopted in July 1951 (CIA, 1952). As a result, with the exception of captured equipment, China was completely dependent on Soviet-made heavy equipment and military equipment. It was suggested that the Sino-Soviet relationship was locked for the duration of the Korean war, after which China would pursue its interests, which at the time were limited to the Far East (CIA, 1952). See Figure 13 and Figure 14 on China's trade data with non-communist countries.

During the 1950s and 1960s, China accomplished rapid industrialisation through Soviet imports of engineers, advanced parts and even entire plants. Following its split with the USSR, China resumed imports of technology from Japan and Western European nations. While China did not develop the technologies on its own, China's imports produced a rapid change in technology and transportation. These changes altered lines of communication and access to resources in the region on a domestic scale that should be attributed to economic development. These changes turned China from an agrarianbased society to an industrial powerhouse in the production of coal, crude, steel, and rare earths.

China's manufacturing capacities expanded as its trade grew to include other communist states in the Soviet bloc. Following the success of its industrialisation efforts and the deterioration of its Soviet relations, China began shifting its focus to non-communist states for access to natural resources. These efforts sought to build the legitimacy of the communist state as well as to expand trade partners and access to resources.

China's Far East interests were constrained during a period of Soviet dependence to the shared desire of eliminating Western influence in the region. As China modernised through rapid industrialising and Soviet support, its growing need for imports increased its reliance on its Bloc partners.

52

In 1953, China depended on exports to the West to both pay for its imports from the West, and to help balance its accounts with Soviet Bloc countries, accounting for more than 70% of its imports, which were comprised mainly of goods required for industrialisation (CIA, 1953a, p. 1).

China receives, at a substantial deficit with the Bloc, goods falling largely into the following categories: (1) machinery for the exploitation of mineral resources, (2) commodities contributing to the war-essential industries, (3) agricultural implements to increase output, (4) transportation and communications equipment, (5) petroleum products, and (6) war material. (CIA, 1953a, p. 1)

Raw material imports from non-Bloc countries included cotton, rubber, iron and steel, some of which is believed to have found its way into the USSR.³⁰ Total imports from non-Bloc countries were estimated to be less than \$300-400mn in value, which largely accounts for bulk items suitable for sea transport (see Figure 33 and Figure 34) (CIA, 1953a, p. 1). It is believed that China's foreign exchange holdings were nearly exhausted as recovered holdings diminished and overseas remittance decreased, leading to predictions of \$13 to \$50mn from overseas remittances during 1953 (CIA, 1953a, p. 1).

While accurate measures of China's total trade with the West are complicated due to re-exports of some imports through Bloc intermediaries, China appeared to have a favourable trade balance with the West. As a result, an embargo or blockade cutting off overseas exports was suggested as a means of cutting off a source of net gain to China's foreign exchange holdings. While the Bloc could likely supply essential imports overland, it was believed that China would be unable to counter-balance the increased trade deficit through Bloc exports. By 1953, China had seven formal trade agreements:³¹ See Figure 15 for details of China's trade agreements in 1953.

China experienced remarkable progress in rapid industrialisation and militarization during its First Five Year Plan (1950-57), with continued dependence on Soviet imports of industrial equipment (see Figure 16 and Figure 17) (CIA, 1959, p. 1). Soviet imports contributed significantly to China's access to resources, which among other major imports during this period included 6.5mn tons of petroleum and petroleum products; more than 2mn tons of steel and 2mn tons of ferrous metals (CIA, 1959, p. 4).³² An

³⁰ Other imports include fertilizer, industrial chemicals, pharmaceuticals, paper and gunny bags.

³¹ Source: SE-37 Foreign Trade (CIA, 1953a, pp. 2–3).

³² Communist China's Imports and Exports, 1954: Trade and Transport Involved (EIC-R1-S4) provides.

analysis of China's first Five Year Plan shows that China achieved a high rate of growth but would experience difficulties from the forced pace of industrial growth (CIA, 1958, p. 2).

The 'Bandung phase', which lasted from 1954 to 1957, was an attempt to cultivate the 'intermediate zone' through improved relations with developing countries (Shambaugh, 2014, pp. 59–60).³³ During the First Taiwan Strait Crisis (1954-1955),³⁴ a brief armed conflict took place between the governments of the People's Republic of China (PRC) and the Republic of China (ROC). See Figure 16 and Figure 17 for data on trade data from 1954 to 1956.

The US was pressured to normalise relations with China following the warming of relations with noncommunist states (see Figure 18). China actively promoted relations with developed countries through the selection of trade items for their political value and started establishing relations in Africa with Egypt in 1956 (Pannell, 2008, p. 717). China exported 37,000 tons of steel to Egypt in the first half of 1956, despite a shortage of steel (CIA, 1957b, p. 10). See Figure 18 for a table of China diplomat status with UN and non-UN member states.

Political and economic crises came together as Sino-Soviet tensions peaked from 1959 to 1960, with a full split from the USSR in 1962 (See Figure 29 and Figure 30). China's 'third front' strategy saw the movement of industrial bases to interior provinces, coupled with large-scale investment in national defence, technology and basic industries. At the same time, the liberation movement saw China's involvement in the Vietnam war (1964-1969), alongside the Soviets and Americans (Chen and Jian, 1995). In 1967, test No. 6 placed China as the 5th country to conduct a successful thermonuclear test.

Through the 1950s and much of the 1960s Mao viewed America as the primary threat to China's security and revolution, "the consideration of geopolitical realities constituted one central element in Mao's calculations" (Zhai, 2000, p. 3). Qiang Zhai discussed Mao's commitment to support national liberation movements around the world, viewing all Third World countries which fought for their national liberation as potential allies in his fight against imperialism. From the late 1960s to the early 1970s, Chairman Mao perceived an increasing threat from the Soviet Union and a diminishing threat from the United States in Vietnam, resulting in a policy shift that lead China to encourage the North Vietnamese revolutionary leaders to conclude a peace settlement (Zhai, 2000, pp. 3–4). This is important as it shows

³³ Named after the 1955 conference of Asian and African nations held in Bandung, Indonesia.

³⁴ Also called the 1954–1955 Taiwan Strait Crisis, the Formosa Crisis, the Offshore Islands Crisis or the 1955 Taiwan Strait Crisis.

an awareness of geopolitical realities early on, suggesting that China's strategy was viewed in ideological and geopolitical terms (Zhai, 2000, p. ix). Grygiel would suggest that China correctly aligned its limited resources, directing its military and diplomatic efforts with geostrategy that accounted for the current geopolitical situation (Grygiel, 2006). The author suggests that Chinese strategists had an early awareness of geopolitics and that it is reasonable to assume that this awareness would persist and continue to inform Chinese strategy in the present.

An early geopolitical awareness was further reinforced through moderates led by Zhou Enlai, "who were more sensible to the subtleties of international politics and the management of triangular relations, may have recognised that a less heavy-handed policy toward Hanoi might offer the best way to counter Soviet influence" (Gilks, 1992, p. 117). Conversely, radicals were disdainful of geopolitics and "may have fuelled Hanoi's suspicions of Chinese expansionism by their strident nationalism during the Paracels crisis in January 1974" (Zhai, 2000, p. 264).

From 1959 to 1961 China suffered the 'Great Chinese Famine,' known in Chinese as 'Three Years of Natural Disasters' (三年大饥荒). Two successive years of poor harvests lead to food shortages, with grain output in 1960 dropping to 1957 levels despite an additional 50mn Chinese to feed. The famine is attributed to a combination of poor weather and policy including the mismanagement of agriculture and labour forces. "The modernisation of agriculture was to wait until industry developed enough to provide simultaneously the resources for further industrial growth and for increased investment in agriculture" (CIA, 1961, p. 2). With local officials competing to over-report levels of production and dictates that protected legal rights for certain amounts of grain in urban populations, the rural peasantry was hit the hardest and likely suffered the most; lacking such rights and subject to non-negotiable production quotas.³⁵ Concern over the food situation was reflected in the adoption of emergency measures.

In response, China gave agriculture a higher priority over the industry focus during the "Leap Forward", relaxed quotas and scheduled nearly three million tons of foods imports at the expense of \$200mn in 1961 (CIA, 1961, pp. 6–7). China negotiated additional grain imports with Australia, Canada and Argentina, in sharp contrast to its regular trade pattern of net exports of over one million tons of grain

³⁵ "Lin and Yang (1996) presented econometric evidence that both urban-biased food ration systems and the food availability decline (FAD) contributed significantly to the increase in death rates during the famine. Other researchers argued that consumption irrationality (Chang & Wen, 1997) and the Great Leap radicalism (Yang, 1996) were the critical causes of massive starvation." (Lin and Yang, 1998, p. 126).

(see Figure 19). This indicates an unbalance development strategy and an emerging need for access to new markets. Much of the analysis of this period has been drawn from declassified CIA document.

"The Soviet Union withdraw of nearly all of the 2,000 to 3,000 industrial technicians in July-August 1960 was seen as the major economic sanction in response to China's open challenge to Soviet authority in the Bloc, resulting in a cooling of Sino-Soviet trade" (CIA, 1961, p. 4).

It was believed by the CIA at the time that souring relations with the Soviet Union led to an increasing desire for self-sufficiency.

We believe that the bitterness of the Sino-Soviet dispute has caused the Chinese leaders to place an increased importance on achieving self-sufficiency ... Recent overtures to Italian and other Western European firms to send technical specialists to Communist China suggest that the Chinese are becoming more flexible in their willingness to use Western technicians. (CIA, 1961, p. 7)

CIA intelligence reported a shortage of petroleum products affecting military, transportation and food distribution in 1960, but was unclear of the cause. This is significant in that the USSR did not make supplemental deliveries of petroleum products and it is believed that China either did not request or was turned down due to political tensions and trade difficulties (CIA, 1961, p. 4).

Despite the willingness of some free world nations to sell fertiliser, machinery, and raw materials on credit, Chinese imports were at their lowest since 1954 (CIA, 1964, pp. 8–9).

We believe that the principal aims of Chinese Communist foreign policy over the next few years will be as follows: (a) to eject the West, especially the US, from Asia and diminish US and Western influence throughout the world; (b) to increase the influence of Communist China in Asia; (c) to increase the influence of Communist China throughout the underdeveloped areas of the world; (d) and to supplant the influence of the USSR in the world at large, especially in the presently disunited Communist movement. (CIA, 1965)

It is suggested that Chinese foreign policy shifted from problematising American influence, to include a growing rivalry with the USSR as a result of differences in ideology and national interest. Chinese leaders saw the nations of the world as falling into three groups: Communists, Capitalists and the Third World (underdeveloped, ex-colonial, mostly non-white nations of Asia, Africa, and Latin America) (CIA, 1965). In a reflection of its civil war tactics, China turned to the developing world as its primary area of

contention in a simultaneous challenge to the US and USSR, eschewing traditional rationalist balance-ofpower politics in an effort to avoid direct confrontation with superior military powers (CIA, 1965).

"Asia, Africa and Latin America" was a prominent phrase appearing in Chinese propaganda, theoretical journals and domestic indoctrination programs (CIA, 1965). While maintaining a somewhat ambivalent attitude towards Moscow, China saw considerable success in undermining its efforts to participate in various Afro-Asian organisations and conferences. In addition to Vietnam, China has seen success in Pakistan, playing on its fears of India. In the North, it sees Japan as an important target for the long game. Beijing sees Africa as the second biggest area of opportunity, following its success in winning recognition from many new African nations, offering substantial support for a UN seat (CIA, 1965). While Latin America is also a region of interest, its more stable social order offers limited possibilities.

"China's foreign trade continues to recover from the slump that followed the Leap Forward and the split with the Soviets" (CIA, 1966, p. 5). China trade with the non-Communist 'free world' saw significant growth, reaching a record high in 1965 that accounted for roughly two-thirds of its total trade, despite issues of export capacity and reserves of foreign exchange (CIA, 1966, p. 6). Sino-Japanese trade doubled in 1964 and grew by half in the following year, rivalling the USSR as China's top trade partner. While machine imports and fertilisers increased, grain accounted for one-third of total imports. Foreign trade increased in 1965 and 1966, with Japan supplanting the USSR and major growth in New World trade, accounting for three-quarters of China's trade (see Figure 20) (CIA, 1967, pp. 6–7).

Nixon characterised China's re-isolation and xenophobic cultural revolution as "living in angry isolation" (Kissinger, 2012). "The economic development or Communist China has been interrupted by two political cataclysms – the Great Leap Forward (1958-60) and the Great Proletarian Cultural Revolution (1966-69)" (CIA, 1971, p. 1).

Sino-Soviet animosities deepened and tensions flared, erupting into a brief border conflict in March 1969. The direct threat from Moscow, coupled with the Soviet invasion of Czechoslovakia and proclamation of the "Brezhnev Doctrine" in 1968 (justifying intervention into socialist countries), made even Mao realise the severity and danger of China's international isolation and escalating Sino- Soviet tensions. (Shambaugh, 2014, p. 60)

Self-isolation impeded China's economic growth, and the political situation derailed its third Five-Year Plan (1966-1970). The cultural revolution upset institutions and resulted in a substantial loss of educated

57

and skilled works. Placing farmers and factory workers above the educated and elite set back China's progress.

In the 1970s China began a new major round of technology imports which emphasise its lagging industries, including steel, petrochemicals, electric power, and transportation (see Figure 40) (CIA, 1978, p. ii). China's drive to import advanced technology has continued into the present with China importing advanced transportation technologies including an aircraft carrier and high-speed rail. China's technology imports resulted in a rapid expansion in human capacity within the region.

During the 1970s, Mao began to wind down the cultural revolution, and China started to open up politically, signalling a new phase in diplomacy characterised by China's formal integration into the international order. China gained admission to the UN and normalised relations across Western and Asian countries, including a strategic opening to the United States (Shambaugh, 2014, p. 60). For China's efforts, it normalised trade relations, cultural ties, and a strategic tilt with the West, in the face of continued Soviet hostility.

Crude imports increased by 500,000 tons in 1970, accounting for 3% of total supply which was attributed to special political ties and requirements for special grades (CIA, 1971, p. 6). 1970's record grain harvest was accompanied by 5.1mn tons of grain imports (Canada 2.1mn, Australia 2.5mn, and France 0.5mn) (CIA, 1971, p. 8). Foreign trade rose by 10% with the most significant increase coming from Japanese imports (see Figure 21). Growth in Sino-Japanese trade exemplified China's fundamental dependence on Japanese and Western European imports for modern plant, industrial products, equipment and technology, including steel alloys (see Figure 35 and Figure 36) (CIA, 1971, p. 13). Dependence on Bloc imports declined, consisting primarily of ordinary industrial materials, equipment and spare parts. Hong Kong featured in China's trade, providing access through its port to sources of free world foreign exchange through provisioning. See Figure 21 for data on Japanese imports in 1970.

China reduced its reliance on grain imports, which led to a decline in imports from developed non-Communist countries. This was partially offset by an increase in trade with Latin America and African Nations, in part due to agreements to purchase nonferrous metals from the producing countries of Zambia, Peru, and Chile (CIA, 1972, p. 3). China's imports were primarily comprised of wheat, rubber, textile fibres, fertilizer, metal products, machinery, and transport equipment, with a decrease in wheat and nonferrous metals, and an increase of iron and steel imports from Japan, Western Europe, and
Communist countries (see Figure 37) (CIA, 1972, p. 4). 1970 to 1974 saw a resumption of systematic growth (Figure 39 and Figure 38).

From 1974 to 1976, Mao Zedong's health and power declined, and the Gang of Four (四人帮) rose to prominence. During this period Moscow-Hanoi relations improved and China's development and output declined due to political conflict and a series of contradictory policies (Worden, Savada and Dolan, 1988). A month after Mao's passing, Deng Xiaoping ousted the 'Gang of Four', and under his leadership, China worked to strengthen ties with neighbours, normalised relations with American and attacked Vietnam in 1979 (Worden, Savada and Dolan, 1988). In 1975, the central government stipulated the 1976–1985 Ten Year Plan Outline of Developing National Economy (Draft), which included the fifth Five-Year Plan.

Opening Up (1977-2003)

China attempted to develop its economy and recover from the effects of the Korean war, but these efforts were impeded by sanctions that restricted its access to much-needed technology and resources. As a result, China took a new direction in foreign policy to expand relations beyond the Soviet bloc.

China's steel and iron imports grew steadily in the 1970s due to increasing demand for industrialisation and poor production output surrounding the political turmoil from the succession struggle from 1974 to 1977 (see Figure 22). Imports saw fourfold growth from 1970 to 1977, increasing from \$400mn to \$1.5bn, of which Japan was the largest supplier, accounting for 70%, West Germany was second with 15%, and Australia in third with 4.9% (see Figure 41) (CIA, 1979, pp. 5–6). Despite growth in imports, China's steel supplies grew slowly in the 1970s.

In 1978, Japan's Nippon Steel Corporation was contracted to construct a major steel plant in Baoshan, Shanghai to accommodate planned imports from Australia and Brazil, despite logistical challenges due to "poor geology for facilitating transportation of imported ore" (CIA, 1979, p. 7). China was in similar talks with Schloemann-Siemag, a West Germany consortium and several Japanese, British and American steel firms. China possessed significant deposits of natural resources, sufficient to become a major producer of steel and iron as well as significant reserves of coal, limestone, manganese, molybdenum, tungsten, vanadium and rare earth (CIA, 1979, p. 9). Unfortunately, it lacked the technology and knowhow to extract, refine and produce these materials in sufficient quantities and did not wish to sell mineral rights to foreign firms. However, it lacked significant reserves of cobalt and chromium and would be entirely dependent on imports of these two metals. In 1978 Deng Xiaoping enacted the Four Modernizations (四个现代化), a set of goals set forth by Zhou Enlai in 1963 to strengthen agriculture, industry, national defence and science technology, running from 1979 to 1982. In 1979, China began the first period of economic reform, known as the 'Period of Readjustment' (1979-1981). Improved relations with its traditional trading partners, most notably the US, significantly enhanced China's access to resources (CIA, 1978, p. 4). China's top five trade partners in both imports and exports in 1979 were Japan, Hong Kong, West Germany, United States and Australia, with Japan accounting for 21% of China's third-quarter imports. The communist party concluded that Mao's vision for a centrally planned economy failed in producing efficient economic development which caused China to fall behind industrialised nations of the West but as well as the new industrial powers of Asia (Worden, Savada and Dolan, 1988). The 'period of readjustment' address key imbalances in the economy, laying a foundation for a well-planned modernisation drive. See Figure 42 for trade data during this period.

China resumed its capital-import program in late 1983 following a three-year hiatus, reconfirming its commitment to the open door policy and economic reform (see Figure 44) (CIA, 1985). In the following year, the National People's Congress granted coastal cites greater autonomy over trade and investment decisions, counter to Mao's policy of balanced growth between inner China and the coast.

From 1982 to 1989, Beijing distanced itself from Washington and courted Moscow, following an 'independent foreign policy' (独立外交), positioning itself between the two superpowers. During this period China benefited from access to international financial institutions, FDI, loans, and technology from Europe, North America and Asia (Shambaugh, 2014, p. 61). In 1986, China's top four trading partners accounted for more than half of China's total trade and 80% of its imports. See Figure 23 for data on China's top ten trading partners in 1986.

The Tiananmen Square protests of 1989, widely known as the Tiananmen Square Massacre, and in China as the June Fourth Incident (六四事件), preceded the fall of the Soviet Union (1990-1991). Beijing's actions shocked the world, carrying political consequences of isolation and economic stagnation. In the wake of the 'incident' Deng argued, "observe clearly, secure our position, and cope with affairs calmly" (

冷静观察, 稳住阵脚, 沉着应付) (Shambaugh, 2014, p. 32).³⁶ Among Asian countries, only Japan joined the international community in condemnation, sanctions, or ostracization.

Thereafter, the ASEAN states led a diplomatic campaign to engage rather than isolate China. Although more critical of Beijing's actions than other Southeast Asian states, Singapore and its leader, Lee Kuan Yew, was the principal conceptualizer and mover behind this strategy. ASEAN's desire to engage China at this critical time left an impression on the leadership in Beijing. The rest of the world was doing its best to isolate China, but ASEAN chose to reach out. (Shambaugh, 2014, pp. 106–107)

After becoming a net oil importer in 1993, and net crude oil importer in 1996, domestic production gradually declined, leading to an increasing reliance on energy imports to meet growing domestic demand. Prior to this China was not a significant importer of natural resources which mainly consisted of grains and goods needed for industrialisation, ranging from finished steel to parts and plants needed for the construction of industrial plants. From 1996, official statistical data is available from the National Bureau of Statistics of China.

In 1998, Jiang Zemin first used the terminology of 'keeping a low profile', typically attributed to his predecessor, Deng.³⁷ From 1998 to 2008 China maintained stable relations with two major powers (US and Russia) and branched out diplomatically through omnidirectional diplomacy, marking an "an excellent and effective period in Chinese diplomacy" (Shambaugh, 2014, p. 63). Over the decade China improved relations across Europe, Africa, Central Asia, and Latin America, including cross-strait ties with Taiwan.

Beijing initiated a process of restructuring in 1998 under the doctrine of "grasp the big, let go the small" ... focusing its support on and encouraging the consolidation of China's biggest and best companies. This policy was later refined when the State-Owned Assets Supervision and Administration Commission ("SASAC") was established in April 2003 as a

³⁶ Shambaugh notes that while many observers attribute Deng's famous aphorism "bide its time, hide its brightness, not seek leadership, but do some things" (韬光养晦, 不当头,有所作为) to this 1989 speech, he has found no evidence of this in in this speech or in Deng's Selected Works (Shambaugh, 2014, p. 32). ³⁷ "The only time Deng appears to have used part of this phrase was in 1992 during his famous "Southern Sojourn" (南巡), when he said, "We will only become a big political power if we keep a low profile (韬光养晦) and work hard for some years, and then we will have more weight in international affairs." (Shambaugh, 2014, p. 32).

holding company for large SOEs such as CNOOC's parent company and nearly 190 other Chinese enterprises. (Silk and Malish, 2006, p. 111)

This strategy is indicative of a shift in state policy. Beijing consolidated its most successful companies to create an efficient, centralised state body to direct the acquisition of natural resources. In order to address the rapid growth in domestic consumption, "Beijing has adopted a mercantilist energy-security policy, attempting to secure reliable sources of natural resources such as oil, natural gas, metals, ores and coal for domestic use" (Silk and Malish, 2006, p. 109). Consequently, China's foreign acquisition strategy aims to lock in long-term supplies of strategic resources. China's domestic consumption is growing at astounding rates. A key feature of the policy is for state oil companies to improve access to foreign supplies of oil and gas, preclude surplus capacity and promote international distribution.

China's energy narrative is shifting from the extraordinary pace of its energy-intensive development to a services-based economy and a much cleaner energy mix with renewables following new energy policies (IEA, 2017). Despite leading in global clean energy development, improving energy efficiency, reducing heavy industry and slowing economic growth, China is pushing ahead with its energy strategy to diversify suppliers. This shift in energy strategy has seen consolidation in domestic players to negotiate long-term energy agreements to enhance supply and distribution (Economy, 2018, pp. 110–112). The way in which state resources are directed to 'rewrite the rules' in the global energy market marks the emergence of a clear strategy to enhance Chinas access to resources with energy security at its core. This provides evidence that China's growing market share has granted a relative level of influence which Beijing has begun to leverage in the key sectors. "Such is China's significance in energy markets on the world stage that its shift toward clean generation technology is driving the trend at the global level." (Buckley, Nicholas, Simon, Brown, 2018, p. 10). This suggests that its push to expand energy suppliers is expanding Beijing's influence in the global energy market beyond what is required to facilitate normal economic development. "The recent upsurge in Chinese oil diplomacy may be linked to the priorities of Chinese strategists at the national level, who may well have as their first priority the long-term goal of being in charge of oil resources at their source to enable them to manipulate future prices" (Jacques, 2012).

Modernisation (2004-2012)

From 2009 to 2010 China's foreign policy returned to a more combative stance, manifested in sharp rhetoric and confrontation resulting from hubris over the financial crisis (Shambaugh, 2014, p. 63). This adversely affected China's global image up until 2011 when the Foreign Minister Yang Jiechi, outlined

62

plans for an "integrated approach" that would serve China's economic development (Shambaugh, 2014, p. 63). Figure 24 indicates a significant increase in resource import during this period. Figure 25 and Figure 26 depict the distribution of China's crude suppliers in 2011.

Hu Jintao strengthened economic ties with Latin America through his 2000 tour in Brazil, Argentina, Chile and Cuba, leading to a 40% growth in annual trade by 2003 with Brazil dominating China's relations in the region. "Between 2000 and 2009, Brazil's exports to China rose eighteenfold, driven by the latter's demand for commodities. By 2009, China had become Brazil's most important export market, accounting for 12.5% of its total exports. Soybeans and iron ore account for two-thirds of these, and crude oil for a further 10%" (Jacques, 2012).

It is during this period that we see evidence of China's emerging energy strategy, increasing access in Latin America, Africa and the Middle East. Brazil quickly developed as a significant energy supplier. In May of 2009, the China Development Bank signed a \$10bn loan with Brazil's state-owned oil company Petrobras in return for up to 200,000 barrels a day of crude oil for ten years (Kiernan, 2009). In September 2010, China made its most substantial investment in South America, when Sinopec pumped \$7.1bn into Repsol Brazil in return for a 40% stake (Hook and Mulligan, 2010). The following month, Brazil discovered one of the world's largest-ever offshore oilfield (BBC, 2010). China and Brazil's development increased the strategic importance of the BRICS grouping.

China's attraction to Africa was natural: "it needs a vast range of raw materials to fuel its economic growth" (Jacques, 2012). In comparison to the Middle East, Africa's rich reserves of raw materials, and recent discoveries of oil and natural gas were relatively neglected, providing China with an opportunity to move in. Under the banner of poverty reduction, China invested heavily in the regions' infrastructure. The relationship is potentially far more beneficial for Sub-Saharan Africa than its past relations with Western states that exploited its resources. For starters, China has demonstrated "the greatest poverty-reduction programme ever seen," and the effectiveness of investment in infrastructure as an strategy for poverty reduction, "the number of people living in poverty falling from 250mn at the start of the reform process in 1978 to 80mn by the end of 1993, 29.27mn in 2001, and 26mn in 2007, thereby accounting for three-quarters of global poverty reduction during this period" (Jacques, 2012).

In 2005, Premier Wen Jiabao proposed a series of measures that would cancel the debt of the poorest African nations and boost Sino-African trade and investment (Harsch, 2007, p. 3; Marks and Manji, 2007, p. 2).

- Increase trade volume to \$100bn by 2010, effectively doubling 2005 levels of trade
- Double its 2006 assistance by 2009 (to about \$1bn)
- Set-up a China-Africa development fund with \$5bnto attract Chinese companies
- Increasing the number of export items to China in receipt of zero-tariff treatment from the least developed countries in Africa from 190 to over 440
- Increasing the number of exports eligible for zero-tariff treatment from 190 to over 440
- Over the next three years, establish three to five trade and economic cooperation zones in Africa; \$3bn of preferential loans and \$2Bn of preferential buyer's credit; train 15,000 African professional; send one hundred senior agricultural exports; dispatch 300 youth volunteers, one hundred senior agricultural experts and set-up ten special agricultural technology demonstration centres; thirty hospitals, thirty malaria treatment centres and one hundred rural schools, and provide RMB 300mn for artemisinin; and double the number of Chinese government scholarships given annually to Africans (to 4,000).

A number of projects were approved, including an aluminium plant in Egypt, a new copper project in Zambia and a mining contract with South Africa. "These commitments have since been fulfilled; trade between Africa and China increased around tenfold between 2000 and 2008, from \$10.6bn to \$106.84bn, and in late 2009 Chinese premier Wen Jiabao pledged a further \$10bn in low-cost loans over the following three years, or double the commitment made in 2006" (Jacques, 2012).

China's actions indicate that its rapidly expanding role in Africa as an energy and resource extractor differs from what American and European companies have done in the past (Jiang, 2009, p. 585). While infrastructure is necessary for trade and access to resources, the benefit to locals can be substantial. Many of these projects are far from profitable for Beijing, providing knowledge, funding, expertise and workforce to modernise Africa in line with its domestic poverty reduction strategies, attempting to replicate the success of its domestic poverty reduction model across the African continent. If Beijing can help elevate poverty in the region, it will contribute to a strong ally, workforce and market in the future.

Chinese investment driving trade and infrastructure projects is building and connecting communities. China's efforts to share its experience and modernise infrastructure represents a chance to break the cycle of poverty and reliance on aid. Unsurprisingly, China's motives are not entirely selfless but look to provide a win-win for the host and investor. In geopolitical terms, China gains access to new sources or natural resources while locals benefit from China's investment in infrastructure and the new opportunities they provide (see Figure 45 for China's natural gas imports from 2006-2013 by source). In addition to increasing access to resources, China is transforming the geopolitical reality in the region. While some nations are apprehensive of China's growing influence in the region, the literature suggests that China's behaviour is in line with national norms.

While it is true that these actions increase China's access, supporting its economic development, this thesis argues that its actions go beyond what is required. China's efforts to lift Africa out of poverty, transfer knowledge and forgive debts are clear evidence that China is attempting to transform the region.

Global Ambitions (2013-present)

China's resource needs cover the whole range of minerals and energy resources. Major suppliers have traditionally been those with pre-existing mining capital infrastructure, including Australia (iron ore, coal, bauxite and alumina, copper, zinc); the US (copper); Peru (copper); Brazil (iron ore, bauxite); Chile (copper), India (iron ore, bauxite, copper); and Guinea (bauxite).

The international iron ore market has been dominated by Australian and Brazilian supplies since Japanese demand played a central role in developing the two countries' iron ore regions from the 1960s to the 1980s (see Figure 27). In 2011, Australia and Brazil accounted for around 69.6% of global exports (39.4% and 30.2%, respectively); China accounted for an estimated 59.0% (645 mt) of global imports in 2011. (Mills and Mcnamee, 2012)

From 2012 to 2015 China's foreign policy has evolved to reflect its foreign interests, taking a more active role in global politics and regional issues. This has resulted in a more active role in Latin America, Africa and the Middle East. China's non-interference policy conflicts with its strategy to diversify access to raw resources, receding as China has taken a more active role in disputes between Pakistan and India as well as domestic issues in Myanmar. Beijing's international strategy can be described as a pivot to European and world markets, shaping international norms and institutions, and constraining the activities of NGOs in China, referred to as "hostile foreign forces" by government officials (Kaplan *et al.*, 2011; Fallon, 2014; Economy, 2018). In 2016, during the 6th Plenum, Xi Jinping presented a strategy for greater transparency in the decision-making process in local governance, which also represents an effort to establish a positive image of China's Communist Party (CCP) overseas.

In an annual meeting of the International Monetary Fund and World Bank, China's deputy finance minister Shi Yaobin described the prospect of 'America First' protectionism and US tax reform as "an

important opportunity for us," suggesting that China is eager to "assume the US's place as the new advocate for economic openness and international co-operation in the world" (Donnan, 2017).

With nearly two-thirds of the world's proven oil reserves concentrated in the Arabian Gulf, China's foreign relations with the Middle East become a matter of national security; Saudi Arabia controls over a quarter, while Iraq and Kuwait share a little under a quarter, meaning three countries control nearly half of the world's known oil reserves (Jacques, 2012). It was not until the 1990s that China seriously took an interest in its energy security and acted to diversify its supply and transportation options. In 2009, the Middle East supplied half of China's oil supply while Africa supplied one-third. As a result of the regions strategic significance, the PLA Navy has conducted counter-piracy operations in the Gulf of Aden since 2008 to ensure continuous access to the regions oil reserves (US DoD, 2017, p. 19). "The major objective of China's strategic cooperation with the Arab countries is to maintain strategic flexibility and thus make readjustments when opportunities arise" (Degang and Zoubir, 2014, p. 96). China has made significant efforts to increase and maintain its access to key oil suppliers, investing in infrastructure and regional stability to ensure continued access.

When the United States invaded Iraq in 2004, Beijing voiced its condemnation from the sidelines. In 2016, Beijing was faced with a political dilemma that was far greater, one that could no longer be ignored. A scheduled visit to the Middle East in spring 2015 was postponed until the following year after a Saudi-led coalition of Sunni states launched a military campaign in Yemen against the Houthis. Following the execution of a leading Shite cleric Sheikh Nimr al-Nimr, considered the voice of Saudi Arabia's Shiite minority, Beijing realised that a choice would have to be made between the consequences of postponing a second time in less than a year or continue with his planned visit to Egypt, Saudi Arabia, and the United Arab Emirates, all majority Sunni countries (Luft, 2016).

After having visited almost every region of the world, President Xi Jinping was forced to choose between non-interference and taking a side. The growing Sunni-Shia dispute in the Middle East threated its 'strategic oil partnership' and long-term energy supply arrangements negotiated during Jiang Zemin visit to Saudi Arabia in 1999 (Wang, 2016). However, such a visit would show support for one of the two major branches of Islam, undermining its policy of neutrality in the region.

China's 'Arab Pivot' commenced in 2016 with a three-state presidential tour to Egypt, Saudi Arabia, and Iran, and the debut of a new 'Arab Policy Paper' aimed at deepening economic engagement in the Middle East following the construction of its first overseas naval base in Djibouti and the posting of a high-ranking military envoy in Syria. Xi's visit with Saudi Arabia coincided with "the Saudi government's execution of 47 people, including Shia cleric Sheikh Nimr Baqir al-Nimr, mounting tensions between Sunni and Shiite countries, and the cutting of diplomatic ties between Iran and a handful of Sunni governments" (Romaniuk and Burgers, 2016).

In addition to its increased engagement in the Middle East, China created an energy buyers' club in 2018 with India and the Sino-OPEC agreement to influence the global energy market which will be discussed in greater detail in Chapter 6. The extent of China's actions extends far beyond its domestic requirements, shaping resource and energy markets, influencing the global economic rules and international financial institutions with regard to infrastructure investment.

China's ambitions for the Silk Road initiative dictate that in order to achieve a global trade highway, it must expand its economic and diplomatic efforts westward, challenging American supremacy across Central Asia and the Middle East (Chaziza, 2016). China's increased involvement in the region has enhanced its energy security while improving relations with its oil suppliers. As China expands its network of crude suppliers, it reduces its dependence on its top suppliers (see Figure 46 and Figure 47 for China's crude imports by source for 2013 and 2014). Figure 28 shows that China's imports from smaller suppliers have increased from 17% in 2014 to 27% in 2016.

State Aid

In order to better understand Chinese state aid, I have selected Sri Lanka, Pakistan and Greece as case studies. These cases were selected to provide more comparison between aid programs offered by China and West. Unfortunately, despite written requests I was unable to gain access to copies of the agreements through official channels.³⁸

Sri Lanka

Sri Lanka requested a \$1 billion loan in 2020, which was paid in two instalments, the second of which was paid after a currency swap facility from China for \$1.5 billion the following year (Srinivasan, 2021).

³⁸ It is possible to gain access to these documents through unofficial back channels but these are not appropriate for a thesis as they are neither legal or verifiable. I contacted the Chinese embassy at 16:58 July 27 2021, requesting access to the agreements but did not receive a reply. I sent a follow-up email on 13:19 September 05 2021 and did not receive a reply.

In addition, the AIIB sanctioned Sri Lanka's request for a \$180 million loan earlier in the year. This is in addition to more than \$5 billion from past loans to China.

"Both the share and the type of loans from China are changing as Sri Lanka wrestles with persistent balance of payment issues." (Moramudali, 2020).

Prior to 2015, nearly all of its loans from China were project loans, the majority of which were heavy infrastructure construction projects, including Hambantota port, Colombo-Katunayake Expressway, and Mattala Airport.

"The government does not really have financial autonomy pertaining to these project loans (or, for that matter, any project loan obtained from the World Bank, Asian Development Bank, or Japan International Cooperation Agency)" (Moramudali, 2020).

This rapid increase in borrowing raises the obvious question, is Sri Lanka a victim of China's 'Debt Trap'? It is often portrayed as one due to its public investment projects financed by China (Moramudali, 2019). The Hambantota port project in which in 2017 was leased to China Merchant Port Holdings Limited for 99 years for \$1.12 billion, is often raised as an example.

[T]he real picture of Sri Lanka's debt crisis, which is not often explained, is very different and far more destructive. Debt owed to China is in fact the tip of the iceberg, and that should make the debt crisis all the more alarming. The famous Hambantota port deal is not merely an issue of Chinese debt — Sri Lanka has much larger economic issues that go well beyond the debt owed to China. (Moramudali, 2019)

China obtained the lease to Hambantota port without needing to write off the loans; Sri Lanka is still committed to loan repayments as per the original agreements.

Sri Lanka has been seen as a crucial test case for debt-trap diplomacy. The conventional narrative is that China lends money to Sri Lanka to build a major port, with the understanding that Colombo would default and Beijing would be able to seize the port in exchange for debt relief and permit its use by the PLA (Chellaney, 2017; Stacey, 2017; Jacob, 2018). A research paper from Chatham House listed five arguments against describing Sri Lanka's relationship with the BRI as a debt trap.

First, the Hambantota Port project was proposed by the former Sri Lankan President (and current Prime Minister) in cooperation with a profit-seeking Chinese SOE, not the BRI. Second, it is a commercial venture to address the vast surplus capacity due to governance problems in Sri Lanka. Third, the port is

only one of many 'white elephant' projects promoted by Mahinda Rajapaksa, which was described as a "corrupt and unsustainable developmental programme" (Jones and Hameiri, 2020). Fourth, there was no debt-for-asset swap. Fifth, the port became the new base of Sri Lanka's own southern naval command, and Chinese naval vessels do not have access.

Critics of the BRI accuse China of pursuing 'Debt-trap Diplomacy', a predatory form of economic statecraft that traps poor, developing countries with unsustainable infrastructure loans to gain assets and extend its strategic reach.

According to a paper from Chatham House, this is not the case:

Mainstream accounts depict China's BRI as a predatory form of economic statecraft, seeking to ensnare poor countries for geopolitical ends ... the BRI is, in fact, motivated largely by economic factors. It has also shown that China's fragmented and poorly coordinated international development financing system is not geared towards advancing coherent geopolitical aims. In addition, recipient countries (such as Sri Lanka and Malaysia) are not hapless victims, but actively shape outcomes within China's development financing system. Accordingly, the BRI does not follow a top-down plan, but emerges piecemeal, through diverse bilateral interactions, with outcomes being shaped by interests, agendas and governance problems on both sides. (Jones and Hameiri, 2020)

Pakistan

Pakistan is an interesting case study that is more political in nature and is considered an all-weather friend by China. This case is different from Hambantota port as Gwadar Port is of significant strategic importance from China and the BRI, connecting its rail links to the Indian Ocean. In addition, Pakistan is an important ally against India. China financed significant infrastructure projects and has fuelled a massive build-up of Pakistan's power generation, and sought to reschedule as much as USD 22 billion in outstanding credits (Business Standard, 2021).

The China-Pakistan Economic Corridor is one of the most ambitious components of China's BRI, linking Beijing to the Indian Ocean. As a result of massive investment in infrastructure, China has become the only country heavily investing in Pakistan. This relationship is not without complications. However, unlike the US, China is not close to India and has a vested interest in a strong Pakistan.

Pakistan's desire to maintain strategic relations with China has resulted in the \$62 billion China-Pakistan Economic Corridor (CPEC), a set of infrastructure projects lacking transparency. Successive civilian

69

governments and Pakistan's military have looked upon China as their principal backer against India (Haqqani, Hussain, 2020). "China's consistent strategic support, including help with Pakistan's nuclear program, is often held out by Pakistan's military establishment favourably in contrast with the more conditional Pakistani alliance with the United States" (Haqqani, Hussain, 2020).

In addition to financial aid, the Pakistan army has received its first batch of Chinese-made VT-4 battle tanks, produced by Norinco, a Chinese state-owned defence manufacturer which began supplying Pakistan in April 2020 (Rajagopalan, 2021). This cooperation had deepened the Sino-Pakistani military and strategic relationship. "The army further noted that these third-generation tanks will be used "in an offensive role by strike formations." The sale and induction of the Chinese tanks are just another indication of the continuing consolidation of the strategic partnership in the face of the evolving international conditions in the region" (Rajagopalan, 2021). This will enhance Pakistan's offensive capacity alongside Chinese-made combat drones or unmanned combat aerial vehicles (UCAVs) which have already been provided. And agreement to sell 50 Wing Loong II UCAVs to Pakistan "would be a nightmare for Indian ground formations in high-altitude areas as India's military does not have the ability to respond to the new-age stand-off weapons" (Rajagopalan, 2021).

Beyond the geostrategic satisfaction of outflanking India, the traditional mutual archenemy of both China and Pakistan, there have been plenty of tangible economic benefits too (Saeed, 2021). Pakistan's relationship with China is more complicated than its relationship with its Western partners as it has both political and military components. China is Pakistan's biggest arms supplier (Xue, 2021). "With Pakistan's military playing an oversized role in its politics, the civilian government has to be wary it doesn't upset its generals in addition to Beijing" (Saeed, 2021).

Greece

The eurozone has emerged from its debt crisis of 2010-18 intact, but at a very high cost to the periphery. Greece's exit from its third bailout in August 2018, the swan song of the crisis, is perceived as successful only from a purely accounting perspective. Of the approximately €290 billion (£248 billion) lent to the country overall by the IMF, European Commission and European Central Bank, less than 12% was spent on investment. (Syrrakos, 2019)

In addition to spiralling national debt, Greece's unemployment is still running at 17%. It was at that point in 2019 when Xi Jinping, visited Athens which was marked with the announcement of 16 new bilateral

agreements. Greece is a member of China's 17+1 initiative (formally named the Cooperation between China and Central and Eastern European Countries). China says that initiative which focuses infrastructure, investment and trade is a 'win–win' cooperation with its EU partners, while critics claim it is an assertive strategy of 'divide and conquer' (Garlick, 2019). In addition, Greece was the first developed economy and NATO member to commit to the BRI back in 2019.

Beijing has been strengthening its ties with Athens since the Greek financial crisis (2007-2008) and Greece announced it was formally joining the BRI in August or 2018. After purchasing a majority stake in Piraeus port in 2016, an agreement was reached in late 2019 between Beijing and Athens which would see an additional 600 million euros investment by COSCO Shipping into Piraeus port in order to increase its role as a major hub linking Asia and Europe (Reuters, 2019).

During a visit in November 2019, President Xi said: "We want to strengthen Piraeus' trans-shipment role and further boost the throughput capacity of China's fast sea-land link with Europe" (Amaro, 2019). Developing Piraeus into the biggest port in Europe has strategic advantages for both parties, which are only recently becoming apparent. Recent information suggests that Beijing is considering building a canal trade route from the Aegean sea to the Danube river, linking Greece and central Europe through the Balkans (Chrysopoulos, 2021).

Greece's relationship with Beijing has obvious strategic advantages the extend long past short and midterm economic motivation. In addition, Beijing is not pushing Athens to increase taxes or privatise resources to repay its loans.

Comparison to US aid

"There has been a spectacular transformation in the global politics of foreign aid as China has, in a few decades, moved from being a recipient of aid to being one of the largest donor states in international development" (Regilme, *et al.*, 2021).

	United States	China
Official definition of foreign aid	Economic and military aid based on the USAID Greenbook; contributions to multilateral organisations such as the United Nations (UN)	Grants (non-repayable funds), interest-free loans and concessional loans
Historical foundations and origins	Marshall Plan to rebuild Europe after the Second World War; revived as a tool for enforcing US interests during the Cold War; repackaged as part of counter-terror efforts during the post-9/11 global war on terror	China first provided foreign aid to the Democratic People's Republic of Korea (DPRK) and Vietnam in the 1950s. This was extended to other developing countries after the 1955 Asian-African Conference in Bandung, Indonesia. Eight principles for economic aid and technical assistance to other countries governing Chinese foreign aid were declared in 1964.
Target recipients	States, multilateral organisations and civil society organisations	States
Top recipient countries	2000-2014: Afghanistan (USD 85 billion); Iraq (USD 58 billion); Israel (USD 39 billion); Egypt (USD 23 billion)	2000-2014: Cuba (USD 6.7 billion); Cote d'Ivoire (USD 4 billion); Ethiopia (USD 3.7 billion)
Deployment mechanisms in recipient countries (via private organisations? Via state institutions?)	United States Agency for International Development (USAID); federal government agencies; International Development Finance Corporation (DFC)	Newly established China International Development Cooperation Agency; currently, Chinese embassies and consulates coordinate local deployment mechanisms

Sources: USAID (2020); DFC (2020); The State Council of the People's Republic of China (2014); Lynch et al. (2020).

Figure 4 Comparative descriptive framework of US and Chinese foreign aid and official finance abroad (Regilme, *et al.*, 2021, chap. 116)

As China's economy grew it emerged as a viable alternative to Western Aid. Not only was China able to offer larger aid packages but the cost of doing business with China has been more attractive for many states that didn't want to privatise resources, make political concessions or were not close allies of the US.

Aid is rarely given without strategic benefit. China gives aid to support its Belt and Road Initiative or to gain soft power. In contrast, aid from Western powers, including the US, tends to include economic concessions that are not necessarily in the interest of the recipient like raising taxes or privatising resources. In addition, China tends to support infrastructure projects with its own labour force, technology and experts. In developing countries, this additional support can make a huge difference in a region's development. In exchange, China strengthens its global transportation infrastructure. When comparing Chinese case studies with Western aid practices we can see the distinction, between economic concessions and strategic benefit.

Prior to China's economic rise, the US and other Western bodies like the IMF and World Bank were the primary distributors of financial and dictators of its terms. The US continues to use foreign aid as a carrot to solicit desired behaviour and trade sanctions to punish. Aid has, in many cases come at the cost of economic concessions.

Conclusion

In 1949, the People's Republic of China (PRC) began in isolation, with a political system that limited its access to markets in Soviet Union, and later states in the Communist bloc. Within four years China formalised trade agreements with seven Bloc states: The Soviet Union, Romania, Bulgaria, Czech, East Germany, Hungary and Poland. In the late 1950s, Beijing began moving away from a Soviet dependence, using trade as a tool to promote political relations, establishing economic relations in Africa through bilateral trade agreements with Algeria, Egypt, Guinea, Somalia, Morocco and Sudan. The opening up

72

and warming of relations with non-communist states put pressure on Washington to normalise relations with China. Following the Sino-Soviet split (1959–89), Moscow withdrew its support and Beijing turned to the West. In 1971, Sino-US relations began to wane with the fall of the international communist movement. In 1978 Deng Xiaoping announced the 'Open Door policy' which shifted China's economic policy to encourage foreign trade and investment, leading to the normalisation of Sino-US relations 1979 (see Figure 43). Access to oil increased in importance after 1973, as rapid industrialisation and development resulted in energy demands that outpaced domestic production. China became a net oil importer in 1993, and net crude oil importer in 1996. Up to this point, China access to resources was tied to economic development.

It was not until the late 1990s that Beijing seriously looked at energy security as a potential threat to its economic development and in turn the Communist party's legitimacy. Having recognised that it was vital to national security, it was re-categorised as a part of foreign policy rather than domestic economic development, and steps were taken to diversify supply and transportation options. It is during this period that China's actions began to move beyond economic development. In 2000, Beijing strengthened economic ties with Latin America, and Brazil in particular, which would grow as an important energy supplier. In 2009, the Middle East accounted for half and Africa one-third of China's oil supply.

Economic development fuelled China's growing demand for energy and raw resources, expanding its global presence across an increasing number of regional conflicts, forcing a choice between access to resources and non-interference. Beijing began participating in counter-piracy and counter-insurgency operations and was forced to adjust its foreign policy as it was drawn into disputes in Myanmar, Africa and the Sunni Shia divide in the Middle East.

China's growing importance as an energy consumer and its role in negotiating access and pricing began to lend significant influence within the energy sector. It is difficult to pinpoint a specific action or time that indicates when this shift began, in part because economic development continues to play an important role. Access to resources alone cannot provide a clear understanding of China's strategy, nor its effects. Access to resources should be viewed in relation to other geopolitical components.

China's continued 'charm offensive', while costly, is a useful political tool that can reduce distrust of its growing presence with a region, permitting it to continue its current strategy of diversifying access to resources. It is important to determine if this is a product of strategy or economic development to

evaluate the implications of China's actions and the mutability of geopolitical reality by human agency. The answer to this question will inform the context in which China's actions are interpreted. China is expanding access in response to growing domestic demand, or China is expanding strategically to increase its influence over key markets and commodities.

Given China's past isolation and experience with economic sanctions, it is not surprising that is has adopted a strategy of diversifying access to resources, minimising the risk that regional conflicts or maritime chokepoints can threaten its access to suppliers. China has achieved this, in part by establishing relations across Africa, Latin America and the Middle East. These overseas interests are supported by substantial investment in infrastructure to support land and sea transportation networks, embodied in China's Belt and Road initiative.

'Opening up' is one of five focus areas in Beijing's 'Thirteenth five-year plan' (2016-2020), which dictates "deeper participation in supranational power structures, more international co-operation" (Xinhua, 2015). China's economic and strategic presence has come at the expense of American supremacy. With its increased engagement, China has begun to control markets, access to resources, and to act as a stabilising force as Washington withdrawals.

If China's actions are guided by a geopolitical strategy rather than economic growth, it can be expected that growth in access would outpace current demand, enhance national security and increase control over the global commodity markets. If instead, China's efforts result from economic development it can be expected that efforts to increase access will reflect growing domestic demand for specific commodities. If China's efforts are not coordinated by a unifying strategy, then it would be expected that local governments and state-owned enterprises (SEOs) will seek personal gains and a competitive edge in the domestic market, i.e. energy companies competing with one another.

This chapter provides evidence of China's unified strategy. No evidence was found in support of competing actors, a hypothesis that has fallen out of favour in recent years. Strong evidence supporting a hypothesis of normal economic development is found through China's rise. In the 1990s evidence begins to emerge of China's geopolitical strategy across Eurasia, African and Latin America. As China's foreign interests and infrastructure investments expanded, it was drawn into regional disputes. It is at this point that the evidence starts to support the hypothesis of a geopolitical strategy which begins to take precedence over the expected behaviour of a hypothesis of normal economic development. International scholars have compared the BRI with the US-led Marshall Plan, suggesting that its potential

exceeds that of the Marshall Plan in terms of investment if not influence, an association that Chinese scholars have denounced (Chance, 2016; Shen, 2016; The Economist, 2018c). The importance of the OBOR initiative (renamed BRI) will be expanded upon across later chapters, with the eventual conclusion that evidence about the BRI as viewed from across all the components of geopolitics collectively constitutes doubly decisive evidence in favour of hypothesis one. China transformed the Mekong Basin, constructing new land networks to replace the waterways that were disrupted by the construction of seven hydroelectric dams on the upper Mekong River with plans a total of twenty-one, and dredging the river to allow larger vessels (Bernstein, 2017). Bernstein suggests that China's experience within the Mekong Basin infrastructure, (discussed in the literature review) informed the BRI and may have been used as a trial to assess the risk of investing \$900bn.³⁹

This thesis argues that China exemplifies mutability of geopolitical reality by human agency through its efforts to diversify its access to resources, not only for strategic advantage but due to sheer demand, which necessitates a reliance on multiple suppliers. While the diversity does enhance security, limiting the risk of a disruption to a supplier, its growing presence in the market lends significant economic and political influence. In turn, this has made China one of the most prominent players across multiple markets, driving availability and pricing. Should China's dream of a modern Silk Road succeed, it will only strengthen its influence across global markets as new lines of communication over land and sea facilitate the trade of resources and market goods.

China's action to expand and diversify its access to resources will have a significant impact on its ability to influence and control supply and pricing across sectors. Furthermore, this diversity enhances security, limits the risk of disruptions to production and grants substantial economic and political influence. China is the world's largest buyer of soybeans, copper and steel and is now the world's largest consumer of bulk commodities, "China's influence across global commodity markets is without parallel" (Wood Mackenzie, 2019). China has demonstrated its influence in the recent trade war with President Trump, threatening the livelihood of US farmers (Bloomberg, 2020).

In May 2021, China announced plans to strengthen commodity price controls in its five-year plan, "China will strengthen price controls on iron ore, copper, corn and other major commodities in its 14th five-year plan for 2021 to 2025 to address abnormal fluctuations in prices ... The country will also step up

³⁹ See Figure 48 of China's rail link and dam projects in the Greater Mekong Subregion.

monitoring and analysis of commodity prices such as crude oil, natural gas and soybean" (Reuters, 2021). In June 2021. "State-owned enterprises were ordered to control risks and limit their exposure to overseas commodities markets by the State-owned Assets Supervision and Administration Commission" (Bloomberg, 2021). "China will strengthen price controls on iron ore, copper, corn and other major commodities in its 14th five-year plan for 2021 to 2025 to address abnormal fluctuations in prices, the state planner said on Tuesday" (Reuters, 2021). To support the logistical demands of increasing access to resources, China has invested heavily in land and sea links through its BRI, which has been enshrined in the constitution during the 19th CPC National Congress (October 24, 2017).

Chapter 4: Land Lines of Communication (LLOC)

Introduction

China is attempting to change the geopolitical reality with \$900bn of planned investment through China's One Belt, One Road project (OBOR) also known as Belt and Road Initiative (BRI). It is arguably the largest overseas investment drive ever launched by a single country. "The Silk Road project signals tectonic shifts in the global order toward not only a more multipolar world but a more multicultural international system " (Pethiyagoda, 2017). Many of the 71 countries that are part of this belt are also members of the China-led Asian Infrastructure Investment Bank (AIIB) (The Economist, 2018b). The BRI is composed of three belts; the North Belt through Central Asia and Russia to Europe, the Central belt through Central Asia and West Asia to the Persian Gulf and the Mediterranean, and South belt through Southeast Asia, South Asia, to the Indian Ocean through Pakistan. As a result, the BRI initiative with its \$900bn budget, accounting for 60% of the world's population and one-third of its GDP represents a concerted effort to alter the geopolitical reality across Eurasia and Africa. China's investment, both inside and outside its borders far exceed any possible short or medium-term economic advantages.

The previous chapter examined China's expanding access to natural resources beyond its borders. Land Lines of Communication (LLOC) are of vital importance to a states' national interest, facilitating the flow of trade, logistics and military forces. China requires robust trade routes in order to support its growing domestic demand. China has demonstrated that investment in infrastructure has proven beneficial, reducing poverty, creating new economic opportunities and promoting the movement of people, trade and ideas. Landlines link points of strategic value through rail, pipelines, roads and highways to facilitate transportation or resources, goods and labour to enhance trade, economic development and military infrastructure. The BRI is having the effect of mutating the relationship between land power and seapower as China continues to expand and link together its maritime and land corridors gaining access to building new trade hubs. Consequently, we can see the configuration of the geographical perspective of the twenty first century.

This chapter will argue that China's rapid investment in railway, and more recently pipelines, cannot be sufficiently explained by economic development and that the only plausible explanation for the rapid expansion is an attempt to change geopolitical reality. This differs from the conventional wisdom of normal economic expansion which encourages a more cautious and sustainable demand-driven growth. The chapter will provide evidence that China's investment in land lines of communications goes beyond

expected growth attributed to economic development. China's energy security strategy, the China– Pakistan Economic Corridor (CPEC) and the Belt and Road Initiative (BRI) in particular aim to enhance China's access to resources, diversify land lines of communication and address security concerns through reducing the effectiveness of containment strategies that would limit its access to natural resources.

Transportation projects will be assessed for evidence of prioritising access to resources and markets, national security and strategic advantage within a region as well as financial considerations. As an example, CPEC gives China access to Sea lines from the Indian Ocean, which it can already access from the South China Sea. Supporting evidence will demonstrate that China's policies to expand overseas ports will greatly enhance its sea capacity both in terms of transportation and a strategic benefit. This is necessary both for imports of resources, exports as well as maritime security. Port projects require significant economic investment without direct economic return. This is especially true of the ports of Gwadar and Djibouti. As a result, China's investments to enhance sea lines of communication do not make sense on short- or medium-term economic advantages, and instead point towards a behaviour pattern that the scale of sustained investment results from a complex and consciously held long-term policy.

If China's transportation networks follow economic growth, how would they develop? It is expected that they would connect economic centres to promote efficiency in the transport or labour and economic goods with an emphasis on sustainability through profitable operation. Transportation networks would develop organically, gradually branching out between major population centres. Economic theories of normal economic growth fail to explain China's growth. For academics, "conflicting views stem from the lack of an agreed framework for analysing China's economy ... given the lack of an appropriate framework for analysing China's develop and theories that have attempted to explain China's growth and attempt to explain why China has grown so fast using neoclassical growth theory and endogenous growth theory, "indicating the important role of physical and human capital formation in determining China's remarkable rate of economic growth" (Ding and Knight, 2011).

The pace and placement of development would be controlled to minimise financial risk and to ensure profitable operation. Looking at European countries, we see limited rail networks connecting major economic hubs. Outside of these lines, roads connect with rail lines. In the case of China, rail expansion to regions with limited population and economic prospects is not consistent with sustainable demand driven growth. Were networks to develop counter to this it can be assumed that they are either poorly planned or designed with other goals in mind. Ignoring poor planning, we can examine strategic factors.

Transportation networks are strategic in nature, altering distance through the connecting of hubs exemplify the mutability of geopolitical reality by human agency. The placement of transport hubs is decided based on multiple political and economic factors. In many cases, it appears that China overlooks economic factors, or at least prioritises political considerations. This concept is also discussed in 'The Geography of Transport Systems' (2013), "geography imposes an organization to activities and consequently a spatial structure," with the unique purpose of transportation to "overcome space, which is shaped by a variety of human and physical constraints such as distance, time, administrative divisions and topography" (Rodrigue *et al.*, 2013, pp. 1, 13).

Mackinder describes the static nature of physical geography as "invariable, when compared, that is, with the short kaleidoscopic evolution of human arts," while acknowledging the role of human agency, "the human flood surges and rests, ebbs and flows--now calmly contained in its basin, now sweeping over, bursting through, or wearing away the obstacles" (Mackinder, 1890, p. 79). He recognises that ingenuity and technology advances facilitate the transformation of geographic features "thus, while the mountains change their form almost imperceptibly in long ages, a daring leader, a mechanical discovery, a great engineering monument, may revolutionise man's relation to geography in the third of a generation." (Mackinder, 1890, p. 79). More importantly, he notes that swiftness with which human advances alter geography is more readily apparent in our ability to transverse space than in other aspects, "the suddenness with which the results of these revolutions become apparent is far more marked as a rule in the case of man travelling than man settling. Roads, even main roads, are far more easily abandoned than settlements" (Mackinder, 1890, p. 79). Simply put, a population will move around because of a decline or increase in resource and employment opportunities. In contrast, trade routes have remained for hundreds and thousands of years as efficient paths to navigate geography. In the case of sea routes, they are determined as the most efficient paths to transgress based on distance, wind and geological obstacles. While new ports may be constructed and old ones abandoned, with few exceptions it is extremely rare for new sea trade routes to appear. These exceptions include man made straits and new routes in the North which require ice breaking ships to create a path.

Keeling notes that "transportation is quintessentially geographic" and that many scholars overlook the "conceptual linkages between transportation and the frameworks that it transforms" (Keeling, 2007, pp. 218–219). He suggests that transportation is fundamental to the economic activity of exchange, that

79

transport geography and economic geography are largely interrelated. The fact that economic models fail to explain China's development suggests that this approach is ill-suited for explaining China's development and actions. Instead, China has demonstrated that strategy plays a significant role in the development of its infrastructure and economy. Evidence suggests that strategy has guided the development of its domestic economy establishes a modus operandi. This thesis argues that China's strategy has expanded beyond the domestic realm, enabled by China's increasing economic influence and market dominance. It is these factors which support China's objective to transform grand strategy to transform the geopolitical reality, transforming the geopolitical reality through human agency.

Henrikson provides a detailed discussion on understanding distance in a geopolitical context in 'Distance and Foreign Policy: A Political Geography Approach' (2002), "some analyses of international relations have gone very far in the opposite direction that is, discounting the importance of actual physical distance" (Henrikson, 2002, p. 443). He suggests that advances in technology, including real-time factfinding, cannot completely eliminate barriers of distance. "No matter to what extent the real barriers of space and time may be overcome by improvements in techniques of transportation and communication, there will remain certain aspects of the distance factor, relating to culture and to local geographic conditions, that are likely to make policy-making in the international sphere distinctively different" (Henrikson, 2002, p. 439). Henrikson proposes that physical distance remains a key factor in the implementation of policy, despite suggestions that physical distance is an 'illusion' (Wohlstetter, 1968). "Irrespective of all of these technological innovations and possibilities, there remains the original "Acheson gap"-the inescapable sense of distance, of physical and related kinds of remoteness, that makes foreign affairs essentially different from domestic affairs" (Henrikson, 2002, p. 462).

Due to its geography, advances in transportation technology were particularly vital to China's development from an economic and security perspective. The introduction of the rail system helped to spread government influence, stimulated economic and social development and enhance border security.

In contrast, rail transport is associated with a relatively low price, as well as a short transportation time compared to maritime routes. Railway transport accepts up to 30.5 tons of goods in a container. A four-axle container car can take 90 tonnes (99.2 short tons; 88.6 long tons) (*Double stack rail transport*, 2018). There is no definite maximum, but there are several variables that contribute to determining a maximum. It is not uncommon for some trains to be hauling more than 200 containers. Rail transport is a fast, cost-effective and reliable means of transporting freight from Europe to China, with a

80

transportation period of 15 days. This is unlikely to change as sea transport has geographical barriers. Air transport is faster but is costly and has weight constraints. As a result, constructing new rail links has substantial strategic benefits which will increase with Chinese exports and advances in high-speed rail technology.

Overview of China's rail system

Multiple military defeats through the First Opium War (1839–1842) demonstrated the strategic necessity of adopting new rail transportation technology. "Political conservatives argued that western technology would weaken the Confucian status quo" (Li, 2014, p. 502). It was only after defeat in the Sino-French war (1884–1885) that the Qing court accepted that inadequate transportation infrastructure strategically disadvantaged the empire (Jui-te, 1993, p. 282). National security drove China's early railway projects, yet even after the courts accepted its strategic importance, construction progressed at a sluggish pace with no more than 411 km of track laid in the lead up to the Sino-Japanese War in 1894 (Li, 2014, p. 503). Over the years other driving interests have emerged including economic growth, poverty reduction, a desire to expand political influence, and cultural assimilation. This suggests that China reluctantly adopted foreign technology only when it was forced to enhance national security, supporting hypothesis one.

China's rail system went through four phases. Early steam trains which ran on coal, which was plentiful at the time. Despite the introduction of newer technology, steam-powered trains remained in operation into the 21st century, due to the low cost of labour and coal. By 1949 China had 21,800 km of railroads. Diesel trains were first introduced in 1958 and gained widespread use along with electric locomotives in the 1980s and 1990s. In the 1980s 'Green-skin trains' (绿皮大车) hard-seat passenger trains were introduced which are still used in remote areas and shorter lines today. Most have been replaced by China's current line of High-Speed Rail (HSR), first introduced in 2007.

Beijing announced plans to spend at least 2.6tn yuan (\$376.81bn) on transport infrastructure in 2017, including 800bn yuan on railways. During its 13th Five-year Plan period (2016-2020), 15tn yuan in transport infrastructure projects are planned, including 3.5tn yuan on railways projects which will extend its railway network by 30,000 kilometres, more than one-third of which will be high-speed railways (Xinhua, 2017c).

In addition to its domestic lines, China has nine lines connecting to major cities across Europe (see Figure 57). The Trans-Asian Railway Network (Figure 66 and Figure 68) grants access to major markets across

the continent. The BRI project is market as a new silk road, a mega transportation network that would grant China significant strategic advantage across the whole of Eurasia through significant investment and personal risk.

Figure 49 and Figure 50 show the trends in China rail construction, with the most significant increase seen during a period of Soviet support from 1947-1950. The second period of growth is from 1958-1961 which follows the Soviet split, taking place during the Great Leap Forward (see Figure 69). The third period of growth is from 2009 to the present, which is framed by state media as China's poverty reduction strategy. This narrative is supported by the creation of the International Poverty Reduction Centre in China (IPRCC) in 2005, and its Poverty Reduction Case Database launched in 2017 (IEA, 2016; World Bank, 2017). The current period of growth is attributed to two motivations, political stability and Beijing's geostrategy (Tiezze, 2014; Arase, 2015, p. 26; Rudolph and Szonyi, 2018, p. 7). The expansion of rail networks into the East of China as well as modernisation projects help to eliminate poverty through attracting economic development. This improves employment opportunities and the spread of Han Chinese, with the desired effect of promoting a 'harmonious state'. Beijing's investment in land-based transportation aims to diminish vulnerabilities at sea, leveraging its considerable labour force to develop infrastructure rapidly.

1950s-1980s: China's Post War Recovery

The expansion of China's national rail network transformed China's vast geography. Beijing recognises 56 ethnic groups, 7-8 language families and hundreds of dialects. A vast transportation network unifies China and strengthens Beijing's influence and control across regions where access was limited. The new rail lines reduce the perceived distance and cost to the capital.

By the end of WWII, China's rail network expanded to cover most of East China and had expanded into the North West through a combination of various standard relating to the import of technology. Despite this growth, the robustness of the network remained an issue due to mixed standards and capacity.

For most of the period since 1949, however, transportation occupied a relatively low priority in China's national development. Inadequate transportation systems hindered the movement of coal from mine to user, the transportation of agriculture and light industrial products from rural to urban areas, and the delivery of import and export. (Worden, Savada and Dolan, 1988) The 1950s witnessed a post-war boom in the recovery and development of China's transportation networks with the emergence of 'Green-skin' (绿皮火车) commuter trains, which were heavily used for three decades (Qi, 2014). Railroads continued to be the most significant interior transport connections utilised in Communist China's international trade with little foreign trade moved by road. "Well over 95% of the total tonnage of international trade over interior routes crossed the border by rail in 1955. Rail service was available between communist China and the USSR, North Korea, Kowloon (Hong Kong), and North Vietnam. Very little of China's foreign trade moved by road" (CIA, 1954a, p. 60).

Significant development occurred in Sino-Soviet and Sino Viet Minh transport relations during 1955 and early 1956, resulting from the completion of the Trans-Mongolian railroad across Inner Mongolia and the Hanoi -Nam Quan railroad in North Vietnam. In addition, the railroad from Hanoi to Kunming in southwest China was completed by the end of 1956, providing an additional route for Sino-Viet Minh traffic (Lippit, 1966). The completion of these projects resulted in an appreciable increase in China's capability to carry foreign trade with the USSR and its Bloc partners. "Reconstruction of the railroad from Hanoi to Kunming in Yunnan will further enhance transport capability with North Vietnam" and "facilitate the exploration of Southwest China's mineral resources" (CIA, 1954a, pp. 61–62).

"More than half of China's total trade was moved by overland routes. An estimated 6.25mn tons moved overland, as opposed to 5.1mn tons by sea" (CIA, 1954b, p. 3). US Navy estimated the extent of unused capacity for overland transport between the USSR and Communist China; the study clearly indicated the following:

- a. The total capacity of the Trans-Siberian Railroad and its three connecting lines to move freight into and out of Manchuria is estimated as being more than three times the volume of overland imports from the USSR and the European Satellites and double the volume of overland exports in 1954;
- the unused importing capacity of these routes for moving goods into Communist China from the USSR is estimated to be nearly three times the total tonnage imported into China by ocean shipping in that year; and
- c. the unused exporting capacity of these routes is estimated to be almost equal to the total tonnage of China's seaborne exports in 1954 (CIA, 1954b, p. 3).

By 1954, the Tran-Siberian railroad and two of its connecting links had become China's most essential trade routes accounting for the bulk of its foreign trade (CIA, 1954a, p. 7). Several additional interior

connections existed between China and its adjacent countries but did not account for a significant volume of trade.

Intelligence reports suggest that railroads continue to carry approximately 95% of China's overland foreign trade in 1965. The Trans-Mongolian Railroad opened on 1 January 1956, offering a considerably shorter route between the European USSR and central and south China, diverting nearly two-fifths of Sino-Soviet rail freight that year compared to 3% for river transport (CIA, 1957a, p. S-3). While this has an economic advantage, reducing transportation time and fuel, it also has strategic importance in diversifying transportation routes given Sino-USSR relations at that time.

China's transportation system continued to rely heavily on railroads for the bulk of its inland traffic and the majority of its Soviet trade, due to its poor roads and a lack of vessels for ocean shipping (CIA, 1957b, p. 18). As a result of the industrial sector's reliance on railroads, the first four years of the First Five Year Plan emphasised the placement of new lines, particularly in the West and North West (CIA, 1958, p. 24). By 1958 the Soviet line from Xinjiang was extended to Yumen in Gansu, granting better access to what was at the time, the largest proved indigenous source of crude oil. This includes an addition on the rail line between Changsha and Shanghai that connecting Yingtan, Jiangxi with the port of Xiamen in Fujian.

The railroad network was primarily concentrated in the east and northwest, connecting important industrial and population centres. Traffic consisted primarily of the movement of a few key commodities and between limited points of origin and principal destinations. Coal accounted for one-third of the total rail traffic, while agricultural products and constructions materials each accounted for an additional one-fifth of traffic (CIA, 1957b, p. 20). As a result of its importance, railroads accounted for 13% of total state investment between 1953 and 1957. "China's transport system, which was overloaded and subject to periodic congestion during the Great Leap Forward, has been able in the last few years to meet basic economic needs without delay" (CIA, 1967, p. 5).

The Cultural Revolution (1966-1976) did not result in significant disruptions. From 1966, China added considerable rolling stock and construction projects to address limitation and extend networks to more remote areas. By 1970, China's railway system was robust enough to withstand the influx of industrial and agricultural commodities without impacting service (see Figure 52). In 1970 multiple major projects were underway:

- a. Completion of the 1,070-km line between Chengdu and Kunming, linking Szechuan and Yunnan Provinces.
- b. Major construction on the 1,000-km line between Luoyang and Loudi, which will provide a third north-south trunk-line in the interior.
- c. Major construction on the 1,200-km east-west line between Wuhan and Chongqing, the first directly with the east. (CIA, 1954a, p. 11)

In 1970, expansion and improvements continued, particularly in Xinjiang, Tibet and the northeast border areas. The party promoted the relationship between improvements across forms of transportation and economic growth made possible through an abundance of workforce.

China's second major boom in rail infrastructure took place from 1971 to 1972, with a minimum of 3,540 km of new lines completed at an average of 1,770 km per year (CIA, 1974, p. 3). More than 44,000 km of rail had been laid by the end of 1973, doubling the length of the pre-Communist network (CIA, 1974, p. 1). The construction of railways slowed following market-oriented economic reforms in 1978, as funds were directed toward higher return investments. It was not until the 1990s, after more than a decade of economic growth, that the state could commit the funds to renew large-scale railway building.

The Advent of High-speed Rail 1990s

Over the past two decades, China has made significant advances in transportation technologies allowing it to overcome barriers of physics and physical geography. Figure 53 and Figure 54 provide evidence of a long-term strategy for the development of China's national rail system. The scale and rapid deployment of infrastructure indicate a centralised initiative from Beijing rather than provincial planning.

These advances enhance access to resources and expand the reach of Beijing's influence as technology draws cities closer to the capital, providing enhanced national security and expanded economic opportunities. Looking at the development of transportation in other large countries like Canada and Russia, rail lines connect major cities, leaving large portions of the country unconnected. Shaping transportation networks around population density would reflect sustainable development driven by economic growth. Running lines into more remote regions with a lower population density increases financial.

In addition to the movement of economic goods and people, it allows for the movement of supplies and personnel in the event of an internal or external threat, proving an effective strategy in suppressing decent as well as a model of assimilation in the Western provinces of Xinjiang and Tibet (The Economist,

2017b). It is the combination of these factors which justifies the significant costs associated with the construction and running of rail lines across vast stretches of sparsely populated land that is likely to remain unprofitable. Reducing the distance will help to bring its borderlands under control. The increased complexity and cost of high-speed rail (HSR) over conventional lines suggests that the project focus is not economical. HSR is not necessary for the transport of migrant workers and projects like the West-to-East Gas Pipelines are better suited for the transport of petroleum and natural gas. This suggests that security and strategic concerns outweighed economic considerations in the development of China's infrastructure strategy. In particular, the rapid deployment increases the economic risks as these lines are unlikely to recoup the initial investment, let alone the continued cost of maintenance which is compounded by the harsh environmental conditions.

In 2004, the 'Medium and Long-Term Railway Plan' was approved to modernise and separate freight and passenger transport systems. In the first stage, the 'China Railway Speed Up Campaign' (中国铁路大提速) ran from 1997 to 2007 with the aim of increasing the average speed of China's passenger trains from 43 km/h to 70 km/h through six rounds over a ten-year period which HSR discussion took place.⁴⁰ The second stage directed the acquisition and development of relevant technology needed for joint production with foreign firms as well as for the creation of Chinese brands, as well as the import of equipment and parts required for domestic production (Petti, 2012, p. 12). In the final stage, the Ministry of Railways and two state-owned train builders negotiated the acquisition of foreign technology.

The 'Medium and Long-Term Railway Plan' is evidence of a long-term strategy connecting rail, pipeline and sea transport, creating a vast transportation network with significant geopolitical implications in Eurasia and Africa. China Ministry of Railways, in co-operation with SOEs, worked together to gain foreign partnerships and technologies that would allow China to upgrade domestic rail networks, as well as those overseas, across African and the BRI.

Forbes announced the "trains are the new Panda," calling it a "paradigm-shifting international trade network" (Shepard, 2017a). The first train, a 200-container block train, travelled the 12,000-kilometre journey in 16 days.

⁴⁰ China is currently the only country with working experience in applying speed upgrades to existing rail systems, achieving 250 km/h on upgraded conventional rail prior to the introduction of HSR in 2008 with A number of domestically developed technologies facilitate a smooth transition to HSR (Lim *et al.*, 2016).

The economic fundamentals of this trans-Eurasian rail service is sound: these trains allowed manufacturers and freight forwarders to get their products between China and Europe in less than half the time of shipping by sea at a fraction of the cost of shipping by air. While these trains are not a viable form of transport for all types of products, they fill a void in the market for high-value products that need to be transported as quickly as possible, such as electronics, fashion items, car parts, heavy machinery, premium agricultural goods, and fresh meat. (Shepard, 2017a)

The Yiwu London Railway Line is a freight railway route from Yiwu, China, to London, United Kingdom, covering a distance of roughly 12,000 km (7,500 miles), consisting of 39 rail lines, which directly connect 16 cities in China with 15 cities in Europe. See Figure 53 Comparison of Eurasian Transportation Routes (Frese, 2019) for logistical comparison or land, sea and air routes. The scale of the BRI projects exceeds anything prior in human history.

While figures are not known, it is believed that they came at a substantial cost. Were China to upgrade its networks gradually, in line with growing demand, it is likely that foreign firms could have been contracted for the project for considerably less.

In order to maintain its advantage as an industry leader, state-owned China Aerospace Science and Technology Corporation (CASC) are working on a 2,500mph flying train to rival Elon Musk's Hyperloop with three times the speed (Coffey, 2017). Scientists have also announced plans for an intercity train that can travel at more than 600mph.

High-speed rail (HSR) in China

Through China's history, it has struggled to project power from its capital, protect its borders and control the influence of neighbouring states. HSR enhances security which encourages the movement of people. It has it is becoming easier for individuals to cover great distances, allowing them to seek economic opportunities farther from home with little sacrifice. This contributes to assimilation and more homogenous culture. China's transition to HSR would be difficult to attribute to normal economic development given the substation costs for its rapid deployment.

"In early 1990s, Chinese commercial train service ran at an average speed of only 48 km/h under a congested railway network, and it was steadily losing its market share to air transportation and the expanding highway network" (Lim *et al.*, 2016). Since connecting Beijing with the port of Tianjin in 2008, China has developed HRS at an incredible rate. Within five years China had 10,000 km (6,200 miles) of

HSR in service, more than all of Europe, and in less than a decade China has laid 20,000 km of HSR lines, more than the rest of the world combined, and plans for another 15,000 km by 2025 (The Economist, 2013a, 2017a). China's HSR program was so successful that it disrupted domestic air transportation, impacting ticket prices (Z. Chen, 2017; Zhang, Yang and Wang, 2017). Over a brief period, China was able to alter the space between the capital and its borders. While air travel services the same routes, it is not a viable alternative for China's population of 1.4bn. According to the China Railway Corporation, its more than 4,000 bullet trains carrying more than four million passengers daily and the Beijing-Tianjin intercity trains carried 250mn passengers carried in the past decade (Shi, 2018).⁴¹ In 2016 China's railways, highways, waterways and civil airlines carried a total of 47.15bn tons of cargo, air accounted for 7.06mn tons compared to Rail freight which accounted for 3.69bn tons, 36.8bn tons for waterway freight and 36.8bn tons for Highway freight (Wenmao, 1988). Given the distance, environmental conditions and transport costs, railways are the most suitable transportation for the region.

The Beijing–Shanghai High-Speed Railway was first proposed in early 1990 to connect China's political and financial capitals and would be the fastest scheduled train in the world. Construction began in 2008 with an expected speed of 380 km/h, intended to travel 1,305 km in 3h58m. Operations began in 2011 with a maximum speed of 250 km/h and a running time of 7h56m. By September 2017 improvements were made to 'restore' the running speeds to 350 km/h, reducing the commute to 4h48m (Xinhua, 2017e). "The OECD, a rich-country think-tank, reckons it costs 90% more to build lines for trains that reach 350kph than it does to lay ones that allow speeds of 250kph" (The Economist, 2017a). In addition, "running the trains 50km/h faster would increase operating costs by one-third, according to an industry estimate" (S. Chen, 2017). The national speed was capped a 300km/h following a collision between two high-speed trains in 2001, though it was spun as a cost-saving measure, reducing energy and maintenance costs (S. Chen, 2017).

The Beijing-Shanghai line draws China's political and financial centres closer together, though it was not necessary as flights between the cities can be cheaper and make the trip in half the time. China's rapid transition to HSR comes at a tremendous financial cost. The Beijing-Shanghai link, 'the world's most profitable high-speed rail' is the only high-speed rail in China to turn a profit in the past five years (Kong, 2016). Only last year did Six lines start to operate at a profit, not including construction costs. The

⁴¹ See Figure 57 China's high-speed rail corridors

Beijing-Shanghai line alone cost \$32bn. It is unlikely that rural lines will turn a profit in the near future, or ever recoup initial costs.

China's high-speed rail sector is facing years of losses due to massive construction costs. However, some lines in eastern China have earned profits recently. The Beijing-Shanghai line earned 6.58 billion yuan in 2015, the most profitable in the world. Five other lines including the Ningbo-Hangzhou line, also started to gain profits last year. However, other lines, especially in western regions, remain stuck in losses. Experts say that it may take at least 16 years for China's high speed railways to pay off their costs. (CCTV, 2016)

While there is no official financial information available online, according to information from a source, in 2015 six lines were profitable: Beijing-Shanghai, Shanghai-Nanjing, Nanjing-Hangzhou, Guangzhou-Shenzhen, Beijing-Tianjin, Shanghai-Hangzhou. Unfortunately, even internally it is difficult to find the official direct financial information because of the complex main management and management relationship.

To put it simply, the eastern coastal lines are more profitable and the central and western regions run at a deficit, which is the basic trend determined by geography and centres of population have a lot to do with it.

China's railway has always relied on freight for profit while passenger transport operates at a loss due to frequent stops which reduce efficiency. This issue has largely been addressed by the development of high-speed rail. Despite this, lines in the Western region continue to operate at a loss.

The overall bill is already high. China Railway Corporation, the state-owned operator of the train system, has debts of more than 4trn yuan, equal to about 6% of GDP. Strains were evident last year when China Railway Materials, an equipment-maker, was forced to restructure part of its debts. Six lines have started to make operating profits (i.e., not counting construction costs), with the Beijing-Shanghai link the world's most profitable bullet train, pulling in 6.6bn yuan last year. But in less populated areas, they are making big losses. A state-run magazine said the line between Guangzhou and the province of Guizhou owes 3bn yuan per year in interest payments—three times more than it makes from ticket sales. (The Economist, 2017a)

While China's transport ministry does not disclose profit data, it is unlikely that profitability was a major factor pushing the national drive for high-speed rail. If China's improvement in its transportation

89

networks was the result of economic growth, a more cautious pace would be expected, as well as limiting projects to major lines that are less likely to operate at a loss.

When Li Keqiang, China's premier, took 16 European leaders on a high-speed train ride in 2015, the trip revealed more than an enthusiasm for rolling stock. It was also Beijing's big sell for an engineering technology that it hoped would spearhead the launch of a grand geo-strategic ambition, allowing China to gain state contract to construct lines in other countries and further expand its Eurasian network.

China's ability to build high-speed railways more cheaply than its competitors gave the technology a central place in "One Belt, One Road", Beijing's ambitious scheme to win diplomatic allies and open markets across more than 65 countries between Asia and Europe by funding and building infrastructure (Kynge, Peel and Bland, 2017).

Li emphasised the link between smooth diplomatic relations and securing Chinese infrastructure and, predicting the railway technology would become China's 'golden business card' (Kynge, Peel and Bland, 2017). China has invested hundreds of billions of dollars into acquiring and developing the necessary technology to upgrade its national rail network. After gaining experience and becoming a leader in the field, China has moved on to railway diplomacy. Transportation technology advances represent the potential of human agency to overcome geographical barriers of topography and distance.

Geographical Barrier

China has traditionally invested in the East of China, focusing on the development of coastal cities and access to seaports. The West of China was largely neglected and isolated from Beijing's influence. As a result, evidence of influence from neighbouring countries can be seen along its Western borders. It is only in recent years the Xinjiang and Tibet have received major investment from the capital. While the West of China does have natural resources, it is a vast region that is sparsely populated and difficult to traverse due to significant geographical barriers. Xinjiang has the country's largest coal reserves as well as significant reserves of oil which China lacked the technology to exploit. Tibet has substantial reserves of copper, lithium, gold and silver that remain largely untouched until recently (Buckley, 2014, p. 90).

In order to provide transportation and economic development in remote regions of Xinjiang and Tibet, technology was developed to overcome nature. The railway projects in western China are impressive in many ways, not only for overcoming geotechnical and environmental challenges and but also in regard to the sheer distance they traverse, accounting for nearly one-half of China's land mass at great expense, suggesting that these lines are strategically necessary, and the cost is a secondary factor. China's Westward shift is motivated by security and border concerns. China has directed infrastructure investments to stabilise the region, secure its borders and cross-border trade, as well as to access its natural resources in its Western provinces.

Tibet, Lhasa

The construction of the Qinghai-Tibet Railway (QTR), the first railway to connect central China to Tibet and the highest-elevation passenger train in the world presented a series of geotechnical challenges beyond consideration for environmental protection and seismic hazards (Wang *et al.*, 2008, p. 2). This is actually the third attempt to construct a line connecting to the region, the first failed in 1961 due to financial problems, and the second effort in the beginning in 1974 was halted in 1978 due to three insoluble problems: permafrost, lack of oxygen and environmental frangibility (Wang *et al.*, 2008, p. 2). In the early 1970s it took 32 days and nearly two tons of petrol for a truck to make a round trip between Xining and Lhasa – a straight-line distance of 880 kilometres (545 miles), a high-speed sleeper train takes around 21 hours (Garver, 2006, p. 14). The first train reached Lhasa from Beijing in July of 2006, travelling 1,140km (710-mile).

While the Chinese Government has been extremely concerned about protecting the ecosystems of the Tibetan plateau during and after construction of the line, the railway has presented some unusual challenges for the carriage designer and builder, as well. These include the lack of oxygen and low barometric pressure at high altitudes, the intense ultraviolet radiation, the climate, and the ecosystems themselves - the frequent sand and snow storms together with the lightning strikes interfering with electrical and communications systems. (Bent, Kadeřávek and Pernička, 2007)

With an average elevation of around 4,500m and a peak elevation of 5,072m, it operates at elevations greater than the Peruvian railway in the Andes. Due to the high altitude oxygen is 35–40% less than at sea level, a Passenger Health Registration Card is required, seats are equipped with an oxygen supply and each train has a doctor (BBC, 2006; Wang *et al.*, 2008, p. 8). Later, pressurised carriages were introduced with tinted windows that withstand changes in barometric pressure and sandstorms, while combating altitude sickness and UV rays 1.6 times stronger than at sea level (Watts, 2005). Sealed Bodyshells was equipped with tight-fitting doors and an HVAC system the that maintains an interior pressure about 15 Pa higher than outside, by means of air damper regulators (Bent, Kadeřávek and Pernička, 2007).

The main engineering challenges, aside from oxygen shortages, were geotechnical challenges associated with the weakness of the permafrost as about half of the second section of the line was constructed on barely permanent permafrost (Qingbai *et al.*, 2002, p. 199). Techniques were developed to account for climate change and to reduce associated risks of heat from trains passing above, which could lead to track damage from frost heave or thaw settlement (Cheng and Li, 2003).

Many engineering challenges were overcome regarding the tracks and passenger cars before construction could begin. As a result, flying was a much more practical solution from a financial perspective. The construction of the line to Tibet featured prominently in state propaganda and was epitomised in the popular song, the Path to the Sky (天路) which says "that is the magic path to the sky, bringing the warmth to the edges," which was sung by five of China's top performers. A number of motivations are likely to have contributed to the construction of the Tibetan line including access to natural resources which include substantial reserves of copper, lithium, gold and silver. Beijing also wishes to promote immigration to the region, for economic development, assimilation and regional security. The remote nature of the region has allowed for a separatist movement to persist for many years. Drawing Tibet closer to the capital would help to increase its influence over the region.

Xinjiang

Xinjiang is a sensitive region in China, with a sizeable Muslim population troubled by issues with border security and extremist groups. China has constructed education camps to assimilate the Uyghur population and has detained more than one million since 2014 (Human Rights Watch, 2019). Xinjiang is rich in fossil fuels, accounting for 25% of China's national petroleum and natural gas reserves and at about 38% of the national coal reserves (China.org.cn, 2018).

Geography and distance isolated the region from Beijing's influence. "Before the end of the 1970s and Deng Xiaoping's policy of modernisation in 1980, air travel in China was relatively rare. The country had only one airline, the Civil Aviation Administration of China (CAAC), and airports and airspace were controlled by the military" (Björkell, 2017). It is only through the introduction of rail lines in 1966 that the region was drawn closer to Beijing, overcoming the vast region's isolation resulting from geography and distance.⁴² This was necessary to secure the region and to install facilities to exploit natural resources and enhance border security (Comtois, 1990, p. 795).

⁴² 1949 to 1978 has been described as the third phase in China's rail history (Xue, Schmid and Smith, 2002, p. 157).

"The Turkic-speaking Muslim Uighurs were traditionally the dominant ethnic group in the region whose Mandarin name, Xinjiang, means simply "New Frontier" — perhaps a reflection of the fact that the region was only brought under Beijing's control in its entirety during the 19th-century reign of the Qing dynasty" (Tharoor, 2009). Uyghur nationalists have sought the formation of 'Eastern Turkestan,' independent sedentary Turkic state since the early 20th century, following two short-lived East Turkistan Republics of Kashgar in 1933 and Ili from 1945-49 (Dwyer, 2005, p. 78).

In 1933, during China's civil wars, Uighur leaders declared Kashgar an independent Republic of East Turkestan, considered a "milestone of Uyghur nationalist history and a precedent cited by today's independence advocates" (Millward, 2004, p. 5). From 1944 to 1949 the Soviet Union backed Uyghur separatists in a rebellion to form the Second East Turkistan Republic in what is now Ili Kazakh Autonomous Prefecture. The region was wholly subsumed into the new state after 1949 and Xinjiang designated as an "Uyghur Autonomous Region." Since 1954, more than 50% of Xinjiang's land area are designated autonomous areas for 13 native non-Uyghur groups (Tharoor, 2009; Bovingdon, 2010, p. 67).

Three events in the 1990s drew attention to the issue of violent Uyghur separatism and terrorism (Millward, 2004, pp. viii–ix). The first was an armed uprising in Baren in 1990, for which the 'Islamic Party of Eastern Turkistan' (TIP)⁴³ claimed responsibility (Davis, 2008). The second was a series of bombings of civilian targets including buses, shops, a cinema and hotel in 1992-93. "The third cluster, from spring 1996 until February 1997, corresponds chronologically with the inauguration of the "Shanghai Five" organisation and a high-profile "Strike Hard" campaign to round up suspected separatists. Chinese reports indicate a wave of protests, explosions, and assassinations of ethnic Uyghur officials around this time, and large numbers of arrests were logged" (Millward, 2004, p. viii). China's crackdown on separatists was followed by large-scale demonstrations which escalated into clashes with police and attacks on Chinese civilians. This was followed by further securitisation and another three bus bombings and economic targets in 1998-99, which no large-scale attacks following the 1996-97 cluster (Millward, 2004, p. ix).

Lanzhou–Xinjiang High-Speed Railway was completed in 2014 and runs 1,776 km at and an operating speed of 200–250 km/h. The Ürümqi-Qumul is the first HSR section in Xingjian, cutting travel times from 20 hours to 12 hours (Global Times, 2014).

⁴³ Also known as 'Turkistan Islamic Movement' (TIM), formerly the as 'East Turkestan Islamic Movement' (ETIM).

While not the first train line to Lanzhou, the high speeds created increased the vulnerability to windshield risks. Near Shanshan, the train passes through the 'hundred-li wind zone', averaging Beaufort 8 Gale force (62–74 km/h) throughout the year, peaking at Beaufort 12 Hurricane force (≥ 118 km/h) (The Economist, 2013a). A 67 kilometre (42 mi) long wind-protection gallery was constructed after a train was overturned in 2007 (Xinhua, 2007).

China's Global Rail Network

For decades, China's African investments focused on strengthening political ties and 'winning heartsand-minds' across the continent through good-will projects, including stadiums, hospitals, anti-malarial and public health work, tertiary education, and agricultural assistance (Rønning and Li, 2013; Shambaugh, 2014). While the recent surge of investment in infrastructure could in part be attributed to commercial interests, this alone does not explain levels of investment not seen since the colonial era (1870s-1920s) (Dienel, 2014, p. 125; Arewa, 2016, p. 101). "Traditionally, most Chinese foreign investment in Africa has been aggressively one-sided and based more on politics than an objective business case" (Jadesimi, 2017). The strategic advantages of constructing new lines of communications provide a geopolitical rationale for investment in rail and pipeline projects, addressing the vulnerability of the oil trade to just a handful of chokepoints. In July 2018, Saudi Arabia temporarily suspended oil shipments through the strait of Bab el-Mandeb after it said two tankers were attacked by Yemen's Houthi militia (Cunningham, 2018). This came shortly after a threat by Iran to close the Strait of Hormuz. Even with the suspension, Saudi Arabia can still use its East-West mega-pipeline with a capacity of 5mn b/d to transport crude from the Persian Gulf to the Red Sea (Blas, 2018). Saudi Arabia's pipeline allows it to suspend shipments through the strait of Bab el-Mandeb without stopping oil shipments to exert political pressure. China's strategy to expand lines of communication allows trade to bypass Russia and maritime choke points, enhancing soft power and access to markets. "Russian sanctions against the import or transit of most EU agricultural and food products is currently the biggest bottleneck of the New Silk Road" (Shepard, 2017b). This provides a compelling explanation for China's ambitious CPEC (China–Pakistan Economic Corridor) and BRI projects.44

"The Silk Road project signals tectonic shifts in the global order toward not only a more multi polar world but a more multicultural international" (Pethiyagoda, 2017). The Initiative is reshaping trade routes across the whole of Eurasia and beyond. Beijing is offering financial and technological support to

⁴⁴ See Figure 61 For an overview of China's infrastructure investments in African railways.
construct a network of ports and rail lines that are connecting Eurasia and Africa over land in a way that has previously only been possible with sea routes, altering the balance between coastal and landlocked states. China's overseas infrastructure investments have increased access to natural resources, diversified trade routes and increased its soft power and regional influence. China's increase in soft power is evident in the growing support for the one-China policy, winning over a number of nations that previously supported Taiwan as well as increasing support in the UN (Dreher and Fuchs, 2015).

China's mega infrastructure projects represent the most significant foreign investment in African since the colonial railroad's construction during the 'Scramble for Africa' 1881 to 1914 defined Africa's geopolitics (Jedwab, Kerby and Moradi, 2017).⁴⁵ The western powers delineated borders and made certain locations more strategically important than others. During this period, colonial powers shaped nations, the movement of people and the formation of cities.⁴⁶ "Europeans did not consider ethnic features and local geography in the design of colonial borders" (Michalopoulos and Papaioannou, 2016, p. 1813). In addition to the TARZANA rail (1975) and the Benguela network (2014), China is currently active in five major rail projects across 35 Africa nations (O'Dowd, 2016; Morlin-Yron, 2017).⁴⁷ In 2011 China invested in maintaining the Zambia – Malawi railway as well as financing rail projects in Kenya, Ethiopia and three projects in Nigeria.

While China's deepening engagement with Africa has largely been associated with better economic performance, its involvement is not without controversy. This is particularly true in the West, as typical headlines portray an exploitive relationship: "Into Africa: China's Wild Rush"; "China in Africa: Investment or Exploitation?"; and "Clinton warns against 'new colonialism' in Africa." (Dollar, 2016, p. 2)

While China is not redrawing borders, investment in local infrastructure will direct FDI and influence the formation of current and future population centres. The expansion of transportation networks will alter the existing relationship between locations and their economies by reducing the distance between them in terms of cost and time, and by extension their political and economic value. While cooperating entities invest in infrastructure to create profits, the decision of where to direct a state's limited

⁴⁵ See Figure 51 for details on the growth of Chinese infrastructure investment in the region.

⁴⁶ Colonial powers build railroads to project military power and for financial gains, allowing them to exercise 'effective control' further European mining interests and connect agriculturally rich areas (Michalopoulos and Papaioannou, 2017, p. 88). "At the turn of the 19th century, sub-Saharan Africa was the least urbanized region in the world, with only about 50 cities of more than 10,000 inhabitants. By 2010, the number of cities had increased to almost 3,000" (Michalopoulos and Papaioannou, 2017, p. 87).

⁴⁷ See Figure 62 for an overview of China's six economic corridors.

resources is strategic in nature, particularly in the case of FDI. China's FDI is shaping economic development, political relations and transportation across the region, altering the geopolitical reality. The distinguishing feature is that of a foreign state reshaping Africa in line with its own interest.

China's investments in Africa follow its domestic model of poverty reduction, creating new economic opportunities for locals as well as political backing (Dollar, 2016, p. 1; Jadesimi, 2017). At the same time, it enhances its access to natural resources and expands its global transportation networks. Instead of focusing on linking with a few top trade partners in a region to improve access for strategic and commercial advantage, China is investing in infrastructure across the whole of Sub-Saharan Africa.⁴⁸

China is redefining Africa's geography through large-scale investment across the continent with a focus on enhancing relations with an entire region instead of limiting investment to a few strategic partners. If its investments aimed to profit from the region, they would be much more limited in scope and scale, guided by specific objectives with consideration of economic risk and return. Diversifying trade routes will enhance security by allowing trade to move around any obstacles that could result from local conflicts or containment efforts. The continued expansion of China's trade network will become increasingly robust, reducing the ability for a political conflict to disrupt Chinese trade and access to resources. More importantly, they enhance China's influence across the region as it controls major transportation networks.

China's global transportation networks include railroads spanning the width and length of the sub-Saharan desert, CEPEC which runs to Moscow and the port of Gwadar, and the BRI which already stretches from Beijing to London. It is difficult to imagine a containment strategy that could have a meaningful impact on China's vast trade routes. China is fast approaching its vision of a new silk road which would provide Beijing access to the entire land mass of Eurasia with more than 60 partner countries (Habib and Faulknor, 2017; Pethiyagoda, 2017).

The implications of China's presence are two-fold. This has significant long-term implications and has the potential to affect China's influence in international organisations and promote Chinese led institutions, including BRICS, the New Development Bank (NDB) and Asian Infrastructure Investment Bank (AIIB). It is also likely to affect access to resources including Sino-African oil ties. "China-Africa oil ties based mainly on oil purchases from and oil investments in Africa are increasingly of concern to many policymakers

⁴⁸ See Figure 67 Map of a proposed trans-Africa highway network.

and experts, especially in the United States, Europe, China and African oil-producing countries" (Zhenxing, 2013, p. 2).

In his inauguration speech, US president George W. Bush said that US foreign policy seeks to "support the growth of democratic movements and institutions in every nation and culture with the ultimate goal of ending tyranny in our world," an approach that has been seen as ineffective in increasing engagement (Coyne and Ryan, 2009, p. 28).

China has been taking advantage of the Western conditional aid approach, "as much as the West proclaims that China's approach is bad for Africa, there are many nations— authoritarian and democratic—stepping up to take China's money" (Condon, 2012, p. 13). "If countries displayed no initial tendency to implement reforms of the desired type, then conditional lending appeared to have little effect in encouraging reform" (Morrissey, 2004, p. 164). This approach is further undermined by China's non-intervention policy and necessitates a rethinking of foreign aid and investment. Failure to adapt will result in a continued reduction in Western influence, solidifying China's presence in the region.

The OBOR initiative is not merely a free trade agreement. It is a massive infrastructure-led economic integration plan. It draws a blueprint for integrating China's trading partners by developing their infrastructure, i.e., ports, roads, airports, railways, etc., in a way that complements Beijing's own interests. Since the outset of the initiative, China has become a primary source of financing for many belt-road countries. For example, Export and Import Bank of China alone lent \$80bn in 2015, compared with more than \$27bn from Asian Development Bank. (Du and Zhang, 2017, p. 3)

The strategic implications of such an undertaking are substantial. This level of access to suppliers and the variety of transportation options goes beyond bypass routes and would grant a significant measure of control of the market, including access and pricing. It is likely that China will view this as a means to regulate against significant price fluctuation as well as to safeguard against significant changes in the market that could result from regional changes resulting from natural disasters, political conflict or outside interference. This is of particular importance due to the political uncertainty in some areas of Africa and the Middle East.

China's global rail network seeks to expand across the Eurasian continent, "these trains carry not only commercial goods but also political ambitions" (Stephens, 2017). In ten years, China-Euro direct services created direct freight services that previously did not exist, and that now connect roughly 35 cities in

China with 34 in Europe. Rail services are considerably cheaper than air and faster than sea, but capacity constraints limit trade volume. Furthermore, China is the primary force behind these routes gaining the majority of the political and economic benefit. Only a few other countries can leverage their positions as transit hubs. Only Germany, Poland and the Netherlands receive more than seven trains per week (See Figure 6) (J. E. Hillman, 2018). "The jury is out on the economics of this latest reincarnation of the ancient silk routes. That is beside the point. The journey above all else was a statement of China's geopolitical intent" (Stephens, 2017). Given the capacity constraints and uncertain economic benefits, the Eurasian rail project embodies its global ambition as a great power. "Foreign leaders readily promote the routes as symbols of deeper ties, regardless of their economic merits … It's a vision of inclusive globalisation that bolsters Chinese leadership credentials at a time when the US is wavering on its international commitments" (Campbell, 2017a).



Figure 5 China-Europe Rail Routes and Frequency (2018) (J. E. Hillman, 2018)

China's Eurasian strategy enhances its soft power and shapes lines of communication, emphasising the value of globalisation and political ties over economic. China is the primary force behind these routes, but a lack of centralised information and significant subsidies make true economic viability more difficult to assess (J. E. Hillman, 2018).

Transportation networks address the general need for logistics. However, they are insufficient for China's energy needs. Pipelines are a specialised infrastructure offering a fixed capacity and path for oil and natural gas.

China's Domestic Pipelines Network

Provided that the region is geologically sound, pipelines provide an efficient means of transporting Highly-volatile liquids (HVLs) to refineries, industrial centres and cities. Pipelines reduce China's reliance on seaports for energy security and in Western China they circumvent limited transportation networks. Pipelines provide a fixed capacity and rate of transfer, regardless of traffic and weather conditions.

China's natural gas pipelines are crucial in addressing the high power demand in industrial sectors, as well as, reducing reliance on coal. Pipelines have a number of benefits including safe transport of volatile liquids, energy efficiency, and environmental impact. While pipelines are less vulnerable to human error (including excavations), traffic and weather, they are vulnerable to natural disasters (primarily earthquakes and fires) and domestic terrorism (Ramírez-Camacho *et al.*, 2017). Many of these risks can be reduced with adequate assessment and planning (Inanloo *et al.*, 2016). Suitable placement of pipelines can minimise environmental threats, but security will remain a concern in some areas of Western China.

An argument can be made that pipelines increase reliance on fossil fuels. However, China is transitioning away from coal and is the leading manufacturer of green energy, including wind and solar power. China became the world's largest producer of photovoltaic cells in 2007 and the world's top wind turbine producer in 2009 (Shambaugh, 2014, p. 159).

China has improved the integration of the country's domestic oil pipeline network to integrate its oil supply and diversify oil import routes. "According to CNPC, China had about 15,657 miles of total crude oil pipelines (70% managed by CNPC and the remaining 30% by other NOCs) and 12,605 miles of oil products pipelines in its domestic network at the end of 2013" (EIA, 2015, p. 14). China's oil pipeline infrastructure is concentrated along the more industrialised coastal markets and the north-eastern region, with an expansion added to connect with oil supplies and downstream refining centres from the north-western region as well as more-remote markets in the central and southwestern regions.

"China continues to invest in natural gas pipeline infrastructure to link production areas in the western and northern regions of the country with demand centres along the coast and to accommodate greater imports from Central Asia and Southeast Asia" (EIA, 2015, p. 23). Currently, China's domestic natural gas pipeline network is fragmented. China plans to increase its main natural gas pipelines from 35,498 miles of main natural gas pipelines at the end of 2013 to 74,564 miles by 2020, through investments into "the expansion of the transmission system to connect more supplies to demand centres along the coast and in the southern regions as well as integrating local gas distribution networks" (EIA, 2015, p. 25).

The West-to-East Gas Pipelines was first proposed in 2002, to link production and imports from the western provinces and imports from Central Asian countries to meet natural gas demand in the eastern and southern regions. This project currently consists of three pipelines, with plans for an additional two. West-East Gas Pipeline I began operation in January 2005, providing an initial annual capacity of 600 Bcf/y. It is China's longest natural gas pipeline, running 2,722 miles from supplies in the West to Shanghai in the East. West-East Gas Pipeline II was designed to connect the Central Asian Gas Pipeline at the border with Kazakhstan and western China's Xinjiang Province to key demand centres in the south-eastern provinces, including Guangdong. The pipeline was completed in 2011 with a length of 5,480 miles and an annual capacity of 1.1 Tcf/y (trillion cubic feet). West-East Gas Pipeline III was designed to accommodate greater gas flows from Central Asia, running parallel to the second West-East Pipeline for most of its length and ending in the south-eastern provinces of Fujian. The pipeline was completed in 2015 and provides an annual capacity of 1.1-Tcf/y.

Proposals for a fourth pipeline are still in the planning stages, with nothing known about the fifth. The fourth pipeline was suggested to run from Tarim Basin or Sichuan in 2009, which was later revised to run from Yining, Xinjiang to Zhongwei, Ningxia, with a length of 2452 km and an annual capacity of 30 bcm/y (billion cubic meters) (China Gas, 2009; Liu, 2014). The Zhongwei-Guiyang pipeline runs 1.898 km, connecting the West-East Pipeline network, China-Myanmar pipeline and gas grids in Sichuan and Chongqing. was completed in March 2011 and began operation in July 2012 (Chongqing Today, 2014; Li and Molina, 2014).

China's pipeline network links major ports and suppliers to refineries to provide reliable energy supply to major industrial centres and cities. Consistent and adequate energy supply is necessary for China's continued economic development, and in cities, it provides a cleaner source of energy that helps reduce its reliance on coal. Domestic pipelines provide a consistent supply of fuel to specific points. The selection of locations as well as the path a pipe will travel is a strategic decision. The state can use pipelines to promote industrial investment in specific regions. In addition to economic costs, pipelines come with political and security considerations. Figure 59 contains a list of current and proposed LNG pipelines. This is mainly an issue in the Western provinces of Xinjiang and Tibet, both in terms of

100

environmental risks and targeted attacks. In order to mitigate the effectiveness of a maritime blockade, China has constructed a series of international pipelines.

China's International Pipeline Strategy

In 2008, 40% of China's crude oil imports passed through the Strait of Hormuz, and 80% of its oil imports transited the Strait of Malacca, increasing to 85% in 2011 (US DoD, 2010). China is aware that the strait acts as a funnel for more than three-quarters of its oil imports, resulting in a vulnerable chokepoint in its energy supply chain. During the cold war, China experienced the effects of isolations and witnessed US containment strategies. China's energy strategy emphasises diversified trade routes to negate the impact of containment strategies as disruptions in its supply chain resulting from geopolitical events. Pipelines are one strategy to alleviate the reliance on maritime choke points, creating new transport routes over land.

China's land and sea routes were diversified with pipelines to enhance China's supply routes and to counter the perceived threat of US containment strategies.⁴⁹ China's foreign energy strategy includes engagement and investment in foreign energy projects in more than 40 states. This is "driven primarily by China's desire to ensure reliable, diverse energy sources to support economic growth" as it "hopes to diversify both energy suppliers and transport options" to lessen its susceptibility to external disruption and reliance on SLOCs through increasing overland supply (US DoD, 2017, p. 51).

Energy security has gained wide currency since the first oil crisis in the 1970s. However, it has different meanings for different countries. In the case of China, most Chinese scholars and think tanks believe that oil security is the core. Some scholars stress that utilization of energy should not be a big threat to the ecological environment,⁵⁰ but most of them regard energy security as a condition in which continuous and stable oil supplies are available to satisfy domestic oil demands in order to ensure national survival, social stability and economic development.⁵¹ (Shaofeng, 2011, p. 604)

⁴⁹ See Figure 12 and Figure 21 Key domestic Oil and Natural Gas Pipelines.

⁵⁰ Lei Zhang, "Lun Zhongguo nengyuan anquan" ("On China's energy security"), Zhongguo shiyou jingji (International Petroleum Economics), Vol. 9, No. 3 (2001); Hongtu Zhao, "Huanjing baohu xia de nengyuan anquan" ("Energy security under environmental protection"), Zhongguo shiyou shihua (China Petroleum and Petrochemics), No. 10 (2002); Yimin Wei, Zhonguo nengyuan baogao: zhanlue yu zhengce yanjiu (China Energy Report: Studies on its Strategies and Policies) (Beijing: Kexue chubanshe, 2006); Minxuan Cui, Zhongguo nengyuan fazhan baogao (The Energy Development Report of China) (Beijing: Shehui kexue wenxian chubanshe, 2006). ⁵¹ There is a plethora of writing on China's energy security. For the think tanks' views, see e.g. the speech made by Qingtai Chen, vice-president of the Development Research Centre of the State Council, in Qingtai Chen, "Zhongguo

China published its first white paper specialised in China's military strategy in 2015, China's Military Strategy (中国的军事战略):

With the growth of China's national interests, its national security is more vulnerable to international and regional turmoil, terrorism, piracy, serious natural disasters and epidemics, and the security of overseas interests concerning energy and resources, strategic sea lines of communication (SLOCs), as well as institutions, personnel and assets abroad, has become an imminent issue. (National Defence Ministry, 2015)

The first part of Beijing's foreign energy strategy is oil supply security. "The majority of China's external energy-related projects and investment since 2003 remains linked to securing long-term energy resources (primarily oil and gas) to sustain economic and industrial development" and to provide "direct access to and control of extracted crude oil and natural gas" (US DoD, 2010). This includes agreements for infrastructure projects across Central Asian governments, including the Central Asia–China gas pipeline that runs from Turkmenistan through Uzbekistan and Kazakhstan into Xinjiang (US DoD, 2010). The second part of its foreign energy strategy is the development of "land-based pipeline corridors that avoid sensitive Sea Lines of Communication (SLOCs) such as the Strait of Malacca [and Strait of Hormuz]" (US DoD, 2010).

Sustained economic development brought an end to three decades of net energy export in 1993, and China is now a net importer of all three types of fossil energy—oil (1993), natural gas (2007), and coal (2009) (Wu, 2014, p. 4). By 2014, China had become the largest energy consuming country in the world by 2014 and the largest net oil importer in 2017 (Smith Stegen, 2015, p. 194; Crooks Ed, 2017). According to predictions from China National Petroleum Corp (CNPC), "China's energy demand will peak by 2040, later than the previous forecast of 2035, as transportation fuel consumption continues to rise through the middle of this century" (Xu and Mason, 2017).

"Crude oil and natural gas pipelines create mutual interdependence among the various participants the interests of which would be deteriorated in the event of any kind of failure throughout the different chains of the operations of the pipelines under consideration," and as such "'security of supply' is

guojia nengyuan zhanglue he zhengce" ("China national energy strategy and policy"), Zhejiang jieneng (Zhejiang Saving Energy), No. 3 (2004), pp. 7–10; National Economic Department, State Development and Planning Commission, "Zhongguo shiyou de jiben shexiang" ("Basic plans for China's oil reserve"), Jingji yanjiu cankao (Economic Research Reference), 9 January 2002" (Shaofeng, 2011, p. 604).

crucially important for the uninterrupted flow of the continuation of the social life and the economies of energy importers (crude oil and natural gas)" (Demir, 2012, p. 87). The relationship between the two parties is founded on the notion of 'common interest' in the uninterrupted flow of commodities to the mutual benefit of both parties.

Pipelines create a dedicated, single commodity link between supplier and buyer. While the link creates a mutual reliance between parties, it does not ensure a sustained level of trade. The nature of pipelines does not support hypothesis two. Pipelines have a substantial initial cost and reduce transportations costs, but have a limited capacity and reduce market competition. It should be noted that pipeline capacity is not indicative of the current volume of trade. Pipelines offer strong evidence that supports hypothesis one as pipelines enhance energy security and strengthen bilateral relations. Like HSR, pipelines change the distance between supplier and buyer, making available as consistent supply (pipelines provide a fixed volume of fuel and are less prone to disruptions in comparison to other sea and land supply chains). In effect, a pipeline places the energy source within China's borders, while introducing a persistent target for domestic and regional threats, from vandalism, sabotage, and terrorist attacks.

In addition to the pipeline's vulnerability as a target, pipelines come with a significant political cost. The viability of a pipeline is dependent on the continued co-operation of both parties, and planned pipeline projects are known to create substantial opposition from local and environmental groups.⁵² "Yunnan authorities obscure location of refinery at end of pipeline from Myanmar and order media to stop mentioning 'Trans-Asia Railway'... Kunming taxi drivers complain that major Chinese online map apps do not show the location of the refinery " (Huifeng, 2017).

From early 2000, China began working to build a network of pipelines to transport natural gas and crude oil from Russia, Myanmar, Saudi Arabia and other Middle Eastern and African countries, illustrating efforts to increase overland supply (US DoD, 2013, p. 19)."By the end of 2011, the Group's [CNCP] pipelines measured a total length of 60, 232 km, consisting of 36,116 km of natural gas pipelines, 14,782 km of crude oil pipelines, and 9,334 km of refined production pipelines" (Li and Molina, 2014). Analysis of proven global oil reserves and China's crude oil imports since 2000 suggest "only minor variation in sources of crude imports," and an increasing reliance on the Persian Gulf, Central Asia, Africa, and North

⁵² The Dakota Access pipeline in the US is an example of a highly publicised protest to a pipeline that lasted from April 2016 – February 2017 (Northcott, 2017).

America (US DoD, 2010). China currently has three international pipelines: The Central Asia–China gas pipeline (Turkmenistan–China gas pipeline), which runs from Turkmenistan to China via Kazakhstan and Uzbekistan, the Eastern Siberia – Pacific Ocean (oil & gas), from Siberia, Russia to Daqing, China and the Sino-Myanmar pipeline (oil & gas), from Kyuakpya, Myanmar (Burma), to Kunming, China.⁵³

Many scholars and think tanks have voiced fears that China's quest for energy will destabilise the world order (Zweig and Jianhai, 2005; Kreft, 2006; Tang, 2006; Heath, Mazarr and Cevallos, 2018). However, Lai suggests that "China's oil diplomacy strengthens its ties with oil-producing nations and complicates those with oil-importing nations" and contrary to pessimistic predictions in Western media, "China's oil diplomacy has neither upset the USA 's fundamental policies towards Iraq and Iran, nor has it generated armed clashes in the South China Sea" (Lai, 2007). Following Beijing's peaceful-rise strategy, it can be argued that with the exception of Japan, accommodations have been sought with the US and its Asian neighbours, including joint efforts in energy exploration. Lai outlines three steps in China's energy security strategy that attempt to satisfy its growing domestic demand, "expanding overseas oil supplies from the Middle East, diversifying its importing sources by reaching out to Africa, Russia, Central Asia and the Americas, and securing oil transport routes" (Lai, 2007).

Beijing's engagement in the energy sector continues to expand with investment projects in more than 50 countries, spanning nearly every continent (US DoD, 2010). Chinese foreign joint ventures differ from typical technology transfer to developing countries, in part because the companies holding the intellectual property right are state-owned. China's economic projects can result in strategic gains and significant political implication, including the strengthening of South-South Cooperation (A. Li, 2016, p. 11). Despite its significant economic contribution, China's dependence on oil imports has prevented its use as a foreign policy lever on the international stage (US DoD, 2010).

Efforts to enhance energy security through diversifying suppliers and bypass routes are shaping Beijing's China's foreign policy and its relations with its energy suppliers, including Russia, African, the Middle East and more recently, Latin America (Steinmüller, 2014, p. 21). Its growing reliance on foreign energy markets has forced Beijing to forgo its long-standing policy of non-interference, intervening in the domestic politics of Myanmar and Shia–Sunni relations to protect energy supplies. China's shift in foreign policy is a direct result of its geopolitical strategy and is not a product of normal economic

⁵³ For an overview of these pipelines see Figure 63.

development. China's involvement is a product of strategic interest to diversify rather than necessitated by demand. This shift in foreign policy is indicative of China's overall strategy, one that priorities access to resources over its stance on non-interference in local disputes.

Myanmar offers a case study of how an unexpected political change forced China to protect its interests. In 2011, after decades as the de facto outside power and sole friend to the military junta (1988-2011), construction was suspended on the Chinese funded Myitsone Dam project (Tao, 2017). Myanmar found itself at the receiving end of multiple charm offensives from America, Japan and India (China Post, 2013; Reilly, 2013). China's exclusive sphere of influence ended when Washington stepped in to support the state's transition to a civilian government after five decades of military rule. Derek Mitchell, the former U.S. ambassador who spearheaded Obama's Myanmar rapprochement, said China was "stunned" when the country reached out to the West between 2011 and 2015 (Pennington, 2017). However, the situation is turning back in Beijing's favour as it changes tactics.

Chinese experts use the idiom, "the cooked duck flew out of the window," meaning "Myanmar was already in our pockets, but somehow the Americans stole it from us" (Pennington, 2017). China has adapted its business practices in order to pursue its interests in the region and avoid local resistance to its infrastructure projects by building hospitals and local infrastructure to sway public perception (Perlez, 2017). A government analysis of the Myitsone Dam in Myanmar suggested that Chinese companies had "strong preferences for mega-projects." were "used to dealing with the central government instead of local governments", ignoring the "complicated relations between central leaders and local leader." As a result of Western sanctions, Chinese State owned Enterprises (SEOs) had become monopolies in their respective industries with "few incentives to accommodate the interests of local governments and local people or to pay attention to corporate social responsibility" (Tao, 2017).

The reality is that others including Taiwan and India cannot compete with China's dollar diplomacy. China has the money to offer more, and to deliver on promises; "India is unable to compete with China. It's simply impossible," according to an Indian politician (Jaishankar, 2015; Rich and Banerjee, 2017). Chinese media suggested that Myanmar realised they are better off with China (Yan and Feng, 1968). That is not to say that the situation has not changed. Myanmar is in a much stronger situation regarding negotiation, and China has become more aware of its image with neighbouring countries.

China's reluctance to mediate between Iran and Iraq unilaterally is based on its non-interference policy and economic interest, benefiting from its lucrative arms sales to both Iran and Iraq (Sun and Zoubir, 2018, p. 228).⁵⁴ According to Sun and Zoubir (2018), China's role in mediating in the Middle East and North Africa (MENA) follows 'Quasi-mediation diplomacy.' "This type of mediator acts without seeking to dominate; to follow rather than to lead; to partake in the revision of the agenda rather than setting it; and, to encourage conflict de-escalation in lieu of determinedly engaging in conflict resolution" (Sun and Zoubir, 2018, p. 224).

China has vital investment ventures in Afghanistan, and the region is becoming increasingly crucial to its Belt and Road Initiative (Sun and Zoubir, 2018, pp. 232–234). "China-owned oil fields are mostly in the South, while the pipelines and oil terminals are in the North; the conflict resulted in the blocking of the flow of oil for eight years due to the domestic turmoil in that country" (Sun and Zoubir, 2018, p. 231). China's position as a peacemaker in the MENA region reflects a shift in foreign policy objectives and practice, from non-interference to mediation diplomacy (Chaziza, 2018, p. 29).

"China, unlike the Western powers or Russia, carries no religious, political, historical or colonial baggage, making it an ideal candidate to break the gridlocks in the region's conflicts and to play the role of an 'honest broker'" (Chaziza, 2018, p. 29). While China's efforts enhance energy security, which has both an economic and geopolitical component, its mediation efforts help cultivate Beijing's image as an honest broker, interested in peace and stability in the region. China's actions to do not sufficiently support an economic narrative as its arms trade benefits from ongoing conflict. Mediation enhances China's access to resources, its Eurasian infrastructure strategy and its image as a great power fostering peace, stability and economic development.

China began testing its fourth strategic energy route in 2013, following the Kazakhstan-China crude oil pipeline (2006), the Central Asia-China gas pipeline (2011), and the Russia-China crude oil and natural gas pipelines (2011 and 2018) (Liu, Yamaguchi and Yoshikawa, 2017).⁵⁵ "For Beijing, the pipelines connecting China with Kazakhstan, Russia, Myanmar, Uzbekistan and Turkmenistan serve two purposes: to enlarge energy supplies and to mitigate transportation risk" (Shaofeng, 2011, p. 618).

"Over the past four years, China has ramped up imports of natural gas via pipelines as production from Central Asia and Myanmar increased and as gas infrastructure in the region improved. China's total

⁵⁴ China is currently the third largest weapons exporter behind the US and Russia, its share of global arms exports rose from 3.8% to 6.2% from 2012 to 2016 according to the latest data released by the Stockholm International Peace Research Institute (SIPRI) (Jiangtao, 2017; Yao, 2018).

⁵⁵ See Figure 71, Figure 72 and Figure 73 outline China's existing and proposed energy infrastructure.

imports by pipeline were 1,133 bcf/y in 2014, up 20% from 2013 imports. Pipeline imports swiftly exceeded LNG imports beginning in 2012" (EIA, 2015, p. 26). EIA estimates suggest that China will have 74,564 miles of natural gas pipeline and import over 66% of its total oil by 2020 and 72% by 2040 (EIA, 2014a, p. 22, 2015, p. 25).

Given China's growing energy dependency, the diversification of transportation options through the expansion of its overseas pipeline network can, at most, alleviate only slightly China's maritime dependency on either the Strait of Malacca or the Strait of Hormuz (US DoD, 2011, p. 21, 2016, p. 47). "Despite China's efforts, the sheer volume of oil and liquefied natural gas that is imported to China from the Middle East and Africa will make strategic SLOCs increasingly important to China" (US DoD, 2017, p. 43). This forces China to pursue a broad strategy that combines access to resources with LLOC and SLOCs. As such, China is unable to mitigate the necessity of SLOCs, and they will remain strategically significant to China's energy security irrespective of its proposed pipeline projects, as these factors suggest that pipelines would be ineffective in reducing China's reliance on maritime transport and the inherent vulnerability of strategic maritime choke-points (US DoD, 2010, 2016). This has forced China to shift its foreign policy to ensure stability across its supply chains and made it easier for China as related companies are state-owned. This approach requires a broad geopolitical approach directing foreign policy and FDI. Pipeline logistics are complex as they cross borders, passing through regions that will not benefit from the project, yet bare environmental risk.

Diversifying access to energy sources enhances energy security through redundancy, reducing the potential impact of disruptions to individual suppliers. While this promotes smooth supplies and pricing of oil/gas, it does not negate uncertainties which can arise from a number of vectors. First, pipelines are not necessarily safer than sea lines and are equally vulnerable to hostile forces and insurgents. Second, suppliers can experience issues of insufficient supply, increased domestic demand, hardware failure and political stability. "Gibson and EU predicted that oil production in Russia would "stagnate for two or three years" and then decline, while its gas production would diminish as early as 2008" (Shaofeng, 2011, p. 619). Third, while any pipeline should "lubricate bilateral relations," in the event of worsening relations, the recipient state is at risk of being deliberately cut off due to sanctions or diplomatic leveraging. "Ukraine's pro-Western course after the 2004 'Orange Revolution' was believed to be a

107

fundamental cause of a number of gas disputes with Russia, where Russia cut off gas supplies passing through Ukrainian territory" (Shaofeng, 2011, p. 619).⁵⁶

Pipelines provide China with alternative energy routes, reducing its reliance on maritime chokepoints. However, the strategic significance cannot compare to the China-Pakistan Economic Corridor (CPEC) providing direct access to the Indian Ocean and logistical support for Gwadar Port or the Belt and Road Initiative (BRI) which embodies China's Eurasian ambitions.

CPEC and OBOR (BRI): China's future gateways

According to its mission statement, the China-Pakistan Economic Corridor (CPEC) is a framework of regional connectivity that will benefit China-Pakistan Economic Corridor as a framework for regional connectivity through the enhancement of geographical linkages including road, rail and air transport (CPEC, 2017b).⁵⁷ CPEC provides China with a strategic corridor to the Indian Ocean that circumnavigates the South China Sea.

The CPEC network provides a much-needed rail connection to Gwadar Port and the Indian Ocean which can facilitate a supply chain for China's navy in the region. It also provides logistical support for the transportation of ammunition and military equipment should China wish to establish a military presence in Gwadar if China feels the need to intervene in a regional conflict. CPEC has an economic component in the region but is far more valuable for its strategic access to the Indian Ocean and Gwadar Port, circumventing the Straits of Malacca. The strategic value of this link will be discussed in greater detail in the next chapter. China's 'Go West policy' introduced in 1999 and its land border crossings have highlighted security concerns, including soft targets and domestic terrorism.

In 2015, Xi Jinping was welcomed to Pakistan with billboards reading "Pakistan-China friendship is higher than the mountains, deeper than the oceans, sweeter than honey, and stronger than steel" in English and Chinese, a phrase that has been picked up by Beijing to describe its ties to Pakistan (Tharoor, 2015). The CPEC announcement was followed by followed by the signing of a \$46bn bilateral agreement, with approximately \$28bn earmarked for "Early Harvest" projects to be developed by the end of 2018 (Stevens, 2015; Iqbal, 2017). The land corridor provides an essential link through Central Asia to what is

⁵⁶ See Figure 55 and Figure 56 for international Operational and planned oil and natural gas pipelines.

⁵⁷ See Figure 62 for infrastructure projects in Pakistan and Figure 74 for a map of CPEC, transportation networks.

expected to be a strategically significant an amphibian port at Gwadar, both from an economic and potentially military perspective.

Beijing is building up the traditional tools of global power partially through the expansion and reorganisation of its maritime capabilities, enhancing its ability to carry out amphibious landings and deploy light expeditionary forces (Ronald O'Rourke, 2018, p. 56). China's acquisition of overseas ports is part of a greater power projection in the Indian Ocean that enhances lines of communication. China has negotiated the construction of at least eight dual-use deep-water ports between Kenya and Myanmar which can support the logistical needs of intelligence, surveillance, reconnaissance (ISR) and other military operations.

On 18 February 2013, Pakistan awarded China a contract for the construction and operation of Gwadar Port which is expected to be fully operational in two to three years (Gulf News, 2017).⁵⁸ Gwadar is situated close to India's littoral waters, at the junction of sea freight and oil trade routes. It is a strategic component of CPEC, the BRI and China's 'Two-Ocean' Strategy (双海战略), referring to the Pacific Ocean and the Indian Ocean (Krupakar, 2017). In addition to their military roots, CPEC and the 'two-ocean' strategy promote economic security and further Beijing's economic interests. Gwadar is just 120 km from the Iranian border.

Pakistan began consultation on the CPEC in 2007, followed by a feasibility study on a rail link connecting China Railway with Pakistan Railways in 2009 (Fazl-e-Haider, 2007). The link extends 650 km from the Khunjerab Pass in Gilgit-Baltistan through Pakistan, with an addition 250 km in China. In 2015, Beijing commissioned a 'preliminary research study' to build a 682 km rail link to Pakistan as part of the China– Pakistan Economic Corridor (Dawn, 2014; Radio Pakistan, 2016). Construction is expected to commence in the second phase between 2018-2022, with a proposed speed of 160 km/h, an increase from the current speed of 105 km/h (PILDAT, 2015). In addition to commercial considerations, the project provides improved transportation and access to Central Asia and the Persian Gulf states.

⁵⁸ Following the completion of Phase 1 in 2013, Singapore was awarded a 40-year port management and development contract with an agreement to invest \$500mn. Singapore pulled out of the agreement in 2013, citing "security situation in Balochistan" in the period between 2007 and 2013 (Naziha Syed Ali, 2014). The port has three planned phases: Phase I: (2002-2006) 12.5 meters (41 feet) max draft (hull) of channels, Phase II: (2007–2029) 20.5 m (67 ft) max draft of channels, Phase III: (2030–2045) 24.5 m (80 ft) max draft of channels (Abrar, 2015).

On November 26th, 2014 local media outlets in India and Pakistan reported on an undisclosed meeting in which Russia had expressed its support for Pakistan's participation in CPEC by linking the Trans-Siberian Railway with Gwadar Port, "Russia formally requested access to Gwadar Port and decided to be part of the China-Pakistan Economic Corridor (CPEC)" (Bhadrakumar, 2016; Rehman, 2016; Sajid, 2016). Russia's interest in CPEC is an indication of its strategic importance to the region. Despite an official statement from the Russian foreign ministry denying the claims,⁵⁹ Indian and Pakistan state media outlets announced that Pakistan had approved Russia's request for access to Gwadar port for its exports and access to warm waters, confirming Russia's interests in joining CPEC and developing strategic defence ties. "Pakistan has approved Russia's request to use the strategic Gwadar Port for its exports ... Russia has also decided to use the Gwadar Port for trade to have access to warm waters ... [and] also wants to join the \$46bn China Pakistan Economic Corridor to reap the maximum dividends. In addition, Russia aspires to develop strategic defence ties with Pakistan (Deccan Herald, 2016; PTI, 2016). Chinese state media adds validity to claims of Russia's strategic interest in the region, including Gwadar and CPEC, suggesting that such a partnership is to be expected (Li Xing, 2017).

Russia as China's strategic partner and a member of BRICS and the Shanghai Cooperation Organization (SCO) has been advancing the Sino-Russian "the Belt and the Union" (the Silk Road Economic Belt and the EAEU) and a broader Eurasian partnership. Russia's participation in the CPEC, including the use of the Gwadar Port, could give a boost to Sino-Russian cooperation and be a demonstration project of OBOR that will enhance future multinational cooperation (Li Xing, 2017).

Additional support came from Pakistan which was an observer of the SCO; gaining full membership together with India in 2017 (Michel, 2017). Improved strategic ties between China, Russia and Pakistan would shift the balance over India and the US, in particular given Russia-Iranian relations and functions mutual interests in the Middle East (Trickett and Thomas, 2017).

Improving Sino-Russian relations threaten American interests in the regions. In particular, Moscow's growing participation in joint regional projects and strategic partnerships including BRICS, SCO, BRI and CPEC strengthens Russia's position and weaken that of the US and the effectiveness sanctions. Proximity is already an issue for Washington's projection of power. This is especially true for containment

⁵⁹ The Pakistani media reports about "secret negotiations" between Russia and Pakistan on the implementation of projects as part of the China-Pakistan Economic Corridor (CPEC) are not true to the facts. Moscow is not discussing the possibility of joining this project with Islamabad" (Russian foreign ministry, 2016).

strategies which are favoured for the region. Recent sanctions were shown to have minimal effect as Russia's economic slowdown has been attributed to falling energy prices, and was generally less affected than in comparison to other markets (Pillalamarri, 2015).⁶⁰

While Japan and South Korea appear to side with the US at the moment, Beijing's charm offensive seems to be effective in drawing others away. A strong strategic and economic partnership between Russia and China would prove increasingly difficult to balance against and would weigh heavily on India's cooperation.

In contrast, a strategic partnership with Russia offers significant advantages both in terms of countering Washington's influence, securing the region and fulfilling its ambition to create a vast Eurasian economic network. A partnership with Pakistan and Russia provides China with a platform for projecting a Chinese lead region security, "if Russia joins the project, it will be a stakeholder which shares economic risk, especially security risk, and has the same or similar goals. It's a good thing" (Li Xing, 2017).

CPEC is strategically significant as it signals co-operation between China, Russia and Pakistan and provides both with direct access to the Indian Ocean. "While China's growing maritime interests in the Indian Ocean are strategically important, it is the new overland routes connecting the Eurasian hinterland with the ocean that have the potential to change the entire geostrategic character of the region" (Brewster, 2017). It can also be seen as an indication of Sino-Russian relations. Chinese Defence Ministry spokesman Wu Qian spoke of Sino-Russian cooperation in a new briefing leading up to the summit of the Shanghai Cooperation Organization:

Strategic cooperation between these states has significant political relevance to the region as a force to counter the US and Indian. Geographically, this can have a major impact on both the Indian Ocean and the Northern Sea Route. It shows the high-level mutual trust and strategic cooperation; it is conducive for both sides to face new threats and challenges in the security field and to jointly safeguard regional peace and stability. In the next step, the two sides will formulate a concrete plan to promote the military cooperation. - Chinese Defence Ministry spokesman Wu Qian (Wu, 2017).

⁶⁰ This is not surprising as studies have shown that only in a third of cases, were sanctions effective and even then, most often partially with the effectiveness positively related to the closeness of relationship between two countries (Ankudinov, Ibragimov and Lebedev, 2017, p. 152).

China's presence in Gwadar is perceived as a threat to Washington's influence in the region and a hindrance to New Delhi's influence in Iran and Afghanistan. Overseas ports like Gwadar are particularly important in extending China's sea power beyond the South China Sea and the Indian Ocean and the Horn of Africa as a vital trade route, not only for China but for global trade. The geopolitical and strategic importance of this should not be understated in terms of economic and military advantage. Critics suggest that at least three of the eight deep-sea ports —Gwadar (Pakistan), Salalah (Oman) and Seychelles— appear ideal for logistical support with the potential naval applications in line with the Djibouti base (Ronald O'Rourke, 2018, p. 210). Furthermore, some fear that China's generous infrastructure programme's real aim is to trap cash-strapped countries like Pakistan through debt-trap diplomacy (Sengupta, 2018; Stashwick, 2018).⁶¹ Pakistan is not in a position to turn away Chinese investment, which accounts for a large part of the \$60bn China-Pakistan Economic Corridor (CPEC), a vital component of its strategic infrastructure programmes, the Belt and Road Initiative (BRI).

China's growing appreciation of its dependence on the Malacca Strait as a primary conduit for energy and its vulnerability to economic coercion during a conflict with the United States has prompted a strategy shift, prioritising the security of sea lanes stretching from the North Arabian Sea to the Malacca Strait and infrastructure development to sustain alternative trade routes. CPEC and the BRI aim to resolve China's "Malacca dilemma" (Stashwick, 2018; Xiaoping Yang, 2018).

situated at the junction of international sea shipping and oil trade routes. Gwadar can act as an international trade hub for Pakistan. It lies at the mouth of the Persian Gulf and its northern areas' junctions to the Chinese north-west province of Xinjiang.

Situated at the junction of international sea shipping and oil trade routes ... Gwadar has become a strategic periphery in the contemporary world. Moreover, Gwadar sea-port is connected to the Strait of Hormuz via Arabian sea from where more than 17 million barrels of oil passes every day. It's ideal location among the three key regions, South Asia, the oil rich Persian Gulf, oil and gas-resourceful Central Asia has further increased its strategic significance. Its development has shifted the New Great Game of Central Asia towards

⁶¹ The term was first used by Indian academic Brahma Chellaney to describe a number of loans given by People's Republic of China to countries in South and South East Asia (Chellaney, 2017).

Pakistan because Gwadar would be the junction to connect the landlocked Central Asia and rest of the world. (Khan, 2016)

Gwadar's real value is proving a port that can act as the end of a funnel from Central Asia. President of Pakistan, Pervaz Musharraf, articulated an ambitious geopolitical outlook that both visualized the present and imagined the future:

If we see this whole region, it is like a funnel. The top of the funnel is this wide area of Central Asia and also China's western region. And this funnel gets narrowed on through Afghanistan and Pakistan and the end of this funnel is Gwadar port. So this funnel, futuristically, is the economic funnel of this whole region. (Musharraf, 2012)

Domestic and Regional Security

Political instability poses one of the greatest threats to China's energy security, shaping Beijing's domestic and international operations. As its global footprint grows, China has been forced to abandon its non-interference foreign policy as it is increasingly 'dragged into international disputes' (Clarke, 2016).

In order to ensure continued access to resources and connecting transportation routes, China has invested in counter-terrorism and has weighed in on regional disputes, particularly after the 9/11 attack on America. This is especially true in the South China Sea, through its continued alliance with Cambodia, in the Indian Ocean between Pakistan and India, and the Middle East with the Sunni-Shia conflict (Wu, 2014, p. 108). In many cases, relations are further complicated due to America's presence in the region.

In Africa, political instability and civil unrest are a growing concern in some of China's largest and oldest partner states, including the political situation in Zimbabwe and Tanzania which could have a significant effect on China's investments, trade relations and access to resources (Morgan and Nicholson, 2016). Myanmar's political shift has affected its relations with China and the US after The state began liberalising reforms in late 2010 to shed its status as a "pariah state" (Ren, 2014; Ramya, 2015; Chow and Easley, 2016, 2017).⁶²

⁶² A pariah state (also known as international pariah or a global pariah) refers to outcast nation in the international community characterised by international isolation, sanction and invasion as a result of its policies, action or existence (Olawale, 2012).

Conclusion

Looking at the development of overland transportation, it becomes clear that China has made significant financial investments to shape LLOC. Government backing has funded a strategy to rapidly expand and upgrade its pipeline networks to decrease its strategic vulnerability to maritime choke points. Expansion of domestic rail networks was followed by a rapid transitioning to high-speed rail, effectively reducing the distance between Chinese cities and the capital, allowing for the rapid movement goods, labour and security forces. This is important for expanding economic development and security, as well as Beijing's political influence.

China's GDP is predicted to grow to \$43.7tn by 2035, 1.6 times larger than the United States and 1.57 times larger than the EU, "China certainly has the economic and financial capacity to underwrite the costs of its ambitious effort to develop alternate land routes to bypass current maritime routes" (Tata, 2017). Foreign investment projects have enhanced transportation networks and infrastructure between key natural resources and vital shipping hubs while emphasising the strategic importance of good relations with Beijing. Projects in areas like Xinjiang and Tibet expand into sparsely populated areas with little economic activity. The rapid adoption of high-speed rail is a strong indication against hypothesis three; state actors pursue individual interests without a unified strategy. The cost and scale of projects constructed outside of economic centres do not support hypothesis two as a viable explanation for this development, which should follow a more focused and cautious approach to investment.

China's strategy includes the 'the Iron Fangs,' a network of road and rail that will encircle all countries adjacent to its southern borders, and at its centre Kunming will act as a hub, connecting to Laos and Burma by road and Vietnam by rail (Sloan, 2017). The network will eventually extend into India, providing access to the Indian subcontinent. Viewed in conjunction with the 'Dawei Port Project' in Burma, the deep-sea port and special economic zone is an infrastructure project provides a new route for Chinese goods.⁶³ Shipping from Burma instead of Shanghai will save at least \$900 per container, helping Chinese manufacturers remain competitive in India, Bangladesh, Bhutan and Nepal (Sloan, 2017).

China's dollar diplomacy, expansion in Africa, CPEC and the BRI strongly suggest an organised and wellfunded strategy informed by geopolitics. China has tested its infrastructure strategy in key economic

⁶³ China's access to Special Economic Zone ports of Sittwe and Kyaukpya in Burma will be discussed in the following chapters.

regions prior to national adoption, including the previously discussed Mekong Basin, and FDI projects under the BRI strongly support the hypothesis that China's expansion is an attempt to change the geopolitical reality.

The China-Pakistan Economic Corridor (CPEC) complements the BRI through the construction of additional bypass routes, circumventing strategic maritime choke points. China continues investing in infrastructure, even though many of these projects have run over budget, and future profitability is uncertain (Eisenman and Stewart, 2017). China's expansive projects under the umbrella of CPEC and BRI are changing the geopolitical reality of Eurasia in a way that has few historical precedents.

China's geopolitical strategy enhances access to a number of key and emerging markets in addition to complementing access to resources, discussed in the previous chapter. These projects are on a scale greater than the Trans-Siberian Railway Network, reaching across Eurasia and into Sub-Saharan Africa and connecting with major ports, which will be discussed in the next chapter.

For a long time, China's geostrategy, and specifically its energy strategy appeared mostly incoherent from the outside, creating the appearance of competing actors and interests resulted in a range of projects that seemed to neither complement each other nor work towards a common interest. Western scholars are moving away from the argument that China's strategy is incoherent and inconsistent and have begun to accept that state policy is guiding China's actions in critical areas like energy security.⁶⁴ A lack of transparency obscures competing interests and actors in departments at state and provincial levels, in addition to state-owned enterprises (Downs, 2004; Kwon and Hanlon, 2016). "Although it is usually debated whether China's energy policy is highly coordinated or just appears to be, the period after 2003 has seen China endeavour to centralize its energy policy, mainly due to the significant challenges it faced in energy shortages and environmental pollution" (Liu, Yamaguchi and Yoshikawa, 2017).

While debate continues on the effectiveness and sustainability of China's development, it is clear that China has made a strategic shift to its strategy. Based on the above evidence China appears to be shaping land-based transportation not only in its own region but also in Africa to promote diplomatic

⁶⁴ This is evident in the number of articles attempting to understand the process and actors that guide Chinese energy security, including articles like 'China's Energy Policy: Is anybody really calling the shots?' (Lester and Steinfeld, 2006).

relations as well as to enhance its access to natural resources. China's transportation options enhance its energy security through diversifying its energy sources and transportation options.

Sloan suggests that this expansion is strategically significant enough to negate the distinction between coastal and landlocked states, "the dissolving of the Rimland and the Heartland binary divide will facilitate a new geopolitical reality" (Sloan, 2017). While changing the geopolitical reality does not necessarily translate into political power within a given geographical location, China's growing influence across Eurasia suggests that it will (Sloan, 2017). China's grand strategy of 'peaceful rise through Euro-Asia' suggests that "Beijing is not seeking a place in the sun, but rather a protected place in the shade. The Eurasian continent could cast a comfortable shadow for years" (Xiang, 2004). China strategy increases its influence within the region, at the expense of the US influence and western institution.

Changes in China's foreign policy and investment in infrastructure suggest an overarching geopolitical approach shaping transport in its favour, extending far beyond its borders. It secures a reliable supply of fuel and reduces transportation time and cost after initial investments are recouped at the expense of locking in suppliers. Pipelines allow for the transportation of a single commodity over a fixed line, with a predetermined capacity. In comparison with SLOC, which have unlimited capacity, flexible routes that can carry a range of transport vessels, no armed escort can safeguard the passage of fuel along a pipeline. Due to its static nature, a pipelines inherent vulnerability to attacks from insurgents and other threats is a real concern in many of the regions these pipelines pass through (Shaofeng, 2011, p. 618; Mills, 2016, p. 10). A pipeline is vulnerable at all points, at all times, as a disruption at any point would compromise the entire system.

US intelligence reports suggest that pipelines are ineffective in mitigating the vulnerability of China's energy supply or dependence on maritime strategic choke points (Spinetta, 2006; Erickson and Collins, 2010; Brewster, 2017). "Although China has and plans to build more oil supply pipelines from Kazakhstan and Russia, these pipelines are no less strategically vulnerable to attack than her seaborne supplies are from potential US disruption" (Chun, 2009). Beijing's pipeline projects serve multiple interests that are not limited to diversifying China's transportation options in the Energy sector. "Russian exports account for a growing share of China's pipeline imports as pipeline capacity expands. China's LNG imports are also projected to grow—supplied by an increasingly diversified pool of exporters" (EIA, 2017). Myanmar's geographic value pertains to location, rather than oil production, offering an alternative transportation route for crude oil from the Middle East that would bypass the potential choke point of the Strait of Malacca (EIA, 2015, p. 12). "The implementation of this project was largely contingent on it being in line with the central government's long-term strategies such as its 'diversification of energy supply and route' strategy, its 'going out' strategy as well as its 'developing the West' strategy" (Liu, Yamaguchi and Yoshikawa, 2017).

"The United States should not underestimate China's ability to achieve energy security within the next two decades. China's Silk Road strategy, which completely bypasses the global maritime commons, is Beijing's non-military solution to US global naval dominance" (Tata, 2017). Once China's overland pipelines become fully operational, Washington will forfeit its ability to cut Beijing's energy supply. In the absence of a credible US deterrent strategy, China may pursue a more aggressive approach to its proclaimed core interests, supported by military actions, including the reunification of Taiwan, controlling the Diaoyu/Senkaku islands and enforcing it nine-dash maritime boundary in the South China Sea.

It appears that China's energy security policies are informed by geopolitics and that they are producing the desired effect of diversifying suppliers and trade routes through the construction of railway and pipelines. These new supply routes are strategically significant in that they provide bypass routes, circumventing maritime choke points. LLOC compliment China's SLOC in providing a robust transportation network to an expanding list of suppliers under CPEC and BRI. In doing so, China increases its access and control over the market. China's changing role in the market grants greater control in negotiations as well as in mitigating market fluctuations. China is diversifying suppliers and trade routes which is changing the geopolitical reality. China is expanding trade routes through pipelines, sea routes and rail. In order to accommodate its rapidly expanding demand for resources, China has invested in a wide range of infrastructure in order to support its logistical demands beyond its borders. This is most evident in investments in ports, and in Africa in particular where it has invested in power generation, telecommunication and road networks. In addition to logistical advantage, it is greatly increasing its control over the supply chain and pricing. China's growing influence across Eurasia will allow Beijing to translate the changing geopolitical reality into political power in regions that are vital to energy security.

Chapter 5: Sea Lines of Communication (SLOC)

Introduction

The preceding chapter argued that Chinese investment in Land Lines of Communication (LLOC) created a massive railway and pipeline network that is both flexible and robust. This chapter will examine Chinese activity pertaining to Sea Lines of Communication (SLOC), including ports and naval development. This chapter will examine China's investment in overseas ports and the three blue economic passages⁶⁵ which form the 21st-century maritime silk road, the sea component of the Belt and Road Initiative. China's activity in each region, specifically sea ports both domestic and abroad, will be assessed for evidence that its policies and actions reveal a willingness willingness of the Chinese to undertake a scale of sustained investment that suggests a complex and consciously held long-term policy. The components of which could not be justified by the economic elements taken in isolation.

With sea lines carrying more than 80% of global trade by volume and more than 70% of its value, the importance of maritime transport cannot be overemphasized (UNCTAD, 2017). More specifically, the South China Sea is of great strategic and economic importance to China and the region, accounting for an estimated 60% of China's trade-in value travelling and an estimated one-third of global shipping totalling an estimated approximately \$3.37tn in 2016 (Panda, 2017a). "Its waters are particularly critical for China, Taiwan, Japan, and South Korea, all of which rely on the Strait of Malacca, which connects the South China Sea and, by extension, the Pacific Ocean with the Indian Ocean" (CSIS, 2018).

SLOCs cover both trade routes and are part of the parameters of maritime strategy. Sufficient domestic ports and access to overseas ports are strategically important as they dictate the cost and routes by which goods can efficiently travel. As a result, both access to ports and waterways are needed for shipped goods to be competitively priced. Constructing a merchant fleet can reduce costs, but it is access that is most important for trade and economic security. Overseas ports enhance access to natural resources. Ports in the Indian Ocean are strategically important for logistics, including refuelling. The terms of port access must be negotiated, including rates and permission for the docking rights of naval vessels. Underpinning all of this is access to choke points through which a significant portion of traffic is

⁶⁵ the China-Indian Ocean-Africa-Mediterranean Sea Blue Economic Passage; the China-Oceania-South Pacific Blue Economic Passage; and one that will lead to Europe via the Arctic Ocean (Lei, 2017).

funnelled. If merchant ships cannot be protected from piracy and passage through a manmade canal can be disrupted, then maritime supply chains are vulnerable to disruption and containment efforts.

It will discuss China's actions and policies towards the South China Sea and the India Ocean which are vital for economic and energy security, connecting its domestic ports to Africa and the Middle East. Figure 93 and Figure 71 depict China's major shipping lines and the choke points they traverse. This evidence will help validate the hypothesis that China's investment in overseas ports and BRI initiative represent a shift in China's grand strategy, from 'hiding and biding' to 'binding and hedging' and then to 'shape and restructure,' which is informed by geostrategy and attempts to alter the geopolitical reality (Figure 96 and Figure 97) (Friedberg, 2018). China's investments in its Navy, port access and blue economic passages represent an effort to alter the geopolitical reality of maritime trade in an effort to enhance access to resources and safeguard its freedom of navigation through enhancing sea control creating new routes.

Despite China's investment in the expansion of land routes, it would be impossible to overstate the importance of sea transport. It is only in the last decade that China's has regained its maritime power, catching up with the West. In an ironic reversal, 500 years after Zheng He set sail, it is China that is pushing the West to maintain trade routes, castigating Trump and the US for being scared of international trade and pushing trade barriers (Figure 75) (Edwards, 2017). In his 2017 address Davos, President Xi said:

If one is always afraid of the sea he will get drowned in the ocean sooner or later. So what China did was to take a brave step forward and embrace the market. We have had our fair share of choking in the water and we have encountered choppy waves. But we have learned how to swim in this process. It has been the right strategic choice ... whether you like it or not the global market is the big ocean you cannot escape from. (Xinhua, 2017h)

In a relatively short period of time, China has built up its navy and merchant fleet. A naval presence is necessary to deter maritime piracy, ensure freedom of navigation, project power and protect overseas interests, which include access to markets and natural resources. China has begun expanding its influence in the South China Sea and has more recently turned to the Indian Ocean. If China wishes to replace the US as the principal regional maritime power, it must demonstrate that it has the capacity to do so.

What would one expect to see if Chinese investment in SLOC was driven by economic development? Investment should focus on expanding domestic ports and reducing shipping costs to increase the competitiveness of Chinese products. It is also expected that China would contribute to, rather than take over safeguarding the passage of vessels. Investment in overseas ports would provide significant benefit for China's merchant ships without focusing on expanding China's naval reach. China's regional agreements should focus on reaching bilateral and regional agreements that enhance its access to resources while providing contracts for its state-owned enterprises (SOE). If China was pursuant of a policy to expand its sea routes in the short or medium term it would be expected that China would focus on expanding its fleet of supertankers rather than foreign ports, in particular an overseas naval port like Djibouti.

If China lacks an overarching strategy, as some scholars suggest, it is expected that provinces would compete to promote local economic development. In essence, we would expect to evidence of coastal provinces competing for port traffic.

In general, China's investment in overseas ports could be explained as a product of financial development rather than a geopolitical model. China's investments without strategic military benefits should enhance the ability of China's products to compete within a region. However, China should not need to invest in foreign ports for this purpose. Instead, these states should be contracting Chinese companies if there is a need to expand or deepen ports. If China's investments are directed by a geopolitical strategy, they should achieve one of three things: enhance political influence within a region, enhance energy security or enhance the ability of its navy to operate within the region. The lack of clear economic benefit to justify investment would provide evidence a long-term strategy which cannot be justified by the economic elements taken in isolation.

During the Ming Dynasty (1368–1644), Zheng He defined China's maritime Policy, establishing trade routes to Africa a decade ahead of the birth of Columbus with whom he is often compared (see Figure 75). Some scholars have even suggested that he reached the Americas (Levathes, 1997; Menzies, Vany and Menzies, 2003).⁶⁶ At the height of its power in the 1400s, the Chinese navy dominated the seas with

⁶⁶ This is contested in Dreyer's book, Zheng He: China and the Oceans in the Early Ming Dynasty, 1405-1433 (Dreyer, 2006).

3,500 ships, some of which were five times the size of ships in European fleets.⁶⁷ In comparison, the US Navy today has only 430, of which 279 are deployable battle force ships (Chief of Information, 2017). The most significant difference between Zheng and Columbus is that "Zheng's maritime campaigns were based on a soft power strategy and weren't an act of conquest" (Brînză, 2016). Instead of aspiring to become a global colonial power, concern grew among the emperor's civil service over the rise of a newly prosperous merchant class. In 1430, the emperors of China threatened by the growing power of merchants, banned oceangoing voyages, resulting in a 200-year-long slump (Deaton, 2013, p. 11; Edwards, 2017). By 1525, the majority of China's 'Treasure Fleet' was burned and the rest abandoned for fear of the influences of foreign trade. Other scholars have attributed the destruction of the 'treasure fleet' to the cost of expeditions which far outweighed the actual treasure they yielded⁶⁸ or raiding on Western China by the Mongols and other Central Asian peoples, a conflict in which the navy was irrelevant (Edwards, 2017).

China abandoned the seas, turned in on itself and focused on securing its Northern borders. In recent years China resolved long-standing territorial disputes along its Northern borders, and once again returned to the sea (Kaplan, 2013). In spite of rapid expansion, China's international rail network will never compare to the unlimited capacity of sea lines. More than six centuries later, Xi Jinping launched the 21st Century Maritime Silk Road: "a new maritime strategy explicitly drawing on Zheng's legacy" (Brînză, 2016). The Maritime Silk Road is the sea component of the BRI, which together with the 'Silk Road Economic Belt' aims to connect China with Europe by land and sea.

At its core, OBOR is an economic project that enables China to export its surplus productive capacity ... But OBOR is far more than a purely economic initiative. It also serves Beijing's other overarching foreign policy goal: to reach strategic parity with the United States in Asia and reshape its security environment to ensure its rise is unrestrained ... To this end, OBOR increases Beijing's influence in states all along these trade routes, from East Asia, through the Indian Ocean and Central Asia, then the Middle East and on to Africa and Europe. Many

⁶⁷ "The Treasure Fleet was vast -- some vessels were up to 120 metres long. (Christopher Columbus's Santa Maria was only 19 metres.) A Chinese ship might have several decks inside it, up to nine masts, twelve sails, and contain luxurious staterooms and balconies, with a crew of up to 1,500, according to one description. On one journey, 317 of these ships set sail at once" (Edwards, 2017).

⁶⁸ The value of these costly expeditions is further reduced when China's abundance of natural resources is taken into consideration.

of the projects can serve dual economic and strategic purposes, such as the ports in Gwadar (Pakistan), Hambantota (Sri Lanka), and Djibouti. (Pethiyagoda, 2017)

Regardless of how much it tries to frame its maritime strategy in terms of economic development, regional co-operation and poverty reduction, China cannot mollify the strategic implications. China's BRI represents a \$900bn project to reshape security and trade across Eurasia. Given the current pivot to Asia and China's rapid growth in trade, catching up and surpassing the US in many markets, it's questionable whether China really needs this network and how many decades it will take for its investment pay off.

Building off of An-Hao Huang's work (Huang, 2009a), the evolution of the PLAN (People's Liberation Army Navy) can be seen in three periods of development. The first period is Maoist China (1949-1976) during which China possessed a brown water navy. Despite having a coastline along the Pacific Ocean that is 14,500 kilometres (9,000 mi) long its power project was limited to 200 sea miles from the coast. During this time China possessed a limited coastal defence and instead focused on the large but weak PLA ground forces. CIA intelligence reported in 1949 that the Chinese Communist Party had acquired 63 naval vessels through defection and captures, "these crafts, plus merchant shipping which may be captured or otherwise acquired, will provide the Communists with a growing capability for short overwater operations" (CIA, 1949). The second period is Dengist-Jiangist China (1977-2003) with a naval build-up that can be classified as a green-water navy capable of projecting power over 200 sea miles from the coast. The present period of Hu-Xi (2004-present) marks a move from the offshore active defence with the two-island chain to far sea defence with blue water capabilities able to project beyond 400 sea miles from the coast. These capabilities are bolstered by the construction of man-made islands in the South China Sea and naval bases in the Indian Ocean. A 2015 CSIS report suggest that China will possess multiple aircraft carrier strike groups (CSGs), giving it a position in its southern waters similar to that enjoyed by the United States in the Caribbean or the Gulf of Mexico, "facilitating the overawing of lesser powers, enhanced regional prestige, and the demonstration effect of near-constant presence. For rival claimants in the South China Sea, this is a game changer ... the South China Sea will be virtually a Chinese lake" (Green, Hicks and Cancian, 2016, p. 19).

"For thousands of years, Chinese emperors focused on defending the middle kingdom against landbased invasions, usually from the north and west. But in 2015 an official white paper on military strategy decreed a big shift that offers a glimpse of the country's changing maritime objectives" (Kynge *et al.*, 2017). "The traditional mentality that land outweighs the sea must be abandoned, and great importance has to be attached to managing the seas and oceans and protecting maritime rights and interests," the

122

document said, requiring the development of a modern naval force to "protect the security of strategic sea lines of communications (SLOCs) and overseas interests" (National Defence Ministry, 2015, p. 16).

"Seapower is the lifeline of China's market economy," wrote a Chinese academic in an article on Mahan in 2011, and President Xi Jinping has pledged to make China a global naval power (Rankin, 2017). China has adopted Mahan's understanding of maritime influence and sea control "by maritime commerce and naval supremacy, means predominant influence in the world; because, however great the wealth of the land, nothing facilitates the necessary exchanges as does the sea" (Mahan, 1897). China's dramatic economic growth has made the increase in defence spending almost effortless (see Figure 77). China's defence budget has seen double-digit annual increases for the past two decades. In 2014 China announced a \$132bn, a 12.2% on the year before and the biggest in three years, though some suggest the increase may actually be 40% higher still (The Economist, 2014a). While China's navy outweigh those of the U.K., Japan, and India in number, its experience in international waters both in trade and military activities cannot rival the United States', "therefore, the challenge China poses to US seapower arguably depends on China's behaviour as an ocean-going military and economic concern" (Kuo, 2017).

In order to accommodate China's growing trade and demand for resources that have resulted from normal economic development, China has invested in expanding domestic ports as well as port projects along the Indian Ocean and Africa's Eastern coastline. Projects increase China's influence and its capacity for sea transport.

China's Ports

The importance of well-functioning seaports for industrial activity, merchandise trade, globalized production processes and economic growth cannot be overemphasized. As key nodes in global transport chains that provide access to markets, support supply chains, and link consumers and producers, ports are under constant pressure to adapt to changes in the economic, institutional, regulatory and operating landscape. (UNCTAD, 2017)

After the end of the Second Sino-Japanese War, Beijing retreated politically until it regained territorial control. In the early days, communist China's trade was limited to the Soviet and Bloc allies. Following the post-1978 open-door strategy China began following a path of economic development. Due to economic sanctions, Hong Kong became a critical gateway, providing access through its port to sources of free world foreign exchange through provisioning (see Figure 85and Figure 86). It was only at this point when its economy and northern borders were secured that it turned its attention to the South.

During the Korean War, China used Hong Kong as an essential channel to gain access to strategic materials.

China remained committed to pursuing economic growth to the exclusion of engaging in great power politics. But once China began asserting territorial control over its maritime domain (the South and East China Seas) and, especially, when Russia began to conquer the so-called "Near Abroad" territories along its borders (parts of Georgia, and the Crimea and eastern Ukraine), classical—state-centric—geopolitics underwent a revival. China, an "amphibious" (i.e., a territorial and maritime) power, and Russia, a territorial power, were suddenly making a play from the Eurasian heartland for control over the entire World-Island of Asia, Europe, and the Middle East—just as Halford Mackinder thought might eventually occur when he wrote *Democratic Ideals and Reality* in 1919. (Hochberg and Sloan, 2017, p. 580)

By 1985 the mainland had become Hong Kong's largest trading partner (see Figure 84). Hong Kong was an important trade partner for re-exports, having established itself as a major regional exporter with strong trade ties in the West (see Figure 83). China has thirteen coastal provinces with direct access to its extensive coastline, stretching approximately 14,500 km. "China currently boasts seven of the top 10 ports in the world based on cargo and container throughput" (China Daily, 2017). China has 34 major ports and more than 2000 minor ports, more than 130 of which are open to foreign ships (Figure 80 and Figure 81) (X. Li, 2016).⁶⁹ Most of China's major cities have ports or are facilitated by a port nearby (Washington Post, 2016). Figure 82 shows China's dominance in the top 20 ports in the *World Port Rankings 2015*, according to the American Association of Port Authorities. Figure 79 shows the volume of handled cargo handled by China's container hubs, many of which have been reconstructed or expanded for handling crude oil and iron ore imports (Figure 90).

China is expanding as a maritime power in terms of port and shipping assets, naval power, and independence, not unlike the U.K. 200 years ago in its exporting to other areas of Empire. China has in a tentacle fashion invested billions of dollars in expanding its international port network in addition to Chinese naval hardware, including surface vessels,

⁶⁹ The Chinese government began expanding ports and opening access for the outside world, increasing the number of ports open to foreign ships from 16 in 1978 to more than 130 by 2000 (Lee and Shen, 2003).

such as warships and aircraft carriers, and nuclear submarines, such as those stationed on Hainan Island province's southerly coast. (Kuo, 2017)

In 2003 Chinese ports surpassed the United States in container traffic with Shanghai and Shenzhen ports ranked third and fourth in the world, Shanghai ranked second in cargo volume, handling more than 300m tons (China.org.cn, 2004).⁷⁰ "At the end of 2004, China's coastal ports had over 2,500 berths of medium size or above, of which 650 were 10,000-ton-class berths; their handling capacity was 61.5m standard containers for the year, ranking first in the world" (Gov.cn, 2012).

China's major ports are primarily located around three main manufacturing hubs: the Pearl River Delta around Guangdong, the Yangtze River Delta around Shanghai, and the Bohai Rim around Beijing/Tianjin (KPMG, 2009, p. 11). "In terms of new developments, the 11th Five-Year Plan identified 639 new deepwater berths and 340 new berths in inland ports and earmarked RMB 40 of the several hundred billion required" (KPMG, 2009, p. 12). It is during this period that Beijing began rapidly expanding direct maritime trade and investment in port networks. As with investments in High-Speed Rail (HSR), China's rapid investment introduces significant economic risk. Instead of expanding with economic development China has called for investment in hundreds of projects over a relatively short period of time, requiring hundreds of billions in investment. Since 2008, China's port activity has increased while Hong Kong's has declined (see Figure 76 and Figure 78). This rapid expansion far exceeds existing demand, and suggests a long-term strategy.

In 2013, China established the China (Shanghai) Pilot Free-Trade Zone (Shanghai FTZ or SFTZ), "seen as the most important attempt at reform since Communist leader Deng Xiaoping, the architect of China's transformation to a market economy, designated Shenzhen on the border with Hong Kong a special economic zone in 1980" (Sudworth, 2013). The program focused on accelerating the development of the yuan and foreign exchange trade, as well as cross-border transactions. Unfortunately, it was not overly successful: "China is making another attempt at keeping Shanghai at the cutting edge of economic reforms after its latest try in 2013 floundered" (SCMP, 2017). The program was significantly expanded in 2017 under 'the Plan for Further Deepening the Reform' and 'Opening up of the China (Shanghai) Pilot

⁷⁰ In 2003 China had eight ports capable of handling more than 100m tons of cargoes annually: Shanghai, Ningbo, Guangzhou, Tianjin, Qingdao, Qinhuangdao, Dalian and Shenzhen (China.org.cn, 2004).

Free Trade Zone,' with the intention of easing regulations and legal barriers to compete against rivals in Singapore and Hong Kong (Chen Han, 2017).

According to Ming Bai, vice-president of International Market Institute at the Chinese Academy of International Trade and Economic Cooperation, "we have to move one step further toward turning Shanghai into a real offshore trading centre and an international finance centre with the free trade port plan." This is particularly significant as "Beijing is looking to establish a number of FTPs, and the centrepiece of the policy is the Shanghai FTP, which is accelerating the development of offshore finance that will turn Shanghai into an international finance centre" (Chen Han, 2017). Guangdong, Fujian and Tianjin were approved in 2015 with an additional seven inland provinces receiving approval in 2016, bringing the number up to 11 within three years (Wei, 2016).

Shanghai is anticipated to be a hub for China's Belt and Road initiative and a model for other zones across China, allowing domestic companies to channel investment overseas. Xi Jinping linked its FTZ project with its global strategy suggesting that Shanghai should turn its free-trade zone into a global channel as a 'comprehensive reform experiment zone': "Shanghai must take the advantage of an early start and be the first one to set up a system that is in line with international investment and trade rules" (Pinghui, 2017).

Historically, China has maintained tight control over its domestic markets, including regulating its currency and restricting foreign financial institutions. The push for rapid economic transformation through opening the Chinese market is uncharacteristic of both economic development and China, suggesting that it is part of a grander strategy with the BRI initiative. China's first economic reform began in 1987 and consisted of two stages. The "reform and opening-up" established Special Economic Zone (SEZ) in the 1980s and the state-owned industry was privatized and contracted out, creating state monopolies in strategic sectors, while still permitting the growth of a private sector into the 1990s. This new reform policy is unique in that is designed to leverage the BRI trade network, suggesting a grand strategy required to coordinate the various aspects. The development of domestic ports and access to overseas ports is vital for China's maritime trade, the majority of which passes through the South China Sea. As a result, China's littoral waters are strategic significant in providing access to the Indian Ocean and ports in Asia, Africa, Europe (Xinhua, 2017d). China's port ownership clusters around vital trade routes and maritime chokepoints (Figure 94).

China's domestic ports remain a vital component of its economic and energy security, accounting for nearly all of its trade, with few exceptions, including the Silk Road and border trade with Russia, India, Myanmar and North Korea. Except for a short period where China's imports were limited to the Soviet Bloc; the South China Sea has remained a critical trade route for China, providing access to the Strait of Malacca while leaving it vulnerable to maritime trade disruptions.

South China Sea

While China has economic interests in the South China Sea (SCS) which include shipping lanes, natural resources and fishing rights, China's focus at this time seems to be on security. From an economic development perspective, China would be expected to focus on negotiating fishing rights and agreements to access the estimated 900tn cubic feet of natural gas.

"More than at any time in the history of these disputes, the South China Sea has today become one of East Asia's most talked-about security flashpoints" (B. Taylor, 2014, p. 99). Robert Kaplan has characterised the South China Sea as "the future of conflict" (Kaplan *et al.*, 2011). A study published by the International Institute for Strategic Studies (IISS) describes the South China Sea as a "crucible for the unfolding geopolitics of Southeast Asia," which has the potential to "influence the evolving balance of power in the region, and perhaps even the prospects for peace in the Asia–Pacific in the twenty-first century" (Raine and Miere, 2013, p. 179).

While China previously had a limited reliance on natural gas, in recent years domestic demand has seen significant annual growth, partially in response to Beijing's push for cleaner energy, prompting state oil companies to look overseas for new gas sources, including Alaska (Xinhua, 2017b). In 2013, instead of constructing oil platforms, China began constructing islands, transforming "seven uninhabitable rocks and reefs submerged at high tide into artificial islands," despite a 2002 signed joint declaration with the ten-member Association of South-East Asian Nation (ASEAN) to "exercise self-restraint" and "refrain from occupying uninhabited features such as reefs" (The Economist, 2016).

Beijing continued substantial construction activities on its dual-use outposts in the Spratly and Paracel Islands. China completed the dredging and land filling operations to create its seven new islands in the Spratlys by early 2016, and seems to have halted such operations to expand islets in the Paracels by mid-2017. But Beijing remains committed to advancing the next phase of its build-up—construction of the infrastructure necessary for fully-functioning air and naval bases on the larger outposts.

In the short period of time since land reclamation was completed in 2016, China has constructed 290,000 square meters of facilities on its dual-use outposts in the Spratly and Paracel Islands, excluding temporary and storage structure (CSIS/AMTI, 2017). The South China Sea is a complicated case involving access to resources, land disputes, US intervention, UNCLOS and man-made islands. Beijing's actions have further complicated the situation and increased regional tensions without apparent economic benefit, resulting in the South China Sea (UNCLOS) (CSIS, 2014, p. 70). Beijing has remained ambiguous in its claim to the region and ignored UNCLOS, despite US support of Vietnam and the Philippines claims. China appears to prioritize the securitization of the South China Sea at the expense of regional relations which would favour economic development, supporting hypothesis one.

China's South China Sea Claim

In 1933, France asserted its claim based on the territory of 1887 French Indochina on behalf of its Vietnamese colony (Ruscheinski, 2002). While it occupied a number of islands and built weather stations on two, France admitted that Chinese fishermen operated in the area, supporting Vietnam's and China's claims (Gao and Jia, 2013, p. 211). Later in 1935, the Republic of China (ROC) announced its ownership and in 1939 Japan occupied multiple islands for use as submarine bases. During the war, Japan combined what they then called the New Southern Islands with the Paracel Islands governed under the Japanese colonial authority in Taiwan. Hence, both Taiwan and Vietnam have claims to the islands through colonising powers. Figure 88 outlines China's claimed territorial waters in the disputed region.

"In 1946, China, pursuant to the Cairo Declaration and the Potsdam Proclamation, recovered the Xisha and Nansha Islands in the South China Sea from Japan" (Gao and Jia, 2013, p. 102).⁷¹ Seeking to expand Chinese territory in an area with no possible resistance, Nationalist Chinese geographer Yang Huairen developed a map of Chinese claims to the South China Sea, released around 1947 (George, 2017).⁷² In 1948, the ROC government declared its sovereignty over the denoted region (Tsirbas, 2016). "The underlying reason for the eleven-dash line was presumably to reaffirm and reiterate China's sovereignty over the island groups in the South China Sea at the beginning of a new, post-war era" (Gao and Jia,

⁷¹ "Japan shall be stripped of all the islands in the Pacific which she has seized or occupied since the beginning of the first World War in 1914, and that all the territories Japan has stolen from the Chinese, such as Manchuria, Formosa, and the Pescadores, shall be restored to the Republic of China. Japan will also be expelled from all other territories which she has taken by violence and greed" (Early, 1943).

⁷² See Figure 87 for the original map. reports conflict on the year it was released.

2013, p. 103). A Chinese document translated by US agencies suggested that China felt that the islands groups off the South China Sea could provide *lebensraum* 'survival space' for the Chinese people, referring to the reserves of oil and minerals beneath the Spratlys (Far Eastern Economic Review, 1992, p. 14).

In 1958, the PRC issued a declaration defending its territorial waters, which encompassed the Spratly Islands. North Vietnam's Prime Minister, Pham Van Dong, sent a diplomatic note to Zhou Enlai on 14 September 1958, stating that "The Government of the Democratic Republic of Vietnam respects this decision," endorsing China's statement (Xinhua, 2016a; Wikimedia Commons, 2018). The diplomatic note publicized on Nhan Dan newspaper (Vietnam) on September 22, 1958 (see Figure 89).

In 1973, four US oil companies signed contracts with the South Vietnam government to begin exploration which resulted in a military response from China with air and navy operation (Far Eastern Economic Review, 1992, p. 15). In 1987 the Scientific and Cultural Organization (UNESCO)'s Intergovernmental Oceanographic Commission (IOC) granted China an invitation to establish five observation posts as part of a worldwide ocean survey, including one post in the Spratly Islands (Song and Tønnesson, 2013, p. 244). "In April, China chose Fiery Cross Reef as the prime candidate for the observation post not only because the size of the reef was large enough but also because the unoccupied reef was isolated from those features occupied by other claimant countries" (Koo, 2010, p. 154). This move increased tensions, leading to the 1988 Johnson South Reef Skirmish between Vietnamese and Chinese navies in the region of Johnson South Reef (Vietnam) / Yongshu reef (China) / Mabini reef (Philippines). Post-WWII, France ceased claiming ownership after sea defeat in the first Indochina War at which time the South Vietnamese government claimed ownership based on the claim France made on its behalf in 1993.

In 1999, the Philippine Navy purposely grounded Number 57 - BRP Sierra Madre, an LST-542-class tank landing ship near Second Thomas Shoal to enable the establishment of an outpost. It has yet to be removed and has been garrisoned by Filipino troops. On 23 May 2011, the President of the Philippines, Benigno Aquino III, warned visiting Chinese Defence Minister Liang Guanglie of a possible arms race in the region if tensions worsened over disputes in the South China Sea. Aquino said he told Liang in their meeting that this could happen if there were more encounters in the disputed and potentially oil-rich Spratly Islands. Australian researchers have noted a gradual build-up of facilities throughout the South China Sea, notably in the Spratlys and Paracel islands as well as the Yulin Naval Base in Hainan. They noted reports suggesting that the PLA is bolstering its forces, deploying "more ships to the disputed region to enhance the militarization of occupied features in the Spratlys, including constructing a port for naval vessels and an airport on Mischief Reef, a Chinese occupied reef that lies inside the EEZ claimed by the Philippines" (Rahman and Tsamenyi, 2010).

China's claims of 'historic rights' for territorial waters in the SCO date back to a map depicting U-shaped eleven-dash line published in 1947 (Figure 87). In 1968, the discovery of one of the largest natural gas reserve beds in the world increased interest in the disputed region. China's historical claim to the region is widely contested in the region.⁷³ A statement from the Shanghai Cooperation Organisation urged states to resolve the issue without internationalizing the dispute, "Directly concerned states should resolve disputes through negotiation and consultation in accordance with all bilateral treaties and the Declaration on the Conduct of Parties in the South China Sea (DOC)" (Xinhua, 2016b). A statement from China's Ministry of Foreign Affairs similarly rejected the involvement of the International Tribunal, "On issues concerning territorial sovereignty and maritime delimitation, China does not accept any recourse to third-party dispute settlement; nor does China accept any solution imposed on it" (Ministry of Foreign Affairs, 2016).

China has yet to clarify its nine-dash line, leaving itself the flexibility to manoeuvre in bilateral relations. A senior Chinese military academic has suggested that the ambiguity in its claim allows "China and other claimants to have more room to manoeuvre and to have more room to compromise" (Wong, 2016b). The US justifies challenging the 'nine-dash line' on the premises that China's claim is inherently destabilizing for the region and global sea trade (Keck, 2014). This has been disputed by China. According to Wang Ying, a Chinese marine geographer who helped draw the U-shaped, 11-dash line in 1947: "the discontinuous line means the national border on the sea. The dash lines mean the ocean, islands and reefs all belong to China and that China has sovereign rights. But it's discontinuous, meaning that other countries can pass through the lines freely" (Beech, 2016). A senior Chinese diplomat reportedly explained to US officials back in 2008, "The dotted line of the South China Sea indicates the sovereignty of China over the islands in the South China Sea since ancient times" (Keck, 2014). It is important to note that China claims sovereignty over the islands but not the waters. While China is contesting mineral and fishing rights through The Hague, China is not trying to restrict maritime trade through the South China Sea which is a vital maritime trade route.

⁷³ Perspectives on the South China Sea Diplomatic, Legal, and Security Dimensions of the Dispute (2014) provides a comprehensive overview of the legal framework, competing claims and arguments.
Despite many claims to the contrary, China has never made an official "historic claim" to all the water within the U-shaped line. It has asserted claims to the reefs and islands and to "surrounding" or "relevant" waters – but never spelt out their exact extent. In May 2009, Chinese diplomats attached a map of the U-shaped line to an official submission to the United Nations Commission on the Limits of the Continental Shelf but didn't explain its significance. Until they do, no one can be sure what it actually means. (Hayton, 2016)

In 2016 the United Nations Convention on the Law of the Sea (UNCLOS) under Annex VII, ruled that China has "no legal basis" to claim historic rights within its nine-dash line in the case of Philippines v. China (PCA case number 2013–19) (Mitchell *et al.*, 2016). "While China has ratified UNCLOS, the treaty by and large rejects 'historically based' claims, which are precisely the type Beijing periodically asserts" (Malik, 2013, p. 4). China does not acknowledge the result of the case and has maintained that it will not accept the ruling since the claim was filed in 2013. Beijing has boycotted the proceedings and rejected the decision; President Xi announced, "China will never accept any claim or action based on those awards," (Mitchell *et al.*, 2016; Tiezzi, 2016).

With China's growing dependence on energy and raw material imports, the threat of containment weighs heavily. China's fears are not unfounded as Japan invaded French Indochina in an effort to embargo all imports into China in 1940, and the US-led an embargo that isolated the Chinese oil industry from 1949 to 1970 (Liberman, 1996). China was self-sufficient in energy until the early 1970s and had the support of the Soviet, yet the embargo still impeded economic and social development (Daojiong, 2006, p. 179). According to Jay Batongbacal, the director of the University of the Philippines Institute for Maritime Affairs and Law of the Sea, "unity among the [South China Sea] claimants is one of China's biggest fears ... [The Chinese] see it as a huge threat when the surrounding countries are aligned. That's what they don't like the most because they think it's containment" (Mangosing, 2018). Aware that its actions could push its neighbours to align together with the US, "China has softened the impact of its military build-up with pledges of investments to the Philippines and talk of a framework for negotiating with ASEAN a code of conduct for the management of rival claims in the strategic waterway" (Mangosing, 2018).

China's activities in the South China Sea, including naval expansion and base building, provides evidence of geostrategy. If Chinese's actions were driven by economic development, it would negotiate access to the disputed region to gain access to its natural resources as soon as possible as China can provide the infrastructure for energy exploration that others in the region lack. Instead, China's actions have

complicated the situation and increased regional tensions without apparent economic benefit suggesting a complex and consciously held long-term policy. China's actions are altering the geopolitical reality in the regain with the potential for significant strategic benefit in the long-term at the cost of relations with regional trade-partners.

Mare Clausum (closed sea)

According to Phifer, sea control and sea denial (a concept which has replaced command of the sea) is the naval equivalent of air supremacy, referring to a naval force that is so dominant that its rivals are unable to pursue a direct confrontation. "This dominance may apply to its surrounding waters (i.e., the littoral) or may extend far into the oceans, meaning the country has a blue-water navy." (Phifer, 2012, p. 52). After the Roman Empire defeated the Greek forces at sea, "no fleet was needed, save a few police vessels, to maintain as complete a command of the arterial sea-way of the Mediterranean as ever the kings of Egypt exercised over their Nile way. Once more land-power terminated a cycle of competition upon the water by depriving sea-power of its bases" (Mackinder, 1919, p. 29). A century later, the Roman conquest of Britain prevented the risk of the rise of a sea-power off the Gallic coast, thus making the channel a 'closed sea,' controlled by land-power (Mackinder, 1919, p. 31).

The Macedonian's ended "the first cycle" of seapower, by seizing the land bases of the Greeks, Phoenicians and Egyptians and thus made of the Eastern Mediterranean a "closed sea ... without the protection of a navy commerce moved securely over a water-way because all the shores were held by one and the same land-power." (Teggart and Mackinder, 1919, pp. 48–49)

In a more contemporary example of sea control and sea denial, Germany "failed strategically because her leaders (like Napoleon) neglected to learn from Alexander that any advance into the Heartland must, of necessity, be preceded by a consolidation of the marginal seapower and the establishment of a closed sea" (Teggart and Mackinder, 1919, p. 241). As sea trade continues to dominate global commerce, the ability to exercise sea control and sea denial remains central to discussions of the South China Sea and the Indian Ocean.

Tensions are rising in the South China Sea, as states fear that Beijing plans to establish the region as a 'Chinese lake'. Domination of the South China Sea "heartland" would grant China great political, economic and military sway over the "rim-land" states (Hyer, 1995, p. 36). The expansion of China's naval presence from its littoral waters to the waters off Southeast Asia faces little resistance, progressing towards a *mare clausum* (closed sea). Kanard defines 'closed sea' as "the narrowing the

marine trade route by creating mid-sea impediments that channelize sea-borne traffic, then controlling and commanding these sea lanes to serve China's larger purpose of asserting its dominance in the region" (Bharat Karnad., 2017). This is important because the South China Sea is "a superhighway of the seas," handling a third of annual global trade (Paul, 2016, p. 6). But also, as the naval historian Milan N. Vego predicts, "most naval actions in the future will most likely take place in relative proximity to the shores of the world's continental landmass, in areas known as 'littoral waters', and part of a war in the littorals would take place in the waters of the enclosed and semi-enclosed seas, the popularly called 'narrow seas' " (Vego, 2003, p. xv).

In addition to building islands and exerting control in the South China Sea, Beijing has been expanding its influence in the Indian ocean, primarily through its rail line connecting to the Port of Gwadar in Pakistan. China's strategic vulnerability in the Indian Ocean is a function of its geography, a large enclosed ocean with few entry points through which carries much of the world's energy. Sea control and sea denial amounts to control of access through chokepoints and key ports. "Over the last 500 years the Indian Ocean has been dominated by a succession of European or Western powers: first Portugal, later Britain and now the United States. To a significant extent, they have formed the current strategic landscape of the Indian Ocean" (Brewster, 2014b, p. 6).

The Indian Navy's 2007 Maritime Military Strategy expressly invokes Albuquerque's⁷⁴ name to justify India's strategy of seeking control over the vital entry and exit points to the Indian Ocean. In contrast to India's position, China cannot currently exert control over any of these chokepoints as it lacks a regular naval presence between any of the ports (Brewster, 2015a, pp. 49–50).

Nine Dragons

"Nine Dragons stirring up the sea" — an allusion to the mythical nine sons of the powerful dragon king at play in the sea often depicted in traditional Chinese artworks—is an expression in Chinese policy circles for the lack of coordination between the various government agencies responsible for the East and South China Seas. Five of these latter-day dragons are the main national maritime agencies, and their overlapping mandates illustrate the problem. (Dupont & Baker 2014, p.88)

⁷⁴ "Among his achievements, Albuquerque managed to conquer Goa and was the first European of the Renaissance to raid the Persian Gulf, and he led the first voyage by a European fleet into the Red Sea" (Stevens, 1711, p. 113).

In the case of 'the Nine Dragons' (九龙闹海), the 'nine' is not to be taken literally, referring to many – it takes many dragons to stir up trouble in the sea. As one Chinese scholar explained, "too many dragons, too much noise," in reference to friction produced by competing for territorial claims in the South China Sea (Richardson, 2012). "The Chinese are acutely aware of this, labelling the different groups as "the nine dragons," a reference to the ancient legend of a dragon king whose nine sons can be seen in countless murals 'stirring up the sea'" (Dyer, 2014, p. 67).

"China's approach to the South China Sea has been one of the clearest examples of how competing vested interests are helping to drive parts of foreign policy—the fracturing in power that the Chinese establishment has witnessed" (Dyer, 2014, p. 67). The 'Nine Dragons' has been used by a number of scholars to describe the uncoordinated efforts of at least five agencies with overlapping responsibilities for China's coast guard duties (Gong, 2012).⁷⁵ A number of more public incidents have involved vessels from other countries. The Ministry of Foreign Affairs is but one of a number of agencies competing for control over foreign interactions and does not even rank among the most influential state actors (Yahuda, 2013). The lack of coordination can be contributed to multiple factors, including coastal provincial and municipal authorities have their own fishery protection vessels. In terms of fishing boats, operators must apply to individual licensing bodies in for each of the coastal bodies it plans to cross.

While it appeared that "the diverse voices and debates can be attributed to the fact that China is far from a unitary actor," the issue was addressed in late 2012 when the central leading group on maritime rights was established and the State Security Committee directly led by Xi Jinping in November the following year (Wenjuan, 2018, pp. 14–15). This centralization strengthens foreign policy and border security at the expense of provincial autonomy which would benefit economic development.

⁷⁵ The 'Nine dragons can refer to "the Ministries of Public Security, Land and Resources (State Oceanic Administration), Transport (Maritime Safety Administration) and Agriculture (fisheries)" (Yahuda, 2013), or "the China Coast Guard (CCG) is responsible for border protection and crime fighting; the Maritime Safety Administration (MSA) manages the inspection of ships, openness of sea lanes, and maritime transport; the Fisheries Law Enforcement Command (FLEC) oversees all fisheries activities; the China Marine Surveillance force (CMS) is responsible for protecting the environment, conducting marine surveys, and enforcing the Law of the EEZ; and the Customs Anti-Smuggling Bureau (CASB) is tasked with collecting customs duties and preventing smuggling, but it also has law enforcement authority over claimed territory and territorial waters" (Dupont and Baker, 2014, p. 88).

China's strategy in the South China Sea has developed sea control and sea denial through naval expansion and territorial claims. While the regional energy reserves have value, China's actions appear to emphasize control of sea lines and countering America's naval supremacy in the region.

Control of the South China Sea remains a core strategic concern owing to its restricted access to the Indian Ocean through the Strait of Malacca through which 83% of its energy imports passed in 2011 (see Figure 93). As a result, China has engaged in a strategy to expand its sea routes through three economic passages.

China's Blue Economic Passages

The document, 'Vision for Maritime Cooperation under the Belt and Road Initiative' (2017) states that China seeks to build platforms for maritime cooperation with countries along the Belt and Road Initiative, listing a number of cooperation Priorities include green development, ocean-based prosperity, maritime security, innovative growth and collaborative governance.

Leveraging the ocean as the basis for enhancing common welfare, with the theme of sharing a blue space and developing the blue economy ... to jointly build unobstructed, safe and efficient maritime transport channels ... Ocean cooperation will focus on building the China-Indian Ocean-Africa-Mediterranean Sea Blue Economic Passage, by linking the China-Indochina Peninsula Economic Corridor, running westward from the South China Sea to the Indian Ocean, and connecting the China-Pakistan Economic Corridor (CPEC) and the Bangladesh-China-India-Myanmar Economic Corridor (BCIM-EC). Efforts will also be made to jointly build the blue economic passage of China-Oceania-South Pacific, travelling southward from the South China Sea into the Pacific Ocean. Another blue economic passage is also envisioned leading up to Europe via the Arctic Ocean. (Xinhua, 2017g)

Under the Belt and Road Initiative China has designated three "blue economic passages" that will connect Asia with Africa, Oceania, and Europe (Lei, 2017).⁷⁶ The China-Indian Ocean-Africa-Mediterranean Sea blue economic passage, runs westward via the South China Sea to the Indian Ocean, linking with the China-Indochina Peninsula Economic Corridor, and connect with the China-Pakistan, and Bangladesh-China-India-Myanmar economic corridors. While, the China-Oceania-South Pacific passage

⁷⁶ China released a document outlining its plans, entitled 'Vision for Maritime Cooperation under the Belt and Road Initiative' (Xinhua, 2017g).

will run southward via the South China Sea into the Pacific Ocean, while another economic passage is also envisioned linking Europe via the Arctic Ocean (Xinhua, 2017d).

"China has put forward plans for three ocean-based 'blue economic passages' that will connect Asia with Africa, Oceania, Europe and beyond, in a bid to advance maritime cooperation under the Belt and Road Initiative" (Xinhua, 2017g). China's maritime strategy will enhance trade lines with its investment in major ports in Africa.

China's maritime silk road represents a unified geopolitical strategy that connects sea lines of communication with land communications that together give access to resources and new economic centres under its Belt and Road Initiative. If China foreign policy was pursuant of short- and medium-term economic advantage, China should increase engagement with global maritime commons. Instead, China demonstrates a willingness of the Chinese to undertake a scale of sustained investment in an attempt to alter the geopolitical reality through reshaping global maritime trade. China's most important trade lines follow the China-Indian Ocean-Africa-Mediterranean Sea blue economic passage which stretches from its ports in the South China Sea, through the Indian Ocean to its ports in Africa.

China has a 25USD billion infrastructure project that will link Kenya with Ethiopia, Uganda and South Sudan (the Lamu Port South Sudan Ethiopia Transport (Lapsset) Corridor – which will link Kenya with Ethiopia, Uganda and South Sudan). Recently port development projects with Chinese financing and construction links to the Belt and Road Initiative include major seaports at Abidjan in the Ivory Coast, Tema in Ghana, Lekki in Nigeria, Kribi in Cameroon, Dar es Salaam in Tanzania, Mombasa in Kenya, and Abukir, Alexandria and El Dekheila in Egypt.

A study by the Centre for Strategic and International Studies in 2019 identified 46 sub-Saharan African ports with financial, construction, or operational involvement by Chinese entities. It said that "forming the backbone of China's 'Maritime Silk Road', investments in African ports provide a gateway to the region's trade and economic development, empower China with political leverage and clout on the continent, and provide a foothold for People's Liberation Army Navy activities" (Devermont, 2019).

China's involvement in transforming the geopolitical reality in Africa is unprecedented in scale, developing entire lines of communication across the continent simultaneously.

"Investments (including a railway to Ethiopia and a Chinese naval base) are not surprising, given Djibouti's importance as a trans-shipment hub on the BRI-linked Maritime Silk Road,

as well as its potential as a commercial hub for access to other parts of Africa, and its strategic location as a security node for busy shipping lanes passing through the Gulf of Aden and the Red Sea". (Nyabiage, 2021)

China's actions are rapidly transforming the geography in Africa through linking land and sea lines of communication on a scale and speed that is unprecedented in the continent's history.

Indian Ocean

Over the past decade, China has dramatically expanded economic relations in the Indian Ocean region, building up a level of influence that rivals or exceeds that of India in several states (Brewster, 2014a, p. 137). It would be difficult to make a case explaining China's presence in the Indian Ocean principally through economic development as China already has efficient access over land through pipeline and rail networks. China's most recent defence strategy emphasizes that the People's Liberation Army (PLA) must 'safeguard the security of China's overseas interests', as well as tasking the PLA Navy to 'shift its focus from "offshore waters defence" to the combination of "offshore waters defence" with "open seas protection" (Stanslas, 2010, p. 2).

Sino-Indian relations become increasingly important, as China must contend with a rising India possessing a geographic advantage in terms of maritime trade and security. The Indian Ocean is the world's third-largest body of water. Competition has been growing between China and India, including deep-water port development in littoral states, military patrols and an escalation in activities and rhetoric that could endanger stability in a critical region for global trade (Albert, 2016) It also provides areas for cooperation between the BRICS partners, including non-traditional security challenges which offer areas of potential collaboration. India's littoral access to the Indian Ocean is of similar strategic importance as China's littoral access to the South China Sea. "India will pursue a three-pronged strategy of securing its eastern flank while cooperating and competing with China in both Western and Central Asia. With India having the advantage of being an Indian Ocean littoral state, it is likely to focus on bolstering its position vis-a-vis China on the Asian continent before turning its attention to the sea" (Fitch Solutions, 2015). While cooperation is improving between India and China, the dynamics are expected to change as India grows as a regional power and expresses its ambitions in the Indian Ocean and "a strong instinct to exclude extra-regional powers from the region" (Brewster, 2015b).

Ward argues that China's rapid increase in investment in countries bordering the Indian Ocean is concerning as indebtedness could be employed as a foreign policy tool to leverage smaller states,

including Sri Lanka, the Maldives, and Djibouti. "The possibility of an Indian Ocean Rim constructed of heavily indebted poor countries (HIPCs) beholden to China should not be overlooked as the geopolitical future of this vital region takes shape" (Ward, 2017, p. 2).

In April 2015, China and Pakistan announced the \$46bn China–Pakistan Economic Corridor (CPEC) as part of the BRI (Aneja, 2015). The port of Gwadar is a crucial feature of CPEC, providing a link between the One Belt, One Road and Maritime Silk Road project and became fully operational on 14 November 2016 (Farwa and Siddiqa, 2017, pp. 82–83). The China–Pakistan Economic Corridor (CPEC) is strategically significant in that it grants direct access to the Indian Ocean through the port of Gwadar. This land link enhances China's strategic position in the region as the port can potentially be used to provide logistical support for naval operations, supplying fuel, food and munitions. The Trans-Siberian Railway and CPEC function as an extension of China's domestic networks in extending access to the port of Gwadar. In addition to enhancing maritime trade, the port of Gwadar and CPEC work in tandem extending China's naval reach.

China is changing the geopolitical reality to ensure that its potential vulnerability with respect to geographical locations such as the Straits of Malacca is reduced. The key to understanding the development of China's 'continental-oceanic' nexus is the construction of two 'amphibian ports' on the Indian Ocean: Gwadar and Ramee Island in Burma (Myanmar). These two ports will have the potential to dissolve the Rimland and the Heartland divide so central to containment and ultimately bring about a new geopolitical reality. They are not just deep-water ports. They are a confluence of sea, pipeline and land and air transport facilities. They will have the potential to provide an alternative supply route to the Malacca Straits and ensure that oil and gas supplies can reach China's Western regions. It will also provide an alternative export route to the Indian Ocean for Chinese finished goods and energy exports from the Central Asian Republics. (Sloan, 2017, p. 258)

China was granted docking facilities for its navy in return for financing the construction of the port and the upgrade to the airport in Ramee, a move that will enhance their sea control and sea denial capabilities (Sloan, 2017, p. 261). Once again, land transport facilities played a vital role in enhancing SLOC.

Objective evidence about China's naval intentions in the Indian Ocean remains contested. For years China flatly denied any intention to establish any military bases, claiming that it was a strategy used in the Indian Ocean by the 'imperialist' Western powers. But Beijing has recently confirmed that it plans to build a new exclusive-use port and other military facilities at Obock in Djibouti to support limited naval capabilities in the western Indian Ocean. There are also reports that Pakistan has encouraged China to establish a naval base at Gwadar, although Beijing has to date been careful to avoid any military connections with the port. (Brewster, 2017)

This should not be taken to mean that China aspires to have the capability to exercise sea control and sea denial of the sea lanes across the Indian Ocean. There are considerable doubts about the military value of ports such as Obock, Gwadar or Hambantota to China's navy in the event of a conflict with another major power such as India or the United States. The cost of necessary investments and the exposed position of these ports may make their utility questionable against an enemy equipped with long-range precision strike capability (Brewster, 2017). Senior analysts, particularly in the United States, are now debating whether China may instead primarily pursue a 'places not bases' strategy in the Indian Ocean under which the PLAN would have access to only limited facilities for specific purposes or contingencies (USCC, 2016, p. 267; Brewster, 2018b, p. 24).

The 'String of Pearls' is a strategic metaphor on potential Chinese intentions in the Indian Ocean region that was popularised by American researchers in the early 2000s to explain China's investment in ports along the Indian Ocean littoral (see Figure 98) (Marantidou, 2014). Geopolitical models and theories seek to simplify the relationship between government policies and physical geography, so that one aspect can be analysed in greater detail and insights drawn from it. According to Snyder, "Geopolitics is concerned with how geographical factors, including territory, population, strategic location, and natural resource endowments, as modified by economics and technology, affect the relations between states and the struggle for world domination." Shapiro suggests competing geopolitical theories "each posit a different centre for what a dominant world power has to control in order to be a global power" (Jacob L. Shapiro and Xander Snyder, 2017).

In 2005, the US consulting firm Booz Allen Hamilton came up with the "string of pearls" hypothesis, which posits that China will try to expand its naval presence by building civilian maritime infrastructure along the Indian Ocean periphery. Brewster describes the String of Pearls' strategy as "a Mahanian strategy of building a chain of naval bases across the northern Indian Ocean that would be used by the Chinese navy to protect China's trade routes and potentially dominate the Indian Ocean" (Brewster, 2017). "If Mahan were alive today, he would note that, given its geographic deadlock with India to the southwest and Russia to the north, China will most likely pursue the way of the sea" (Cropsey and

Milikh, 2012). China's port activities in the Indian Ocean have alarmed both the US and India, "In the eyes of some Indians, Colombo is part of a "string of pearls" —an American-coined phrase that suggests the deliberate construction of a network of Chinese built, owned or influenced ports that could threaten India" (The Economist, 2013b).⁷⁷ American and Indian scholars suggest that China's presence in the region is strategic. The 'String of Pearls' theory (see Figure 98).⁷⁸ An alternative strategic explanation is that China needs port access to extend the reach of its navy but does not want US-style overseas bases.

The 'String of Pearls' theory posits that sea control has generally been more important than control of the rimland and solidifying influence over Mackinder's heartland regarding global soft power and that China needs to "break out of the box of the South China Sea it is fundamentally constrained" (Shapiro and Snyder, 2017). China wants to be a seapower, but it is blocked in by the United States. The 'String of Pearls' suggests that China seeks to construct a network of seaports across the Indian Ocean to gain sea control over India and the US. This theory argues that that impact of China's advances in its naval technology and acquisition of seaports are potentially more significant than its Belt and Road Initiative.

Geopolitics attempts to identify geographical patterns of political history, and the extent to which changes in transport and weapons technology will increase the strategic and political importance of certain locations and configurations in the future. One critic of the 'String of Pearls' theory and geopolitical theories, in general, is the attempt to fit all of China's actions neatly within one category, as geopolitical theories specifically concern themselves with global domination (Jacob L. Shapiro and Xander Snyder, 2017). This is a particularly problematic and bland generalisation as it has not been established that China seeks global dominance. While China is investing in significant infrastructure projects across Eurasia and Africa, it is problematic to equate foreign investments with military strategy.

Despite a lack of supporting evidence this theory continues to be referenced, interpreting any attempt by China to increase access to ports as predatory (Marantidou, 2014; Yung, 2015). One explanation for the popularity of the theory is that it provides a simplified explanation for China's presence in the region that fits the narrative of Sino-India rivalry. The theory is based on a number of assumptions about the

⁷⁷ These include a facility in Gwadar and a port in Karachi (both in Pakistan); a container facility in Chittagong (Bangladesh); and ports in Myanmar.

⁷⁸ Naval bases in China's supposed "string of pearls": Gwadar (naval & surveillance), Pakistan - Hambantota (container port), Sri Lanka - Chittagong (upgraded port, non-military), Bangladesh - Sittwe (naval base), Burma - Coco Islands (surveillance facility-unconfirmed), Burma - Kra Canal (bypass Malacca Strait), Burma - Bagamoyo, Tanzania - Port Sudan, Sudan.

function and intentions of China's basing model that is not sufficiently supported by fact. A competing narrative suggests that the Chinese PLA Navy (PLAN) will only use these ports for 'limited purposes,' while Beijing claims it is part of planned economic development, as part of its Maritime Silk Route initiative (Brewster, 2017). This chapter suggests that China's port agreements, expansions and acquisitions are part of a strategy to shape the geopolitical reality, but not in the way this theory suggests.

The subtler strategy, the one best undertaken in peace, is to secure, slowly and almost imperceptibly, territories useful for commerce, territorial management, or as preparation for the possibility of determined commercial competition or armed conflict itself. As a theorist, Mahan would have nodded approvingly at China's efforts to develop the naval facilities and supporting bases in the Indo-Pacific region called the "string of pearls." He observes that, "in peace [naval strategy] ... may gain its most decisive victories by occupying in a country, either by purchase or treaty, excellent positions which would perhaps hardly be got by war." Peace for Mahan is a breather, a time when architects of foreign policy look to the direct and indirect effects of far-flung seapower in a future when gun ports are once again opened. (Cropsey and Milikh, 2012)

A number of scholars support this interpretation in discussing the security implications of China's buildup in the Indian Ocean (Gertz, 2005; Pehrson, 2006; Khurana, 2008). Two US Naval War College researchers suggest that China is attempting to increase its commercial power under the shadow of a dominant US maritime power, a geostrategic situation necessitating the establishment of "bases adjoining the sea lines of communication" in the South China Sea (Holmes and Yoshihara, 2008, p. 53). Young argues "the 'String of Pearls' model has long outlived its usefulness as a strategic concept" (Yung, 2015). "China's current method of protecting its interests abroad by relying solely on commercial port access was unsatisfactory from a Chinese perspective, which suggests change is likely. A number of Chinese commentators agree with this conclusion" (Yung, 2015).

What kind of logistics support would the Chinese military need for an expanded overseas presence? Yung addressed this question by identifying and comparing six potential logistics models.⁷⁹ He suggests a

⁷⁹ The report examined the characteristics of each model against long-standing Chinese foreign policy principles. For example, China has emphasized the principle of non-interference in the internal affairs of other country. It has also followed Deng's maxim to lie low and bide time while focusing on the development of its economy. Because some basing models (the "Lean Colonial model", "Warehouse model" and "Model USA") involve placing large

lack of evidence in support of the idea that China would pursue a "String of Pearls" model because sites "lack the features necessary to support major combat operations, and there is little physical evidence of a covert military build-up on any of them" (Yung, 2015). This conclusion is similar to Marantidou which found little evidence that supports Chinese naval base building along the Indian Ocean littoral, "particularly as that specific arrangement may not be beneficial to China," and instead suggests that "these same locations could serve as useful logistics support for the Chinese Navy, meeting its need to support a blue-water navy with less political cost. 'Places with Chinese characteristics' would affect the security calculus of India and the US in the region, as well as set a precedent, potentially for application in Europe" (Marantidou, 2014, p. 1). Yung proposes that the "dual use logistics facility" best represents China's port activities, which is characterized by its light footprint and emphasis on providing logistics support to overseas non-traditional security missions, and its dual commercial and military nature (Figure 91). "Current PLAN operational pattern of behaviour (e.g., ad hoc visits, largely involving liberty port calls, with small numbers of vessels at a time) is inconsistent with a country preparing the battle space for large-scale conventional conflict" (Yung, 2015).

Chinese resupply activities are mostly conducted on a commercial basis. China and the host governments do not sign memoranda of agreement or negotiate a status of forces agreement covering visiting Chinese sailors. Chinese commentators describe PLAN port visits as similar to a visit by a tourist cruise ship. The host nation provides the ships "hotel services" and expects the sailors to aid the local economy through "tourist" activities. The local Chinese embassy or consulate negotiates agreements for PLAN ships to use facility water, food, and fuel. The Chinese embassy or consulate also arranges to have spare parts flown in by commercial air so that crews may conduct minor or intermediate repairs to ships and helicopters. (Yung *et al.*, 2014, p. 32).

Yung Concludes that the "String of Pearls" model does not make sense for China from a strategic perspective given their proximity to India: "placing high value PLAN assets within range of Indian precision air and missile threats; dividing China's naval forces in ways that make the Chinese homeland more vulnerable; and jeopardizing China's 'peaceful rise' image by building up large, offensively oriented

numbers of troops on the sovereign territory of host nations, we assessed the likelihood of Chinese adoption to be low. Only two models survived the assessment process: the "Dual Use Logistics Facility" and the "String of Pearls" model (Yung, 2015).

naval and air forces and associated logistics support bases in the Indian Ocean" (Yung, 2015). Young suggests that China currently uses the 'Pit Stop' model to support its Gulf of Aden counter-piracy operation, relying "solely on access to existing commercial ports, and is an expensive, ad hoc, and limited means of resupplying naval vessels" (Yung, 2015).

The Indian Ocean is economically and strategically significant to China, "China's economic and energy security is inextricably tied to shipping routes across the Indian Ocean and through the Strait of Malacca, motivating a growing military and commercial footprint in the region" (Figure 93) (Stashwick, 2018). "The sea lanes in the Indian Ocean are considered among the most strategically important in the world—according to the Journal of the Indian Ocean Region, more than 80% of the world's seaborne trade in oil transits through Indian Ocean choke points" (DeSilva-Ranasinghe, 2011). This explains why it is host to a number of significant infrastructure projects connected to the BRI. The region's economic value is overshadowed by its strategic value, granting access to major markets in the region and connecting with existing and planned economic corridors (CPEC, BCIM and Southern Corridor) as well as significant ports in Shanghai and Guangdong.⁸⁰ In addition, access to port facilities enhance China's blue water ambitions.

The Indian Ocean has an unusual scarcity of overland pathways between the Indian Ocean and the Eurasian hinterland. Blocked by Myanmar, China has no direct access, and sea lines are controlled by a number of choke-points, creating "a strategic premium for powers that are able to gain control of the so-called maritime 'chokepoints' and deny their rivals access to ports within the region … Until well into the twentieth century, there were no major transport routes – roads, railways or rivers – connecting the Indian Ocean with the Eurasian hinterland" (Brewster, 2017). To overcome this China has proposed a corridor through Myanmar (Thiha, 2018). See Figure 71 for proposed bypass routes. The Indian Ocean has a long history as a mare clausum (or 'closed sea') and has changed hands many times. First, by the Portuguese in the fifteenth century, then by the British from the early nineteenth century when it controlled the Malacca Strait, Cape Town in South Africa and Aden on the Red Sea until its gradual withdrawal in the early 1970s when the US took control of the region (Brewster, 2017).

⁸⁰ The Bangladesh- China- India- Myanmar (BCIM) corridor connects the land routes via the Kolkata and Kunming (K2K) highway with sea routes between Mandalay, Myanmar to Kolkata, India at an estimated cost of \$22bn (PwC, 2017, p. 22).

China's actions have enhanced its ability to secure access and influence in the region through port agreements, allow for the refilling of commercial and naval vessels, extending the navies capacity to project naval power beyond the front line. This is important because the Chinese economy is dependent on the region for energy imports from the Middle East, Africa resources, and European trade (Figure 93) (Ward, 2017, p. 1). "Since the turn of this century, Chinese companies have been involved in the construction, expansion or operation of numerous commercial port facilities in the northern Indian Ocean, including at Gwadar (Pakistan), Hambantota and Colombo (Sri Lanka), Kyaukpyu (Myanmar), Lamu (Kenya) and Bagamoyo (Tanzania) and several others (such as Sonadia in Bangladesh) have been proposed" (Brewster, 2017). China's basing model allows it to expand its influence without necessitating its involvement in regional conflicts. This has several benefits over a US basing model which alters the regions balance of power and comes with military commitments to maintain the base and regional security.

Allegations of secret Chinese military bases around the Indian Ocean create an impression of a Chinese navy increasing the geographical scope of its operations. Supposedly, China leased the Great Coco Island in 1994 after establishing a SIGINT intelligence gathering station on the island two years prior to monitor Indian naval activity in the Andaman and Nicobar Islands, shipping routes between the Bay of Bengal and the Strait of Malacca (Selth, 2008b; Chenyang, 2012). Analysis of literature on China's military presence in the Indian Ocean suggests a limited presence that is exaggerated by a few vocal voices. This suggests that at this time China does not have any secret facilities in the region.

The first public reference to Chinese military bases in Burma was in August 1992 ... no one has questioned China's important strategic interest in closer ties with Burma, or India's concerns about the implications of this developing relationship. On the evidence available, however, claims of China's influence in Burma since 1988 appear to have been greatly exaggerated, a fact that belatedly seems to have been accepted by India ... a military alliance between Burma and China, of the kind long suspected and frequently reported, remains a distant prospect. (Selth, 2007, pp. 286, 302–303)

"Indian strategists have long feared the potential for China to convert other facilities, including ports at Gwadar in Pakistan, Sittwe in Myanmar, and Hambantota in Sri Lanka, into dual-use logistics node for naval use" (Panda, 2017b). Both governments and the Burmese military deny the existence of both the lease and the installation. Despite a lack of evidence, doubts have persisted (Haacke, 2010). In 1998, the US stated they had not detected any significant Chinese activity in Burma (Selth, 2008a, p. 10). In 2005 the Indian Navy was invited to inspect the islands and ports and conceded "that there was no Chinese intelligence facility on Great Coco Island and nor were there any Chinese naval bases anywhere in Myanmar after being investigated" (Selth, 2007, p. 292). India became increasingly concerned about China's presence in the region after a Chinese submarine and a warship docked at Colombo harbour for five days in 2014, (Aneez and Sirilal, 2014). The Government of Sri Lanka has stated the Chinese naval vessels are permitted to refuel in the port of Columbo but not Hambantota, "We told China that we can't allow the port for military use and that 100% responsibility of security matters should be with the Sri Lankan government." (Mathieson and Ondaatjie, 2016; Aneez, 2017).

China's features in the Indian Ocean can be broadly differentiated into three groups by economic significance. 'Service' ports; primarily functions to service imports/exports for local markets, 'hub' ports; such as Hambantota and Colombo principally functions as regional transhipment hubs, servicing huge ships carrying more than 18,000 containers, and transhipping them onto smaller ships to connect with feeder ports and 'gateway' ports such as Gwadar in Pakistan and Kyaukpyu in Myanmar primarily intended to connect the Indian Ocean with China via new overland transport corridors (Brewster, 2017). The functionality and profitability of these hubs depend on having a critical mass of throughput and the capacity of the overland connections (road/rail/river/pipelines) that feed them.

From an economic perspective, China has little incentive to invest in overseas service and hub ports. The value of China's investment is not seen in individual ports, but in the network they create. This is an indication of a strategy to increase control of shipping lanes and ports in the region. China's growing influence is enough to alarm India. As China continues to gain access to new ports, it becomes clear that China is trying to reshape sea trade across the region, reduce vulnerability to choke points and enhance energy security.

The container port in Hambantota has the potential to shift world trade routes, "the future plan is for the China Merchants' Colombo port to mainly handle cargo for Sri Lanka's domestic market, while Hambantota will become the central Chinese-operated transhipment hub in the Indian Ocean" (Fuhrman, 2017). Beijing signed a \$1.1bn, 99-year lease for a majority stake in a deepwater container port it built for more than \$1bn that has not turned a profit in seven years (Stacey, 2017). In addition, refuelling and resupply facilities would enhance access to the Indian Ocean (Sidhu and Rogers, 2015, p. 84). China's relations with Sri Lanka have strategic and economic components. Columbo will support China's domestic imports and allow naval vessels to refuel, enhancing China's ability to operate in the region. Together with Jiwani and Djibouti will create a triangle, allowing China to patrol the area and escort maritime traffic. It will also provide a network of new trade routes and refuelling points for Chinese trade.

In addition to visits by Chinese naval assets to the East African coast during anti-piracy operations, underway since 2008, Chinese submarines docked in Pakistan in 2015 and in Sri Lanka in 2014, at a Chinese owned terminal in the port of Colombo. In June 2017, three Chinese warships arrived in Pakistan where a joint naval exercise is scheduled (Stanslas, 2010, p. 2). A Chinese naval officer said of prior exercises with Pakistan in November 2016 that they would 'improve the naval capability of both countries to protect Gwadar port activities' – Pakistan's Gwadar is a hub on BRI's 'Maritime Silk Road' (Stanslas, 2010, p. 2).

From a geopolitical perspective, Gwadar is significant as a gateway to CPEC, which has led to plans for a naval base at Jiwani. Sittwe port is vital to China's energy security as a part of Beijing's "two oceans" strategy, as the Sino-Myanmar oil and natural gas pipelines link the deep-water port of Kyaukphyu (Sittwe) in the Bay of Bengal with Kunming in Yunnan province of China (Hornby, 2017). China has leases on Gwadar Port in Pakistan and Hambantota Port in Sri Lanka for "commercial purposes" and will establish its first overseas military base in Djibouti for "for logistical facilities geared for naval rest and supply" (Sun and Payette, 2017).

China plans to build a second naval base with joint naval and air facility 60 kilometres west of Gwadar at Jiwani (see Figure 101), allowing it to separate Chinese naval forces from commercial shipping at Gwadar (Brewster, 2018a; Chan, 2018; Gertz, 2018).

China's proposed construction of the Kra Canal, a 100km canal across Thailand, would provide a direct link between the Indian Ocean and South China Sea, bypassing ports in the Strait of Malacca area, including Port Klang, Tanjung Pelepas, and Singapore, as well as traditional maritime chokepoints from which the US Navy could exercise influence (Hochberg and Sloan, 2017, p. 589). China completed a feasibility study in 2016 and gained the support of local groups which met at the Kra Canal Conference but is waiting for Thai Government endorsement (LaRouchePAC, 2017). The Thai government has started a review of the project through the government insists they did not have a policy on the Kra Canal project (Channel NewsAsia, 2018).The canal has a number of security concerns, including local militant groups and the potential to disrupt national unity in the South

The construction of a \$28bn ship canal would contribute to China's 21st century maritime Silk Road, providing an alternative to Straits of Malacca. While this would reduce shipping time and costs, it would

also allow shipping lanes to pass through a Chinese controlled choke point. This project has the potential to reshape region trade.

China's port activities in the Indian Ocean have produced considerable debate among scholars regarding its strategic intent in the region. While discussions of China's basing model have moved past the string of pearls model first proposed in 2005, a consensus has not been reached regarding China's geopolitical strategy for the region. This thesis argues that China is using a dual-purpose basing model to expand China's blue water navy capabilities to enhance its influence in the region and capacity for sea control. China is acutely aware of the region's history and the importance of its sea lines and maritime choke points. China is attempting to US naval dominance in the region and connecting the Indian Ocean through CPEC and to its Belt and Road Initiative as a part of its 21st-century maritime silk road strategy. Where China's actions are the result of normal economic development, it should be expected that China would instead increase its engagement in the commercial maritime community, its participation in antipiracy and the global maritime commons (Minot-Scheuermann, 2016). In addition to expanding its influence in the Indian Ocean as a component of its maritime strategy China, China has rapidly expanded infrastructure in Africa, investing in ports and connecting rail lines to enhance access to resources.

Africa

China made significant investments in African infrastructure, including port investment under the Maritime Silk Road (Figure 99). It can be argued that this investment is not necessary as existing ports have been sufficient to meet US and European import demands and states could seek loans through the AIIB. The \$480m Lamu deep-sea port is Kenya's second international seaport which opened in May, 2021 (Campbell, 2017a). Lamu port which connects the Indian Ocean town of Lamu in Kenya to Ethiopia and South Sudan, in combination with other Chinese infrastructure projects, including road, rail, and oil refinery, will form the Lamu-Southern Sudan-Ethiopia Transport (LAPSSET) Corridor (Xinhua, 2017a).⁸¹ The Lamu Port Project consisting of 32 Deep Sea Berths is estimated to cost \$5bn with the LAPSSET Corridor Program expected to cost over \$26bn to complete (LAPSSET, 2017a; Xinhua, 2017f). The LAPSSET Program is part of the Kenya Vision 2030 Strategy, a long-term development policy that started

⁸¹ A port at Manda Bay, Standard gauge railway line to Juba (capital of South Sudan), Road network, Oil pipelines (Southern Sudan and Ethiopia), Oil refinery at Bargoni, Three Airports, and Three resort cities (Lamu, Isiolo and Lake Turkana shores) (LAPSSET, 2017b).

in 2008. The scope and cost of funding such a corridor with indicate that it is not economically viable in terms of investment, suggesting a strategic motivation.

Though India has long been the dominant military power in the Indian Ocean, China has been seeking a greater presence and more influence there, primarily to protect the sea lines of communication upon which its economy depends. In recent years, this trend has been illustrated by PLA antipiracy patrols in the Gulf of Aden, submarine deployments and a combat readiness patrol in the Indian Ocean, and the announcement that China will establish its first overseas military logistics facility in Djibouti. (USCC, 2016, p. 16)

The Chinese naval base in Djibouti is adjacent to the Chinese owned Port of Doralehis, the region's second major maritime project under the BRI.⁸² China began negotiations with Djibouti in 2015, an agreement reached and construction began the following year, and the base became operational in the summer of 2017 (Arteh, 2017; Zhou, 2017). From the perspective of the US, China's investment in infrastructure and a new free trade zone amount to dollar diplomacy. In addition to 'Camp Lemonnier,' France, Italy and Japan also have bases in the country, with Spanish and German troops also stationed in Djibouti.⁸³ In 2017 Saudi Arabia finalised an agreement with Djibouti to construct a military base. With eight states stationed in the country, Russia is the only power that has been barred from building a base because Djibouti did not want to "become the terrain for a proxy war" (Aglionby and Kerr, 2017).

The US recognises the opening of an overseas military base as a significant milestone for China with strategic implications to its interest (USCC, 2017, p. 33). "China's military foothold in Djibouti will boost its power projection capabilities and influence in an area of the world crucial to China's economic interests" (USCC, 2016, p. 218). The control of the sea lines and points of strategic egress has become increasingly pertinent to China's strategic designs in the Asia-Pacific region" (Chaturvedy and Snodgrass, 2012). China has framed "the building of logistical facilities in Djibouti" as a contribution to UN peacekeeping operations and multilateral exercises, the naval base "is of great significance for the Chinese troops in their performance of international obligations to safeguard international and regional peace and stability" (Lei, 2016). Even while trying to underplay the bases strategic significance, it has acknowledged the importance of the waterway, "while foreign media call the new facility a "military"

⁸² China pledged nearly £1 billion in infrastructure investments, including \$590m to upgrade the Port of Doraleh and \$450 for a new international airport in Bicidley.

⁸³ See Figure 100 for a map of overseas military bases in Djibouti.

base, China instead calls it a "support base," which "will ensure China's performance of missions, such as escorting, peace-keeping, and humanitarian aid in Africa and West Asia," (Xinhua, 2917).

Despite China's claim that the support facility is purely intended for its "peacekeeping and humanitarian" operations in Africa, its proximity to a vital waterway for oil imports from the Red Sea (see Figure 92) as well as the potential to spy on the US and its allies would substantially weaken the risk of a potential future blockade. China's investments in the small country next to the strategic 'Gate of Tears'⁸⁴ is a crucial waterway for Chinese energy security and trade (Marley, 2010; Kaplan, 2011). With more than \$22bn invested in Africa, it would be challenging to support any hypothesis other than an attempt to reshape the geopolitical reality across the continent. US intelligence reports suggest that China will seek additional bases in the region, "as China's economic interests along the economically and geostrategically important Indian Ocean grow, China likely will look to establish more bases there" (USCC, 2017, p. 163). In 2018, China pledged \$60bn in financing for projects in Africa in the form of assistance, investment and loans, furthering efforts to link the continent's economic prospects to its own (Campbell, 2018).

China's presence in Africa is motivated by a number of factors. China has a long history in the region, supporting developing countries to gain influence, leading up to South Africa joining BRICS in 2010. More recently, China partnered with and invested in the region under the banner of poverty reduction and the Belt and Road Initiative. China's first overseas base, the Chinese People's Liberation Army Support Base in Djibouti formally opened in 2018, joining the US, France, Italy and Japan with Saudi Arabia soon to follow. The base is strategically significant for China's navy, which is next to the Suez Canal, one of the world's busiest shipping routes which and a backbone of the global economy. China's actions increase access to resources, expand its naval reach and shape the development of the region. While China's maritime road expands west from the South China Sea, through the Indian Ocean to Africa, a third route is opening up as ice melts in the Arctic, opening sea passage between the Pacific and the Atlantic oceans.

Emerging geopolitics of the Arctic

Climate change is dramatically altering the Northern landscape, opening up trade routes and access to natural resources in the region, including major reserves of oil and natural gas, large quantities of

⁸⁴ The Bab-el-Mandeb, known as the 'the gate of tears' is a strait located between Yemen on the Arabian Peninsula, and Djibouti and Eritrea in the Horn of Africa.

minerals including iron ore, copper, nickel, zinc phosphates and diamonds (National Ocean Economic Program, 2021). Shifting national interests follow geopolitical change brought on by climate change which is making the Arctic's resources and passages more accessible (see Figure 105). As melting ice in the Arctic gives way, a shortcut opens up between the Pacific and the Atlantic oceans. "Originally composed of one route spanning westward from China to Europe, and the other extending from the country's eastern coastline down to the Indian Ocean," this new route is widely acknowledged as the third arch of the Belt and Road Initiative, "a new area for the development of the Belt and Road Initiative as the 'Silk Road on Ice" (SRI)'. The third arch was originally composed of one route spanning westward from China to Europe, and the other extending from the country's eastern coastline down to the Indian Ocean" (Dingdu, 2017).

As global warming melts sea ice across the far north, opening up access to new maritime routes and natural resources which are currently controlled by Russia which China may gain access to (Johnson, 2015; Nagai, 2018). Russia's Northern Maritime Route through the Arctic has been given to Rosatom to manage, a Russian Nuclear energy company founded by Vladimir Putin in 2007. The announcement was formalised after China issued its Arctic white paper in January claiming its role as a "near Arctic state" (Hui, 2018; Marc Lanteigne and Mingming Shi, 2018; Nicholas Trickett, 2018). A report from the British Defence Committee 'On Thin Ice: UK Defence in the Arctic' suggests the potential for conflict between Russia and Norway (Defence Committee, 2018, p. 9).

According to the US Geological Survey in 2008, "the Arctic region is the largest unexplored prospective area for petroleum remaining on earth ... 13% of the world's total undiscovered oil and about 30% of the undiscovered natural gas" (Robertson and Pierce, 2008; Kolcz-Ryan, 2009, p. 152). "At today's consumption rate of 86mn barrels a day, the potential oil in the Arctic could meet global demand for almost three years. The Arctic's potential natural gas resources are three times larger" (Mouawad, 2008). However, extraction is not currently feasible due to energy prices and operational costs. Instead, the focus is on dominating arctic trade. "The total mean undiscovered conventional oil and gas resources of the Arctic are estimated to be approximately 90bn barrels of oil, 1,669tn cubic feet of natural gas, and 44bn barrels of natural gas reserves, or 22% of the worlds undiscovered hydrocarbon resources (Bird *et al.*, 2008). There are currently nine legal disputes through UNCLOS as Canada, US, Russia, Denmark and Norway paint a complicated map of overlapping EEZ zones, backed by

continental shelf reports (see Figure 106) (Naja, Hall and Dietrich, 2017).⁸⁵ These legal disputes, which were once meaningless, have taken on strategic importance as critical trade routes become more viable (see Figure 107).

The Northwest Passage (NWP) provides an alternative route between Asia and the northern coast of North America via waterways through the Canadian Arctic Archipelago, bypassing Panama Canal (see Figure 108 and Figure 109). It also provides a route from Europe and the North Atlantic to the Pacific Ocean. In 2014 the first cargo vessel navigated the Northwest Passage without an escort from icebreakers. In comparison to the Panama Canal, this new route cuts transit by 40%, saving an estimated \$80 000 in fuel, while enabling the Nordic Orion, a bulk oil and coal carrier, to carry its full capacity. "The Northwest Passage is more than 1,000 nautical miles shorter than the traditional shipping route through the Panama Canal and will save time, fuel and reduce carbon dioxide emissions, but even more importantly increase the amount of cargo per transit 25%" (Mcgarrity and Gloystein, 2013).

The Northern Sea Route (NSR) provides passage between Europe and Asia via the Arctic, avoiding the Suez Canal (Figure 109). "Russia believes the Northern Sea Route could become the prime passage between Europe and Asia. Traffic jumped from four vessels in 2010 to 71 in 2013 – the journey takes only 35 days, compared to a 48-day journey between the continents via the Suez Canal" (Farquhar, 2014). In 2017 a Russian tanker travelled solo from Hammerfest in Norway to Boryeong in South Korea in 19 days via the northern sea route. Without an icebreaker slowing it down, the vessel was able to complete the journey about 30% quicker than the conventional southern shipping route via the Suez Canal.

As the Polar ice caps melt the north is transformed from an impenetrable mass of ice and the hostile sea route to two viable trade routes that significantly reduce transportation time and cost (see Figure 104). In addition, they circumvent passage fees and hostile waters. The rapid retreat of the Arctic Sea, an unintended by-product of climate change, has revealed three Arctic shipping routes that connect East Asia and Europe.

China is willing to work with all parties in conducting scientific surveys of navigational routes, setting up land-based monitoring stations, carrying out research on climatic and environmental changes in the Arctic, as well as providing navigational forecasting services.

⁸⁵ The US is not a signatory to UNCLOS (Almond, 2017).

China supports efforts by countries bordering the Arctic in improving marine transportation conditions, and encourages Chinese enterprises to take part in the commercial use of the Arctic route. (Xinhua, 2017g)

China has released an Arctic policy white paper which notes that China and Russia have been conducting dialogues on Arctic issues since 2013, "China, as a responsible major country, is ready to cooperate with all relevant parties ... and advance Arctic-related cooperation under the Belt and Road Initiative" (Xinhua, 2018). China has made it clear that it views the Arctic passageways as strategically significant and has incorporated them into its BRI. While they do hold value in the economic sector by reducing the cost and time of shipping, China would not necessarily need to take such an active role to benefit from the trade routes. China has emphasised points of development and stability, mentioning governance 19 times in the short paper.

China does not border the polar route and has no control of entry or potential for sea denial and thus cannot monetise its passage. Instead, China plans to work with Russia and other Arctic countries to develop the polar route. If China was motivated by economic development, it could play the card of a developing country and benefit from the investments of others. Despite reducing the journey by nine to ten days "it is not economically viable in the foreseeable future" (Pruyn, 2016, p. 663; Liu, 2017; Melia, Haines and Hawkins, 2017, p. 30). Instead, China has partnered with Russia, though this is not without complications as Russia views the Northern Sea Route as its internal waters and consequently wholly under Russian jurisdiction (Liu, 2017).

China is signalling that it sees itself as a "near-Arctic state," analysts say Beijing is "particularly attracted to the region given its mounting energy demands and reliance on maritime trade" as evidenced by \$60m spending on the region as well as signing a free trade agreement with Iceland and building the largest embassy in Reykjavik (*The Emerging Arctic: Risks and Economic Opportunities*, 2014). China's focus on governance and bilateral cooperation together with the sea routes that are only viable for "smaller cargo sizes" (Pruyn, 2016, p. 669).

Despite being the smallest and shallowest of the world's major oceans, the Arctic Ocean caps the Northern Hemisphere which accounts for around 90% of international trade, linking Asia with Europe and North America (Guschin, 2013). Following China's earlier interest in the Arctic, dating back to a research expedition in the 1990s, researchers have sought to understand its motives as China's efforts to extend its influence in the Arctic could have global ramification (Mroczkowski, 2012). "One thing is certain: China's interests in the Arctic, whether regarding possibilities for expanded navigation and shipping, access to resources, concerns over the environmental impact of the melting ice packs or possibly even defence and security issues in the region, are only going to grow" (Stephens, 2012). Between 1984 and 2012, Beijing has initiated five Arctic and twenty-eight Antarctic expeditions, constructed the Arctic Yellow River Station (2003) and bought the Xuelong icebreaker from Ukraine (1993) (Mroczkowski, 2012). In 2013 Beijing began construction of its own icebreaker and joined the Arctic Science Committee, Arctic Science Summit Week, Ny-Ålesund Science Managers Committee, and the International Polar Year project, and most important of all, it was granted permanent observer status of the Arctic Council.

These solo journeys (conducted by a single vessel) show how climate change is opening up the high Arctic. The enormous potential of Canadian and Russian passageways which will compliment traditional corridors such as the Suez and Panama Canals. China first sent an expedition team to the Antarctic in 1984 and had since established four scientific research stations in the Antarctic. In 2016 China began construction of its first domestically produced polar icebreaker, *Xuelong 2*, or Snow Dragon 2 (Gady, 2016).⁸⁶

The opening of Arctic routes is strategically significant to China for a number of resources, in addition to natural resources, it expands China's maritime routes, cuts transport time and fuel costs avoids US waters and bypasses the Suez and Panama Canals. In addition to higher fuel consumption, the Panama and Suez Canals charge a substantial fee for the passage of large container ships, as well as being able to delay or deny passage. In addition to circumnavigating maritime choke points, the new Arctic route will cut transport time by 12-13 days (see Figure 109) (Rahman, Saharuddin and Rasdi, 2014; Lanteigne, 2017). Figure 104 offers a comparison between the Suez Canal and the Northern Sea Route.

Despite its position as a non-Arctic state, China is overshadows by its interest in infrastructure investments in the Arctic region, "the BRI is a \$5tn plan to upgrade infrastructure between Asia and Europe — dwarfing the Marshall Plan, which spent roughly \$120bn to rebuild European infrastructure after World War II" (Gudjonsson and Nielsson, 2017).

⁸⁶ China first ice breaker research vessel, Xuelong was constructed in Ukraine, and has been in service since 1994 (Chi, 2017).

China's Arctic initiative, the third of its blue economic passages, has the potential to reduce transport time and cost. However, as China will be unable to control access, it will not grant a competitive edge. The strategic importance of the maritime passage is that it circumvents multiple maritime chokepoints with the potential to influence global trade profoundly.

Conclusion

After securing its northern borders China turned its attention south, supported by double-digit increases to its defence budget. First China expanded its Navy to secure its littoral waters before expanding into the South China Sea. Its Southern waters are strategically significant for a number of reasons. Control of the South China Sea is essential to project power in the region and reduce the risk of sea denial from a US containment strategy which would threaten a significant portion of China's sea trade and its energy supply. The South China Sea contains vast reserves of natural gas which strengthen its position in the region, will help it to keep foreign companies out and negotiate access with its neighbours. Next China turned to the Indian Ocean which stands between China and Africa. While China has no direct access, CPEC provides a land route between China and its port of Gwadar in Pakistan for which it has negotiated access. China has also attempted to gain more direct access through Myanmar and Thailand though it has not been able to negotiate a canal project. China has been docking facilities for the Chinese navy at a number of ports around the Indian Ocean with permission for refuelling, expanding its naval reach. Finally, China has invested significantly in infrastructure projects in Africa, including port upgrades and its first overseas base in Djibouti, near the Horn of Africa. China's sea lines from its domestic ports to East Africa. Twenty-First Century Maritime Silk Road (MSR) in 2013 is a development strategy to boost infrastructure connectivity throughout Southeast Asia, Oceania, the Indian Ocean, and East Africa. China's Maritime Silk Road compliments the Silk Road Economic Belt which stretches across Eurasia. In 2017, the China released the "Vision for Maritime Cooperation Under the Belt and Road Initiative," a document that included an idea for an Arctic link between China and Western Europe, complementing the regime's other plans to construct infrastructure and trade routes connecting the country with Central Asia, the Middle East, and Europe. "Together these initiatives form the One Belt One Road (OBOR) initiative designed to enhance China's influence across Asia" (Green, 2018).

China is ramping up efforts to gain access to overseas ports as it expands its reach as a maritime power, doubling its investments over the past year to \$20bn and pushing ahead with plans to open new shipping routes through the Arctic Circle. China port investments are clustered around its three 'blue economic passages' that will connect Asia with Africa, Oceania, Europe under the Belt and Road

Initiative, "a grand scheme to win diplomatic allies and open markets in around 65 countries between Asia and Europe" (Kynge, 2017; Xinhua, 2017d). China's overseas investments in infrastructure supporting trade routes over land and sea reveal it can be argued indicates a policy to change the geopolitical reality. Land and sea connections come together creating a vast web of networks that have been funded by Beijing, transforming the geopolitical reality. This has enhanced China's position in trade, security, regional security and international bodies. China's action indicates that it wishes to be equal or dominant as a regional power as well as being able to prevent containment. China's investments are spread wide across Eurasia and Africa. China's port investment which spans the South China Sea to Africa cannot be justified by the economic elements taken in isolation.

The next chapter will conclude the analysis of China's sustained investments under that Belt and Road Initiative which transform its access to resources, land lines of communication and sea lines of communication through consciously held long-term aim to reshape the geopolitical reality.

Chapter 6: Conclusion

The previous section discussed China's Sea lines of communication and their rule-making in the international order, highlighting the role of China's evolving foreign policy and engagement in international organisations. It suggests that China, together with allies in BRICS and developing states, is building an alternative to the existing liberal order. "China is a rising power that is confronting an age-old geopolitical problem: what does it do with its new and growing capabilities? How does it project power and turn power into purpose? How does it gain more control over its geopolitical environment, within Asia and the wider world?" (Collins, 2014, p. 1).

China's policies and action in access to resources, land lines of communication and sea lines of communication advances its geopolitical circumstances is such a manner that doesn't make sense on short- or medium-term economic advantages.

Are China's policies, discussed above, having the overall effect of altering the geopolitical reality in ways that improve China's geopolitical position? The chapters are divided into four constituent elements of geopolitics. The scope of the research was initially limited to China and the South China Sea. However, China's recent activities resulted in this being expanded to include Eurasia and Africa due to China's evolving foreign policy. In order to accommodate a wider breadth of study the scope has been narrowed to focus on three constituent elements of geopolitics: access to resources, land lines of communication and sea lines of communication

"Rising great powers inevitably find themselves with growing stakes in how the world is organized, and they seek to help shape that regional and global environment. As their capabilities increase, the instruments of statecraft available to rising powers expand in potency and scope" (Collins, 2014, p. 1). Two competing hypotheses emerged through this process, geopolitical strategy and economic development, and it became increasingly clear that they are interconnected. Continued economic development necessitated an expansion of access to resources, lines of communication and market access. China's growing economic influence allowed it to influence the political and strategic meaning of certain geographical locations and invest its surplus. It is increasingly evident that China's sustained foreign infrastructure investments are guided by consciously held long-term policy.

Distinguishing between economic development and geopolitical strategy is even more problematic, especially as not all strategy is geopolitical, further complicated by the fact that it is not uncommon for states to invest in strategic economic projects without tangible economic returns. It is also true that projects can serve a dual purpose, furthering economic and geopolitical interests, and that many strategic projects will serve both. As a result, projects are considered evidence of geopolitical strategy if they contribute to China's geopolitical strategy in one or more of the four constituent elements of geopolitics and link to China's energy security or Belt and Road Initiative (BRI). China's BRI is the embodiment of its long-term policy which cannot be justified by the economic elements taken in isolation.

Economic development and geopolitical strategy complement one another, enhancing demand and the ability to promote change in the geopolitical reality. China's demand for natural resources has outgrown domestic capacity, necessitating a strategy that seeks to expand access beyond its border. This is particularly evident in Africa where "demand from China for the continents' main exports—oil, iron, copper, zinc, and other primary products—has led to better terms of trade and higher export volumes" (Dollar, 2016, chap. 2). China supports its African exports through infrastructure finance and direct investment which has seen a significant increase since 2000 (Gutman, Sy and Chattopadhyay, 2015, chaps 23–24).⁸⁷

China's African strategy has drawn considerable attention as infrastructure-oriented Official Development Finance (ODF) doubled to \$10bn annually and foreign private financing, known as 'PPI' or private participation in infrastructure expanded from almost nothing at the start of 1990 to \$15bn in 2012. "While China's economic activity in Africa is significant and growing rapidly, often exaggerated in the press and most discourse" similarly, the notion that Chinese direct investment "is saturating Africa with infrastructure financing is overblown" (Dollar, 2016, chap. 54). Even at its peak, China's contribution of \$8bn in 2010 makes it the smallest of the three sources.⁸⁸ In addition, many of its largescale projects that attracted widespread media coverage have quietly been scaled back or fallen through. In part, this is the result of reform efforts that aim to increase transparency and accountability.

Accountability is especially important now that Chinese institutions provide as much in development finance as the top six multilateral development banks combined" (Natalie Bridgeman Fields, 2018). In

⁸⁷ Deficient infrastructure is a dominant factor limiting economic grown and integration with the global, with IMF's analysis suggests raising the quality of infrastructure which is weak across all main sectors (roads, ports, telecommunications, power, water, and sanitation) would spur an estimated 42% increase in trade (Dollar, 2016, chap. 57).

⁸⁸ PPI and ODF provide significantly more financing than does China (Natalie Bridgeman Fields, 2018, p. 54).

late 2017, all major Chinese commercial and policy banks met in a workshop held in Beijing to discuss the role of accountability offices in the BRI, leading to the creation of AIIB's accountability office the following year.

Three reasons have motivated the creation of accountability offices for overseas financing with Chinese financial institutions. First, while it opens such institutions to criticism from parties affected by state-funded projects, the complaints already exist. An accountability office would allow them to hear, address and learn from issues before they escalate. Second, the lack of such a body threatens their reputation for not following international standards and norms on issues like the environment, transparency, and accountability (Stewart M. Patrick, 2018). Third, they assess and reduce the risk of delay or failure that can result from poor execution of social and environmental policies, providing a forum to mediate labour disputes or grievance over land that could otherwise impede a projects progress and success (Natalie Bridgeman Fields, 2018). Reforms in infrastructure investment and financial institutions that engender increasing transparency and accountability, in line with international norms, successfully enhance China's influence and that of the AIIB. This leads to increasing acceptance of China's role in the global economic order and BRI project which will, in turn, promote continued economic development and finance future investment. China's geopolitical strategy helps further economic interests, feeding back into growth and influence.

The three core chapters have discussed the constituent elements of geopolitics: access to resources, land lines of communication and sea lines of communication. Geographic characteristics and human capacity determine geopolitical reality at a given time and location. Natural resources gain and lose value with substantial shifts in technology that shape demand. Even large-scale infrastructure projects rarely alter access and security on a regional scale. As a result, the value of a region is relatively constant, changing with significant breakthroughs in technology, including significant advances in transportation, energy production and resource extraction. The invention of the wheel, horse and carriage, steam engine, flight, the telephone and internet reshaped the world by changing our understanding of distance. This advancement changes our understanding of accessibility and at the highest-level global dominance becomes a viable political aim through advances in technology the overcome geographical barriers. In energy, the technology to access offshore oil, fracking, pipelines, and new forms of energy productions were all significant.

China's infrastructure investment in new road, highway and high-speed rail projects is replacing river travel under the "increasingly nebulous and all-encompassing" BRI, connecting Thailand, Laos, Cambodia

and Myanmar (Bernstein, 2017). China dollar diplomacy transformed the 'Greater Mekong Subregion,' also known as the 'Golden Triangle' to enhance regional influence and energy security, ending a way of life for millions that had persisted for more than a century.⁸⁹ It illustrates how the relationship between access to resources and transportation change over time with technology. The rivers, previously valued as a food source, gained potential value through the development of hydroelectricity. The geographic value reflects the development of hydroelectricity, eclipsing its value as a food source. The analytical chapters describe how China expanded its Mekong strategy across Eurasia and Africa. Infrastructure investment is expanding access to resources, and lines of communication that together with new economic centres enhance influence through what is arguably the largest and most ambitious project in history – the Belt and Road Initiative (BRI).

China's double-digit growth over the past two decades helped support its transition from an agrarian to an industrial society, building its awesome manufacturing capacity allowed it to emerge as a global economic power. This rapid industrialisation and urban infrastructure boom have created dependency on energy sources, raw materials and natural resources to maintain economic stability and political legitimacy, resulting in a global quest for resources. The third chapter framed access to resources through diversifying access to natural resources and energy security as national priorities to sustain growth and security. Following a period of isolation characterised by US sanctions and a dependence on the Soviet Bloc, China began a charm offensive, expanding access to natural resources across African, the Middle East and South America. "China's transformation from a peripheral, isolated, agrarian society into a dominant economic force and a key player in the global economy has spawned a voracious appetite for energy sources, raw materials and other critical resources to sustain its economic growth at about 10%" (Burgos Cáceres and Ear, 2012, p. 70).

China has expanded access beyond domestic requirements as a strategy to reduce the effectiveness of sanctions or potential maritime choke points, enhancing economic security and increasing control over global commodity markets. The Strait of Malacca represents a significant geostrategic vulnerability through which 80% of oil its shipments pass through. Adding to China's concern for energy security is an

⁸⁹ For more information on China's involvement in the Mekong regions see Impact of China's Rise on the Mekong Region (2015), Chinese Encounters in Southeast Asia (2017), The Art of Neighbouring: Making Relations Across China's Borders (2017) as well as recent publications by Oliver Hensengerth.

American fleet of warships⁹⁰ stationed at the Changi Naval Base in Singapore (Chan, 2017a, p. 570). The chapter demonstrated a concerted effort to expand access to resources that were initially driven by economic development but later expanded as part of its geopolitical strategy to increase market diversity and expand its soft power to driving availability and pricing. Its regional relations in Asia are rooted in regional trade, energy and security concerns. Beijing is expanding its influence in resource markets together with infrastructure projects and trade relations through the BRI to become one of the biggest players across strategic markets, resulting in significant economic and political influence. China's approach has been termed 'assertively competitive', driven by an 'outward-looking' strategy that combines state-sponsored economic measures with salient political initiatives. China's 'scramble for resources' is supported by infrastructure investment.

The fourth chapter examined China's rapid investment in land lines of communication, representing a strategy that seeks to mitigate its vulnerability to threats from the sea by expanding land links across Eurasia and Africa. Several new pipeline projects are indented to enhance energy security, that together with CPEC and the Gwadar Port, provide access to the Indian Ocean. In 2013, Xi Jinping announced the One Belt One Road (OBOR), renamed to Belt Road Initiative (BRI) in 2016, which illuminates China's geopolitical ambitions. China's expanding trade network is transforming Eurasia and Africa on a grander scale than the Trans-Siberian Railway Network at the beginning of the 20th century. This project extends far beyond market access, rapidly expanding China's economic and political influence across the region.

China's strategy for cross-border trade includes the 'Iron Fangs,' a transportation network the runs along its southern border connecting with CPEC, a crucial component of both land and sea components of the BRI. The Silk Road Economic Belt aims to increase influence across Eurasia and expand access to deep sea ports in Burma and Pakistan. The geopolitical impact of China's new land routes is more apparent than expanding access to resources as it has a more obvious impact on global trade. In addition to circumventing maritime choke points, these new routes will significantly cut shipping time and transportation costs, altering the viability and competitive edge of suppliers on a global scale. New routes effectively reduce the perceived and geographical distance between major markets. China's

⁹⁰ Three Littoral Combat Ship (LCS) have deployed to Singapore since 2013, with plans to simultaneously deploy two of the ships to Singapore in 2018 (Stashwick, 2017).

expansion is supported by dollar diplomacy, supporting an organised and well-funded geopolitical strategy in Africa, CPEC and the BRI.

China has invested in several pipeline projects to circumvent maritime chokepoints. However, reports suggest that it is an ineffective strategy. The fixed line and predetermined capacity cannot compete with the unlimited capacity of sea lines. As a result of their static nature, pipelines are inherently more vulnerable to security concerns than the sea lines that they seek to alleviate. Pipelines are highly vulnerable due to their dependence on the end supplier and the physical vulnerability along the entirety of its length to damage from natural forces, cyber attacks, accident damage, vandals, saboteurs, and terrorists.

China's economic and labour surplus allows it to pursue a grand strategy of 'peaceful rise through Euro-Asia' without significant opposition, as Taiwan and India cannot afford to compete. China's 21st-century Maritime Silk Road compliments its Silk Road Economic Belt, creating a robust transportation network that allows greater market access and control, translating its geopolitical influence into political power. Geographical influence translates into political power through access and control of natural resources and lines of communications, or more simply control of the means of production and trade.

The fifth chapter discussed sea lines of communication (SLOC), looking at China's acquisition of overseas ports, naval expansion, maritime routes and chokepoints in connection with its expanding land networks. As the backbone of global trade, SLOC is fundamental for economic stability, accounting for 80% of global trade by volume. An estimated 60% of China's trade-in value passes through the South China Sea. China has invested heavily in expanding its naval influence, port access and infrastructure. China has increased its investment and participation in maritime security and anti-piracy to promote its image and soft-power as a responsible great power. Evidence suggests that energy security plays a central role in China's naval expansion with a focus on reducing China's reliance on the US Navy and its vulnerability to maritime choke points. Without the fear of sanctions and blockades, it is likely that China would have felt secure with increased participation in the existing international security framework. Significant regions include the South China Sea and Indian Ocean as well as its ports in Africa, expanding its access to markets and natural resources. Port access in the Indian Ocean provides logistical support blue water operations. Its first overseas base in Djibouti, next to the Horn of Africa is a crucial channel for energy imports. Three 'blue economic passages represent China's vision for maritime trade.' China's maritime strategy represents an attempt to alter the geopolitical reality of ocean trade

through dollar diplomacy and infrastructure investment intended to enhance seapower and expand access to ports and natural resources.

After securing its northern border China turned its attention South, expanding its naval capacities from its littoral into disputed waters. Control of the South China Sea is central to China's maritime security and ambitions as a regional power. The value of trade that passes over its water's dwarfs that of the natural resources found below them. Instead of promoting regional cooperation and integration into the existing liberal order, China's strategy seeks to reduce the US naval influence and expand its own, evidenced in the rise of conflicts, territorial disputes and construction of artificial islands. China rejected the 12 July 2016 UNCLOS ruling that stated China has no legal basis or historic claim on the Nine-dash line (PCA, 2016, p. 9). China is willing to upset regional trade and continue a major conflict which has involved the US, UK and Australia in order to pursue its long-term policy to exercise sea control in the South China Sea, which region which has both security and economic value. China's maritime trade and supply routes stretch from its Southern Ports through the Indian Ocean and up into the Middle East and Europe, passing through a series of maritime choke points which are vulnerable to US containment strategies.

China has attempted to gain direct access to the Indian Ocean with Myanmar (Burma) and Thailand, but negotiations for a canal project were unsuccessful. CPEC provides a land route from China to the port of Gwadar, providing logistical support for naval operations with permission for docking and refuelling, supporting its blue water ambitions in the region. China's port activities are best characterised by dualuse logistics facilities, emphasising a light footprint and logistical support for economic and overseas non-traditional security missions that are not consistent with preparations for large-scale conventional conflict. The economic benefit of the land route is relatively limited in capacity when compared with the volume of maritime trade. China has increased investment in bordering countries and negotiated access to other ports, enhancing influence and access to ports in Africa and beyond.

China's infrastructure investments in Africa are extensive. In comparison to other regions, China's projects in Africa enhance connectivity across a region whose development has been constrained by poor infrastructure. As a result, China has framed its investment in the area as a poverty reduction strategy that has yielded significant political and economic influence. China's port projects and its first overseas base in Djibouti enhance access to natural resources and seapower in the Indian Ocean. Not all ports projects will automatically translate into the ability to exercise seapower. However, China is scaling up its naval presence beyond its coastal waters as it transitions from a continental to a maritime

power, suggesting a two-ocean naval strategy, covering the Pacific and the Indian Oceans (Kaplan, 2011; Krupakar, 2017; Brewster, 2018b). "China has managed to string together a patronage network of multiple South Asian coastal nations through massive investment spending, focused port development projects, and collaborative naval equipment transfers" (Mukherjee, 2018). With ports in Bangladesh (Chittagong), Pakistan (Gwadar) and Sri Lanka (Hambantota), the Kyaukpyu port project in Myanmar would be the third Chinese port in India's vicinity.

Using the Maritime Silk Road as a pretext for this strategy, China has established interdependencies between itself and various South Asian states. The Maritime Silk Road is a product of strategy aiming to establish interdependencies between itself and various South Asian states. The dual-use ports have the potential to be used for surveillance missions with the aim to secure its sea lines of communication (SLOCs) in the Indian Ocean and its surrounding waters are home to China's principal shipping lanes.

Consequently, the impact of China's policies in terms of altering the geopolitical reality in the region is more apparent, owing to the areas need for investment and infrastructure for economic development. Developing countries are in a weaker position to negotiate or oppose China's Belt and Road Initiative as they become increasingly dependent on Chinese investment and trade.

China seeks dominance in the South China Sea, evidenced by territorial disputes and the rise of conflicts with the US, Vietnam⁹¹ and the Philippines. Beijing has rejected the tribunal's ruling in the South China Sea case, instead, seeking to settle disputes through bilateral agreements. On 28 March 2018, Chinese Foreign Minister Wang Yi announced that China and Vietnam are moving towards a settlement agreement on the status of their sovereignty claims in the South China Sea (Vu and Nguyen, 2018). China's activities in the South China Sea, including its expanding naval power, the construction of artificial islands and attempts to negotiate a canal into the Indian Ocean represent an attempt to enhance their sea control and sea denial capabilities. "If China has had doubts about the dependence of its economy—and, as a result, the survival of the regime—on its sea lanes, that uncertainty has long

⁹¹ Beijing's relationship with Hanoi has been rocky since the 1979 Sino-Vietnamese War. In 2014, Vietnam responded to an attempt to drill for oil in disputed waters near the Paracel Islands. Beijing responded in kind by dispatching its own vessels and one Vietnamese fishing boat was rammed and sunk during the altercation (Maritime Executive, 2018).

since been removed by a number of Western "strategists" writing that in time of conflict the way to bring China to its knees is to cut its sea lanes" (Mcdevitt, 2016, p. 38).⁹²

China's 2015 defence white paper states, the PLA Navy strategy "will gradually shift its focus from offshore waters defence to the combination of offshore waters defence with open seas protection" (National Defence Ministry, 2015, p. 14). In short, "open seas protection" will become a priority, necessitating a build-up in the navy's far-seas-capable ships (Mcdevitt, 2016, p. 67). "Open seas protection" are not exclusively a far seas mission, including SLOC protection operations that would take place in both China's near seas and far seas to protect China's sea lanes that cross the Indian Ocean en route to or from China (Mcdevitt, 2016, p. 36).

China's port activities enhance its capacity as a maritime power, helping to mitigate the risk of maritime choke points. Anti-piracy deployments have taught PLAN the importance of having sufficient multi-purpose replenishment ships. Replenishment ships and dual-purpose ports signal China's out-of-area ambitions, providing logistical support for continuous far seas operations in addition to the counter-piracy patrols (Mcdevitt, 2016, p. 43).

"There is an inherent duality in the facilities that China is establishing in foreign ports, which are ostensibly commercial but quickly upgradeable to carry out essential military missions," says Abhijit Singh, a senior fellow at the Observer Research Foundation in New Delhi. "They are great for the soft projection of hard power" (Kynge *et al.*, 2017). "The strategic positioning of MSRI [Maritime Silk Road Initiative] port projects at key trade chokepoints better position China to perform blockades while simultaneously making themselves resistant to that form of economic coercion" (Causwell, 2018). China recognises the strategic significance of its port projects around the Gulf of Aden, Malacca straights, and Myanmar as a vital to securing their shipping lanes against foreign interference and reorganising sea routes to their advantage (Causwell, 2018; Thorne and Spevack, 2018). Investments in those ports also give China more financial leverage over developing countries. By initially financing Sri Lanka's Hambantota port project, China ensnared the former in insurmountable debt, eventually compelling a

⁹² See for example, Douglas C. Peifer, "China, the German Analogy, and the New Air-Sea Operational Concept," Orbis 55, no. 1 (Winter 2001); T.X. Hammes, "Offshore Control: A Proposed Strategy for an Unlikely Conflict," Strategic Forum 278 (Washington, DC: NDU Press, June 2012); Geoff Dyer, The Contest of the Century: The New Era of Competition with China and How America Can Win (New York: Knopf, 2014), chapter 2; and Sean Mirski, "Stranglehold: Context, Conduct and Consequences of an American Blockade of China," Journal of Strategic Studies 36, no. 3 (2013).

transfer of port ownership to a Chinese state-owned enterprise. Yet, Sri Lanka's Chinese debt bondage woes remain (J. Hillman, 2018).

China's ports in Africa support extensive trade lines that enhance access to natural resources and a strategic labour market that will become increasingly valuable as China transitions away from a manufacturing-based economy. China's growing influence in the African continent provides a crucial base of soft-power. China's 21st Century Maritime Silk Road includes three 'blue economic passages' that will connect Asia with Africa, Oceania and Europe, foster an economic and political shift to Asia supported by new economic centres.

China's shift in strategic behaviour is transforming the geopolitical reality through substantial investment in new infrastructure, enhancing China's position in trade, security, regional security and international bodies across Eurasia and Africa. China's investments include the Belt and Road Initiative (BRI), Silk Road Fund (SRF), New Development Bank (NDB) and Asian Infrastructure Investment Bank (AIIB). In 2013 China announced the \$900bn BRI project and in 2014, China pledged \$40bn to the SRF and \$41bn of the initial authorised capital of \$100bn for the NDB. In the same year, China doubled the initial registered capital of the AIIB from \$50bn to \$100bn, equivalent to two-thirds of the capital of the Asian Development Bank and about half that of the World Bank, accounting for a total investment of \$1.081tn across new economic centres. China's role in establishing these institutions, the Cross-Border Interbank Payment System (CIPS) as an alternative to the SWIFT system, the formation of an oil buyers' club to engage with OPEC, and the SCO challenges our understanding of geopolitical reality as *la longue durée*⁹³, something that changed over an extended period. China is demonstrating that it is possible for

⁹³ The longue durée, an expression used by the French Annales School of historical writing to designate their approach to the study of history, is part of a tripartite system that designates three categories: in short, medium and long-term snapshots. Fernand Braudel's approach "gives priority to long-term historical structures over what François Simiand called histoire événementielle ("eventual history", the short-term time-scale that is the domain of the chronicler and the journalist), concentrating instead on all-but-permanent or slowly evolving structures, and substitutes for elite biographies the broader syntheses of prosopography. The crux of the idea is to examine extended periods of time and draw conclusions from historical trends and patterns" (Grote, 2015, p. 5). In short, history can be viewed in short, medium and long-term snapshots; historians should focus on long-term historical structure, leaving short-term changes to journalists.

a major power with sufficient economic surplus to rapidly transform the constituent elements of geography and the geopolitical reality itself.

In less than a decade, China has established itself as a new economic centre that represents a viable alternative, prioritising infrastructure projects in smaller and developing nations that would be deemed not feasible by Bretton Woods institutions. Its banks support infrastructure investment and economic development in countries that are dependent on outside support with a high-risk tolerance and faster approval rate. China's strategy challenges the existing global economic order, increasing its influence while pushing for reform. Its financial statecraft aims to establish the rules of the global economy, and 'behind-the-border' measures are perceived as a threat to western interests, shifting the centre of gravity to Asia. China's soft balancing against the US pivot to Asia represents a push against the notion of an international rules-based order subscribed to throughout the West, deciding who will take the lead.

Currently, it appears that China has neither the interest nor the ability to replace the current liberal order from which it continues to benefit. China's stance is not unexpected, as it has shown a penchant for adopting a wide range of approaches. China can be characterised as a 'reform-minded status quo state' acting to shape the existing order to further its interests. China is already writing the rules in infrastructure investment through cooperation with existing institutions and promoting Asian focused international intuitions. As a new economic centre, China's increasing influence within the existing order and its ability to shape the new rules-based order, representing a concerted effort to alter the geopolitical reality across Eurasia and Africa.

Analysis across the constituent elements of geopolitics addresses a gap in the existing literature, yielding significant conclusions that contribute to an understanding of China's grand strategy. As China grows in economic influence, it has begun to reflect on its image as an emerging great power, compelling a revaluation of its non-interference policy in response to growing overseas interests and responsibilities reflected in increased participation in regional security, negotiations and peacekeeping. China's actions are the product of three primary influences: economic development, geopolitical strategy and a response to external pressure, threats and events that challenge its economic stability and the government's credibility.

Considering these factors, it is clear that China's geopolitical strategy enhances a broad range of interests. Policy and state spending directly address China's growing energy security concerns and
overseas interests, as well as fears of international sanctions and blockades through enhancing naval strength, supply chain diversification and infrastructure projects. Influence and market dominance derived from trade volume, control of financing, infrastructure and free trade zones further enhance influence and control of pricing and availability in major markets. An increasing role in maritime security expands maritime influence and promotes an image of a responsible rising power. Furthermore, it reduces its dependence on the US and increases its engagement in NATO, which helps PLAN develop its blue-water capabilities, an essential aspect of gaining dominance in the South China Sea.

As the leading energy importer, China wields significant influence in the global energy market and OPEC in particular. Growing demand has driven market diversity, pipeline investment and a shift in foreign policy. China has adopted a geopolitical strategy emphasising infrastructure investment, shaping a foreign policy shift in Africa and an 'Arab Pivot' signalling the end of non-intervention (Okolo, 2015; Luft, 2016).

While many examples of China's strategy demonstrate the capacity to transform the geopolitical reality China's, its concerted efforts to rapidly enhance its access to resources and markets through the Belt and Road Initiative, which was written into the constitution as a means of expanding sea and land lines of communication that China's capacity to transform the geopolitical reality is revealed. Access to resources is dependent on lines of communication. Transforming lines of communications requires access to resources and financial institutions for infrastructure investment in ports, pipelines and rail enhance connectivity and access to resources. Alternative routes carry security and economic benefits. Lines of communication can be shorter and more cost-effective, as well as circumventing or limiting the effectiveness of chokepoints. This, in turn, enhances Beijing's position and influence in relation to strategic locations. Access to resources and lines of communications help support China's continued economic development and exports to global markets which support further transformation through infrastructure investment, securing Beijing's position as a new financial centre. China's position as a new financial centre emerged with the BRI, driving mega infrastructure projects. On its own, an attempt to transform access to resources or lines of communication would be difficult to achieve, with limited results. Without China's mega infrastructure projects, it would be difficult to gain international backing for the AIIB and strengthening China's position not only as a major economic market, but as a new financial centre.

Beijing's policy shift to Eurasia can be seen as a countermeasure, balancing against the US Pivot to Asia, which excluded China from the US-led TPP and its opposition to China's economic diplomacy and the

AIIB (Ratner, 2013; Zhixin, 2014; Xue, 2016; Chan, 2017a). The emergence of the AIIB (and, in the case of BRICS, the New Development Bank), represents in part, a response to frustration with existing multilateral financial institutions, "whose voting structures are stacked against emerging countries (see Chan, Lee, and Chan 2012, 64–67; Donnan 2015; Dove 2016; Etzioni 2016; Kastner, Pearson, and Rector 2016)" (Chan, 2017a, p. 572).

"China has created a Eurasian zone of economic influence to its west in order to offset the imminent threat from the US from the east" (Chan, 2017b). A shared frustration among emerging powers with the voting structure of existing multilateral financial institutions motivated support for the AIIB, see (Chan, Lee and Chan, 2012, pp. 64–67; Donnan, 2015; Dove, 2016; Etzioni, 2016; Kastner, Pearson and Rector, 2016; Chan, 2017b). As the AIIB increases cooperation with the NDB and Bretton Woods Institutions Beijing has attempted to distance multilateral development bank from its Eurasian development strategy, the BRI (Shepard, 2016; Sarah Zheng and Kristin Huang, 2017). "The big banks have held conferences on BRI, appointed senior bankers to champion their role in the initiative and set up committees to coordinate their approaches across different business activities," seeing the Belt and Road Initiative as "a generational opportunity to expand the scale and reach of their businesses" (Arnold, 2018). Beijing uses economic diplomacy to strengthen its position as a global power, increasing its influence of lines of communication, global commodities and financial institutions while securing its domestic legitimacy through continued economic development.

While many examples of China's strategy provide evidence of China's attempt to alter the geopolitical reality, few can stand on their own. It is only through viewing the constituent elements of geopolitics together that China's attempt to transform the geopolitical reality is revealed.

China's actions in the South China Sea, which includes the Nine-Dash Line, rejection of UNCLOS and construction of artificial islands, represent an attempt to alter the reality of the region. Some scholars claim that China is adopting a 'String of Pearls' strategy in the Indian Ocean, but this is not a convincing argument. The BRI is the single most compelling piece of evidence, which incorporated massive investment in transforming lines of communication across land and sea to enhance access across Eurasia and Africa. This is further strengthened by the AIIB which was also unveiled in the same month.

According to China's 2015 white paper, "China's armed forces will adapt themselves to new changes in the national security environment" and ", implement the military strategic guideline of active defence in the new situation" (National Defence Ministry, 2015, p. 3). This strategy that reflects changes in the

national security environment, state interests through military modernisation and directs building and employment of the country's armed forces to "safeguard China's sovereignty, security and development interests."

With the growth of China's national interests, its national security is more vulnerable to international and regional turmoil, terrorism, piracy, serious natural disasters and epidemics, and the security of overseas interests concerning energy and resources, strategic sea lines of communication (SLOCs), as well as institutions, personnel and assets abroad, has become an imminent issue. (National Defence Ministry, 2015, p. 6)

A grand strategy can be discerned which gives direction to China's foreign policy and surpluses (which allow China exert a degree of control over supply, pricing of resources) in an attempt to alter the geopolitical reality and restore its position as a great power and regional dominance in the Indo-Pacific, powerful enough to counter Washington when needed (Mastro, 2019). China's position as a major controller of many natural resources and market power allow for a degree of influence which can and has been applied in foreign policy. This is particularly true in the case of rare earth metals which are required in the manufacturing of many high-tech industries and has been cited in political rows with Japan and South Korea. "Deng Xiaoping once noted that while the Mideast has oil, China has rare earth elements" (Moran, 2010). In addition, metal exports have impacted US manufactures in the recent Sino-US trade war under the Trump administration.

Significant investment in access to resources, lines of communication and economic centres enhance entire supply chains across Eurasia and Africa, furthering its influence through supporting an alternative global order. The BRI has a fundamental goal of "enhancing the connectivity between Asia and Europe and bridging the 'infrastructure gap' across the Central and Eastern Europe" (Chen and Gao, 2018). The Silk Road Economic Belt connects existing rail lines to create a vast Eurasian network. It is now possible to transport freight from London to Beijing in 15 days, travelling over 12,99 km of rail (Josephs, 2017).

India has opposed the BRI, suspicious of it aims to further China's influence which it views as a threat to its national security and regional influence. Xi Jinping defended the project saying, "China has no geopolitical calculations, seeks no exclusionary Blocs and imposes no business deals on others", while skirting practical issues, including "concerns over its projects traversing through disputed regions such as Pakistan-occupied Kashmir" (PTI, 2018). The framing of the BRI around connectivity suggests strategic intent.

169

While some projects, including schools, hospital and stadiums give the appearance of isolated or unrelated investments, a closer look will see they frame political interests, as a tool of economic diplomacy to help secure regional support for additional infrastructure. This is most apparent in Africa where a series of highway, rail and seaport projects link together to create a transportation hub that connects vital markets and resources to Chinese shipping lines.⁹⁴

Additional infrastructure projects, including airports, energy and telecommunication networks and free trade zones compliment these networks. Shipping lines link China's first overseas naval base in Djibouti with ports in the Indian Ocean for which China has negotiated access for docking and refuelling, as well as joining the international community in enhancing maritime security through anti-piracy missions that help develop its blue-water navy. Ports in the Indian Ocean connect with CPEC allow ships to offload goods and resupply, granting a significant logistical advantage. From the Indian Ocean, shipping lines cross into the South China Sea where China is contesting freedom of navigation in the South China Sea. China is investing in a third maritime passage in the Arctic in cooperation with Russia and other Arctic-states, though this is still in the early stages of development.

Within its littoral waters, China has developed significant infrastructure supporting maritime trade. China is home to seven of the ten largest ports in the world, including Shanghai, Shenzhen, Hong Kong, Ningbo-Zhoushan, Qingdao, Guangzhou and Tianjin (World Shipping Council, 2018). These ports connect sea lines with domestic manufacturing districts, economic centres and international shipping hubs. In cross-border trade, goods travel along a robust network of high-speed rail and a growing network of pipelines enhancing China's energy security.

Considering all the factors we have discussed, it is clear that China is attempting to alter the geopolitical reality through infrastructure investment, new financial institutions and multilateral cooperation, turning itself into a new economic centre (while some may argue that it is already a powerful economic centre). Evidence of this can be seen in the impact of the Sino-US trade war 2020-2021). China is building an alternative to the liberal order with allies in BRICS and developing states. China's rapid economic development has created the necessary surplus to commit to this undertaking. The effect of China's influence can already be seen in Africa where its projects produce a significant impact. The effect across Eurasia is less pronounced due to existing infrastructure. China's influence on infrastructure

⁹⁴ See Figure 67 for proposed trans-Africa highway network (2003).

investment and MDBs has prompted a noticeable shift in the global economy with the emergence of the NDB, AllB and the growing importance of BRICS and emerging economies.

Australia was excluded from China's Belt and Road Initiative for the same reason despite its strategic importance. Geopolitically, Australia is in a triangle between China, Taiwan and the US. Hugh White discusses Australia's position and the potential for balancing in 'The China Choice' (2012). China has invested in Australian infrastructure and agriculture. China purchased the Port of Melbourne, the countries busiest port for an inflated price of \$7.3bn, \$4.3bn being the target set by the Victoria state government (Lefort and Kaye, 2016). Two months later, the State government barred China's \$25.1bn bid on a majority share in Ausgrid, the country's largest electricity network despite an evaluation of \$20.8bn two months prior, citing national security concerns. China was critical of the lack of transparency, describing the move as protectionist and a threat to future Chinese investments (Jonathan Barrett and Sue-Lin Wong, 2016). Clive Hamilton examines China's presence in his controversial book, 'Silent Invasion: China's influence in Australia' (2018).

The research raises an interesting question concerning the balancing of cooperation and competition between regional powers exercising economic diplomacy through infrastructure investment to influence spheres of influence. Russian investments focus on Central Asia under the EEU. India has expressed concern over China growing influence. As a rival and partner, how will its involvement in BRICS and SCO develop as China proceeds with the BRI? In South East Asia, Japan, South Korea and Taiwan have their strategies to enhance influence. Japan presents a second strategy of engagement through quality infrastructure investment as a tangible response to the AIIB (Basu, 2018). Japan is using infrastructure investments for the dual purpose of increasing influence and engaging China as well as Korea and Taiwan. Pressure to reform goes both ways. The AIIB currently has 87 members, how can states pressure China and influence reform from within the institution? This pressure must apply to China as well if it wishes to challenge the status-quo by offering an intuition that differentiates itself from the Bretton Woods system and long-established counterpart Multilateral Development Banks.

It can be argued that the previous chapters that the US policy of 'America First' is not going to contain China. Future research is needed to examine the viability of potential vectors for engaging with China. One strategy is through with large trade Blocs like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), also known as TPP- 11, through trade diversion pressure, which aims to write the rules on the global economy and to pressure China on issues including intellectual property rights, SOE protections and technology transfers.

171

The emerging global order and MDBs present a challenge to the liberal order with faster approval times and high-risk tolerance. The IMF and World Bank are not viewed favourably by developing states which accuse them of operating with a bias, inequality and double standards. Economic growth has slowed in developed Western states relative to the developing world, recognised in the term BRICS, coined by former Goldman Sachs chief economist Jim O'Neill. Institutions should re-evaluate policies on infrastructure investment and streamline the approval process to increase appeal to developing states. If these institutions fail to prioritise emerging economic states, they will be succeeded, unable to influence the direction of future rules of the global economy and 'behind-the-border' measures.

Russia, India and China are leading players in the region that are currently cooperating under BRICS and SCO. Given China's disproportionate weight in BRICS, the long-running rivalry of Sino-Indian relations and suspicion of Sino-Soviet relations it is expected that the BRI will continue to complicate BRICS cooperation. India and Brazil appear suspicious of the AIIB, which stole the thunder of the NDB. India is very protectionist and has already had issues with ASEAN plus six (Katada, 2018). It would be useful to examine the future of China's relationship with the Bloc. What are the broader geopolitical aims of BRICS and will BRICS continue to support China's geopolitical revision? We could be coming to the end of China's peaceful rise.

The United States, under the Trump administration, took a number of steps towards withdrawing from the liberal order (Paris Peace Agreement and Iranian Nuclear Deal), leaving multilateral engagement in favour of bilateral negotiations and trade wars, creating opportunities for others to step up as a responsible global power. American has begun to reverse course under President Joe Biden, but undoing the damage to US relations under the previous administration will not be a quick or easy process. Biden has re-joined the Paris Peace Agreement but Iranian Nuclear Deal won't be as easy. "While Mr. Biden's pledge pleased the deal's other signatories, who were angry that President Trump withdrew from it two years ago, returning to the way things were may be impossible, complicated by both Iranian and American politics" (Erlanger, 2020). Trumps actions will have a lasting impact on America's role in the global order. This is reducing Washington's influence in central regions, including the Middle East, and institutions through actively encouraged the breakup of the EU and has questioned the utility of America's longstanding security alliances with NATO (Stokes, 2018, p. 133). Moving forward, the certainty of America's future role in the liberal order is uncertain after it withdrew from agreements and gave a voice to nationalist groups. It is unclear how the long-term fallout will effect its role or what or if another Trump like figure will be the next Commander-in-chief, however, it seems likely that the

withdrawal of the US will result in a shift to a more multipolar or polycentric order in which China has taken a greater share of the influence.

Classical geopolitics is a synthesis of three disciplines: geography, strategy and history. Its utility as a theoretical model provides an important analytical tool that can be used across a broad spectrum of geopolitical contexts and events to further our understanding of contemporary issues. My original contribution to the literature is the synthesis and analysis of the constituent elements of geopolitics to illuminate China's current and future trajectory. China's maritime actions in the South China Sea, Indian Ocean and Africa, as well as its Eurasian strategy, cannot be adequately explained without an analysis of how China's actions in these regions enhance China's access to resources, lines of communications and influence as a new economic centre. The importance of correctly assessing China's actions cannot be denied as rising tensions increase the risk of emerging flashpoints.

Counter to Grygiel's claims that geography is a *de facto constant,* this thesis argued in chapter 2 that that reality is not an objective force, and with a sufficient surplus of resources, states can alter this reality (Grygiel, 2006, p. 23; Sloan, 2017, p. 15). This thesis demonstrates that, at a tremendous expense, China is able to alter the geopolitical reality and provides a robust analysis of China's current trajectory. Projections of China's future trajectory are dependent on its continued economic development and continued cooperation of its partners. The classical geopolitical framework proposed in this study, of course, is not the sole explanation for China's actions and regional cooperation, as it does not include sovereignty, which is a guiding principle of Beijing's foreign policy, including Taiwan and the Western provinces of Xinjiang and Tibet. Instead, it provides a plausible understanding of China's Eurasian strategy.

This thesis has argued that China has been following a strategy that has a close congruence to a geopolitical approach, it becomes increasingly apparent that China has an overarching strategy that recognises the importance of the constituent elements of geopolitics. Attempts to diversify access to resources, on their own, offer insufficient support for this hypothesis. However, when viewed in conjunction with the other elements the evidence begins to aggregate, creating a narrative of the

173

\$900bn Silk Road revival project⁹⁵ working in parallel with institution building. Furthermore, it exemplifies the mutability of geopolitical reality by human agency.

While its effectiveness is contested, Beijing is pursuing a policy of massive infrastructure investment, including port and rail projects through the Belt and Road Initiative (BRI), together with the emergence of the Asian Infrastructure Investment Bank (AIIB), are altering the geopolitical reality, with real-life consequences for global trade and the international rules-based system. Returning to the original question, I believe the evidence in the preceding chapters, which detail China's policies that enhance its access to resources and lines of communication, reveal a willingness of the Chinese to undertake a scale of sustained investment that suggests a complex and consciously held long-term policy. The components of which could not be justified by the economic elements taken in isolation. Beijing's willingness to invest in capacity and networks that have as yet unforeseen positive spinoffs. Given the scale of China's actions and that many of its projects are still under way, it would be difficult to give a comprehensive analysis of the geopolitical implications of China's policy beyond the trends that have been outlined in the substantive chapters. However, it has become evident that China has a growing role in global economics, trade and security through policies that enhance access and control of natural resources and infrastructure through the BRI. China is an exemplar of the argument that a state may have agency to modify geopolitical reality, as was done with the construction of the Suez Canal and Trans-Siberian railway, and as this thesis has argued, China is doing now with a range of initiatives. In conclusion, this thesis emphasizes that China is an exemplar of the argument that a state may have agency to modify geopolitical reality, as was done with the construction of the Suez Canal and Trans-Siberian railway, and this is what China is doing now with a range of initiatives.

⁹⁵ The Belt and Road Initiative (BRI) enhances lines of communication and access to resources through the Silk Road Economic Belt and the 21st-century Maritime Silk Road.

Appendix

Chapter 2



Has already or will eventually replace U.S.





Median % across 18 countries surveyed in 2009 and 2011. PEW RESEARCH CENTER.

Figure 6 Opinion poll of China's rise 2011

Americans, Chinese differ on China's future as world's leading superpower

Which comes closest to your view?



Figure 7 Views of China in 2017

More Western Europeans Convinced China Is World's Leading Economy

	Nam		as world	's leading er
	2009 %	2010 %	2011 %	09-11 Change
Spain	22	34	49	+27
Germany	28	51	48	+20
Britain	34	44	47	+13
France	35	47	47	+12
PEW RESEARC	H CENTE	R Q26.		

Figure 8 European views of China

Will China Replace U.S. as World's Leading Superpower?

	Has already replaced U.S.	eventually		Will never replace U.S.
	%	%	%	%
U.S.	12	34	46	45
France	23	49	72	28
Spain	14	53	67	30
Britain	11	54	65	26
Germany	11	50	61	34
Poland	21	26	47	31
Russia	15	30	45	30
Lithuania	11	29	40	40
Ukraine	14	23	37	36
Turkey	15	21	36	41
Palest. ter.	17	37	54	38
Jordan	17	30	47	45
Israel	15	32	47	44
Lebanon	15	24	39	54
China	6	57	63	17
Pakistan	10	47	57	10
Japan	12	25	37	60
Indonesia	8	25	33	46
India	13	19	32	17
Mexico	19	34	53	31
Brazil	10	27	37	47
Kenya	7	37	44	43
Not asked in	Equat			

Not asked in Egypt.

PEW RESEARCH CENTER Q28.

Figure 9 Global views of China

Source: Pew Research Centre, global attitude project (Pew Research Center, 2011; Wike, 2011; Manevich, 2017)

The Spectrum of Chinese Global Identities

Nativists 中国不高兴 (China is unhappy). A collection of populists, nationalists, and Marxists that would to close China's borders and seek international autonomy. They distrust the outside, viewing international multilateral involvement as a 'trap' to draw China into costly commitments overseas.

Realists Another group of nationalists, "China Firsters" place the principle of state sovereignty above all else, while being more pragmatic and less xenophobic but care little for other states or global affairs.

Major Powers 大国师是首要 (major powers are of primary importance). Diplomatic efforts should focus on great powers to protect and Chinese interests.

Asia first 'Every power must protect its own yard', China should focus efforts on its immediate periphery and Asian neighbourhood to promote regional stability and enhance national security.

Global South Identifies with developing states due to a shared history of colonialism and imperialism and advocates a more balanced foreign policy of non-intervention and "no strings attached" aid to its long-term partners.

Selective Multilateralism Viewing contributions to global governance as a tactic, a gradual expansion of global involvements should follow on issues directly affecting national security and demonstrate China's involvement in global issues.

Globalists Embracing globalization, they favour diplomacy, soft power and pan-regional partnerships. China should increase its engagement in global governance and become a 'responsible power'.



Figure 10 Spectrum of Chinese Global Identities

English Name	Chinese Name	Reclaimed Area
Subi Reef	Zhubi Jiao (渚碧礁)	976 acres reclaimed
Mischief Reef	Meiji Jiao (美济礁)	1,379 acres reclaimed
Johnson Reef	Chigua Jiao (赤瓜礁)	27 acres reclaimed
Hughes Reef	Dongmen Jiao (东门礁)	19 acres reclaimed
Gaven Reefs	Nanxun Jiao (南薰礁)	34 acres reclaimed
Fiery Cross Reef	Yongshu Jiao (永暑礁)	677 acres reclaimed
Cuarteron Reef	Huayang Jiao (华阳礁)	56 acres reclaimed

AMTI figures tracking Chinese reclamation projects in the South China Sea

Figure 11 AMTI figures tracking Chinese reclamation projects in the South China Sea (AMTI, 2017)

Chapter 3

China's Trade with Non-Communist Countries							
Period	Imports	Exports	Trade Balance				
Jan. – June 1950	112	170	58				
July – Dec. 1950	302	230	72				
Jan. – June 1951	· · · · · · · · · · · · · · · · · · ·						

Figure 12 Communist China's Trade with Non-Communist Countries (CIA, 1951, p. 9a)

China's 1951 foreign trade data published in percentage form						
	Soviet Blo)C	Non-Communist Countries		Total trade	
Period	Imports	Export	Imports	Exports	Imports	Export
		s				s
1950,	17	52	112	170	129	222
Jan/June						
1950,	94	123	302	230	396	353
July/Dec						
1951,	980-	565	420-450	160	1,400-	725
Jan/July	1,050				1,500	

* 1951 imports estimated on the basis of estimated imports from non-communist countries of \$420-450 million (including smuggling).

** 1951 exports estimated on the basis of stated relationship with 1950 exports (In millions of US dollars).

Figure 13 Revised trade figures reflecting China's 1951 foreign trade data (CIA 1951, p.9c)

China's Trade Agree	ements in 1953	
Trade	Exports	Imports
Agreements		
Sino-Soviet Union	US dollars, tea and raw materials.	An electric-power generation plant, machinery for engineering and finishing factories, mining machinery, railway material, especially rails.
Sino-Romanian	Coloured metals, chemicals, oil, fats, tea.	Industrial equipment, products of the electrical industry, oil products, chemicals.
Sino-Bulgarian	Non-ferrous metals, cotton, silk, silk fabrics, tea, livestock products.	Electrical machinery, fertilizers, chemicals.
China–Czech	Resin, silk, hemp, lead, oilseeds, goatskins, wolfram, mica, mercury, tin, leather, asbestos, hob bristles, egg products	Steel and engineering products, locomotives, trucks, rubber, chemicals, pharmaceuticals, textiles, paper products.
Sino-East German	Raw materials, foodstuffs, earths, minerals.	Machinery, electrical and precision instruments, optical materials, chemicals, and metals.
Sino-Hungarian	Raw materials.	Industrial raw materials and mechanical equipment (machine tools, radio equipment, chemical products).
Sino-Polish	Soya, tobacco, wolfram, fats, ores, asbestos, graphite, corn, hides, tea.	Textiles, rolled and general metal products (rails, steel bars, sheet-metal, zinc sheets), workshop equipment and chemicals, railway rolling stock, paper, medicine.

Figure 14 China's trade agreements in 1953 (CIA, 1953a, pp. 1–2)

·				Thousand	<u>us</u>
Country	1954 Total	1955 <u>Total</u>	First Half	1956 Second Half	Total
Europe, Western Hemisphere and South Africa b/	•				
Argentina Austria Belgium-Luxembourg Brazil Cuba Denmark Finland France West Germany Greece Italy Mexico Netherlands Norway Portugal Sweden Switzerlend (c.i.f.) Union of South Africa UK	1,495 445 2,938 185 3,390 8,379 20,554 5,285 N.A. 1,565 28 N.A. 632 4,085 N.A. 18,170	981 2,694 5,435 4,672 418 56 14,606 6,438 28,488 5,841 45 2,791 35 4 1,546 10,568 1,043 22,756	916 4,256 8,059 3,270 8,634 11,003 1,32 3,926 1,023 715 115 7 889 3,072 788 11,216	2,285 11,491 683 1,684 5,289 9,141 20,479 62 6,703 486 4,681 1,077 267 3,361 7,555 337 17,047	916 6,541 19,550 686 6 2,233 8,559 17,775 31,482 10,629 1,509 5,396 1,192 2,396 1,192 2,274 4,627 1,125 28,263
Yugoslavia US Canada	N.A. 6 <u>c</u> 47	0	0 0	3,691 0 2,473	3,691 0 2,473
Plus 10-percent adjustment for c.i.f (except Switzerland)		9,891	5,551	9,124	14,675
Subtotal	73,984	119,368	64,130	107,916	172,046

Recorded Imports of Communist China from Free World Countries, by Value 1954-56 g/*

Figure 15 Recorded imports of Communist China from Free World Countries, 1954-56 (CIA, 1957a, p. 2)

Geographic Distribution of the Foreign Trads of Communist China, by Value 1955 and 1956

10-1101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		·····			
	1955	(Revised)	1956		
Trade with:	Million UB \$	Percent of Total	Million US\$	Percent of Total	
USSR European Satellites Far Eastern Sutellites	2,800 675 200	62.5 15.0 4.5	2,370 760 195	53°7 17°2 4°4	
Total Trade with the Bloc	3,675	82.0	3,325	75.3	
Trade with the Free World	810	18.0	1,090	24.7	
Total foreign trade	4,485	100.0	4,415	100.0	

Figure 16 Geographic distribution of the foreign trade of communist China, 1955-56 (CIA, 1957a, p. 10)

Diplomatic Status of Communist China in 1957			
UN members which recognize		Non-UN members which	
Communist Chin	а	recognize Communist China	
Afghanistan	Nepal	Switzerland	
Albania	Netherlands	East Germany	
Bulgaria	Norway	North Korea	
Burma	Pakistan	Outer Mongolia	
Ceylon	Poland		
Czechoslovakia	Romania		
Denmark	Sweden		
Egypt	Syria		
Finland	United Kingdom		
Hungary	USSR		
India	Yugoslavia		
Indonesia	Yemen		
Israel			

Figure 17 Diplomatic status of communist China (CIA 1957, p.29)

	Metric Tons		
	1959	1961	
	(Contracts)	
MAJOR GRAIN IMPORTS (a	.11		
from non-Bloc countries)			
Wheat (from Australia			
and Canada)	53,500	1,870,000	
Barley (from Australia			
and Canada)		590,000	
Rice (from Burma)	3,500	350,000	
Rice (from Malaya)	7,000		
Total Imports of			
Grain	64,000	2,810,000	
ESTIMATED GRAIN EXPOR		.,,	
To Bloc countries	816,000	250,000	
To non-Bloc countries	838,000	350,000	
Total Exports of			
Total Exports of Grain	1,654,000	600 000	
Estimated Net Exports (+)	1,054,000	600,000	
or Net Imports ()	1 500 000	9 910 000	
or mer miports ()		-2,210,000	

Figure 18 1961 grain imports (CIA, 1961, p. 6)





Figure 19 China's Trade Trends, from 1950-1971 (CIA, 1972, p. 2)

Japanese Imports in 1970	
Chemicals (mainly fertilizer)	145
Manufacturers (featuring steel products)	320
Machinery and transport equipment	120
Crude materials and miscellaneous	20
Total	605

Figure 20 Japanese imports in 1970 (million USD) (CIA, 1971, p. 12)



Figure 21 China's Imports of Iron and Steel by county, 1977 (CIA, 1979, p. 7)

China's Top 10 Trading Partners in 1986* (USD Millions)						
Country	Total Trade	Exports	Imports	Balance**		
Japan	17,200	4,764	12,463	-7.627		
Hong Kong and	15,453	9,830	5,623	4,207		
Macao						
United States	7,336	2,622	4,714	-2,092		
West Germany	4,558	1,003	3,555	-2,552		
Soviet Union	2,640	1,200	1,440	-240		
United Kingdom	2,444	1,433	1,011	422		
Singapore	1,768	1,215	553	662		
Australia	1,617	210	1,407	-1,197		
Italy	1,500	363	1,137	-744		
France	1,052	321	731	-410		
*Based on China's customs statistics.						
**Minus sign indicates a deficit for China.						

Figure 22 China's Top 10 Trading Partners, 1986 (CIA, 1987, p. 3)



Figure 23 China – resource imports, 2004-2012 (Connolly, Jääskelä and Merwe, 2013, p. 21)

China's Crude Imports, 2011

During 2011:

- Middle East: 51% (+15%)
- Africa: 24% (*15%)
- Asia Pacific: 3% (\$2%)
- Elsewhere: 22% (+17%) •



Figure 24 China's crude imports, 2011 (Wu, 2012)

China Import Countries, 2011



Percentage of Imports 19.8 12.5 10.9 7.8 7.2 5.4 5.1 4.5 4.4 3,8 2.7 2.6 2.2 1.3 Thousand Barrets 366,825 227.395 202.575 144.175 132,495 100,740 94,900 83,950 81,760 69,715 49,275 48,910 41,245 208,780

Created by Marcia Underwood of the Brookings Institution with data compiled from the U.S. Energy Information Agency's China Country Report 2012. http://www. eia.gov/countries/cab.cfm?fips=CH.

Suppliers of Iro	on ore exp	orts, from	2010 to 20)17 (millior	n tons)			
	2010	2011	2012	2013	2014	2015	2016	2017
Australia	402	439	493	525	588	678	749	779
Brazil	311	313	333	372	411	443	467	489
India	96	63	43	46	46	46	44	40
Canada	33	34	36	37	37	38	38	38
South Africa	48	54	58	64	67	71	75	79
West Africa*	11	12	14	15	17	23	35	47
World	1 051	1 075	1 1 4 9	1 213	1 279	1 355	1 439	1 500
Exports								

Figure 25 China import countries, 2011 (Jones, Steven and Brien, 2014)

Figure 26 China's potential resource supply: the case of iron ore, 2010–17 (Mills and Mcnamee, 2012)

2014			2016								
Country	Volume	% Imported	Country	Volume	% Imported						
Saudi Arabia	1,012	15	Russia	1,009	13						
Russia	850	13	Saudi Arabia	847	11						
Angola	775	12	Angola	773	10						
Iraq	643	10	Iraq	641	8						
Oman	642	10	Oman	640	8						
Iran	533	8	Iran	531	7						
Venezuela	320	5	Venezuela	320	4						
Kuwait	289	4	Brazil	288	4						
Brazil	278	4	Kuwait	278	4						
UAE	251	4	UAE	251	3						
Others	1,123	17	Others	2,029	27						
Total	6,716	102	Total	7,607	99						

Figure 27 China's top crude suppliers 2014 vs 2016 (US DoD, 2016, p. 48, 2017, p. 18)



Figure 28 Percentage distribution of Foreign Trade by dollar value (1950, 1955 and 1958) (CIA, 1959, p. 4)



* Modellaneous Ohinese exports includes such entergenex as industrial packs, industrial pak meternils, chemicals and rubber, and cutrial and consumer goods.
** Association of Contents instructs such categories as cramicals, building macrolidy, pharmacualisels, and cutrials and consumer goods.
27658 4.59
*** Represents value of goods not includes such categories and baiewed to be primarily of military and strategies regim.

Figure 29 Commodity composition of trade between Communist China and the USSR, 1950, 1956, and 1957 (CIA, 1959, p. 9)

									Million US \$
Bloc trade	<u>1950 </u>	<u>1951 </u>	1952	<u>1953 </u>	<u>1954</u>	<u>1955 </u>	<u>1956</u>	<u>1957 </u>	1958 (Preliminary)
USSR European	320	750	965	1,).70	1,275	1,705	1,460	1,290	1,515
Satellites Far Eastern	20	205	320	345	375	430	465	485	550
Satellites	5	20	30	50	. 90	225	120	125	95
Subtotal b/	350	<u>970</u>	1,315	1,565	1,740	2,265	2,045	1,895	2,160
Free World trade	<u>865</u>	920	580	750	625	800	1,090	1,140	1,300
Total	1,215	1,890	1,895	2,315	2,365	3,065	3,135	3,035	3,460

Dollar Value of the Foreign Trade of Communist China a/ 1950-58

a. Based primarily on trade information released by Communist China, which apparently has adopted a dual conversion ratio for foreign trade. The dollar value of trade with the USSR and other Bloc countries is derived by applying the conversion ratio of 1 yuan to 1 ruble, which is equivalent as a cross rate to a conversion ratio of 4 yuan to US \$1. The dollar value of trade with the Free World is derived from the conversion ratio of 2.46 yuan to US \$1.
b. Subtotals may not agree with the sum of their rounded components. Figures are rounded to the nearest 5 million.

Figure 30 Dollar Value of the Foreign Trade of Communist China 1950-58 (CIA, 1959, p. 5)

Percentage Distribution of the Foreign Trade of Communist China by Dollar Value <u>a</u>/ 1950-58

						•			Percent
	<u>1950 </u>	<u>1951 </u>	<u>1952 </u> .	<u>1953 </u>	1954	<u>1955 </u>	<u> 1956 -</u>	<u>1957</u>	1958 (Preliminary)
Sino-Soviet Bloc trade									
USSR European	25.3	39.7	50.9	50.5	53.9	55.6	46.6	42.5	43.8
Satellites Far Eastern	1.7	10.3	16.9	14.9	15.9	14.0	14.8	15.9	15.9
Satellites.	0.4	1.1	1.6	2.2	3.8	411	3.8	4.1	2.7
Subtotal b/	28.8	51.3	69.4	67.6	73.6	73.9	65.2	62.4	62.4
Pree World trade	<u>71.2</u>	48.7	30.6	32.4	26.4	26.1	34.8	37.6	37.6
Total srade	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. Because of the dual conversion rate system used by China, these figures differ from those announced by the Chinese on distribution of the yuan value of trade.

b. Subtotals may not agree with the sum of their rounded components.

Figure 31 Percentage distribution of the Foreign Trade of Communist China 1950-58 (CIA, 1959, p. 6)

SHIP ARRIVALS IN COMMUNIST CHINA

Non-Bloc Ship Arrivais in Chinese Ports	19 No.	54 Thousand GRT.	1 No.	955 Thousand GRT.	Percentage Change in GRT. over 1954	No.	1956 (preliminary Thousand GRT.	Percenta O Change GRT. over 195
Flag								
British	518	2,056	524	2,276	10%	532	2,630	18%
Japanese	97	504	196	748	48%	278	1,159	55%
Norwegian	69	323	54	234	-27%	81	316	28%
Danish	35	181	34	174	-1%	32	185	8%
Swedish	32	181	26	156	-14%	41	233	33%
Italian	23	151	16	94	-38%	9	60	-36%
French	14	105	10	74	-30%	16	96	30%
Dutch	17	120	56	329	174%	57	304	-8%
Finnish	18	89	19	95	7%	20	89	4%
Panamanian	4	28	-	-	-	-	-	•
German	4	20	8	64	220%	35	270	311%
Pakistanian	2	14	6	41	193%	3	21	45%
Indian	2	12	3	20	67%	1	7	-65%
Moroccan	1	7	-	-	-	~	-	-
Turkish	-	-	4	17	-	2	7	-59%
Egyptian	-	-	2	15	-	5	28	87%
South African	-	-	2	14	-	6	45	220%
Burmese	-	-	1	6	-	1	6	-
Lebanese	-	-	1	2	-	1	7	250%
	846	3,791	962	4,359	15%	1,120	5,473	28%

Bloc Ship Arrivals in Chinese Ports	1 No.	954 Thousand GRT.	No.	1955 Thousand GRT.	Percentage Rise in GRT.
USSR	113	535	132	653	22%
Poland	41	253	55	355	40%
Czechoslovakia	4	22	8	46	110%
	158	810	195	1,054	30%

Figure 32 Ship arrivals in communist China 1954-1957 (CIA, 1957a, p. 23)

THE FOR	EIGN TR	ADE OF CI IN 1955	OMMUNI	ST CHINA
		Imports		
	lume of Ti nds of Me	rade tric Tons)		Value of Trade (Million US \$)
	Seaborne	Overland	Total	
Non-Bloc Bloc Total	1,552 452 2,004	negligible 2,240 2,240	1,552 2,692 4,244	420 2,065 2,485
Volu (Thousand	me of Tra is of Metri			Value of Trade (Million US \$)
1	Seaborne	Overland	Total	
Non-Bioc Bioc Total	2,675 1,910 4,585	133 4,165 4,298	2,808 6,075 8,883	455 1,545 2,000

Figure 33 The Foreign trade of communist China in 1955 (CIA, 1957b, p. 23)

Communist China: Key Economic Series

Item	1952	_1957	1958	1959	1960	1961	1962	1963	1964	1965	1965	1967	1958	1969	1970
Population, mid-year (million persons)	570	641	657	673	686	698	709	723	738	755	772	789	806	824	843
Grain (million metric tons)	154	185	200	165	160	160	175- 180	175- 180	180- 185	190- 195	195-	210- 215	195-	200-	215- 220
Steel (million metric tons)	1,35	5,35	8.0	10	13	8	8	9	10	11	12	10	12	13	14
Coal (million metric tons)	66.5	130.7	230	300	280	170	180	190	200	220	240	190	200	250	300
Electric power (billion kilowatt hours)	7.3	19.3	27.5	41.5	47	31	30	33	36	42	47	41	44	50	60
Crude oil (million metric tons)	0.44	1.46	2.56	3.7	4.6	4.5	5,0	5.5	6.9	8	10	10	11	14	17-18
Chemical fertilizers (million metric tons, product weight)															
Supply	0.4	1.9	3.0	3.1	3.5	2.4	3.1	4.9	4.7	6.8	8.0	8.3	8.8	9.9	11.8
Production	0.2	0.8	1.4	1.9	2.5	1.4	2.1	2.9	3.5	4.5	5.5	4.0	4.8	5.8	7.0
Imports	0.2	1.1	1.6	1.2	1.0	1.0	1.0	2.0	1.2	2.3	2.5	4.3	4.0	4.1	4.8
Trucks (thousand units)	0	7.5	16.0	19.4	15	1	14	16	26	34	47	34	31	66	75
Foreign trade (billion US \$)															
Total	1.89	2.03	3.74	4.26	3.97	3.02	2,68	2.77	3.22	3.85	4.20	3.86	3.71	3,86	4.2
Exports	0.88	1.60	1.91	2.20	1.94	1,52	1.53	1.57	1.75	2.00	2.17	1.92	1.89	2.02	2.1
Imports	1.01	1.43	1.83	2.06	2.03	1.50	1.15	1.20	1.47	1.85	2.03	1.94	1.82	1.84	2.1

Figure 34 Key Economic Series, 1952-1970 (CIA, 1971, p. 5)

	1971		1	970	1969		1968		1967		1966	
	Rank	Million US\$	Rank	Million US\$	Rank	Million US\$	Rank	Million US\$	Rank	Million USS	Rank	Million US\$
Japan	1	929	1	855	1	654	1	567	1	569	1	631
Hong Kong	2	431	2	359	2	327	2	311	3	292	2	380
West Germany	3	249	3	270	3	280	3	272	2	296	4	217
Canada	4	241	6	176	7	156	5	185	9	130	5	215
France	5	192	8	154	9	110	6	170	7	142	7	159
Malaysia and Singapore	6	185	5	190	4	260	4	220	6	185	8	145
United Kingdom	7	161	4	212	5	211	8	141	5	203	6	178
USSR	8	155	22	45	19	55	10	95	10	105	3	320
Romania	9	145	10	108	14	81	15	84	14	72	19	66
Italy	10	127	9	132	8	128	9	126	8	138	10	113

China: Major Trading Partners, by Rank

Figure 35 China's major trade partners, 1971-1966 (CIA, 1972, p. 14)

China:	Commodity	Composition	of	Trade
--------	-----------	-------------	----	-------

						Percen
	1966	1967	1968	1969	1970	1971
Exports ^a	100	100	100	100	100	100
Foodstuffs	28	26	28	30	32	34
Crude materials, fuels, and edible oils	22	23	21	22	21	20
Chemicals	4	4	4	4	5	5
Manufactures	42	44	44	40	42	40
Other	5	3	3	3	Neal	1
Imports ^a	100	100	100	100	100	100
Foodstuffs	25	19	23	19	16	13
Crude materials, fuels, and edible oils	17	16	16	17	17	16
Chemicals	12	15	17	17	15	13
Manufactures	45	48	43	46	51	57
Other	1	1	1	1	Negl	1

^a Because of rounding, components may not add to the totals shown.

Figure 36 Commodity Composition of trade, 1966-1971 (CIA, 1972, p. 15)

															Million US			
	1966		1967		1968		1969			1970			1971					
	Total	Commu- nist	Non- Commu- nist	Total	Commu- nist	Non- Cemmu- nist	Total	Commu- nist	Non- Commu nist									
otal	2,035	505	1,530	1,950	345	1,605	1,820	340	1,480	1,830	295	1,535	2,175	350	1,825	2,255	435	1,820
Foodstuffs	510	80	430	380	75	305	410	75	335	350	70	280	355	70	285	300	70	230
Grains	400	0	400	295	0	295	305	0	305	260	0	260	280	0	280	210	0	210
Crude materials, fuels, and edible oils Of which:	340	100	240	320	65	255	300	65	235	310	55	255	360	80	280	355	65	290
Rubber	85	0	85	75	0	75	85	0	85	145	0	145	80	0	80	75	0	75
Textile fibers	150	0	150	150	0	150	100	0	100	90	0	90	110	0	110	115	0	115
Chemicals Of which:	250	25	225	285	5	280	315	5	310	310	5	305	330	10	320	295	15	280
Fertilizer	155	0	155	200	0	200	200	0	200	205	0	205	230	0	230	200	0	200
Manufactures. Of which:	910	275	635	945	185	760	775	185	590	850	165	685	1,120	190	930	1,275	275	1,000
Textile yarn and fabrics	35	0	35	45	0	45	40	0	40	30	0	30	45	0	45	25	0	25
Iron and steel	225	25	200	320	25	295	265	25	240	275	20	255	405	35	370	475	45	430
Nonferrous metals.	55	5	50	85	10	75	125	10	115	225	5	220	210	10	200	145	10	135
Machinery and equipment	455	205	250	380	135	245	275	140	135	240	130	110	395	140	255	495	210	285
Other	25	25	0	20	15	5	20	10	10	10	5	5	10	0	10	30	10	20

 Data have been rounded to the nearest \$5 million. Estimates are based on data reported by trading partners. Where a mentary information from trade agreements and press reports and on commodity breakdowns available for earlier years.

Figure 37 China: Commodity Composition of Imports 1966-1971 (CIA, 1980, p. 5)



China: Commodity Composition of Trade, 1971

Figure 38 Commodity Composition of Trade in 1971 (CIA, 1972, p. 4)

			China: Commodity Composition of Trade with Non-Communist Countries a 1971									Million US		
					Devel	oped Countrie	es b							
	Total Non- Communist Countries	Communist	Total Nac				Wes	tern Europe						
Commodity Category			Total °	Japan	Total d	West Germany	United Kingdom	France	Italy	Canada	Australia	Hong Kong and Macao ^e	Less Developed Countries '	
Imports	1.820	1,430	607	575	160	92	125	71	213	29	5	385		
Foodstuffs Of which:	230	205	Negl	1	0	1	Negl	0	199	2	ő	25		
Grains Crude materials, fueis,	210	200	Negl	0	0	0	Negl	0	199	2	0	10		
and edible oils Of which:	290	85	17	48	1	13	Negl	9	9	10	3	200		
Rubber	75	5	7	Negl	0	Negl	Negl	0	Negl	0	0	70		
Textile fibers	115	35	8	19	1	10	Negl	0	Negl	6	0	80		
Chemicals Of which:	280	270	173	98	32	5	7	26	Negl	1	0	10		
Fertilizer	200	190 h	110 h	1	1	1	1	1	Negl	0	0	1		
Manufactures Of which:	1,000	865	417	424	127	73	118	35	5	16	2	135		
Textile yarn and														
fabric	25	25	14	9	3	1	4	Negl	1	Negl	0	0		
Iron and steel	430	430	282	137	72	10	11	17	Negl	12	0	0		
Nonferrous metals 1	135	50	11	30	5	16	1	1	3	4	0	85		
Machinery and equip-														
ment	285	285	94	192	33	23	92	17	Negl	Negl	0	0		
Other g	20	5	Negl	4	0	Negl	Negl	1	Negl	Negl	0	15		

China: Commodity Composition of Trade with Non-Communist Countries a

* Figures rounded to the nearest \$5 million for total developed countries, total Western Europe, and less developed countries, and to the nearest \$1 million for individual countries. Because of rounding, components may not add to the totals shown. Figures are adjusted to reflect Chinese imports c.i.f. and Chinese exports f.o.b.

^b Adjusted official figures except for total Western Europe and Australia.

e Total of Japan, Western Europe, Canada, Australia, and New Zealand.

⁴ Sum of adjusted official figures for Austria, Belgium-Luxembourg, Denmark, Finland, France, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and West Germany. • Exports are official data for Hong Kong plus estimates for Macao. Imports are estimates. • Estimates based on very limited information. Complete commodity breakdowns are available for only a small number of countries, and partial breakdowns are available

for a few others.

a Including unreported trade.

* Freight adjustment was made independently, based on information on actual shipping costs.

¹ Complete information on fertilizer imports, by country, is not available. ¹ Data for nonferrous metals include official country data plus an estimate of nonferrous imports, especially copper, that are sold to China through the London Metals Exchange but have not been reported by the exporting country as sales to China.

Figure 39 Commodity Composition of Trade with Non-Communist Countries 1971 (CIA, 1980, p. 5)

			-			COUNTON	
CHINA:	IMPORTS.	FUB,	B۲	AREA	ANU	COUNTRY	1/

Million US\$

PROVENANCE	197	77		11	978			1979			ANNUAL	
	111	IV	1	11	111	IV	I	II	111	1976	1977	1978
ORLD	1 915 2	2 056 2	1.881.4	2.361.4	2.558.1	3.489.7	3,613.0	3.756.7	3.626.8	5,577.7	6,602.8	10.290.5
DN-COMMUNIST COUNTRIES					2,200.1		3,127.8			4,499.9	5,536.0	8,765.0
EVELOPED COUNTRIES	1,230.1	1,359.7	1,331.1		1,818.7		2,453.5			3.768.3	4,166.0	7,268.1
EAST ASIA AND PACIFIC	792.7	754.3	657.8	902.7		1.165.7	1,155.3		958.6	1,954.6	2,453.5	3,621.9
Australia	175.8	193.6	151.0	134.0	106.7	91.1	130.8	166.5	191.6	264.3	461.0	482.9
Japan	606.1	551.9	497.6	754.2	773.4	1,048.7	1,000.7	1,035.6	755.6	1,665.8	1,954.9	3,073.9
NORTH AMERICA	115.7	169.7	175.9	243.6	380.3	506.9	523.3	454.2	517.9	334.7	517.8	1,305.7
Canada United States	88.4 27.3	87.9	78.4	124.5	138.4	100.8	128.0 395.3	139.8	* 141.3	199.7 135.0	346.5	442.1
	321.7	435.7	497.4	531.4	542.8	767.9	774.9	908.7	908.9	1,479.0	1,194.7	2,339.5
WESTERN EUROPE	18.9	16:1	38.8	45.9	44.7	76.0	53.9	44.9	13.2	40.0	48.0	205.4
France	20.8	27.0	30.9	47.0	49.5	71.8	97.7	72.4	85.1	354.6	95.3	199.2
West Germany	125.0	165.7	250.7	227.3	223.6	293.6	322.0	389.2	410.1	622.0	500.7	995.3
Italy	32.8	35.8	38.8	42.5	40.9	66.2	65.2	87.7	63.6	126.9	88.9	188.
Netherlands	21.8	20.9	19.8	18.9	25.5	70.8	59.2	37.3	26.8	38.9	52.5	135.
Norway	20.4	55.5	24.3	11.8	16.0	7.7	13.0	12.3	4.1	18.4	96.3	59.
Spain	6.1	8.5	11.0	16.6	13.3	25.4	34.1	42.1	30.2	17.4 30.8	21.3 45.3	66. 84.
Sweden	18.1	14.8	9.5	14.1	23.4 22.8	37.4 28.4	24.8	23.4	22.0	51.9	45.3	94.0
Switzerland United Kingdom	12.8 28.5	18.8 30.5	24.3 30.7	19.1 44.8	42.7	57.4	55.8	139.9	177.6	125.6	108.9	175.
SS DEVELOPED COUNTRIES.	395.8	328.0	262.6	353.1	381.3	490.0	674.3	713.5	768.6	731.6	1.370.0	1,496.9
SOUTHEAST ASIA	120.7	94.5	58.0	92.9	73.1	130.0	167.1	194.1	245.8	219.8	441.7	354.0
Hong Kong	10.1	14.4	12.3	16.4	14.3	20.0	44.2	77.5	94.6	30.1	44.4	62.
Indonesia	.0	.0	.0	.0	.0	.0	.0	* .0	.0	.0		
Malaysia	41.4	29.6	18.5	13.4	25.9	52.5	61.0	19.4	.57.2	44.8	119.9	110.
Philippines	13.1 28.8	22.4	6.1	28.6	9.1 14.2	22.0	33.0	* 65.3	63.1	38.7	59.4	57.9
Singapore Thailand	27.1	9.3	9.3	20.1	7.5	16.2	21.1	12.9	* 12,4	61.4	102.0	53.
SOUTH ASIA	21.5	31.7	21.1	30.0	36.7	41.0	42.1	38.1	60.5	82.2	82.8	128.
Pakistan	1.9	11.0	* 12.7	15.6	17.1	23.2	24.1	25.1	24.3	17.0	17.3	68.
Sri Lanka	13.7	14.8	.0	8.6	13.2	9.1	9.0	3.7	27.2	56.9	47.4	31.0
MIDDLE EAST	45.2	66.0 2.0	45.6	45.5 .0	31.6	50.4 .0	77.6	77.5	72.3	160.0 18.3	205.2	173.
Bahrain												
					.0		. •					
Iran	11.4	12.3	4.9	6.2	5.7	9.2	* 9.6	9.9	9.6	22.8	39.9	27.0
Iraq Kuwait Approved	11.4	12.3 * 6.3	4.9	6.2 7.1	5.7 7.8	9.2 10.6	* 9.6	9.9 11.4 10.9	9.6 11.0 10.6	22.8 50.0 9.8	39.9 20.0 39.9	27.0 31.2 22.8
Iraq Kuwait Approved Syrta	^{11.4} 5.8 I For, ຊື່ອູ້ອີ	12.3 * 6.3	4.9	9.2 1A-ROP	5.7 7.8	9.2 10.6	* 9.6	9.9	9.6	22.8 50.0	39.9 20.0	27.0
Iraq Kuwait Approved Syrta	11.4 5.8 I For, Rel 19	* 6.3 ease 2001	4.9 5.8 /11/08		6.7 7.8 8 6B009 8	9.2 5R000300	* 11.5 00500,036-59	9.9 11.4 10.9 * 26.8 1979	9.6 11.0 10.6 25.8	22.8 50.0 9.8 37.3	39.9 20.0 39.9 55.2 ANNUAL	27.0 31.2 22.8 33.2
Iraq Kuwalt Approved Syria	^{11.4} 5.8 I For, ຊື່ອູ້ອີ	* 6.3 ease 2001	4.9	9.2 1A-ROP	6.7 7.8 86B0098	9.2 10.6	* 9.6	9.9 11.4 10.9 * 26.8	9.6 11.0 10.6	22.8 50.0 9.8	39.9 20.0 39.9 55.2	27.0 31.2 22.8
Iraq. Kuwait Approved Synta ROVENANCE	11.4 5.8 I For, Rel 19 111	12.3 * 6.3 ease 2001	4.9 5.8 /11/08:5	6.2 7.1 IA-ROP	6.7 7.8 86B00998 1978 111 2 29.1	9.2 10.6 5R000300	* 9.6 11.0 0050000659	9.9 11.4 10.9 * 26.8 1979 II II	9.6 11.0 10.6 25.8 III 40.7	22.8 50.0 9.8 37.3 1976 56.2	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7	27.0 31.2 22.1 33.2 1974
I rag. Kuwa It Approved Synta	11.4 5.8 I For, Ref 19 111	12.3 * 6.3 ease 2001 	4.9 5.8 /11/08	6.2 7.1 IA-ROR II	6.7 7.8 86B00998 1978 1111 2 29.3 16.3	9.2 10.6 5R000300	* 9.6 005000659	9.9 11.4 10.9 * 26.8 1979 II II 42.1 23.8	9.6 11.0 10.6 25.8 III 40.7 3 23.0	22.8 50.0 9.8 37.3	39.9 20.0 39.9 55.2 ANNUAL	27. 31. 22. 33. 197. 117 64
Iraq. Kuwait Approved Synta ROVENANCE NORTH AFRICA. Egypt	11.4 5.8 I For, Rel 19 111 111 24.0 9.9	12.3 * 6.3 ease 5001 777 IV 17.7 10.7 3.4	4.9 5.8 /11/08 5	6.2 7.1 IA-ROP	6.7 7.8 86B0098 1978 1111 2 29.3 9 16.3	9.2 10.6 5R000300 IV 40.2 2 22.0 5 .6	* 9.6 11.0 00500005,9 J 43.0 * 22.9	9.9 11.4 10.9 * 26.8 1979 II II 42.1 23.8 .7	9.6 11.0 10.6 25.8 III 40.7 3.23.0 7.7	22.8 50.0 9.8 37.3 1976 \$6.2 51.4	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 34.1	27.1 31. 22.3 33. 1975 117 64 1
Iraq. KuwaitApproved SyrtaApproved ROVENANCE NORTH AFRICA Egypt. Libya SUB-SAHARA AFRICA Nigeria	11.4 5.8 I For, Re 19 111 24.3 9.9 3 56.9 9.4	12.3 * 6.3 ease 5001 777 IV 17.7 10.7 49.3 .0	4.9 5.8 /11/08:50	6.2 7.1 IA-ROP	6.7 7.8 86B00998 1978 1111 2 29.5 16.3 9 16.3 4 .5 1.6 3 3.0	9.2 10.6 5R000300 IV 40.2 22.0 5 .6 9 75.4	* 9.6 11.0 005000055 I 43.0 * 22.9 .6 78.5 * 4.3	9.9 11.4 10.9 * 26.8 1979 II 42.1 23.8 .7 81.7 4.5	9.6 11.0 10.6 25.8 III 40.7 23.0 7 7 7 7.8.9 4.3	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 34.1 1.2 1	27. 31. 22. 33. 197. 117 64 1 215
Iraq. KuwaitApproved SyrtaApproved ROVENANCE NORTH AFRICA Egypt Libya SUB-SAHARA AFRICA Nigeria Sudan	11.4 5.8 I For, Re 19 111 24.2 9.9 9.9 9.9 9.4 14.7	12.3 6.3 ease 5001 17.7 IV 17.7 10.7 17.7 10.7 49.3 .0 15.9	4.9 5.8 /11/08 1 20.7 11.7 * .3 39.0 2.2 5.4	6.2 7.1 IA-RDP II 26.1 14.5 2.8 6.5	6.7 7.8 86B0099 1978 111 2 29.1 9 16.2 4 .6 9 51.6 3 3.6 9 7.5	9.2 10.6 5R0003300 IV 9 40.2 2 22.0 5 .6 9 75.4 0 4.1 5 10.2	* 9.6 11.0 005000659 I 43.0 * 22.9 .6 78.5 * 4.3 * 10.6	9.9 11.4 10.9 * 26.8 1979 II 42.1 23.8 .7 81.7 4.5 11.0	9.6 11.0 10.6 25.8 III 40.7 8 23.0 7 7 7 78.9 9 4.3 0 10.7	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 34.1 1.2 1 185.5 11.7 56.3	27. 31. 22. 33. 197 117 64 1 215 12 30
Iraq. KuxaitApproved SyrtaApproved ROVENANCE NORTH AFRICA Egypt Libya SUB-SAHARA AFRICA Nigeria Sudan Tanzania	11.4 5.8 I For, Re 19 19 111 24.0 9.9 9.4 3 56.9 9.4 14.7 * 6.0	12.3 * 6.3 ease 2,001 777 IV 17.7 10.7 10.7 49.3 .0 15.9 6.4	4.9 5.8 /11/08 20.7 11.7 * .3 39.0 2.2 5.4 5.5	6.2 7.1 IA-ROPE	6.7 7.8 86B00998 1978 1111 2 29.4 16.2 4 9 51.6 3 3.0 9 51.6 3 3.0 9 51.6 3 8.0	9.2 10.6 5R000300 IV IV 40.2 2 22.0 5 .6 9 75.4 0 4.1 5 10.2 9 10.8	* 9.6 11.0 00500059 1 43.0 * 22.9 .6 78.5 * 4.3 * 10.6 * 11.3	9.9 11.4 10.9 * 26.8 1979 II 42.1 23.8 -7 81.7 4.5 11.0 11.7	9.6 11.0 10.6 25.8 III 40.7 23.0 7 .7 78.9 4.3 0 10.7 11.3	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 34.1 1.2 185.5 11.7 56.3 20.8	27. 31. 22. 33. 197 197 64 1 12 215 12 300 32
Iraq. KuxaitApproved SyntaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria SuB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia	11.4 5.8 I For, Re 19 1111 24.0 9.9 9.4 3 56.9 9.4 14.7 * 6.0 7.2	12.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 77 1V 1V 1V 17.7 10.7 10.7 10.7 10.7 10.7 10.4 10.3 10.4 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	4.9 5.8 /11/08 20.7 11.7 * .3 39.0 2.2 5.9 * 5.6	6.2 7.1 IIA-ROPI III 26.1 14.5 48.5 2.8 6.5 7.3 7.0	6.7 7.8 86B00998 1978 1111 2 29.3 9 16.3 4 . 5 1.6 3 3.0 9 7.5 3 8.0 9 7.5 3 8.0 9 7.6	9.2 10.6 5R0003300 IV 40.2 22.0 5 .6 9 75.4 5 .6 9 75.4 10.8 3 10.3	* 9.6 11.0 005000599 I 43.0 * 22.9 .6 78.5 * 4.3 * 10.6 * 11.3 * 10.8	9.9 11.4 10.9 * 26.8 1979 III 42.1 23.8 .7 81.7 4.5 11.0 11.7 11.2	9.6 11.0 10.6 25.8 III 40.7 7.7 7.8.9 5.4.3 10.7 11.3 10.8	22.8 50.0 9.8 37.3 1976 26.2 51.4 1.0 1.0 1.0 1.0 24.2 13.7 27.0	39.9 20.0 39.9 55.2 1977 73.7 34.1 1.2 1 185.5 11.7 56.2 20.8 29.0	27. 31. 22. 33. 197. 117 64 1 215 122 30 30 32 30
Iraq. KuwaitApproved SyrtaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia LATIN AMERICA	11.4 5.8 1 For, R 11 11 11 24.2 9.9 9.5 3 56.9 9.4 4.7 7.2 127.3	12.3 * 6.3 ease 2,001 777 IV 17.7 5 10.7 5 10.7 6 4 9 49.3 0 15.9 6 .4 6 .1 6 .1	4.9 5.8 /11/06 1 20.7 11.7 * .3 39.0 2.2 5.4 5.4 5.5 * 5.6 78.1	6.2 7.1 FIA-ROPI II 20.4 14.5 2.6 2.6 5 2.6 5 7.5 7.7 119.7	6.7 7.8 866B0098 1978 1111 2 29.4 9 16.2 4 9 51.6 3 3.0 9 7.5 3 8.0 0 7.6 3 8.0 0 7.6 9 7.5 158.1	9.2 10.6 5R000300 IV 2 22.0 5 .6 9 75.4 0 4.1 5 10.2 0 10.8 3 10.3 1 152.9	* 9.6 11.0 005000559 J 43.0 * 22.9 6 78.5 * 4.3 * 10.6 11.3 * 10.8 * 266.1	9.9 11.4 10.9 * 26.8 1979 III 42.1 23.8 .7 81.7 45.5 11.0 11.0 11.2 280.0	9.6 11.0 10.6 25.8 III 40.7 23.0 7 7 78.9 4.3 0 10.7 7 78.9 4.3 0 10.7 11.3 10.8	22.8 50.0 9.8 37.3 1976 36.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 73.7 73.7 73.7 1.2 1 1.2 1.1 1.2 1.1 1.5 5 11.7 56.3 20.8 29.0 381.1	27. 31. 22. 33. 197. 117 64 1 215 12 30 322 30 508
Iraq. KuvaitApproved SyrtaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria Sudan Tanzania. Zambia. LATIN AMERICA Argentina	11.4 5.8 I For, Res IIII 24.0 9.9 9.4 356.9 9.4 14.7 * 6.0 7.2 127.3 28.7	12.3 * 6.3 ease 2.001 17.7 IV 17.7 10.7 .4 49.3 .0 15.9 6.4 6.1 6.8 8 7.5	4.9 5.8 /11/08 1 1 20.7 11/7 * .3 39.0 2.2 5.4 5.5 5.5 5.5 5.5 7 8.1 1.1.1	6.2 7.1 IIA-ROPI III 26.2 14.5 26.2 14.5 2.6 2.6 2.6 2.6 2.7 .7 .7 .7 .7 .7 .1 19.7 16.8	6.7 7.8 8660099 1978 1111 2 29.3 16.3 16.3 1.5 1.5 3 3.6 9 7.5 3 8.6 9 7.5 3 8.6 9 7.5 3 8.6 9 7.5 3 8.6 9 7.5 3 8.6 9 7.5 4 .5 9 7.5 8 8.6 9 7.5 8 7.5 9 7.	9.2 10.6 5R000300 IV IV 2 2200 5 .6 9 75.4 0 4.1 5 10.2 5 10.8 3 10.3 1 152.9 5 15.1	* 9.6 11.0 005000559 I 43.0 * 22.9 .6 78.5 * 4.3 * 10.6 11.3 10.8 2266.1 * 130.8	9.9 11.4 10.9 * 26.8 1979 III 42.1 23.8 .7 81.7 41.7 11.2 280.0 136.0 136.0	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 4.3 10.7 11.3 10.8 270.5 213.4	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7	39.9 20.0 39.9 55.2 1977 73.7 34.1 1.2 1.2 1.2 1.1 185.5 11.7 56.3 20.8 29.0 381.1 87.1	27. 31. 22. 33. 197 117 64 1 215 12 30 32 30 32 30 508 61
Iraq. KuwaitApproved SyrtaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia LATIN AMERICA	11.4 15.6 1 For, R. 1 For, R.	12.3 * 6.3 ease 2,001 777 IV 17.7 10.7 17.7 10.7 17.7 10.7 10.7 15.9 6.4 6.4 6.4 6.4 6.4 15.9 1	4.9 5.8 /11/06 1 20.7 11.7 * .3 39.0 2.2 5.4 5.4 5.5 * 5.6 78.1	6.2 7.1 IIA-ROP 20.1 20.2 48.0 2.8 6.5 7.3 7.0 7.0 119.7 16.8 35.5	6.7 7.8 866B0098 1978 1111 2 29.3 9 16.3 4 4 4 51.3 8 8.0 9 7.5 8 8.0 9 7.5 8 8.2 9 7.6 7 158.8 8 28.6 9 35.1	9.2 10.6 5R000300 IV IV 40.2 2.22.0 56 9.75.4 0.4.1 56 9.75.4 0.4.1 56 9.10.2 0.10.8 10.2 0.10.3 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	* 9.6 11.0 005000559 J 43.0 * 22.9 6 78.5 * 4.3 * 10.6 11.3 * 10.8 * 266.1	9.9 11.4 10.9 * 26.8 1979 III 42.1 23.8 7 7 81.7 4.5 11.0 11.2 280.0 11.7 11.2 280.0 28.9	9.6 11.0 10.6 25.8 III 40.7 23.0 7 .7 78.9 4.3 0 10.7 7.11.3 10.8 270.5 270.5 270.5 270.5 2131.4 * 28.0	22.8 50.0 9.8 37.3 1976 36.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 73.7 73.7 73.7 1.2 1 1.2 1.1 1.2 1.1 1.5 5 11.7 56.3 20.8 29.0 381.1	27. 31. 22. 33. 197. 117 64 1 215 12 30 32 30 508 61 126.
Iraq. KuvaitApproved SyriaApproved PROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia. LATIN AMERICA Argentina Brazil Peru OMMUNIST COUNTRIES	11.4 5.8 I For, R. 6 1111 24.3 56.9 56.9 56.9 14.7 7.2 127.3 28.7 61.8 7.1 1 289.3	12.3 ease 5.001 ase ase 5.001 a ase b b b b c b c b c c c c c c c c	4.9 5.8 /11/08 20.7 11/7 39.0 2.2 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.2 7.1 IAAROPE 144.5 2.6 48.5 2.8 48.5 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 119.7 7.0 7.0 7.0 7.0 7.0 119.7 7.0 119.7 7.0 11 14.6 7 7.0 11 14.6 7 7 11 14.6 7 7 10 11 14.6 7 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.6 7 7 10 11 14.5 7 7 10 11 14.5 7 7 10 14.5 7 14.5 14.5 7 14.5 7 14.5 7 14.5 7 14.5 7 7 14.5 7 7 14.5 7 7 14.5 7 7 14.5 7 7 7 11.5 7 14.5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	6.7 7.8 8660099 1978 1111 2 29.3 9 16.2 4 .4 9 51.3 8 3.0 9 7.5 8 8.0 9 7.5 8 28.6 9 7.5 8 28.6 9 35.1 9 5.5 9 5.5 9 5.5	9.2 10.6 5 5R000300 IV IV 9.40.2 2 22.0 5 .6 9.75.4 9.75.4 9.75.4 9.10.8 5 10.3 1.15.1 15.10.8 5 10.3 1.16.5 12.8 9.559.2	* 9.6 11.0 005000559 I 43.0 * 22.9 * 22.9 * 4.3 * 10.6 11.3 10.8 24.8 24.8 13.9 * 13.9	9.9 11.4 10.9 25.8 25.8 11.7 11.7 11.2 23.8 7 81.7 4.5 11.0 13.6 0 28.9 13.9 460.2	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 10.7 11.3 10.7 11.3 10.8 270.5 131.4 * 28.0 13.4 472.8	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9	39.9 20.0 39.9 55.2 1977 73.7 34.1 185.5 11.7 56.3 20.8 29.0 381.1 87.1 162.7 28.3 1.066.8	27. 31. 22. 33. 197 117 64 11 215 12 30 322 30 508 61 126 63 7 1.525
Iraq. KuwaitApproved SyrtaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria SUB-SAHARA AFRICA Nigeria Sudan Tanzania. Zambia. LATIN AMERICA Argentina. Brazil Peru OMMUNIST COUNTRIES USSR	11.4 5.8 I For, R. 6 1111 24.3 56.9 56.9 3.5 6.9 4.14.7 7.2 28.7 61.8 7.1 289.3 23.2	12.3 ease 5,001 17.7 1V 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 1.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 15.9 6.4 7.5 21.8 7.6 368.5 79.3	4.9 5.8 /11/08 20.7 11/7 3.3 39.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.2 7.1 IAAROPA III 26.2 48.6 48.6 6.5 7.0 7.0 7.0 7.0 119.7 16.8 35.5 8.6 320.5 31.0	6.7 7.8 8660099 1978 111 2 29.3 9 16.2 4 5 1.6 9 51.3 8 8.0 9 7.6 8 8.0 9 7.5 8 5.1 9 7.5 9 7.5 8 5.1 9 7.5 9 7.5	9.2 10.6 5 5R000330 IV 9.40.2 2 22.0 5 .6 9.75.4 0.4.1 5 10.2 0.4.1 5 10.2 0.4.1 5 10.2 0.4.1 5 10.3 1 152.9 5 15.1 1 31.6 5 12.8 2 25.0 0 1.8 5 10.5 1.8 1.9 5 10.5 1.0 5 10.5 1.0 5 5 1.0 5 5 1.0 5 5 5 1.0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 1.0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	* 9.6 11.0 005000559 I 43.0 * 22.9 6 78.5 * 4.3 * 10.6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 266.5 * 13.3 10.8 266.5 * 11.0 * 22.9 6 * 6 * 11.0 * 22.9 * 6 * 4.3 * 10.8 * 10.8	9.9 11.4 10.9 26.8 26.8 11.7 23.8 7 81.7 81.7 81.7 81.7 11.2 280.0 13.9 13.9 460.2 25.2	9.6 11.0 10.6 25.8 III 40.7 23.0 7.7 78.9 0 10.7 11.3 10.8 270.5 131.4 * 22.0 13.4 472.8 44.2	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4	39.9 20.0 39.9 55.2 1977 73.7 34.1 185.5 1.2 1.2 1.1 185.5 3.2 0.8 29.0 381.1 87.1 162.7 29.3 1,066.8 161.8	27. 31. 22. 33. 197. 117 54 1 215 125 30 30 508 61 1266 37. 1,525 242
Iraq. KuvaitApproved SyriaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Nigeria Sudan Tanzania. Zambia. LATIN AMERICA Argentina. Brazil. Peru DMMUNIST COUNTRIES USSR EASTERN EUROPE.	11.4 5.8 IFor, R.S. IIII 24.2 9.9 9.4 14.7 7.2 127.3 28.7 7.1 228.7 123.2 2127.3 228.7 127.3 228.7 127.3 228.7 127.3 228.7 127.3 228.7 127.5 228.7 127.5 228.7 127.5 228.7 127.5 228.7 127.5 228.7 127.5 228.7 127.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 17.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 229.7 127.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20	12.3 * 6.3 ease 2.001 17.7 IV 17.7 10.7 10.7 15.9 6.4 6.1 6.4 6.1 6.8 8.75 21.8 7.6 368.5 79.3 209.1	4.9 5.8 /11/08 1 1 20.7 11/7 * 39.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 7 8.1 1.1 2.4.0 7.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 7 8.1 1.2 4.0 2.2 5.5 7 8.1 5.5 7 8.1 7 1.1 7 7 1.1 7 7 5.5 7 5.5 7 1.1 7 7 1.1 7 7 5.5 7 1.1 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6.2 7.1 II IIA-ROP 7.4 I4.5 2.6 2.6 2.6 2.6 2.6 2.6 3.1 2.6 3.5 .5 3.1 2.0 5 3.1 2.1 4.5 2.6 3.5 2.5 3.1 2.0 2.1 4.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2	6.7 7.8 86680098 1978 1111 2 29.1 3 16.1 4 9 51.5 3 8 9 7.5 3 8 9 7.5 7 7.6 7 7.6 8 28.6 9 7.5 7 9 51.5 8 2.8 9 51.5 9 7.6 9 51.5 9 51.5 9 7.6 9 51.5 9 51.5 9 7.6 9 51.5 9 7.6 9 51.5 9 7.6 9 51.5 9 7.6 9 7.8 9 51.5 9 7.6 9 7.8 9 7.6 9 7.6	9.2 10.6 5R000300 IV IV 9.2 2.2200 5.6 9.75.4 0.4.1 5.002 9.2 2.220 5.6 9.75.4 0.4.1 5.10.8 5.10.8 5.10.8 5.10.9 15.10 5.10.9 5.10.1 5.10.9 5.10.1 5.10.9 5.10.1 5.10.2 5.10.1 5.10.2	* 9.6 11.0 005004559 I 43.0 * 22.9 .6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 266.1 * 130.8 24.8 13.3 * 130.8 24.8 13.3 * 300.6	9.9 11.4 10.9 26.8 1979 1978 107 107 107 107 107 107 107 107	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 4.3 10.7 11.3 10.8 270.5 131.4 * 28.0 13.4 * 28.0 13.4 * 28.0 13.4	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 9.0 41.9	39.9 20.0 39.9 55.2 1977 73.7 34.1 1.2 1.2 1.1 1.2 1.1 20.8 29.0 381.1 87.t 162.7 29.0 381.1 87.t 162.7 29.0 381.1 87.t 162.7 29.3 1.066.8 161.8 649.1	27. 31. 22. 33. 197 117 64 1 215 12 30 30 508 61 126 37 1.525 242 956
I raq. Kuwait. Approved Syrta. Approved ROVENANCE NORTH AFRICA. Egypt. Libya. SUB-SAHARA AFRICA. Nigeria. Sudar. Tanzania. Zambia. LATIN AMERICA Argentina. Brazil. Peru. DMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechoslovakia.	11.4 5.8 IFor, R.S. IIII 24.2 9.9 9.4 14.7 56.9 9.4 14.7 7.2 127.3 28.7 7.1 228.7 228.7 123.2 23.2 191.8	12.3 * 6.3 ease 5,001 777 1V 17.7 10.7 17.7 10	4.9 5.8 /11/08 20.7 11/08 20.7 11/7 3.3 39.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.2 7.1 IAAADA III 26.2 26.2 26.4 2.6 6.5 7.2 7.2 7.2 7.1 14.5 35.9 8.6 320.5 31.0 2214.5 26.1	6.7 7.8 8660099 1978 111 2 29.3 9 16.2 4 .5 9 51.3 8 32.6 9 7.6 8 32.6 9 7.5 9 358.0 9 51.5 9 358.0 9 51.5 9 358.0 9 51.5 9 358.0 9 25.5 9 225.5 9 225.5 9 225.5	9.2 10.6 5 5R000300 IV 9.40.2 2 22.0 5 .6 9.75.4 0.4.1 5 10.2 5 .6 9.75.4 10.2 10.8 3 10.2 5 .6 10.8 3 10.2 5 .6 5 .6 5 .6 5 .6 5 .6 5 .6 5 .6 5 .6	* 9.6 11.0 005004959 I 43.0 * 22.9 6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 266.1 * 130.8 266.1 * 130.8 266.5 * 4.3 * 0.6 * 22.9 6 * 4.3 * 1.0 * 22.9 * 4.3 * 10.8 * 11.3 * 10.8 * 11.3 * 10.8 * 11.3 * 10.8 * 13.3 * 13.5 * 4.3 * 4.3 * 10.8 * 13.5 * 4.3 * 13.5 *	9.9 11.4 10.9 26.8 26.8 10.9 26.8 10.9 11.7 11.2 23.6 1.7 81.7 81.7 81.7 81.7 11.2 280.0 13.6 0 28.9 13.9 460.2 25.2 314.7 41.9	9.6 11.0 10.6 25.8 III 40.7 23.0 7.7 78.9 6.3 10.7 11.3 10.8 270.5 131.4 * 28.0 13.4 472.8 44.2 312.4 40.5	22.8 50.0 9.8 37.3 1976 36.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4 608.4 69.9	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 73.7 11.2 1 11.7 56.3 20.8 29.0 381.1 87.1 162.7 28.3 1.066.8 161.8 649.1 7.3,4	27. 31. 22. 33. 197. 197. 117. 64 11 215. 125. 300. 300. 508. 303. 300. 508. 31. 126. 30. 30. 30. 508. 11. 126. 31. 30. 30. 30. 30. 30. 30. 30. 30
I raq. Kuwait. Approved Syrta. Approved ROVENANCE NORTH AFRICA. Egypt. Libya. SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA. Argentina. Brazil. Peru. DMMUNIST COUNTRIES. USSR. Czechoslovakia. East Germany. Hungary.	11.4 5.8 IFor, R. III . 24.0 9.9 9.4.0 . 3. 56.9 9.9.4 14.7 7.2 127.3 28.7 61.8 7.1 289.3 23.2 191.8 23.3 33.4 8.5	12.3 46.3 ease 5,001 777 1V 17.7 10.7 17.7 10.7 17.7 10.7 15.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.9 6.4 6.1 1.5 9 6.4 6.5 7.5 7.5 3.68 5.7 7.9 3.20 9.1 2.09 1.5 7.5 7.5 3.68 5.7 7.9 3.20 9.1 2.3 0.0 1.5 9 1.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7	4.9 5.8 /11/08 1 1 20.7 11/7 * 39.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 7 8.1 1.1 2.4.0 7.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 7 8.1 1.2 4.0 2.2 5.5 7 8.1 5.5 7 8.1 7 1.1 7 7 1.1 7 7 5.5 7 5.5 7 1.1 7 7 1.1 7 7 5.5 7 1.1 7 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	6.2 7.1 IA-ROP 7.1 IA-ROP 7.2 IA-S 14-S 2.8 5.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7	6.7 7.8 8660098 1978 1111 2 29.3 16:3 16:3 16:3 16:3 16:3 16:3 16:3 16:	9.2 10.6 5 5R000300 IV IV 9.40.2 2 22.0 5 .6 9.75.4 0.4.1 5 .0.2 9.5 .6 9.75.4 0.4.1 1 .0.2 9.5 .6 9.15.9 1 .0.8 3 .0.3 1 .0.5 9.5 .12.9 1 .0.6 1 .0.8 3 .0.6 1 .0.8 1 .0.8 1 .0.6 1 .0.8 1 .0	* 9.6 11.0 005004959 I 43.0 * 22.9 6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 266.1 * 130.8 266.1 * 130.8 266.5 * 4.3 * 0.6 * 22.9 6 * 4.3 * 1.0 * 22.9 * 4.3 * 10.8 * 11.3 * 10.8 * 11.3 * 10.8 * 11.3 * 10.8 * 13.3 * 13.5 * 4.3 * 4.3 * 10.8 * 13.5 * 4.3 * 13.5 *	9.9 11.4 10.9 26.8 1979 1970 1979 1970 1	9.6 11.0 10.6 25.8 III 40.7 23.0 7 7 8 23.0 7 7 7 8 23.0 7 7 8 23.0 7 7 7 8 23.0 7 7 7 8 23.0 7 7 7 8 23.0 7 7 7 8 23.0 7 7 7 8 23.0 7 7 8 23.0 7 7 8 23.0 7 7 7 8 23.0 7 7 8 23.0 7 8 2 8 2.0 8 2.1 8 2.4 8 2.4 9 2.4 8 2.4 8 8 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8 8	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 9.0 41.9	39.9 20.0 39.9 55.2 1977 73.7 34.1 185.5 11.7 56.3 20.8 29.0 38.1.1 87.1 162.7 29.3 31.066.8 161.8 649.1 73.4 115.0	27. 31. 22. 33. 197 117 64 1 215 12 30 30 508 61 126 37 30 508 61 126 37 1.525 242 956 114 182
I raq. KuvaitApproved SyrtaApproved ROVENANCE ROVENANCE SUB-SAHARA AFRICA Libya SUB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia. LATIN AMERICA Argentina Brazil Peru DMMUNIST COUNTRIES USSR EASTERN EUROPE Czechoslovakia	11.4 5.8 IFor, R. 6	12.3 ease 5.001 17.7 1V 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.7 10.7 17.6 17.9 0.6.4 17.5 21.8 7.5 21.8 7.5 21.8 7.5 21.8 7.5 368.5 79.3 209.1 23.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 17.0 366.0 36.0 17.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 367.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 366.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 367.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0	4.9 5.8 /11/08 20.7 11/7 * 39.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 7.8.1 1.1 24.0 7.00 287.7 7 42.2 196.6 6.2 21.1 32.9	6.2 7.1 IIA-ROP 7.1 II III 26.2 48.5 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	6.7 7.8 866B0098 1978 1978 1978 2 29.3 9 51.4 9 51.4 8 28.6 9 7.6 9 7.8 9 51.4 9 7.6 9 7.6 9 7.6 9 7.8 9 51.4 9 7.6 9 7.6 9 7.6 9 7.8 9 7.6 9 7.	9.2 10.6 5 5R0003300 IV IV 40.2 2.00 5 .6 9 75.4 10.8 3 10.3 10.8 3 10.3 1152.9 5 15.1 3 1.6 5 15.1 3 31.6 5 15.9 2 359.2 5 559.2 5 559.2 559.2 559.2 559.2 559.2 559.2 559.2	* 9.6 11.0 005000599 	9.9 11.4 10.9 26.8 26.8 11.7 23.8 23.9 2	9.6 11.0 10.6 25.8 III 40.7 7.8.9 40.7 7.78.9 4.3 10.7 7.78.9 4.3 10.7 11.3 10.8 270.5 131.4 28.0 13.4 44.2 312.4 40.5 64.7 3.9	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 7.0 9.0 41.0 7.8 238.4 608.4 69.9 9.04.0	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 73.7 11.2 1 11.7 56.3 20.8 29.0 381.1 87.1 162.7 28.3 1.066.8 161.8 649.1 7.3,4	27. 31. 22. 33. 197. 197. 117 64 1 215 12 32 30 30 508 611 126 37. 1.525. 2422 956 114, 182 57.
I raq. Kuvait. Approved Syrta. Approved ROVENANCE NORTH AFRICA. Egypt. Libya. SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA. Argentina. Brazil. Peru. DMMUNIST COUNTRIES. USSR. Czechoslovakia. East Germany. Hungary.	11.4 15.8 IFOR , R IFOR ,	12.3 6.3 ease 5.001 17.7 1V 17.7 10.7 10.7 10.7 49.3 0 15.9 6.4 6.1 6.4 6.1 6.8 8 7.5 21.8 7.5 21.8 7.5 368.5 79.3 209.1 23.0 17.0 17.0 17.7 10.7 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	4.9 5.8 /11/08:5 1 0 0.7 0.7 1.7 * .3 39.0 2.2 5.4 5.5 * 5.6 78.1 1.1 24.0 7.0 287.7 42.2 186.6 21.1 32.9 186.6 21.1 32.9	6.2 7.1 IAAROPY 144.5 26.2 144.5 48.6 48.6 2.8 5.7 7.0 7.0 119.7 16.8 35.5 8.8 8.8 8 8.8 8 8.6 144.5 214.5 26.1 41.8 8.8 8.8 10.0 214.5 26.1 10.0 214.5 26.1 10.0 214.5 26.1 10.0 21.5 20.1 10.0 21.5 20.1 21.5 20.1 21.5 20.5 21.5 20.5 21.5 21.5 21.5 21.5 21.5 21.5 21.5 21	6.7 7.8 8660098 1978 1111 2 29.3 9 16.3 9 16.3 17.4 9 16.3 17.4 9 16.3 17.4 9 16.3 17.4 9 16.3 17.4 9 16.3 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17.4	9.2 10.6 5 FRO00230 IV IV 222.0 5 6 75.4 0 4.1 5 10.2 2 220.0 5 .6 9 75.4 4.1 5 10.3 10.3 10.3 1152.9 5 151.1 131.6 5 12.8 1330.0 330.0 330.0 330.0 33.3 30.2 127.4	* 9.6 11.0 005004959 I 43.0 * 22.9 6 78.5 * 4.3 * 10.6 * 4.3 * 10.6 * 11.3 10.8 266.1 * 130.8 266.1 * 30.8 266.3 * 30.8 266.3 * 30.8 266.3 * 30.8 266.3 * 30.8 30.0 * 30.9 * 30.9	9.9 11.4 10.9 26.8 26.8 11.7 23.8 23.9 2	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 4.3 10.7 11.3 10.8 23.0 7 78.9 4.3 10.7 11.3 10.8 23.0 7 78.9 4.3 10.7 11.4 * 28.0 13.4 * 28.0 3.5 * 3.4 * 3.5 * 3.4 * 3.5 * 3.4	22.8 50.0 9.8 37.3 1976 26.2 51.4 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4 69.9 1.077.8 238.4 69.9	39.9 20.0 39.9 55.2 ANNUAL 1977 73.7 73.7 73.7 1.2 1 1.2 1 1.2 1 1.2 20.8 29.0 38.1.1 87.t 162.7 29.3 1.066.8 161.8 173.4 173.	27. 31. 22. 33. 197. 197. 197. 197. 197. 197. 197. 107.
Iraq. Kuxait. Approved Syrta. Approved Syrta. Approved Egypt. Superior Systems SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA Argentina. Brazil. Peru. OMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechoslovakia. East Germany. Hungary. Poland. Romania.	11.4 5.8 IFOR, R.S. IIII 24.2 24.2 3. 56.9 9.4 14.7 7.2 127.3 28.7 61.8 7.1 289.3 23.2 28.7 121.3 33.4 8.5 14.4 69.4 21.4	12.3 * 6.3 ease 5.001 17.7 10.7 10.7 10.7 10.7 10.7 15.9 6.4 6.1 6.8 8 7.5 21.8 * 7.6 368.5 79.3 209.1 23.0 16.0 17.0 10.7 10.	4.9 5.8 /11/08 5 1 1 20.7 107 5 5.5 5 5.5 5 5.5 5 5.5 5 5.6 7 8.1 1.1 24.0 7.0 287.7 42.2 186.6 287.7 42.2 186.6 121.1 24.7 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	6.2 7.1 1 14.5 26.2 14.5 2.6 2.6 2.6 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 2.6 3.1 14.5 2.6 3.1 2.6 3.1 14.5 2.6 2.6 3.1 14.5 2.6 3.1 14.5 2.6 3.1 14.5 2.6 3.1 14.5 2.6 3.1 14.5 2.6 3.1 14.5 2.6 3.5 5.5 3.1 14.5 2.6 3.5 5.5 3.5 5.5 3.5 1.5 5.5 3.5 1.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5	6.7 7.8 8660098 1978 111 2 29.1 3 16.1 4 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 8 28.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.5 7.6 9 51.9 7.6 9 51.9 7.6 9 51.9 7.6 9 51.9 7.6 9 7.5 7.6 9 51.9 7.6 9 7.5 7.6 9 7.5 7.5 9 7.5 7.6 9 7.5 7.5 9 7.5 7.5 9 7.5 7.5 9 7.5 9 7.5 7 7 9 7.5 9 7	9.2 10.6 5R009300 IV IV 9.2 2.22.0 5.6 9.75.4 0.4.1 5.0.2 9.75.4 0.4.1 1.0.8 5.15.1 1.0.3 1.152.9 5.15.1 1.2.8 5.15.2 1.18.0 330.0 5.33.7 6.1.9 5.33.1 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.2.8 5.15.4 1.18.0 1.2.8 5.15.4 1.18.0 1.2.8 5.15.4 1.18.0 1.2.8 5.15.4 1.18.0 1.18.0 1.18.0 1.2.8 5.14.1 1.2.8 5.14.1 1.5.9 5.14.1 1.5.9 5.14.1 1.5.9 5.15.1 1.5.8 5.14.1 5.15.4 1.5.8 5.5.12.8 5.	* 9.6 11.0 005004959 I 43.0 * 22.9 * 43.0 * 22.9 * 43.0 * 22.9 * 43.3 * 10.6 11.3 10.8 266.1 * 130.8 24.8 13.3 * 130.8 24.8 13.3 * 40.3 * 40.5 * 40.3 * 40.5 * 40.5 * 40.3 * 40.5 * 40.5	9.9 11.4 10.9 26.8 1979 1970 1	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 4.3 10.7 11.3 10.8 23.0 7 78.9 4.3 10.7 11.3 10.8 23.0 7 7 8.9 4.3 10.7 11.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.9 4.3 10.8 23.0 7 7 8.13 11.3 8 23.0 7 7 8.9 4.3 10.7 11.3 8 23.0 7 7 8.13 1.3 4 23.0 7 7 8.9 1.3 1.4 4.2 8 23.0 7 7 8.13 1.4 4.2 8 23.0 7 7 8.13 8 1.3 4 8 23.0 7 7 8.13 1.4 4.2 8 1.3 4.3 8 1.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 4.3 8 1.3 8 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	22.8 50.0 9.8 37.3 1976 36.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4 608.4 69.9 9 1.077.8 238.4 608.4 69.9 1.04.0 39.6 63.2 248.8	39.9 20.0 39.9 55.2 1977 73.7 73.7 73.7 73.7 1.2 1 1.2 1 1.2 1 1.2 1 1.2 1 1.2 2.0 8 2.9 0 381.1 87.t 162.7 29.3 1.066.8 161.8 649.1 73.4 173.5 175.5 175.5	27. 31. 22. 33. 197. 117 64 1 215 12 30 32 30 508 61 126 37 1.525 242 956 114 182 57 957 37 34 34 34
Iraq. Kuvait. Approved Syrta. Approved Syrta. Approved Egypt. Libya SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA Argentina. Brazil. Peru. OMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechoslovakia. East Germany. Hungary. Poland. Romania. Yugoslavia.	11.4 5.8 IFOR, R.S. IIII 24.2 24.2 3. 56.9 9.4 14.7 7.2 127.3 28.7 61.8 7.1 289.3 23.2 28.7 121.3 33.4 8.5 14.4 69.4 21.4	12.3 * 6.3 ease 5.001 17.7 10.7 10.7 10.7 10.7 10.7 15.9 6.4 6.1 6.8 8 7.5 21.8 * 7.6 368.5 79.3 209.1 23.0 16.0 17.0 10.7 10.	4.9 5.8 /11/08 1 1 20.7 11/7 * 39.0 2.2 5.4 5.5 5.5 5.5 7 8.1 1.1 24.0 7.0 0 287.7 7 42.2 186.6 21.1 32.9 4.9 17.7 67.6 6.5 59.0	6.2 7.1 IA-ROP 7.1 II II 26.2 14.5 2.8 5.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7	6.7 7.8 8660098 1978 1111 2 29.3 16:3 16:3 16:3 16:3 16:3 16:3 16:3 16:	9.2 10.6 5 5R000300 IV IV 2 22.0 5 6 9 75.4 0 4.1 5 10.8 5 10.8 5 10.8 5 10.8 5 10.8 5 10.8 5 10.8 5 10.3 1 152.9 5 15.1 1 31.6 5 12.8 5 18.0 1 330.0 5 33.0 5 33.7 6 1.9 5 12.4 18.0 5 33.0 5 12.4 18.0 5 33.0 5 12.4 18.0 5 12.8 5 12.4 18.0 5 12.8 5 12.8 5 12.4 18.0 5 12.8 5 12.4 18.0 5 12.8 5 12.4 18.0 12.4 18.0 5 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 18.0 12.4 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5	* 9.6 11.0 005004559 I 43.0 * 22.9 .6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 266.1 * 130.8 24.8 13.3 485.2 69.6 300.0 * 40.3 * 40.3 * 31.9 * 132.5 * 5.7	9.9 11.4 10.9 26.8 1979 1978 1979 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1978 1979 1	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 4.3 10.7 11.3 10.7 11.3 10.8 270.5 131.4 28.0 133.4 44.2 312.4 44.2 312.4 472.8 44.2 312.4 472.8 44.2 312.4 133.4 133.2 133.2	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4 608.4 69.9 9104.0 39.6 63.2 2428.8 11.4	39.9 20.0 39.9 55.2 1977 73.7 34.1 1.2 1.85.5 11.7 56.3 20.8 29.0 381.1 87.t 162.7 29.0 381.1 87.t 162.7 29.0 381.1 87.t 162.7 29.0 381.1 17.7 56.3 20.8 29.0 381.1 17.7 56.3 20.8 29.0 381.1 1.2 20.8 29.0 29.0 20.0 20.0 20.0 20.0 20.0 20.0	27.1 31.2 22.3 33.3 33.3 1973 117 64 1 215 12 30 32 30 32 30 32 30 508 61 126 37 30 32 30 30 30 30 30 30 30 30 30 30 30 30 30
Iraq. Kuvait. Approved Syrta. Approved Syrta. Approved Syrta. Approved Syrta. Approved Egypt. Elby SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA Argentina. Brazil. Peru. OMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechoslovakia. East Germany. Hungary. Polend. Romania. Yugoslavia. OTHER 2/	11.4 5.8 IFor, R. 6	12.3 6.3 ease 2,001 77 1V 17.7 10.7 10.7 10.7 10.7 10.7 10.7 15.9 0.6.4 0.4 15.9 0.6.4 0.4 1.5.9 0.6.4 0.4 1.5.9 0.6.4 0.4 1.5.9 0.6.4 0.4 0.5.5 7.5 368.5 79.3 209.1 23.0 366.0 17.0 368.5 79.3 209.1 23.0 366.0 10.6 74.8 22.5 80.1	4.9 5.8 /11/08 20.7 11/7 39.0 2.2 5.4 5.5 5.5 5.5 7.8.1 1.1 24.0 7.0 2.2 5.4 5.5 5.5 5.5 7.8.1 1.1 24.0 7.0 2.2 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.2 7.1 14.4 26.2 14.5 2.6 48.5 2.6 5.7 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	6.7 7.8 8660098 1978 1111 2 29.3 16.3 9 16.3 9 15.3 9 16.3 9 16.3 9 17.5 9 15.3 9 16.3 9 15.3 9 16.3 9 15.3 9 15.3	9.2 10.6 5 5R000300 1V 1V 9.40.2 2 22.0 5 .6 9 75.4 0 4.1 5 10.2 9 15.1 15.1 9 15.9 9 15.1 15.1 9 15.9 9 15.1 18.0 1330.0 1330.0 330.0 330.0 127.4 18.1 111.2 XAINED FRO	* 9.6 11.0 005000599 	9.9 11.4 10.9 26.8 26.8 11.7 23.8 7 81.7 4.5 11.0 23.0 13.6 0 28.9 25.2 314.7 4.1 23.6 28.9 13.6 0 28.9 13.7 9 13.9 4.5 11.0 28.9 13.6 0 28.9 13.8 13.7 9 13.8 13.7 9 13.8 13.8 120.3 28.7 20.8 20.9	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 10.7 11.3 10.7 11.3 10.7 11.3 23.0 7 78.9 10.7 11.3 10.8 270.5 131.4 44.2 312.4 44.2 312.4 44.2 312.4 13.4 115.2 13.4 116.2 ATA: <u>3</u> /	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 105.3 2.7 9.0 107.8 238.4 608.4 69.8 104.0 39.6 63.2 248.8 11.4 231.0	39.9 20.0 39.9 55.2 1977 73.7 34.1 185.5 11.7 56.3 20.8 29.0 381.1 187.1 162.7 28.3 20.8 29.0 381.1 17.7 56.3 20.8 29.0 381.1 17.7 34.1 1.2 1.1 1.2 1.1 1.2 1.1 1.2 1.2 1.1 1.2 1.2	27. 31. 22. 33. 197. 117 54 1 215 12 30 30 508 61 126 37 1. 525 242 956 114 126 37 4 374 34 326
Iraq. KuwaitApproved SyriaApproved SyriaApproved Egypt Libya SUB-SAHARA AFRICA Nigeria Sudan Tanzania Zambia LATIN AMERICA Argentina Brazil Peru SUBMUNIST COUNTRIES USSR EASTERN EUROPE Czechosiovakia East Germany Hungary Poland Romania Yugoslavia OTHER <u>2</u> /	11.4 5.8 IFor, R. III 24.0 9.9 9.4.3 56.9 9.4.4 7.2 127.3 28.7 61.8 7.1 289.3 23.2 191.8 21.3 33.4 8.5 5 14.4 4 69.4 21.4 98.67	12.3 * 6.3 ease 5,001 777 1V 17.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7	4.9 5.8 7 11/08 5.5 11 1 20.7 11.7 11.7 3.9 2.2 5.4 5.5 5.5 5.5 7 8.1 1.1 24.0 7.0 2.87,7 7.0 2.2 5.4 5.5 5.5 5.5 5.5 5.5 5.5 0 PERCENT 96.05	6.2 7.1 IIA-ROP 7.1 II II 26.2 14.5 2.5 3.1 2.6 3.5 3.1 2.6 3.5 3.5 3.1 2.6 119.7 16.5 3.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 10.0 10.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.7 7.8 8660098 1978 1111 2 29.3 9 16.3 9 16.3 9 51.6 9 51.6 9 51.6 9 7.5 7.5 9 7.5 9 7.5	9.2 10.6 5 5R000300 IV IV 2200 5.6 9.75.4 0.4.1 5.002 9.75.4 0.4.1 5.10.2 9.10.8 3.10.3 1.152.9 5.15.1 1.31.6 5.159.2 9.118.0 1.330.0 5.333.3 1.127.4 1.12.8 5.333.0 5.127.4 1.12.8 5.1	* 9.6 11.0 0050045,9 I 43.0 * 22.9 * 43.0 * 22.9 * 6 78.5 * 4.3 * 10.6 11.3 10.8 266.1 * 130.8 226.9 * 130.8 226.9 * 130.8 24.8 13.3 * 40.3 * 40.3 * 40.3 * 40.3 * 40.3 * 132.5 * 5.7 115.6 M TRADE P. 79.81	9.9 11.4 10.9 26.8 1979 1979 1979 1979 1979 1979 1979 10.2 81.7 42.1 23.0 11 23.0 28.9 13.9 460.2 25.2 314.7 41.9 67.0 25.2 314.7 41.9 67.0 25.2 314.7 41.9 67.0 4.5 13.8 13.9 13.8 120.3 MATNER D. 75.68	9.6 11.0 10.6 25.8 III 40.7 23.0 7.78.9 4.3 10.7 7.78.9 4.3 10.7 11.3 23.0 7.78.9 4.3 10.7 11.3 28.0 13.4 4.2 312.4 40.5 64.7 3.9 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	22.8 50.0 9.8 37.3 1976 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 41.9 1.077.8 238.4 608.4 608.4 608.4 608.4 608.4 1.4 231.0 99.34	39.9 20.0 39.9 55.2 1977 73.7 34.1 1.2 11.7 56.3 20.8 29.0 381.1 87.t 162.7 29.3 1.066.8 161.8 649.1 73.4 115.0 32.0 60.7 239.2 48.0 255.9 98.73	27.0 31.2 22.1 33.3 1973 1973 1973 1973 1973 1973 1973 197
I raq. Kuwait. Syria. PROVENANCE PROVENANCE SUB-SAHARA AFRICA. Digeria. SUB-SAHARA AFRICA. Nigeria. Sudan. Tanzania. Zambia. LATIN AMERICA. Argentina. Brazil. Peru. Communist CountRIES. USSR. EASTERN EUROPE. Czechoslovakia. East Germany. Hungary. Poland. Romania. Yugoslavia.	11.4 5.8 IFOR, R.G. IIII 24.0 9.9 9.4 3 56.9 9.4 14.7 7.2 127.3 28.7 7 1 289.3 23.2 121.3 33.4 69.4 21.3 33.4 4 69.4 21.4 74.3 98.67 100.00 93.57	12.3 * 6.3 ease 5,001 777 1V 17.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7	4.9 5.8 /11/08 20.7 11/7 39.0 2.2 5.4 5.5 5.5 5.5 7.8.1 1.1 24.0 7.0 2.2 5.4 5.5 5.5 5.5 7.8.1 1.1 24.0 7.0 2.2 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.2 7.1 IIA-ROP 7.1 II II 26.2 14.5 2.5 3.1 2.6 3.5 3.1 2.6 3.5 3.5 3.1 2.6 119.7 16.5 3.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 16.5 3.5 2.6 119.7 10.0 10.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 3.1 0.0 2.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	6.7 7.8 8660099 1978 1111 2 29.3 9 16.2 9 16.2 16.2 9 16.2 9 15.2 9 15.2	9.2 10.6 5 5R000300 1V 1V 22.20.0 5 .6 9 75.4 9 75.4 9 75.4 9 152.9 15.1 15.1 9 152.9 15.1 12.8 9 559.2 9 118.0 9 559.2 9 118.0 12.8 9 30.0 330.3 12.7 4 11.2 13.6 9 30.0 33.3 12.7 4 11.2 13.0 9 30.0 33.3 12.7 4 11.2 13.0 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	* 9.6 11.0 005000599 	9.9 11.4 10.9 26.8 26.8 11.7 23.8 7 81.7 4.5 11.0 23.0 13.6 0 28.9 25.2 314.7 4.1 23.6 28.9 13.6 0 28.9 13.7 9 13.9 4.5 11.0 28.9 13.6 0 28.9 13.8 13.7 9 13.8 13.7 9 13.8 13.8 120.3 28.7 20.8 20.9	9.6 11.0 10.6 25.8 III 40.7 23.0 7 78.9 10.7 1.3 10.7 1.3 10.7 1.3 10.7 1.3 10.7 1.3 10.7 1.3 10.8 270.5 131.4 472.8 44.2 312.4 472.8 44.2 312.4 472.8 44.2 313.4 116.2 4TA: <u>3</u> / 72.82 99.88	22.8 50.0 9.8 37.3 1976 56.2 51.4 1.0 108.1 1.0 24.2 13.7 27.0 105.3 2.7 9.0 105.3 2.7 9.0 107.8 238.4 608.4 69.8 104.0 39.6 63.2 248.8 11.4 231.0	39.9 20.0 39.9 55.2 1977 73.7 34.1 185.5 11.7 56.3 20.8 29.0 381.1 187.1 162.7 28.3 20.8 29.0 381.1 17.7 56.3 20.8 29.0 381.1 17.7 34.1 1.2 1.1 1.2 1.1 1.2 1.1 1.2 1.2 1.1 1.2 1.2	27.0 31.2 22.1 33.2 1978

<u>1</u>/ Country listings for any given area are not exhaustive: only major trade partners are presented. Country data for all quarters to the right of an asterisk are extrapolated and are subject to change.
 <u>2</u>/ Cambodia, Cuba. Mongolian Republic. Loos, North Korea, and Vietnam.
 <u>3</u>/ Includes quarterly data that have been interpolated from annual trade partner data.

Figure 40 China's imports 1977-1979 (CIA, 1980, p. 6)



China: Imports, f.o.b., by Area

China: Imports, f.o.b., by End Use

Figure 41 Chinese imports by area and end of use, 1979-1984 (CIA, 1985)

Highlights of US-China Trade



Data from US Department of Commerce show both exports and imports on an f.o.b. basis.

Figure 42 US-China Trade, 1971-1984 (CIA, 1985)

CHINA: IMPORTS, FOB, BY AREA AND COUNTRY A/

Million US \$

											Million	••••
	1982		19	83			19	84			ANNUAL	
	IV	I	11	111	IV	I	11	111	IV	1982	1983	1984
WORLD	4 182 5	4.011.7	4.466.7	4,412.5	5.450.2	4.950.3	5,363.1	6.373.8	8.413.6	16,686.0	18,341.0	25,100.1
NON-COMMUNIST COUNTRIES				4,000.3		4.533.4	4,891.9	5,829.8	7,769.1		16,688.6	
DEVELOPED COUNTRIES		2,770.5	2,722.4	2,682.4	3,546.2	3,154.1	3,263.3	3,882.9	5,141.4		11,721.6	
EAST ASIA AND PACIFIC				1,348.4			1.721.4			4,446.0		8,057.
Australia	225.1 923.5	144.9 871.0	64.2	55.3 1,278.3	128.3	193.6	173.3	184.3	184.7	837.9 3,500.0	392.8 4,917.7	7,198.
NORTH AMERICA	752.2	959.3	697.7		1,080.8	827.3	752 9	1.074.7	1.316.9	3,917.2	3,362.2	3.971.
Canada	233.7	290.5	332.5	226.6	339.5	199.2	218.7	220.7	328.9	1,005.2	1, 189.1	967.
United States	518.5	668.8	365.2	397.8	741.3	628.1	534.2	854.0	988.0	2,912.0		3,004.
WESTERN EUROPE	804.0	754.6	705.0	709.6	769.7	728.4	789.0		1,063.3	2,440.7		3,412.
Belgium	87.7	53.8	48.5	54.1	56.9	53.4	62.0	67.6	89.2	203.3	213.3 450.0	272. 310.
France	178.5	151.6	129.1	79.4	89.9	78.7	65.2	59.6 239.9	106.7 336.9	335.8 852.6	1.074.9	1,037.
West Germany	233.2	257.1	257.1	269.4	291.3	248.3 97.1	212.7	109.9	122.5	210.3	264.5	394.
Italy	52.6 20.0	70.6	49.2 22.6	66.8 29.7	77.9 37.3	37.3	33.7	46.2	49.8	66.3	132.9	167.
Netherlands Spain	39.4	33.8	28.6	19.3	27.4	22.8	39.7	60.3	62.3	111.9	109.1	185.
Sweden	15.0	10.9	29.2	36.0	38.4	25.8	31.6	23.9	39.6	59.7	114.5	120
Switzerland	44.5	19.8	32.0	29.7	42.8	25.3	33.9	26.1	37.7	128.2		123
United Kingdom	60.2	66.8	70.8	62.5	43.5	75.3	179.1	81.0	88.6	178.5	243.6	424
ESS DEVELOPED COUNTRIES.	952.1			1,317.9	1,398.8		1,628.6			4,165.7		7,582.
SOUTHEAST ASIA	690.1	621.7	734.4		1,037.4		1,272.4			2,996.6		5,030
Hong Kong	479.3	434.3	560.1	663.0 6.5	837.4	862.5		9.4	12.4	14.1		37
Indonesia	3.8 32.1	5.9 37.2	6.5	51.4	33.4	34.9	38.0	44.7	59.1	110.4	156.7	176
Malaysia Philippines	14.3	17.3	2.4	2.8	.0	12.9		21.2	24.3	105.2	22.4	60
Singapore	72.1	45.6	60.3	49.5	57.5	45.6		62.3	78.6	240.4		243
Thailand	39.6	34.0	20.1	17.6	35.5	27.5	59.6	52.1	43.0	306.5	107.3	182
SOUTH ASIA	19.7	35.4	120.4	40.8	22.5	32.2		22.8	38.8	213.3		121 8
Bangladesh	7.4	10.5	3.7	3.2	1.2	6.4		. 1		25.7		40
Pakistan	. 3	9.8	106.2	25.9	4.0	9.4		6.2 3.1		144.6		19
Sri Lanka	3.2	6.5	1.1	2.4	5.9	5.8	5.5					
MIDDLE EAST	25.6	23.3	32.7	25.4 .0	40.1	36.4 .0		42.4		167.6 .0		
Kuwait Saudi Arabia	0. 0.	0. 0.	.0	.0	.0	.0				.0	.0	
Syria	9.8	9.5	10.6	10.5	12.9	11.8				11.2		
United Arab Emirates		.0		.0	.0	.0				.0		
Yemen Arab Republic.	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1		9
	1982		19	83			19	84			ANNUAL	
	IV	I	11	111	IV	I	11	111	IV	1982	1983	1984
NORTH AFRICA	15.6	19.0	25.4	25.5	25.3	22.4	21.9	20.5	27.1	75.2	95.2	91.5
Egypt	8.9	8.6	9.6	9.4	11.7	10.7	11.5	13.7	18.1	35.4	39.3	54.
Tunisia	.0	3.6	3.5	4.3	1.8	7.4		.0	.0	16.2		11.
SUB-SAHARA AFRICA							3.8				13.1	
	37.7	42.8	48.2	48.6	62.0	56.5	61.3	72.8	96.1	144.6	201.7	286.
Cameroon	.0	.0	.0	. 3	. 1	56.5 .0	61.3 .0	72.8	.0	144.6 .0	201.7	286 .
Cameroon	. 0 . 0	.0 .0	.0 .0	.3	.1	56.5 .0 .0	61.3 .0 .0	72.8 .0 .0	.0.	144.6 .0 .0	201.7 .4 .0	286 .
Cameroon	.0	.0	.0	. 3	. 1	56.5 .0	61.3 .0	72.8	.0	144.6 .0	201.7	286 . 78 .
Cameroon Nigeria Sudan Zambia	.0 6.4 3.0	.0 .0 12.5 2.9	.0 .0 13.9 3.3	.3 .0 13.7 3.2	.1 .0 17.0 4.0	56.5 .0 15.5 3.6	61.3 .0 .0 16.8 3.9	72.8 .0 .0 20.0 4.7	.0 .0 26.4 6.2	144.6 .0 .0 25.7	201.7 .4 .0 57.1	286. 78. 18.
Cameroon Nigeria Sudan Zambia LATIN AMERICA	.0 .0 6.4 3.0 163.5	.0 .0 12.5 2.9 179.4	.0 .0 13.9 3.3 367.5	.3 .0 13.7 3.2 330.4	.1 .0 17.0	56.5 .0 15.5 3.6 162.7	61.3 .0 .0 16.8 3.9 200.4	72.8 .0 .0 20.0	.0 .0 26.4	144.6 .0 .0 25.7 12.0	201.7 .4 .0 57.1 13.4	286. 78. 18. 877.
Cameroon Nigeria Sudan Zambia LATIN AMERICA Argentina	.0 6.4 3.0	.0 .0 12.5 2.9	.0 .0 13.9 3.3	.3 .0 13.7 3.2	.1 .0 17.0 4.0 211.4	56.5 .0 15.5 3.6	61.3 .0 .0 16.8 3.9	72.8 .0 20.0 4.7 212.5	.0 .0 26.4 6.2 302.2	144.6 .0 25.7 12.0 568.4	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4	286.
Cameroon Nigeria Sudan Zambia LATIN AMERICA	.0 .0 6.4 3.0 163.5 34.4	.0 .0 12.5 2.9 179.4 76.6	.0 .0 13.9 3.3 367.5 212.5	.3 .0 13.7 3.2 330.4 143.2	.1 .0 17.0 4.0 211.4 39.4	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3	.0 .0 26.4 6.2 302.2 19.9 187.5 29.6	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9	201.7 .4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7	286. 78. 18. 877. 85. 461. 125.
Cameroon Nigeria Sudan Zambia LATIN AMERICA Argentina Brazil Guatemala	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0	.0 .0 26.4 6.2 302.2 19.9 187.5 29.6 .0	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4 93.7 .6	286. 78. 18. 877. 857. 461. 125.
Cameroon Nigeria Sudan Zambia LATIN AMERICA Argentina Brazil. Chile Guatemala Mexico	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4 18.1	.0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0 20.5	72.8 0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2	.0 .0 26.4 6.2 302.2 19.9 187.5 29.6 .0 29.3	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4 93.7 .6 53.7	286. 78. 18. 877. 85. 461. 125. 98.
Cameroon Nigeria Sudan Zambia LATIN AMERICA Argentina Brazil. Chile Guatemala Mexico	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0	.0 .0 26.4 6.2 302.2 19.9 187.5 29.6 .0	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4 93.7 .6	286. 78. 18. 877. 461. 125. 98. 2.076.
Cameroon Nigeria Sudan Zambia Argentina Brazil Chile Guatemala Mexico OMMUNIST COUNTRIES	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4 18.1 478.5	.0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8 0 26.9 416.9 99.5 200.3	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0 20.5 471.3 117.2 254.4	72.8 0 0 20.0 4.7 212.5 15.1 109.7 38.3 0 22.2 544.0 186.9 255.4	.0 26.4 6.2 302.2 19.9 187.5 29.6 0 29.3 644.5 171.0 339.2	144.6 .0 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4 93.7 .6 53.7 1,652.4 339.7 845.1	286. 78 18 85 461 125 98 2.076 574
Cameroon Nigeria Sudan Zambia Argentina Brazil Guatemala Mexico OMMUNIST COUNTRIES USSR EASTERN EUROPE Czechoslovakia	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4 18.1 478.5 48.7 285.4 69.7	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 164.8 24.7	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1	.1 .0 17.0 4.0 211.4 39.4 .0 14.7 505.2 128.8 282.9 43.5	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 99.5 99.5 200.3 200.3	61.3 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0 20.5 471.3 117.2 254.4 36.5	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4	.0 26.4 6.2 302.2 19.9 187.5 29.6 .0 29.3 644.5 171.0 339.2 33.4	144.6 .0 .25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1	201.7 .4 .0 57.1 13.4 1,088.7 471.6 272.4 93.7 .6 53.7 1,652.4 339.7 845.1 112.7	286. 78. 18. 85. 461. 125. 98. 2.076. 574. 1.049. 124.
Cameroon Nigeria Sudan Zambia Argentina Brazil Chile Guatemala Mexico OMMUNIST COUNTRIES USSR EASTERN EUROPE Czechosiovakia East Germany	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 .4 18.1 478.5 48.7 285.4 69.7 33.7	0 0 0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 164.8 24.7 34.1	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 48.7	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1 39.7	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2 128.8 282.9 43.5 64.3	56.5 .0 15.5 3.6 162.7 24.7 56.2 33.8 33.8 26.9 99.5 200.3 29.4 25.1	61.3 .0 16.8 3.9 200.4 25.6 107.8 23.6 107.8 23.6 .0 20.5 471.3 117.2 254.4 36.5 30.2	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4	.0 26.4 6.2 302.2 19.9 187.5 29.6 0 29.3 644.5 171.0 339.2 33.4 43.2	144.6 .0 .025.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5	201.7 .4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7 53.7 1.652.4 339.7 845.1 1.12.7 186.8	286. 78. 18. 877. 461. 125. 98. 2.076. 574. 1.049. 124. 1.049. 124.
Cameroon Nigeria Sudan Zambia Argentina Brazil Guatemala MUNIST COUNTRIES USSR EASTERN EUROPE Czechoslovakia East Germany Hungary	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4 18.1 478.5 48.7 285.4 69.7 33.7 13.1	.0 0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 194.8 24.7 34.1 6.6	.0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 48.7 7.5	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 0 13.9 412.1 110.5 190.9 19.1 39.7 8.6	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2 128.8 282.9 43.5 64.3 22.6	56.5 .0 .0 15.5 3.6 162.7 24.7 24.7 56.2 33.8 .0 26.9 99.5 200.3 29.4 25.1 7.9	61.3 .0 16.8 3.9 200.4 25.6 .0 20.5 471.3 117.2 254.4 36.5 30.2 15.3	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.3 32.7 14.5	.0 26.4 6.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7	201.7 4 .00 57.1 13.4 1.088.7 471.6 272.4 93.7 6 53.7 1.652.4 339.7 845.1 112.7 186.8 45.3	286. 78. 18. 857. 857. 461. 125. 98. 2.076. 574. 1.049. 124. 131. 588.
Cameroon Nigeria Sudan Zambia Argentina Brazil Chile Guatemala Mexico OMMUNIST COUNTRIES USSR EASTERN EUROPE Czechoslovakia East Germany Hungary Poland	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 32.6 18.1 478.5 48.7 285.4 69.7 33.7 13.1 33.7	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 164.8 24.7 34.1 6.6 11.5	0 13.9 3.3 367.5 212.5 77.8 16.4 0 12.5 415.6 61.1 206.6 25.4 48.7 7.5 27.5	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1 39.7 8.6 27.2	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 0 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 99.5 200.3 29.4 29.4 25.1 7.9 39.7	61.3 .0 .0 16.8 23.6 .0 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4 255.4 32.7 14.5 37.0	.0 26.4 6.2 302.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8	144.6 .0 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1	201.7 .4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7 53.7 1.652.4 339.7 845.1 112.7 186.8 45.3 99.8	286 . 78 . 18 . 125 . 98 . 2.076 . 574 . 1.049 . 124 . 131 . 58 . 160 .
Cameroon Nigeria Sudan Zambia Argentina Brazil Guatemala MMUNIST COUNTRIES USSR EASTERN EUROPE Czechoslovakia East Germany	.0 6.4 3.0 163.5 34.4 21.6 32.6 .4 18.1 478.5 48.7 285.4 69.7 33.7 13.1	.0 0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 194.8 24.7 34.1 6.6	.0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 48.7 7.5	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 0 13.9 412.1 110.5 190.9 19.1 39.7 8.6	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2 128.8 282.9 43.5 64.3 22.6	56.5 .0 .0 15.5 3.6 162.7 24.7 24.7 56.2 33.8 .0 26.9 99.5 200.3 29.4 25.1 7.9	61.3 .0 16.8 3.9 200.4 25.6 .0 20.5 471.3 117.2 254.4 36.5 30.2 15.3	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.3 32.7 14.5	.0 26.4 6.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7	201.7 4 .00 57.1 13.4 1.088.7 471.6 272.4 93.7 6 53.7 1.652.4 339.7 845.1 112.7 186.8 45.3	286. 78. 18. 85. 461. 125. 98. 2.076. 574. 1.049. 124. 131. 58. 160. 448.
Cameroon. Nigeria. Sudan. Zambia. Argentina. Brazil. Chile. Guatemala. Mexico. OMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechosiovakia. East Germany. Hungary. Poland. Romania. Yugosiavia.	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 48.7 285.4 69.7 33.7 13.1 33.7 107.8	.0 0 12.5 2.9 179.4 76.6 33.0 7.5 39.3 19.5 39.3 164.8 24.7 34.1 6.6 11.5 67.8	0 13.9 3.3 367.5 212.5 77.8 16.4 12.5 415.6 61.1 206.6 61.1 206.6 25.4 415.7 5.2 7.5 27.5	.3 .00 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1 39.7 8.6 27.2 74.3	.1 .0 17.0 4.0 2111.4 39.4 28.4 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6 33.6 91.8	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 416.9 99.5 200.3 29.4 25.1 7.9 39.7 73.4	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 .0 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5 111.0	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4 255.3 32.7 14.5 37.0 114.0	.0 26.4 6.2 19.9 187.5 29.0 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8 150.5	144.6 0.25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1 430.2	201.7 4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7 1.652.4 339.7 845.1 112.7 186.8 45.3 99.8 309.1	286. 78. 18. 877. 85. 461. 125. 98. 2.076. 574. 1.049. 124. 131. 58. 160. 448. 98.
Cameroon	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 48.7 285.4 69.7 33.7 13.1 33.7 13.1 33.7 107.8 16.2	0 0 12.5 2.9 179.4 76.6 33.0 7.5 6 12.6 319.5 39.3 164.8 24.7 34.1 6.6 11.5 67.8 15.8 115.4	.0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 448.7 7.5 27.5 75.2 17.5	.3 .3 .7 .3 .2 .3 .7 .3 .2 .3 .7 .4 .0 .0 .1 .3 .9 .4 12.1 .1 .0 .5 .9 .9 .9 .9 .7 .2 .2 .7 .4 .3 .9 .4 .4 .4 .5 .7 .4 .2 .7 .2 .2 .7 .2 .2 .3 .0 .4 .4 .4 .5 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .4 .4 .5 .2 .7 .4 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .1 .9 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .5 .1 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6 91.8 21.3 93.5	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 0 26.9 99.5 200.3 29.4 25.1 7.9 39.7 73.4 19.5	61.3 .0 .0 16.8 23.6 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5 111.0 21.1 99.7	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 255.4 257.7 14.5 37.0 114.0 25.1 110.1 110.7	.0 26.4 6.2 302.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8 150.5 33.1 134.3	144.6 0.25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1 430.2 49.1	201.7 .4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7 53.7 1.652.4 339.7 845.1 1.12.7 186.8 45.3 99.8 309.1 71.8	286. 78. 18. 877. 85. 461. 125. 98. 2.076. 574. 1.049. 124. 131. 58. 160. 448. 98.
Cameroon. Nigeria. Sudan. Zambia. Argentina. Brazil. Chile. Guatemala. Mexico. OMMUNIST COUNTRIES. USSR. EASTERN EUROPE. Czechoslovakia. East Germany. Hungary. Poland. Romania. Yugoslavia.	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 .4 18.1 478.5 48.7 285.4 69.7 33.7 13.1 33.7 107.8 16.2 144.4	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 164.8 24.7 34.1 6.6 11.5 67.8 15.8 15.8	.0 .0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 48.7 7.5 27.5 27.5 27.5 27.5 147.9 RCENT OF	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1 39.7 8.6 27.2 74.3 17.3 110.8 ESTIMAT	1 0 17.0 17.0 211.4 39.4 74.2 28.4 0 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6 91.8 21.3 93.5 E OBTAINE	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 416.9 99.5 200.3 29.4 25.1 7.9 39.7 73.4 19.5 117.1	61.3 .0 .0 16.8 23.6 .0 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5 111.0 21.1 99.7 RADE PAR	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4 255.4 25.3 30.7 14.5 37.0 114.0 25.1 101.7 (NER DAT/	.0 26.4 6.2 302.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8 150.5 33.1 134.3	144.6 0.25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1 430.2 49.1	201.7 .4 .0 57.1 13.4 1.088.7 471.6 272.4 93.7 53.7 1.652.4 339.7 845.1 112.7 186.8 45.3 99.8 309.1 71.8 467.6	286. 78. 18. 877. 85. 461. 125. 98. 2.076. 574. 1.049. 124. 131. 58. 160. 448. 98. 452.
Cameroon Nigeria. Sudan Zambia Brazil Guatemala Guatemala Guatemala Mexico USSR EASTERN EUROPE Czechoslovakia East Germany Hungary Poland Romania Yugoslavia OTHER b/	.0 6.4 3.0 163.5 34.4 21.6 32.6 4 18.1 478.5 48.7 285.4 69.7 33.7 13.1 33.7 107.8 16.2 144.4 97.90	.0 0 12.5 2.9 179.4 76.6 33.0 7.5 319.5 39.3 164.8 24.7 34.1 6.6 11.5 67.8 15.8 115.4 PE 96.82	.0 13.9 3.3 367.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 448.7 7.5 27.5 75.2 17.5	.3 .3 .7 .3 .2 .3 .7 .3 .2 .3 .7 .4 .0 .0 .1 .3 .9 .4 12.1 .1 .0 .5 .9 .9 .9 .9 .7 .2 .2 .7 .4 .3 .9 .4 .4 .4 .5 .7 .4 .2 .7 .2 .2 .7 .2 .2 .3 .0 .4 .4 .4 .5 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .2 .7 .4 .4 .5 .2 .7 .4 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .4 .5 .9 .4 .1 .9 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .9 .4 .1 .5 .5 .1 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5 .5	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 .0 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6 91.8 21.3 93.5	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 416.9 99.5 200.3 29.4 25.1 7.9 39.7 73.4 19.5 117.1 20 FROM TI 96.38	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5 111.0 21.1 99.7 RADE PAR	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .2 22.2 544.0 186.9 255.4 255.4 255.4 255.4 255.4 14.5 37.0 114.0 25.1 101.7 (NER DAT/ 95.89 100.00	.0 26.4 6.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8 150.5 33.1 134.3 A: <u>c</u> / 87.06 96.98	144.6 .0 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1 430.2 49.1 575.9	201.7 4 .0 57.1 13.4 1,088.7 4716 272.4 93.7 53.7 1,652.4 339.7 845.1 112.7 186.8 45.3 99.8 309.1 71.8 467.6 96.82 100.00	286.
Cameroon	.0 6.4 3.0 163.5 34.4 21.6 32.6 32.6 .4 18.1 478.5 48.7 285.4 69.7 33.7 13.1 33.7 107.8 16.2 144.4	.0 .0 12.5 2.9 179.4 76.6 33.0 7.5 .6 12.6 319.5 39.3 164.8 24.7 34.1 6.6 11.5 67.8 15.8 15.8	.0 13.9 3.3 367.5 212.5 212.5 77.8 16.4 .0 12.5 415.6 61.1 206.6 25.4 48.7 27.5 27.5 27.5 27.5 27.5 147.9 36.83	.3 .0 13.7 3.2 330.4 143.2 87.4 41.4 .0 13.9 412.1 110.5 190.9 19.1 39.7 8.6 27.2 74.3 17.3 110.8 ESTIMAT	.1 .0 17.0 4.0 211.4 39.4 74.2 28.4 0 14.7 505.2 128.8 282.9 43.5 64.3 22.6 33.6 33.6 33.6 33.6 33.6 33.5 E OBTAINE 96.81	56.5 .0 .0 15.5 3.6 162.7 24.7 56.2 33.8 .0 26.9 416.9 99.5 200.3 29.4 25.1 7.9 39.7 73.4 19.5 117.1	61.3 .0 .0 16.8 3.9 200.4 25.6 107.8 23.6 20.5 471.3 117.2 254.4 36.5 30.2 15.3 34.5 111.0 21.1 99.7 RADE PAR	72.8 .0 20.0 4.7 212.5 15.1 109.7 38.3 .0 22.2 544.0 186.9 255.4 255.4 255.4 255.3 32.7 14.5 37.0 114.0 25.1 101.7 (NER DAT/ 95.89	.0 26.4 6.2 19.9 187.5 29.6 29.3 644.5 171.0 339.2 33.4 43.2 21.2 48.8 150.5 33.1 134.3 A: <u>c</u> / 87.06 96.98	144.6 .0 25.7 12.0 568.4 136.6 86.2 61.9 15.1 87.1 1,716.4 165.2 975.3 185.1 134.5 33.7 98.1 430.2 49.1 575.9	201.7 4 .00 57.1 13.4 1.088.7 4716 272.4 93.7 53.7 1.652.4 339.7 1.652.4 339.7 1.12.7 186.8 45.3 99.8 309.1 71.8 467.6 96.82 100.00	286.(

<u>a</u>/ Country listings for any given area are not exhaustive; only major trade partners are presented. Country data for all quarters to the right of an asterisk are extrapolated and are subject to change. See appendix A. China: International Trade Quarterly Review, First Quarter 1979 for further details.
 <u>b</u>/ Kampuchea, Cuba, Mongolia, Laos, North Korea, and Vietnam.
 <u>c</u>/ Includes quarterly data that have been interpolated from annual trade-partner data.

Figure 43 Chinese Imports, FOB, by Area and Country, 1982-1984 (CIA, 1985)



Figure 44 China's natural gas imports by source 2006-2013 (Dunn, 2014)



China's crude oil imports by source, 2013

Figure 45 China's crude oil imports by source, 2013 (EIA, 2014b)



China's crude oil imports by source, 2014

Figure 46 China's crude oil imports by source, 2014 (EIA, 2015, p. 11)



Map 2. The Growing Transport Network (China-Myanmar gas-oil pipeline) and Dams in the Greater Mekong Subregion

Figure 47 Infrastructure and dam projects in the Mekong (Chen and Stone, 2013, p. 10)

Chap	oter 4
------	--------

China's Rail Network Length (1948-2015)									
Year	km	±% p.a.	Year	km	±% p.a.	Year	km	±% p.a.	
1947	6,884	_	1967	38,600	2.12%	1995	62,400	5.76 %	
1948	12,768	85.47%	1968	38,800	0.52%	1996	64,900	4.01%	
1949	21,800	70.74%	1969	39,300	1.29%	1997	66,000	1.69%	
1950	22,200	1.83%	1970	41,000	4.33%	1998	66,400	0.61%	
1951	22,300	0.45%	1979	53,000	2.89%	1999	67,394	1.50%	
1952	22,900	2.69%	1980	53,300	0.57%	2000	68,700	1.94%	
1953	23,800	3.93%	1981	53,900	1.13%	2001	70,100	2.04%	
1954	24,500	2.94%	1982	52,900	-1.86%	2002	71,900	2.57%	
1955	25,600	4.49%	1983	54,100	2.27%	2003	73,000	1.53%	
1956	26,500	3.52%	1984	54,500	0.74%	2004	74,400	1.92%	
1957	26,700	0.75%	1985	55,000	0.92%	2005	75,400	1.34%	
1958	30,200	13.11%	1986	55,700	1.27%	2006	77,100	2.25%	
1959	32,300	6.95%	1987	55,800	0.18%	2007	77,966	1.12%	
1960	33,900	4.95%	1988	56,100	0.54%	2008	79 <mark>,</mark> 687	2.21%	
1961	34,500	1.77%	1989	56,900	1.43%	2009	85,818	7.69%	
1962	34,600	0.29%	1990	57,800	1.58%	2010	90,504	5.46%	
1963	35,000	1.16%	1991	57,800	0.00%	2012	97,600	3.85%	
1964	35,300	0.86%	1992	58,100	0.52%	2013	103,144	5.68%	
1965	36,400	3.12%	1993	58,600	0.86%	2014	111,800	8.39%	
1966	37,800	3.85%	1994	59,000	0.68%	2015	120,970	8.20%	

Figure 48 Railway Business Mileage from National Bureau of Statistics of China [table] (NBS, 2017)



Figure 49 Railway Business Mileage from National Bureau of Statistics of China [graph] (NBS, 2017)



Figure 50 China's infrastructure financing in Africa (Dollar, 2016, p. 56)

The Chinese Transportation Network									
(Mileage in Kilometres)									
Mode of Transportation	1950	1960	1970	1971					
Railway (operation)	22,512	33,000	40,000	41,000					
Highway (in operation)	99,600	500,000	650,000	NA					
Inland Waterway (navigable)	73,615	168,000	NA	NA					

Figure 51 Chinese Transportation networks from the 1950s to 1970s (Fan, 2009)

No.	Date	Cumulative counted twi ≥	Nat'l avg. passenger train speed				
		2 120 km/h	≥ 140 km/h	≥ 160 km/h	≥ 200 km/h	≥ 250 km/h	(km/h)
First	1997-04-01	1,398	1340	752			54.9
Second	1998-10-01	6,449	3,522	1,104			55.2
Third	2000-10-21	9,581	6,458	1,104			60.3
Fourth	2001-11-21	13,166	9,779	1,104			62.6
Fifth	2004-04-18	16,500		7,700	1,960		65.7
Sixth	2007-04-18	22,000		14,000	6,003	846	70.2

Figure 52 Cumulative length of track



Figure 53 Comparison of Eurasian Transportation Routes (Frese, 2019)
Six Rail Spee	ed upgrade in 1997–2007	
Date	Major Improvements	Length of Track Upgraded (Maximum Speed)
April 1997	Major North-South corridors train speed up and conventional track upgrade (Maximum running speed track).	120 km/h – 140 km/h: 1,398 km 140 km/h – 160 km/h: 588 km More than 160 km/h: 752 km
October 1998	Major NS corridors train speed up and conventional track upgrade (Maximum running speed track).	120 km/h – 140 km/h: 6,449 km 140 km/h – 160 km/h: 3,522 km More than 160 km/h: 1,104 km
October 2000	Major NS and EW corridors train speed up and conventional track upgrade (Maximum running speed track).	120 km/h – 140 km/h: 9,581 km 140 km/h – 160 km/h: 6,458 km
November 2001	National train speed up and conventional track upgrade (Maximum running speed track).	120 km/h – 140 km/h: 13,166 km 140 km/h – 160 km/h: 9,779 km More than 160 km/h: 1,104 km
	Indigenously developed high-speed train running at maximum 200 km/h put in service. National ticket sales online in one single network. (Maximum running speed track).	More than 160 km/h: 1,104 km
April 2004	National train speed up and major corridor conventional track all upgraded to >160 km/h. Some major corridor lines run at maximum speed of 200 km/h	
April 2007	National train speed up and all major corridor lines run at maximum speed of 200 km/h. Indigenously developed 250 km/h trains put into service.	

Figure 54 Six Rail Speed upgrade in 1997–2007 (Lim et al., 2016, p. 218)

Major Internationa	l Pipeline	Projects as of 2011			
Project	Lengt h (km)	Destination in China	Designed capacity (Mt/y)	Due date	Expected costs (billion US\$)
China– Kazakhstan oil pipeline	3,088	Allah Mountain Pass in Xinjiang 新疆 阿拉山口	20	2005–12	3
China–Russia oil pipeline	2,764	Major pipeline, Taishet in Siberia to Skovorodino, then to Daqing	15, for 20 years	2011	25, Ioan to Russia
China–Central Asian gas pipeline	1,818	Xinjiang	5 bcm from 2010, 40 bcm from 2012, for 30 years5 bcm from 2010, 40 bcm from 2012, for 30 years	2012	3
China–Myanmar oil pipeline	2,000	Kunming	20, for 30 years	2013	1.5
China–Myanmar gas pipeline	2,000	Kunming	10 bcm, for 30 years	2014	1

Figure 55 Major International Pipeline Projects as of 2011 (Shaofeng, 2011, p. 611)

Collection of Operational and planned oil and natural gas pipelines						
Pipelines	Pipeline Sections	Date put into service	Maximum/year			
Kazakhstan-China crude oil 1 pipeline		July 2006	20 MT			
2 Central Asia–China gas pipeline	Kazakhstan-China section Turkmenistan-China section Uzbekistan-China section	December 2009 December 2009 August 2012	about 55 bcm			
3 Russia-China crude oil pipeline		2011 <mark>(</mark> 20 years)	15 MT			
Russia-China gas pipeline (east 4 line) Russia-China gas pipeline (west line)		2018 (30 years) postponed	38 bcm about 30 bcm			
Myanmar-China crude oil 5 pipeline		2017 estimated	12 MT			
6 Myanmar-China gas pipeline		July 2013	12 bcm			

Figure 56 Collection of Operational and planned oil and natural gas pipelines (Liu, Yamaguchi and Yoshikawa, 2017)

The nine cargo lines running from China to Europe							
Date	Route	Time Taken	Distance				
2011	Chongqing-Duisburg	15 Days	11,179 km				
2012	Wuhan-Prague	15 Days	11,000 km				
2013/4	Chengdu-Lodz	14 Days	9,826 km				
2013/7	Zhengzhou-Hamburg	15 Days	10,214 km				
2013/9	Suzhou-Warsaw	15 Days	11,200 km				
2014/12	Yiwu-Madrid	18 Days	13,053 km				
2015	Changsha-Duisberg	13 Days	11,808 km				
2015	Hefei-Poland	18 Days	9,820 km				
2017	Yiwu-London	18 Days	7,456 km				

Figure 57 China's overland transport to Europe (Lim et al., 2016; Embury-Dennis, 2017)

Four vertical HSR corridors

- Beijing-Harbin High-Speed Railway 350 km/h 1,700 kilometres (1,100 mi)
- Beijing–Shanghai High-Speed Railway 350 km/h 1,433 kilometres (890 mi)
- Beijing–Guangzhou–Shenzhen–Hong Kong High-Speed Railway 200–350 km/h 2,229 kilometres (1,385 mi)
- Hangzhou–Fuzhou–Shenzhen High-Speed Railway 250–350 km/h 1,495 kilometres (929 mi)

Four horizontal HSR corridors

• Qingdao–Taiyuan High-Speed Railway - 250 km/h - 873 kilometres (542 mi)

Figure 58 China's high-speed rail corridors

Terminal name	Status/online date	Developer	Initial / expansion capacity (MMcf/d)	Possible supplier
Dapeng/Guangdong	Operational; Second Expansion - 2014	CNOOC; BP	885 / 530	Australia NWS
Mengtougou Peaking Facility	Operational	Shanghai Gas Group	15	Spot cargoes
Fujian	Operational	CNOOC; Fujian Investment and Development Co.	345	Indonesia - Tangguh
Shanghai	Operational; Expansion - 2015	CNOOC; Shenergy Group	395 / 395	Malaysia - Petronas
Dalian	Operational; Expansion - 2015	CNPC	395 / 395	QatarGas IV; Australia
Rudong/Jiangsu	Operational; Expansion(Permitting) / 2014	CNPC; RGM International; CITIC	460 / 395	QatarGas IV
Zhejiang/Ningbo	Operational	CNOOC	395	QatarGas III
Zhuhai	Operational; Expansion / 2017	CNOOC; Yudian Group	460 / 460	Not determined
Tianjin FSRU	Operational; Onshore terminal expansion proposed	CNOOC	290 / 795	Not determined
Caofeidian/Tangshan	Operational	CNPC; Beijing municipal government	460	Australia and Qatar
Qingdao/ Shandong	Construction / 2014; Expansion	Sinopec; Huaneng Group	395 / 265	PNG LNG (ExxonMobil) and APLNG
Hainan	Construction / 2014; Expansion / 2017	CNOOC; Hainan Development	260 / 130	Not determined
Beihai/Guangxi	Construction / 2014; Expansion / 2020	Sinopec	395 / 395	Papua New Guinea LNG and Australia Pacific LNG
Shenzhen/Diefu	Construction / 2015	CNOOC; Shenzhen Energy	530	Not determined
Tianjin	Construction / 2016	Sinopec	395	Australia Pacific LNG
Shantou	Awaiting NDRC approval / 2014 (Phase 1) and 2017 (Phase 2)	SinoGas	160 / 240	Australia
Jiangsu/Yancheng FSRU	Planning; NEA approval received August 2013 / 2014	CNOOC	290	Not determined
Yantai, Shandong FSRU	Planning / 2013	CNOOC	200	Not determined
Shenzhen	NDRC approval; Awaiting siting permit / 2015	CNPC; CLP	400	Australia's Gorgon LNG (ExxonMobil)
Yuedong/Jieyang	Environmental approval; Awaiting NDRC approval / 2014 / Expansion in 2020	CNOOC	260 / 260	Not determined

Figure 59 China's major LNG import terminals (current and proposed) (EIA, 2015, p. 30)

Туре	Pipeline name	Starting point	Terminal point	Length (km)	Design capacity (billion cubic meters)	Construction time
Has been built	The First West-East Gas Pipeline	Lunnan	Shanghai	3,900	12.0	2004
	East Sichuan gas Pipeline	Puguang	Shanghai	1,700	12.0	2010
	Zhongwu Pipeline	Zhongxian County	Wuhan	1,700	3.0	2004
	Shan Jing Pipeline	Chingpien	Beijing	1,090	3.0	1997
	The Second Shan Jing Pipeline	Chingpien	Beijing	935	12.0	2005
	SeNingLan Pipeline	Sebei	Xining, Lanzhou	953	2.0	2001
	SeNingLan vice Pipeline	Sebei	Xining, Lanzhou	955	3.3	2009
	ZhongJi Pipeline	Puyang	Jinan	261	0.8	1999
	Qiongya 131 - Hong Kong Pipeline	South China Sea Cliff	Hong Kong	778	3.0	1995
	The Second West-East Gas Pipeline	Horgos	Guangzhou, Shanghai	9,794	30.0	2015
	The Third Shaanxi-Beijing Pipeline	Yulin	Beijing	900	15.0	2010
Planning	The Third West-East Gas Pipeline	Horgos	Shaoguang	4,661	30.0	2015
	The Fourth West-East Gas Pipeline	N/A	N/A	N/A	17.0	N/A
Total domestic pi	peline	1		1	143.1	1
Foreign pipeline	Central Asia Channel	Hauula border	Horgos	1,801	30.0	2011
	China and Burma Channel	Sittwe Port	Kunming	1,727	12.0	2013
	Sino-	West Line	Daqing	N/A	30.0	2011
	Russian channel	East Line		N/a	38.0	2017-2018

Figure 60 Existing and planned gas pipelines in China (Ming, Ximei and Yulong, 2014)

China's infrastructure investment in African railways

Zambia – Malawi railway: The TAZARA Railway also called the Uhuru Railway, or the Tanzam Railway was constructed from 1970 to 1975 with Chinese financial support to eliminate landlocked Zambia's economic dependence on Rhodesia (now Zimbabwe). The project is said to symbolize China's support for newly independent African countries, and lent its name to the TAZARA designation as the 'Great Uhuru Railway', Uhuru being the Swahili word for Freedom.

The 1,860km East African line connects the port of Dar es Salaam in Tanzania with the town of Kapiri Mposhi in Zambia's Central Province, providing the only route for bulk trade from Zambia's Copperbelt to reach the sea without having to transit white-ruled territories.

The project was completed two years ahead of schedule and was the single longest railway in sub-Saharan Africa. With a construction cost of \$500mn (the equivalent of US \$3.08bn today), it was also the largest single foreign-aid project undertaken by China at the time, at. To keep trains running, China provided technical assistance and waived 50% of its loan-free construction debt in 2011.

Mombasa-Nairobi Standard Gauge Railway Project (SGR), Kenya: The Mombasa–Nairobi project was completed in 2017, linking the port city of Mombasa to Kenya's capital city, Nairobi. 90% of the projects estimated \$3.6bn cost was supplied by a loan from the Exim Bank of China, with the remaining 10% coming from the Kenyan government. The 485km line directly employed 25,000 Kenyans and operated at an annual capacity of 22mn tonnes.

This project replaces a line constructed by the British in the 19th century, with the modernization allowing the Mombasa–Nairobi SGR to link with other standard gauge railway projects across East Africa. Phase I was completed 18 months ahead of schedule with passenger services in 2017 and cargo services beginning in the following year. Phase II, which is currently under construction is expected to extend the railway to the Uganda border by 2021.

Lagos Rail Mass Transit System, Nigeria: The Lagos Rail Mass Transit is an urban rail system composed of seven lines in Lagos, the largest city in Nigeria. Proposed in 2008, construction starting the following year with Phase I (the Blue Line from Marina to Mile 2) completed in 2017.

Ethiopia-Djibouti Railway Line Modernization, Ethiopia: The Ethiopia-Djibouti railway modernization project, also known as the Addis Ababa-Djibouti railway, is the first modern electrified railway line in Africa. The modernization project ran from 2011 to 2016, with a total investment of \$4bn. The new 752.7km line modernized an existing 780km line opened in 1917, connecting landlocked Ethiopia with Djibouti Port. The port represents a major cargo entry point, yet the line had deteriorated due to a lack of maintenance and management.

Abuja-Kaduna Rail Line, Nigeria: Completed in July 2016, and running between Northern Nigeria and the capital, the Abuja-Kaduna Rail Line has gained popularity among the rich and poor as a shorter and safer alternative to the hazardous roads. Two hours and 40-minute-long, the line currently runs 2,700 journeys annually and is steadily increasing.

Coastal Railway, Nigeria: The Coastal Railways is an \$11.2bn Nigerian rail project approved in June 2106, with Phase 1 running between Calabar and Port Harcourt and Phase 2 expanding from the port to Lagos via Onitsha. The 1,400km rail project has been described as one of the 'highest value' rail projects in African history, which will create an estimated 200,000 jobs for Nigerian locals during the construction phase, followed by 30,000 permanent jobs upon the completion of the project.

__Figure 61 China's infrastructure investment in African railways

China's infrastructure projects in Pakistan

Main Line 1: Karachi–Peshawar Railway Line (1,687 km) is one of four major rail lines in Pakistan serving 75% of the country's cargo and passenger traffic, connecting 184 railway stations from Kiamari to Peshawar Cantonment. As part of the CPEC "Early Harvest", a planned \$8.4bn modernization project is expected to double the average rail speed of the century patchwork railway system constructed during the 19th-century patchwork to 160 km/h upon completion.

Main Line 2: Kotri–Attock Railway Line (1,519 km) 2 opened in 1891 and connects 73 railway stations from Kotri Junction to Attock City Junction.

Main Line 3: Rohri–Chaman Railway Line (523 km) opened in 1879 and connects 35 railway stations from Rohri Junction to Chaman.

Lahore Metro (Orange Line) (27.1 km) will become Pakistan's first light rail line and is the first of three proposed for the Lahore Metro (APP, 2014a; Ran, 2015). Though frequently mentioned as a part of CPEC, the Orange Line Lahore is a Punjab Government Project (The National, 2017). The 27-kilometre automated light rail rapid transit system has a projected cost of \$1.6bn with \$300mn coming from the Federal Government of Pakistan. The remaining \$1.55bn will be provided by Beijing through a soft loan, to be repaid in instalments over a 20-year period (K. Smith, 2015; Usman, 2016).

Following the signing of a memorandum of understanding between Pakistan and China in 2014, financing was secured, and construction began in Lahore, Punjab, Pakistan in 2015, with full project completion by 2019 (APP, 2014b; Dawn, 2015). Production lines in Hunan, China complete the first 27 trains for the Metro, with the remaining 26 to come by the end of the year (APP, 2014a). The Orange line will operate as a joint venture of China Railways and Norinco for the first 5 years following completion, serving 26 stations with a daily capacity of 250,000 commuters (K. Smith, 2015; Pakistan Today, 2016).

Khunjerab Railway (682 km), also known as the Taxila–Khunjerab Railway Line, also known as the Khunjerab Railway, currently runs from Taxila Junction station to Havelian station, with a proposed linkage with China's Kashgar–Hotan Railway through an extension between extension Havelian station to the Pakistan-China border town of Khunjerab (Xinhua, 2011).

Figure 62 China's infrastructure projects in Pakistan

China's International Pipelines

The Central Asia–China gas pipeline (Turkmenistan–China gas pipeline)

Turkmenistan to China via Kazakhstan and Uzbekistan:

China inaugurated its first transnational oil pipeline in 2006, the Central Asia–China gas pipeline, "a crude oil pipeline designed to deliver 200,000 barrels per day (b/d) of crude oil from Kazakhstan to China became operational. A project to expand the capacity to 400,000 b/d is nearing completion with future plans to increase capacity to 800,000 b/d" (US DoD, 2013, p. 20).

Construction of the from Turkmenistan to China across Kazakhstan and Uzbekistan, China's first from Turkmenistan to China across Kazakhstan and Uzbekistan began in the summer of 2007 and was expected to deliver up to 40 billion cubic meters (bcm) of natural gas annually, with plans to expand it to 60 bcm (US DoD, 2015).

Operation began in 2009, and by 2011 "China had imported 14.3bn cubic meters (bcm) of natural gas, accounting for 46% of all of its natural gas imports. Import volume increased each year, accounting for approximately 46% of China's natural gas imports (34.2bcm)) by 2017. This pipeline is currently designed to carry 55 bcm per year with plans to expand it to 80 bcm per year" (US DoD, 2017, p. 43).

Eastern Siberia - Pacific Ocean (oil & gas) - Siberia, Russia to Daqing, China

In May of 2009, construction began on the Eastern Siberia – Pacific Ocean oil pipeline, a crude oil pipeline from Siberia to Daqing China. By January 2011 the 300,000 b/d spur pipeline was completed. Negotiations began in 2013 to double the capacity to 600,000 b/d, supplying China with up to 68 bcm of gas per year (US DoD, 2014, p. 18). Work began in 2014 and capacity was doubled by 2016.

In 2015 an agreement was signed to construct a pipeline to deliver up to 38 billion cubic meters of gas by 2035; initial flows are to start by 2018 (US DoD, 2015). The project, also known as the Altai gas pipeline was delayed from 2018 to 2019. Planned expansion to the ESPO to Skovorodino would see capacity reach 1.6mn b/d by 2020 (EIA, 2015, p. 13).

Sino-Myanmar pipeline (oil & gas) - Kyuakpya, Myanmar (Burma), to Kunming

Myanmar holds a unique geographic position, bordering both China and the eastern Indian Ocean. The pipelines offer a bypass route to the Indian Ocean, avoiding any potential conflicts in the South China Sea, see Figure 64 and Figure 65. The pipeline also helps to strengthen Sino-Myanmar relations which are of strategic importance to blue water ambitions.

The Sino-Myanmar crude oil pipeline was proposed in 2004 to transport 400,000 b/d of crude oil, from Kyuakpya, Burma, to Kunming, China. The pipeline would be supplied by Saudi Arabia and other Middle Eastern and African countries, bypassing the Strait of Malacca. Construction started in 2011 and was completed up to China's border in 2014, but was not fully operational as the pipeline infrastructure in China was incomplete. In 2015, construction was finished on the 440,000 b/d Burma–China oil pipeline; however, operations were delayed a further two years by the finalization of transit fees negotiation (US DoD, 2015).

The Sino-Myanmar natural gas pipeline was proposed in 2010 to deliver 12 bcm per year from Burma, running parallel to the crude oil pipeline. Construction began in 2011, and the 14 bcm pipeline was completed in 2013, shipping 3 bcm of gas in 2014 and 3.9 bcm of gas in 2016 (US DoD, 2015, 2017).

Figure 63 China's International Pipelines



Figure 64 The Myanmar-China energy pipeline and West-East gas pipeline (Liu, Yamaguchi and Yoshikawa, 2017)



Figure 65 The Myanmar-China energy pipeline (Liu, Yamaguchi and Yoshikawa, 2017)



Figure 66 China's Trans-Asian Railway Network (UN ESCAP, 1999, p. 2)



Figure 67 Map of a proposed trans-Africa highway network (Staden, 2018)



Figure 68 Trans-Siberian Railway map (Trans-Siberian Rail Routes, 2018)



Figure 69 Communist China railroads and selected roads, June 1961 ('Communist China Railroads and Selected Roads)



Figure 70 Key domestic Oil and Natural Gas Pipelines (EIA, 2014a, p. 23)



Figure 71 China's import transit routes/critical chokepoints and proposed/under construction SLOC bypass routes (US DoD, 2010).



OFFICE OF THE SECRETARY OF DEFENSE Annual Report to Congress: Military and Security Developments Involving the People's Republic of China

Figure 5: China's Import Transit Routes and Proposed Routes for Bypassing SLOCs.

Figure 72 From US-DOD: China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)

216



Figure 73 China's Energy Import Transit Routes (US DoD, 2017, p. 44).

Railways Network of CPEC Highways Network Of CPEC



Figure 74 Monographic Study on Transport Planning 2014-2030 (CPEC, 2017a)

Chapter 5



Figure 75 The Expeditions of Zheng he 1405-1433 (Levathes, 1997, p. 5)



Figure 76 Container traffic through Chinese owned or invested ports (Kynge et al., 2017)



Figure 77 China defence spending has increased rapidly since 2000 (Kynge et al., 2017)



Figure 78 China and Hong Kong port activity 2008-2014. Source UNCTAD (Bland, 2016)



Figure 79 Volume of handled goods in China from 2008 to 2016, by port type (in billion metric tons) (Statista, 2017)

Dry port	Description		Functions					
	Serving port(s)	Started	Capacity (TEU/year)	Area (ha)	Customs clearance	Storage	Forwarding	Other
An'yang	Rizhao	NA	200,000	800	V	V		
Baotou	Tianjin	2007	38,000	190	√			
Changchun	Dalian	2008	50,000	200	V			
Chengde	Qinghuangdao	2009	NA	180	V	V		Processing, packaging
Daging	Dalian	2010	100,000	130	V	V		
Dezhou	Tianjin	2008	NA	NA	V	V		
Er'lanhaote	Tianjin	2008	50,000	550	V	V		
Handan	Tianiin	2010	NA	NA	V			
Houma	Qingdao, Tianjin	2009	60,000	149	V			
Huinong	Tianjin	2007	100,000	NA	V			
li'an	Xiamen	2009	NA	NA	V	v		
filin	Dalian	2008	60.000	41	V	V		
Lanzhou	Tianjin	NA	300,000	1200	V		V	Distribution, processing
Linvi	Rizhao	2008	120,000	180	V			,1 0
Longyan	Xiamen, Fuzhou	2010	90,000	86	V	V		Distribution
Manzhouli	Dalian, Qinghuangdao	2007	250.000	180	V	V		
Mudanjiang	Dalian	2011	200,000	270	V	V		
Pinggu, Beijing	Tianiin	2010	200,000	200	V	V		Distribution, processing, bonded storag
Ouzhou	Ningbo	2009	50,000	54	V			
Sanming	Xiamen, Fuzhou	2007	50,000	30	V	V		
Shangrao	Ningbo	2008	50.000	300	V	V		
Shaoguan	Yantian	2008	100.000	100	V	V		Bonded logistics
Shenyang	Dalian, Yingkou	2003	150,000	200	V	V	V	Consolidation, transshipment
Shijiazhuang	Tianjin	2006	205,000	255	V	V	V	consonauton, dansonpricite
Wu'lumu'gi	Tianjin	2009	NA	NA	V	V	(2 ·)	
Xining	Rizhao, Tianjin	NA	100,000	145	V	V		
Yinchuan	Lianyungang, Tianjin	2009	NA	NA	V	V	v	
Yingtan	Ningbo	2011	100,000	200	V	V		
Yiwu	Ningbo	2002	1,000,000	1601	V	v	V	Consolidation, distribution
Yuyao	Ningbo	2002	70,000	89	V	V	V	Consolidation, distribution
Zhangjiakou	Tianjin	2011	100,000	300	V	V	57	
Zibo	Tianjin	2010	100,000	105	V	V		
Taiyuan	Tianjin	2012	NA	8	V.	V	\checkmark	
Bayannur	Tianjin	2015	NA	1200	v.	v	10.0	Distribution
Langfang	Tianjin	2014	NA	NA	V	5		
Tangshan	Tianjin	2014	NA	NA	V	V		
Baoding	Tianjin	2014	NA	53	V	5	V	

Figure 80 Dry port developments in China initiated by seaport interests (Notteboom and Yang, 2017)



Figure 81 Geography of China's domestic Sea Port system (Notteboom and Yang, 2017)

WORLD PORT RANKINGS (2015)								
		TOTAL CARGO VOLUME	- TONS, 000s		CONTAINER TRAFFIC – TEUs - (Twenty-Foot Equivalent Units), 000s			
RANK	PORT	COUNTRY	MEASURE	TONS	RANK	PORT	COUNTRY	TEUs
1	Shanghai	China	Metric Tons	646,514	1	Shanghai	China	36,516
2	Singapore	Singapore	Freight Tons	575,846	2	Singapore	Singapore	30,922
3	Qingdao	China	Metric Tons	476,216	3	Shenzhen	China	24,142
4	Guangzhou	China	Metric Tons	475,481	4	Ningbo	China	20,636
5	Rotterdam	Netherlands	Metric Tons	466,363	5	Hong Kong	China	20,073
6	Port Hedland	Australia	Metric Tons	452,940	6	Busan	South Korea	19,469
7	Ningbo	China	Metric Tons	448,828	7	Qingdao	China	17,323
8	Tianjin	China	Metric Tons	440,430	8	Guangzhou	China	17,097
9	Busan	South Korea	Revenue Tons	347,713	9	Dubai Ports	United Arab Emirates	15,585
10	Dalian	China	Metric Tons	320,658	10	Tianjin	China	13,881
11	Kwangyang	South Korea	Revenue Tons	272,007	11	Rotterdam	Netherlands	12,235
12	Hong Kong	China	Metric Tons	256,488	12	Port Kelang	Malaysia	11,887
13	Qinhuangdao	China	Metric Tons	246,550	13	Kaohsiung	Taiwan	10,264
14	South Louisiana	United States	Metric Tons	235,058	14	Antwerp	Belgium	9,654
15	Port Kelang	Malaysia	Metric Tons	219,786	15	Dalian	China	9,591
16	Houston	United States	Metric Tons	218,575	16	Xiamen	China	9,215
17	Antwerp	Belgium	Metric Tons	208,423	17	Hamburg	Germany	8,821
18	Xiamen	China	Metric Tons	200,500	18	Tanjung Pelepas	Malaysia	8,797
19	Nagoya	Japan	Freight Tons	197,947	19	Los Angeles	United States	8,160
20	Shenzhen	China	Metric Tons	191,037	20	Long Beach	United States	7,192

Sources: Agência Nacional de Transportes Aquaviários - ANTAQ(Brazil), Institute of Shipping Economics & Logistics ; U.S. Army Corps of Engineers' Waterborne Commerce Statistics Center, Secretariat of Communications and Transport (Mexico), Waterborne Transport Institute (China); AAPA Surveys; various port internet sites.

Figure 82 APAA's World Port Rankings 2015: top 20 ports by volume and traffic (AAPA, 2017).



Figure 83 Hong Kong's Re-export growth and Mainland China's export growth. Source: CEIC (Hong Kong et al., 2003)

The Expans		orts to China	Kong and China (A)	-	rage annual growth rate (%)) HK imports from China		
	Total	Domestic	Re-exports	Total	Retained	Re-exports	
1980-91	31.86	32.03	31.79	23.57	8.96	32.98	
1980-85	45.65	44.95	45.88	19.76	14.38	28.34	
1985-91	20.36	21.26	20.06	26.74	4.44	36.83	

Sources: Hong Kong Census and Statistics Department. Hong Kong Monthly Digest of Statistics, various issues

Figure 84 The expansion of trade between Hong Kong and China (Ash and Kueh, 1993, p. 714)

Domesti	Domestic exports and imports concerning outward processing (unit: %)						
Year	Hong Kong exports to China	Hong Kong imports from China					
1990	79.0	61.8					
1991	76.5	67.6					
1992	74.3	72.1					
1993	74.0	73.8					
1994	71.4	75.9					
1995	71.4	74.4					
1996	72.8	74.9					
1997	75.6	75.2					
1998	76.8	76.6					

Note: Figures indicate 'percentages' of total Hong Kong domestic exports to and imports from China

Source: Census and Statistics Department (1999).

Figure 85 Domestic exports and imports between Kong and China (Song, 2002, p. 101)



Figure 86 Container traffic in the port of Hong Kong (Song, 2002, p. 102)



Figure 87 South China Sea charts, Secretariat of Government of Guangdong Province. January, 1947 (Wikimedia, 2008)



Figure 88 China's claimed territorial waters, disputer regions (Hill, 2012)



TRANSLATION:

"Comrade Prime Minister,

We have the honour to bring to your knowledge that the Government of the DRVN recognizes and supports the declaration dated 4th September, 1958 of the Government of the PRC fixing the width of the Chinese territorial waters. The Government of the DRVN respects this decision and will give instructions to its State bodies to respect the 12-mile width of the territorial waters of China in all their relations in the maritime field with the PRC. I address to you, comrade Prime Minister, the assurance of my distinguished consideration". (Wikimedia Commons, 2018)

Figure 89 1958 Diplomatic note from Pham Van Dong to Zhou Enlai



Chinese investment in foreign ports is speeding up

Figure 90 Chinese investment in foreign ports is speeding up (Kynge et al., 2017)

China's 'dual use' commercial and naval ports



Figure 91 China's 'dual use' commercial and naval ports (Kynge et al., 2017)

'Dual use' is defined as Chinese owned or invested ports confirmed, or proposed, as engaging in both commerce and military use *China has not invested in a port, but its navy uses Seychelles' facilities in anti-piracy operations in the Indian Ocean **The US has expressed concern over the possible use of Chinese-owned Darwin port for military purposes Source: FT research

Major ports Maritime transportation routes Middle East Route Khark Strait of Hormuz Indian Ocean South China Sea China Strait of Malacca Al-Fao Mina al Ahmadi Mina Abd Allah Das Island Mina Al Fahal South America Route Port of Rio De Janeiro Atlantic Ocean Mozambique Indian Ocean Strait of Malacca South China Sea China La Cruz Caribbean Panama Sea of Japan Bohai bay Puerto Biovar Atlantic Ocean African Route Port Sudan Mandeb Strait Aden Indian Ocean Strait of Malacca South China Sea China Arzew Mediterranean Es Sider Cabinda Port Gulf of guinea Mozambique Lobito Harbor Bonny Southeast Asia Route South China Sea Port of Tanjung Priok South Sea China

Maritime transportation routes of China's oil imports.

Note: The information is culled from publicly available sources.

Figure 92 Maritime transportation routes of China's oil imports



Figure 93 China's Energy Import Transit 2011 (Moore, 2014)



Figure 94 China's global port (Kynge et al., 2017)

China Import Countries, 2011



41,245

208,780

Created by Marcia Underwood of the Brookings Institution with data compiled from the U.S. Energy Information Agency's China Country Report 2012.

48,910

49,275

Figure 95 China's import countries, 2011 (Dews, 2014)

69,715

81,760

		our Phases of China's Dev		1
Period	Maoist China	Dengist—Jiangist	Hu—Wen China	Xi Jinping
Conditions	(1949-1975)	China (1977-2003)	(2004-2012)	China (2013-)
Politics	Domestic political	Stable autocracy under	Steady authoritarian	Political stability
	upheaval under tense	alleviative Cold War	political system under	through anti-corruption
	Cold war period.	period.	post-Cold War period.	measures and growing
				international presence.
Economics	Agricultural economy	Economic open-door	Continuing economic	Sustained domestic
	with limited maritime	policy with huge	reformation with rising	growth, strong global
	interests.	maritime interests	economic-energy	presence following
			interests.	financial crisis.
Socio-	Social disorderliness	Social reconstruction	The quest for China's	Desire for regional
Culture	and cultural revolution.	with a weak ocean	seapower under a	control in South China
		consciousness.	strong oceanic	Sea and presence in
			consciousness.	Indian Ocean
Military	The military doctrine of	People's war under	Local war under high-	5 battle zones replace 7
	people's war and	modern conditions and	tech and	military regions.
	guerrilla warfare with a	limited War. Request	informationalised	Formation of Strategic
	weak and large PLA	for a modernised PLA.	condition. Request for	support forces (SSF)
	ground force.		an advanced PLA.	and counter-terrorism.
	Appraisal o	f maritime strategic choice	s and naval build-up	
Maritime	Coastal defence with	Offshore active defence	Far sea defence with	Island building and
Strategy	the concept of People's	with the two-island	blue—water maritime	port-access, projecting
	war at sea.	chain strategy.	capabilities.	to Indian Ocean.
Naval	Brown-water navy with	Green-water navy with	Blue-water navy with	Carriers, ports, nuclear
Build-up	the power projection	the power projection	the power projection	submarines, rocket
	range of below 200 sea	range of over 200 sea	range of over 400 sea	force and long-range
	miles from the coast.	miles from the coast.	miles from the coast.	ballistics and counter
				ballistics.
		Constituent elements of ge	opolitics	
Access to	Closed / self-sufficient	Net oil exporter until	Increasing dependence	Energy security, rare
Resources		1990s, second-largest	on foreign markets.	earth, raw minerals
		net importer of crude	-	Market control
		and petroleum by 2009.		
Land Lines of	domestic	Western China's rail	Ninth Five-year Plan	Pipe-lines and rail
Communication		and road system, 1978	(1996–2000), High-	(OBOR)
		Xinjiang–Central Asian,	speed national rail	
		1984 Sino-Soviet.	system (HSR) 2007.	
Sea Lines of	closed	Opening port cities/	Call for sea-power,	Carriers, super-tankers,
Communication		(SZE) Shenzhen 1990	expansion and	maritime-piracy
			modernization of	
			commercial fleets	
		China's geopolitical re	ality	
	Self-reliance,	Realisation of the	Active member of	Following a perceived
Geopolitical	Isolationism and	importance of	existing global order,	decline of western
Awareness	nationalist.	globalization.	avoidance of regional	order, China attempts
AMALENESS	nationalist.	Biobalization.	issues.	to alter geopolitical
			133003.	elements in its favour
			1	

* Building off of 'Maritime Strategic Choices of China in Different Phases' (Huang, 2009b)

Figure 96 Four Phases of China's Development



Figure 97 The Gwadar project and its international (Garver, 2006, p. 8)



Figure 98 'String of pearls' ports (Khmer Times, 2014)



Figure 99 China's investments in Africa (Robert D. Kaplan, 2016)



Figure 100 Overseas military bases in Djibouti (Allison, 2018)



Figure 101 China's first overseas military bases (Chan, 2018)



Figure 102 China's Import Transit Routes and Proposed Routes for Bypassing SLOCs (US DoD, 2012)

238
Map: Economic corridors and passages under OBOR

The economic corridors and blue passages along the Belt and Road vary from schemes that are being actively developed to ones that remain largely ideas on the drawing board.



Source: Verisk Maplecroft; National Development and Reform Commission; State Oceanic Administration.

Figure 103 Economic corridors and passages under OBOR (Brennan, 2017)

The artic passages			
Element	Maritime Routes (via)		
	Suez Canal (SC)	Northern Sea Route (NSR)	Statement
Distance (nm)	11585	7356	[Far East vs. N.W. Europe] Yokohama - Hamburg Suez Route (11,585 N.M.) vs. NSR Route (7,356 N.M./-36%) The navigation distance from Northwest European port to Far East via NSR is an approximately 36% shorter compared Suez Canal route.
Fuel Consumption	High	Low	Norway to China: Shipping via the NSR save \$550,000 in fuel costs compared to the journey via Suez Canal (Bulk Ship named MV Nordic Barents)
Journey Time	32 days (15 knots)	18 days (15 knots)	North West Europe (London) to Far East (Yokohama) Shipping via the NSR save 14 days on the journey compared to via the Suez Canal by using same speed
Speed (Knots)	15 knots 32 days	9 knots 32 days	North West Europe (London) to Far East (Yokohama) Shipping via the NSR using speed only 9 knots on the journey compared to via the Suez Canal by using 15 knots on speed
Piracy	Yes	No	There is also much-reduced level of piracy through this northern route, compared to the risk of piracy for ships in the Indian Ocean using the Suez Canal
Fee	Low	High	A maritime route with transhipment (T/S) includes T/S charges at T/S ports. NSR Fee USD 674 per TEU Suez Canal Fee (SDR/GT) for the 1st 5,000GTx USD7.88+ 2nd 5,000GTx USD5.15+; 3rd 10,000GTxUSD4.12+; 4th 20,000GTxUSD2.88+; 5th 30,000GTxUSD2.6+ 70,000GT(+)xUSD2.11
Transport Cost	High	Low	North West Europe (Hamburg) to Far East (Yokohama) Transport cost via NSR (USD/TEU) <1,123 Via Suez Canal (USD/TEU) 1,299
Cost Saving	Low	High	Cost analysis may heavily depend on changes of bunker oil and ship-building prices as well as NSR, and Suez Canal fees. Thus, the shipping scenarios including navigation conditions would be a key factor in the cost analysis here. Severe competition will be expected among NSR and Suez Canals in the near future

Figure 104 A comparison of two shipping routes for the Asia-Europe trade (Rahman, Saharuddin and Rasdi, 2014)



Figure 105 Minimum sea-ice extent from 1980 to 2016 (The Economist, 2017c)



Figure 106 Arctic map of UNCLOS claims (The Economist, 2014b)



Figure 107 Arctic shipping routes (Farquhar, 2014)



SOURCE: University of Reading. United Kingdom

STAFF GRAPHIC | MICHAEL FISHER

Figure 108 Northwest passage (Overton, 2016)



Figure 109 China's Arctic passage (Rahman, Saharuddin and Rasdi, 2014)

Bibliography

Primary Sources

Armitage, R. L. and Nye, J. S. (2007) How America Can Become A Smarter Power, CSIS Commission Report on Smart Power.

Chief of Information (2017) Navy Fact File: Status of the Navy, United States Navy. Available at: http://www.navy.mil/navydata/nav_legacy.asp?id=146 (Accessed: 24 November 2017).

CIA (1949) Probable Developments in China (ORE-45-49). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001086039.pdf.

CIA (1951) Trade of Communist China in 1951. Available at:

https://www.cia.gov/library/readingroom/docs/CIA-RDP79S01011A000600010035-5.pdf.

CIA (1952) Relations Between the Chinese Communist Regime and the USSR (NIE-58). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001086032.pdf.

CIA (1953a) Foreign Trade (SE-37). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400030001-3.pdf.

CIA (1953b) International Trade Syndicatess in China (1950-1951). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80-00809A000700140063-5.pdf.

CIA (1953c) Trade Agreements and Import of Industrial materials in China, 1950-1951. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80-00809A000700130201-2.pdf.

CIA (1954a) Communist China's Imports and Exports, 1954: Trade and Transport Involved (EIC-R1-S4). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400020002-3.pdf.

CIA (1954b) Memorandum for Mr. Dulles: Communist China's Imports and Exports, 1954; Trade and Transport Involved (IAC-D-42/11). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400020001-4.pdf.

CIA (1957a) Communist China's Imports and Exports, 1956: Trade and Transport Involved (EIC-R1-S6) (IAC-D-42/13). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79S01011A000600010035-5.pdf.

CIA (1957b) Communist China Through 1961 (NIE-13-56). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001098224.pdf.

CIA (1958) Communist China national intelligence estimate (NIE 13-58).

CIA (1959) Economic Relations of Communist China with the USSR since 1950 (CIA/RR-59-16). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0000313442.pdf.

CIA (1961) The Economic Situation in communist China (SNIE 13-61).

CIA (1964) National Intelligence Estimate (NIE 13-64). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001098204.pdf.

CIA (1965) Communist China's Foreign Policy (NIE-13-9-65).

CIA (1966) Communist China's Economic prospects (NIE-13-5-66). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001090195.pdf.

CIA (1967) Economic Outlook for Communist China (NIE 13-5-67). Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001095913.pdf.

CIA (1971) Communist China: Economic Expansion in 1970 (ER IM 71-20). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85T00875R001600040021-4.pdf.

CIA (1972) People's Republic of China: Internaional Trade Handbook (A 72-38). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79-00928A000100030002-0.pdf.

CIA (1974) China: Railroad Construction Since 1970 (ER RP 74-7). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79T01098A000200130001-0.pdf.

CIA (1978) China: Foreign Trade Policy in the 1970s (ER 78-10455). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80T00702A000200060012-0.pdf.

CIA (1979) China: The Steel Industy in the 1970s and 1980s (ER 79-10245). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP86B00985R000300040017-8.pdf.

CIA (1980) China: International Trade Quarterly Review Third Quarter, 1979 (ER CIT 80-002). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP86B00985R000300050006-9.pdf.

CIA (1985) China's Foreign Trade: Patterns and Prospects (EA M 85-10108). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP04T00447R000301730001-0.pdf.

CIA (1987) China's Trade: Austerity Measures for 1987 (EA M 87-20051). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP90T00114R000200100001-5.pdf.

'Communist China Railroads and Selected Roads - June 1961' (1961). Library of Congress.

CSIS/AMTI (2017) A Constructive Year for Chinese Base Building, Asia Maritime Transparency Initiative. Available at: https://amti.csis.org/constructive-year-chinese-building/ (Accessed: 8 February 2018).

CSIS (2014) Perspectives on the South China Sea Diplomatic, Legal, and Security Dimensions of the Dispute. Edited by M. Hiebert, P. Nguyen, and G. B. Poling. Lanham: Rowman & Littlefield.

CSIS (2018) How much trade transits the South China Sea?, Center for Strategic & International Studies. Available at: https://chinapower.csis.org/much-trade-transits-south-china-sea/#easy-footnote-bottom-1 (Accessed: 2 February 2018).

Defence Committee (2018) On Thin Ice: UK Defence in the Arctic. London.

Development Concepts and Doctrine Center (2015) Strategic Trends Programme, Future Character of Conflict. Shrivenham. Available at:

http://www.mod.uk/DefenceInternet/MicroSite/DCDC/OurPublications/Concepts/FutureCharacterOfConflict.htm.

Devermont, J. (2019) Assessing the Risks of Chinese Investments in Sub-Saharan African Ports, CSIS. Available at: https://www.csis.org/analysis/assessing-risks-chinese-investments-sub-saharan-africanports (Accessed: 28 September 2021).

Dews, F. (2014) MAP: China's Energy Vulnerabilities, Bookings. Available at: https://www.brookings.edu/blog/brookings-now/2014/04/17/map-chinas-energy-vulnerabilities/ (Accessed: 24 September 2017).

Djankov, S. and Miner, S. (2016) 'China's Belt and Road Initiative: Motives, Scope and Challenges', Peterson Institute for International Economics Briefing. Kindle. Edited by S. Djankov and S. Miner, PIE Briefing 16-2, pp. 1–34. Available at: http://www.piie.com/publications/briefings/piieb16-2.pdf.

EIA (2014a) China, U.S. Energy Information Administration. Available at: https://www.eia.gov/beta/international/analysis.cfm?iso=CHN (Accessed: 13 March 2015). EIA (2014b) EIA China Report, U.S. Energy Information Administration. Available at: http://www.eia.gov/countries/analysisbriefs/China/china.pdf (Accessed: 13 March 2015).

EIA (2015) China. Available at:

https://energy.gov/sites/prod/files/2016/04/f30/China_International_Analysis_US.pdf.

EIA (2017) International Energy Outlook 2017 Overview, U.S. Energy Information Administration. doi: www.eia.gov/forecasts/ieo/pdf/0484(2016).pdf.

FMPRC (2017) Chinese Relations with Sweden, Ministry of Foreign Affairs, the People's Republic of China. Available at: http://www.fmprc.gov.cn/ce/cggb/chn/zrgx/t216965.htm (Accessed: 24 June 2017).

Green, M., Hicks, K. and Cancian, M. (2016) Asia-Pacific Rebalance 2025: Capabilities, Presence, and Partnerships. Center for Strategic & International Studies. Available at: https://csisprod.s3.amazonaws.com/s3fs-

public/legacy_files/files/publication/160119_Green_AsiaPacificRebalance2025_Web_0.pdf.

Gutman, J., Sy, A. and Chattopadhyay, S. (2015) Financing African infrastructure: Can the world deliver? Washington, D.C. Available at: https://www.brookings.edu/wpcontent/uploads/2016/07/AGIFinancingAfricanInfrastructure_FinalWebv2.pdf.

Heath, T. R., Mazarr, M. J. and Cevallos, A. S. (2018) Building a Sustainable International Order. RAND. Available at: https://www.rand.org/pubs/research_reports/RR2423.html.

IEA (2016) Boosting power in Sub-Saharan Africa - China's Involvement. Paris. Available at: http://www.iea.org/publications/freepublications/publication/Partner_Country_SeriesChinaBoosting_th e_Power_Sector_in_SubSaharan_Africa_Chinas_Involvement.pdf.

IEA (2017) World Energy Outlook 2017: China, World Energy Outlook. Available at: https://www.iea.org/weo/china/ (Accessed: 21 January 2019).

Iqbal, A. (2017) Ahsan Iqbal briefing Senate Forum for Policy Research at PIPS, Ministry of Planning, Development & Reform. Available at: http://pc.gov.pk/web/press/get_press/62 (Accessed: 7 November 2017).

Katada, S. N. (2018) The BRICS and Collective Financial Statecraft. London. Available at: https://www.eventbrite.co.uk/e/the-brics-and-collective-financial-statecraft-tickets-46655792732#. Ministry of Foreign Affairs, the P. R. of C. (2016) Statement of the Ministry of Foreign Affairs of the People's Republic of China on Settling Disputes Between China and the Philippines in the South China Sea Through Bilateral Negotiation, Ministry of Foreign Affairs, the People's Republic of China. Available at: http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1370476.shtml (Accessed: 4 December 2017).

Naja, B., Hall, M. and Dietrich, C. (2017) Arctic continental shelf claims Mapping interests in the circumpolar North.

Robertson, J. and Pierce, B. (2008) USGS Release: 9090 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic Released, U.S. Geological Survey. Available at: https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=1980.html (Accessed: 30 October 2018).

Russian foreign ministry (2016) Comment by the Information and Press Department on Pakistani media reports about Russia's alleged involvement in the China-Pakistan Economic Corridor project - News - The Ministry of Foreign Affairs of the Russian Federation, The Ministry of Foreign Affairs of the Russian Federation.

UN ESCAP (1999) Development of The Trans-Asian Railway: Trans-Asian Railway in the Southern Corridor of Asia-Europe routes. New York. Available at: http://www.unescap.org/sites/default/files/tarsc-fulltext_1980.pdf.

UNCTAD (2017) UNCTAD Review of Maritime Transport 2017, UNCTAD. United Nations Publications. Available at: http://unctad.org/en/PublicationsLibrary/rmt2017_en.pdf.

US DoD (2010) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2010, Office of the Secretary of Defense. Available at: papers3://publication/uuid/098E27EA-5553-477B-83D8-2AE68DFB6DED.

US DoD (2011) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011, Office of the Secretary of Defense. Available at: https://www.defense.gov/Portals/1/Documents/pubs/2011_CMPR_Final.pdf.

US DoD (2012) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012, Office of the Secretary of Defense.

US DoD (2013) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013, Office of the Secretary of Defense.

US DoD (2014) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014, Office of the Secretary of Defense.

US DoD (2015) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015, Office of the Secretary of Defense. Available at: papers3://publication/uuid/098E27EA-5553-477B-83D8-2AE68DFB6DED.

US DoD (2016) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2016, Office of the Secretary of Defense.

US DoD (2017) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2017, Office of the Secretary of Defense. Available at: https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF.

US Legal (2017) Trading with the Enemy Act [TWEA] Law and Legal Definition, US Legal. Available at: https://definitions.uslegal.com/t/trading-with-the-enemy-act-twea/ (Accessed: 24 October 2017).

USCC (2016) USCC 2016 Annual Report. Washington, D.C. Available at:

http://origin.www.uscc.gov/sites/default/files/annual_reports/2016 Annual Report to Congress.pdf.

USCC (2017) USCC 2017 Annual Report. Washington, D.C. Available at:

https://www.uscc.gov/sites/default/files/annual_reports/2017_Annual_Report_to_Congress.pdf.

Secondary Sources

Books and thesis

Aron, R. (1966) Peace and War. London: Weidenfeld and Nicolson.

Bhadrakumar, M. (2016) Chinese naval ships at Gwadar port call for a rethink of India's regional policy, Dawn.

Bovingdon, G. (2010) *The Uyghurs: Strangers in Their Own Land*. Columbia University Press. Available at: https://cup.columbia.edu/book/the-uyghurs/9780231147583.

Brewster, D. (2014b) *India's Ocean: The Story of India's Bid for Regional Leadership*. Kindle Edi. New York: Routledge.

Brewster, D. (2018b) *India and China at Sea: Competition for Naval Dominance in the Indian Ocean*. Kindle. New Delhi: Oxford University Press.

Buckley, M. (2014) Meltdown in Tibet. St. Martin's Press.

Chan, G., Lee, P. K. and Chan, L.-H. (2012) *China Engages Global Governance: A New World Order in the Making?* London: Routledge. Available at: https://www.routledge.com/China-Engages-Global-Governance-A-New-World-Order-in-the-Making-1st/Chan-Lee-Chan/p/book/9780415557139.

Deaton, A. (2013) *The Great Escape: Health, Wealth, and the Origins of Inequality*. Kindle. Princeton and Oxford: Princeton University Press.

Dienel, H.-L. (2014) *Linking Networks: The Formation of Common Standards and Visions for Infrastructure Development*. Edited by M. Schiefelbusch. Routledge.

Dreyer, E. L. (2006) *Zheng He: China and the Oceans in the Early Ming Dynasty,* 1405-1433. Pearson. Available at: https://books.google.co.uk/books/about/Zheng_He.html?id=9BeFQgAACAAJ&redir_esc=y.

Dyer, G. (2014) The Contest of the Century. New York: Vintage.

Economy, E. C. (2018) *The Third Revolution: Xi Jinping and the New Chinese State*. Kindle Edi. Oxford University Press. Available at: https://www.cfr.org/book/third-revolution.

Ejiogu, K. U. (2012) 'Monsoon: The Indian Ocean and the Future of American Power - By Robert D. Kaplan', *Governance*, 25(2), pp. 356–358. doi: 10.1111/j.1468-0491.2012.01575.x.

Gilks, A. (1992) *The Breakdown of the Sino-Vietnamese Alliance: 1970-1979*. Institute of East Asian Studies, Berkely, University of California.

Glassner, M. I. and Harm de Blij (1989) *Systematic Political Geography*. 4th edn. New York: John Wiley and Sons.

Gray, C. S. (2005) *Global Geostrategy: Mackinder and the Defence of the West*. Edited by B. W. Blouet. London: Routledge. Available at: https://books.google.co.uk/books?id=JYeTJy7Oyj8C&lpg.

Gray, C. S. (2013) Perspectives on Strategy. Oxford: Oxford University Press.

Grygiel, J. (2006) Great Powers and Geopolitical Change. Baltimor: Johns Hopkins University Press.

Hamilton, C. (2018) Silent Invasion: China's influence in Australia. Hardie Grant.

Hayton, B. (2015) The South China Sea: The Struggle for Power in Asia. London: Yale University Press.

Hensengerth, O. (2017) 'Water Governance in the Mekong Basin: Scalar Tradeoffs, Transnational Norms and Chinese Hydropower Investment', in *Chinese Encounters in Southeast Asia: How People, Money, and Ideas from China Are Changing a Region*. Seattle: University of Washington Press. Available at: http://www.washington.edu/uwpress/search/books/NYIHOW.html.

Holmes, J. R. and Yoshihara, T. (2008) *Chinese Naval Strategy in the 21st Century: The Turn to Mahan*. London: Routledge.

Huang, A.-H. (2009a) 'The Maritime Strategy of China in the Asia-Pacific Region: Origins, Development and Impact', (August).

A. Thayer, C. (2011) 'The Tyranny of Geography: Vietnamese Strategies to Constrain China in the South China Sea', *Contemporary Southeast Asia*, 33(3), p. 348. doi: 10.1355/cs33-3d.

AAPA (2017) Port Industry Statistics, American Association of Port Authorities. Available at: http://www.aapa-ports.org/unifying/content.aspx?ItemNumber=21048 (Accessed: 26 November 2017).

Abrar, M. (2015) *Between the devil and deep Gwadar waters, Pakistan Today*. Available at: https://www.pakistantoday.com.pk/2015/12/05/between-the-devil-and-deep-gwadar-waters/ (Accessed: 25 January 2019).

Acemoglu, B. D., Johnson, S. and Robinson, J. A. (2001) 'The Colonial Origins of Comparative Development: An Empirical Investigation', 91(5), pp. 1369–1401. Available at: https://www.jstor.org/stable/2677930.

Acemoglu, D., Johnson, S. and Robinson, J. A. (2005) 'Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth', in, pp. 385–472. doi: 10.1016/S1574-0684(05)01006-3.

Acemoglu, D. and Robinson, J. A. (2002) 'Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution', *Quarterly Journal of Economics*, 117(4), pp. 1231–1294. doi: 10.1162/003355302320935025.

Aglionby, J. and Kerr, S. (2017) *Djibouti finalising deal for Saudi Arabian military base | Financial Times, Financial Times*. Available at: https://www.ft.com/content/c8f63492-dc14-11e6-9d7c-be108f1c1dce (Accessed: 25 October 2018).

Agnew, J. (2010) 'Emerging China and Critical Geopolitics: Between World Politics and Chinese Particularity', *Eurasian Geography and Economics*, 51(5), pp. 569–582. doi: 10.2747/1539-7216.51.5.569.

Agnew, J. (2012) 'Looking Back to Look Forward: Chinese Geopolitical Narratives and China's Past', *Eurasian Geography and Economics*, 53(3), pp. 301–314. doi: 10.2747/1539-7216.53.3.301.

Albert, E. (2016) *Competition in the Indian Ocean, Council on Foreign Relations*. Available at: https://www.cfr.org/backgrounder/competition-indian-ocean (Accessed: 25 October 2018).

Albert, E. and Xu, B. (2018) *The Chinese Communist Party, Council on Foreign Relations*. Available at: https://www.cfr.org/backgrounder/chinese-communist-party (Accessed: 29 November 2018).

Allison, S. (2018) *Djibouti's greatest threat may come from within, Mail & Guardian*. Available at: https://mg.co.za/article/2018-03-02-00-djiboutis-greatest-threat-may-come-from-within (Accessed: 25 October 2018).

Almond, R. G. (2017) *U.S. Ratification of the Law of the Sea Convention, The Diplomat*. Available at: https://thediplomat.com/2017/05/u-s-ratification-of-the-law-of-the-sea-convention/ (Accessed: 30 November 2017).

Amaro, S. (2019) *China wants to turn Greece's Piraeus port into Europe's biggest, CNBC*. Available at: https://www.cnbc.com/2019/11/15/china-wants-to-turn-greece-piraeus-port-into-europe-biggest.html (Accessed: 27 July 2021).

AMTI (2017) *Chinese Occupied Features, Asia Maritime Transparency Initiative*. Available at: https://amti.csis.org/island-tracker/chinese-occupied-features/ (Accessed: 31 March 2017).

Anderlini, J. (2017) *Xi Jinping's anti-corruption drive mimics a Ming obsession, Financial Times*. Available at: https://www.ft.com/content/39860d76-d9b3-11e7-a039-c64b1c09b482 (Accessed: 9 October 2018).

Aneez, S. (2017) 'Exclusive: Sri Lanka's cabinet "clears port deal" with China firm after concerns addressed', *Reuters*, pp. 2–5. Available at: https://www.reuters.com/article/us-sri-lanka-china-port/exclusive-sri-lankas-cabinet-clears-port-deal-with-china-firm-after-concerns-addressed-idUSKBN1AA0PI (Accessed: 18 February 2018).

Aneez, S. and Sirilal, R. (2014) *Chinese submarine docks in Sri Lanka despite Indian concerns, Reuters*. Available at: https://www.reuters.com/article/us-sri-lanka-china-submarine/chinese-submarine-docks-in-sri-lanka-despite-indian-concerns-idUSKBN0IM0LY20141102 (Accessed: 18 February 2018).

Aneja, A. (2015) *Xi comes calling to Pakistan, bearing gifts worth \$45 billion, The Hindu*. Available at: https://www.thehindu.com/news/international/xi-jinping-visit-to-pakistan-preview/article7114980.ece (Accessed: 28 October 2018).

Ankudinov, A., Ibragimov, R. and Lebedev, O. (2017) 'Sanctions and the Russian stock market', *Research in International Business and Finance*, 40, pp. 150–162. doi: 10.1016/j.ribaf.2017.01.005.

APP (2014a) Good news on track: Lahore to get Pakistan's first metro train, The Tribute Express. Available at: https://tribune.com.pk/story/711864/good-news-on-track-lahore-to-get-pakistans-firstmetro-train/ (Accessed: 11 September 2017).

APP (2014b) *Pakistan, China sign pact on Lahore Orange Line metro project, Dawn*. Available at: https://www.dawn.com/news/1107936 (Accessed: 9 November 2017).

Arant, R. (2011) 'Monsoon: The Indian Ocean and the Future of American Power, by Robert D. Kaplan, is reviewed', *Journal of International Affairs*, 64(2), p. 284.

Arase, D. (2015) 'China's Two Silk Roads Initiative What It Means for Southeast Asia', *Southeast Asian Affairs*, pp. 25–45. doi: 10.1108/17506200710779521.

Arewa, O. B. (2016) 'Constructing Africa: Chinese Investment, Infrastructure Deficits, and Development',

Cornell International Law Journal, 49(1), pp. 101–139. Available at: http://papers.ssrn.com/abstract=2695155.

Armitage, R. L. and Nye, J. S. (2007) *How America Can Become A Smarter Power, CSIS Commission Report on Smart Power*.

Arnold, M. (2018) Western banks race to win China's Belt and Road Initiative deals, Financial Times. Available at: https://www.ft.com/content/d9fbf8a6-197d-11e8-aaca-4574d7dabfb6 (Accessed: 17 January 2019).

Aron, R. (1966) Peace and War. London: Weidenfeld and Nicolson.

Arteh, A. (2017) *Djibouti breaks ground on massive Chinese-backed free trade zone, Reuters*. Available at: https://www.reuters.com/article/china-djibouti/djibouti-breaks-ground-on-massive-chinese-backed-free-trade-zone-idUSL4N1F649H (Accessed: 20 May 2018).

Ash, R. F. and Kueh, Y. Y. (1993) 'Economic Integration within Greater China: Trade and Investment Flows Between China, Hong Kong and Taiwan', *The China Quarterly*, 136(1), p. 711. doi: 10.1017/S0305741000032318.

Asia, C. (2015) *30 Heads of State Will Watch China's Military Parade Next Week Who is Going to China's Military Parade?, The Diplomat.* Available at: http://thediplomat.com/2015/08/30-heads-of-state-will-watch-chinas-military-parade-next-week/ (Accessed: 13 April 2017).

Ayapbergenovna, T. Z. (2015) 'China's approach in territorial disputes settlement', *Asian Social Science*, 11(16), pp. 278–283. doi: 10.5539/ass.v11n16p278.

Basu, T. (2018) *Japan's Belt and Road Puzzle, Decoded, The Diplomat*. Available at: https://thediplomat.com/2018/02/japans-belt-and-road-puzzle-decoded/ (Accessed: 10 July 2018).

BBC (2006) *First Beijing train reaches Lhasa, BBC*. Available at: http://news.bbc.co.uk/1/hi/world/asia-pacific/5140514.stm (Accessed: 11 October 2017).

BBC (2010) *Brazil Finds Massive Oil Field, BBC*. Available at: http://www.bbc.co.uk/news/world-latin-america-11659582 (Accessed: 12 October 2017).

BBC (2017) *Xi Jinping 'most powerful Chinese leader since Mao Zedong', BBC*. Available at: http://www.bbc.co.uk/news/world-asia-china-41730948 (Accessed: 14 November 2017).

Beech, H. (2016) *South China Sea: Where Did China Get Its Nine-Dash Line?, Time*. Available at: http://time.com/4412191/nine-dash-line-9-south-china-sea/ (Accessed: 23 October 2018).

Bender, J. (2015) *These 8 narrow chokepoints are critical to the world's oil trade, Business Insider India*. Available at: http://www.businessinsider.in/These-8-narrow-chokepoints-are-critical-to-the-worlds-oil-trade/articleshow/46775193.cms (Accessed: 25 April 2017).

Bent, M., Kadeřávek, P. and Pernička, J. (2007) *Carriages for the Railway over the Roof of the World*, *Hubner*. Available at: http://www.hubner-

group.com/en/Carriages+for+the+Railway+over+the+roof+of+the+world.html# (Accessed: 11 October 2017).

Bernstein, R. (2017) *China's Mekong Plans Threaten Disaster for Countries Downstream – Foreign Policy, Foreign Policy*. Available at: https://foreignpolicy.com/2017/09/27/chinas-mekong-plans-threaten-disaster-for-countries-downstream/ (Accessed: 16 July 2018).

Bhadrakumar, M. (2016) *Chinese naval ships at Gwadar port call for a rethink of India's regional policy, Dawn*.

Bharat Karnad. (2017) *China narrows the South China Sea – Asia Dialogue, Asia Dialogue*. Available at: http://theasiadialogue.com/2017/10/06/china-narrows-the-south-china-sea/ (Accessed: 27 October 2018).

Bijian, Z. (2005) 'China's "Peaceful Rise" to Great-Power Status', *Foreign Affairs*, 84(5), p. 18. doi: 10.2307/20031702.

Bin, G. (2018) *The Belt and Road Initiative is not China's Marshall Plan, Financial Times*. Available at: https://www.ft.com/content/29dedffe-9a1c-11e8-88de-49c908b1f264 (Accessed: 2 October 2018).

Bird, K. J. *et al.* (2008) 'Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle', *USGS Fact Sheet 2008-3049*, 2008–3049, pp. 1–4. doi: USGS Fact Sheet 2008-3049.

Björkell, S. (2017) *The development of China's aviation industry, gbtimes*. Available at: https://gbtimes.com/development-chinas-aviation-industry (Accessed: 16 October 2018).

Blanchard, J.-M. F. (2017) 'Probing China's Twenty-First-Century Maritime Silk Road Initiative (MSRI): An Examination of MSRI Narratives', *Geopolitics*, 22(2), pp. 246–268. doi: 10.1080/14650045.2016.1267147.

Blanchard, J.-M. F. and Flint, C. (2017) 'The Geopolitics of China's Maritime Silk Road Initiative', *Geopolitics*, 22(2), pp. 223–245. doi: 10.1080/14650045.2017.1291503.

Bland, B. (2016) *Hong Kong: One country, two economies, Financial Times*. Available at: https://www.ft.com/content/eb0e795a-3d17-11e6-9f2c-36b487ebd80a (Accessed: 5 February 2018).

Blas, J. (2018) *Saudis Suspend Oil Shipments Via Bab el-Mandeb After Attack, Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2018-07-25/saudis-halt-oil-shipments-via-bab-el-mandeb-strait-after-attack (Accessed: 22 November 2018).

Bloomberg (2020) *China Halts Some U.S. Farm Imports, Threatening Trade Deal, Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2020-06-01/china-halts-some-u-s-farm-imports-threatening-trade-deal (Accessed: 15 September 2021).

Bloomberg (2021) *China's Campaign to Control Commodities Goes into Overdrive, Business Standard*. Available at: https://www.business-standard.com/article/international/china-s-campaign-to-control-commodities-goes-into-overdrive-121061601356_1.html (Accessed: 15 September 2021).

Bovingdon, G. (2010) *The Uyghurs: Strangers in Their Own Land*. Columbia University Press. Available at: https://cup.columbia.edu/book/the-uyghurs/9780231147583.

Brennan, H. (2017) *Global Risks Forecast, Verisk Maplecroft*. Verisk Maplecroft. Available at: https://www.maplecroft.com/portfolio/new-analysis/2017/06/29/chinas-belt-road-one-initiative-many-questions/ (Accessed: 31 October 2018).

Brewster, D. (2014a) 'Beyond the "String of Pearls": is there really a Sino-Indian security dilemma in the Indian Ocean?', *Journal of the Indian Ocean Region*, 10(2), pp. 133–149. doi: 10.1080/19480881.2014.922350.

Brewster, D. (2014b) *India's Ocean: The Story of India's Bid for Regional Leadership*. Kindle Edi. New York: Routledge.

Brewster, D. (2015a) 'An Indian Ocean dilemma: Sino-Indian rivalry and China's strategic vulnerability in the Indian Ocean', *Journal of the Indian Ocean Region*, 11(May), pp. 37–41. doi: 10.1080/19480881.2014.994822.

Brewster, D. (2015b) 'Indian Strategic Thinking About the Indian Ocean: Striving Towards Strategic Leadership', *India Review*, 14(2), pp. 221–237. doi: 10.1080/14736489.2015.1030198.

Brewster, D. (2017) 'Silk Roads and Strings of Pearls: The Strategic Geography of China's New Pathways in the Indian Ocean', *Geopolitics*, 22(2), pp. 269–291. doi: 10.1080/14650045.2016.1223631.

Brewster, D. (2018a) *China's new network of Indian Ocean bases, Lowy Institute*. Available at: https://www.lowyinstitute.org/the-interpreter/chinas-new-network-indian-ocean-bases (Accessed: 9 February 2018).

Brewster, D. (2018b) *India and China at Sea: Competition for Naval Dominance in the Indian Ocean*. Kindle. New Delhi: Oxford University Press.

Brînză, A. (2016) *How a Greek Port Became a Chinese 'Dragon Head', The Diplomat*. Available at: https://thediplomat.com/2016/04/how-a-greek-port-became-a-chinese-dragon-head/ (Accessed: 26 October 2017).

Brown, K. (2017) *China's World: What Does China Want*. London: I.B.Tauris. Available at: https://www.ibtauris.com/books/humanities/history/regional national history/asian history/chinas world the global aspiration of the next superpower.

Buckley, Nicholas, Simon, Brown, M. (2018) 'China 2017 Review, World's Second-Biggest Economy Continues to Drive Global Trends in Energy Investment', (January). Available at: http://ieefa.org/wp-content/uploads/2018/01/China-Review-2017.pdf.

Buckley, M. (2014) Meltdown in Tibet. St. Martin's Press.

Burgos Cáceres, S. and Ear, S. (2012) 'The Geopolitics of China's Global Resources Quest', *Geopolitics*, 17(1), pp. 47–79. doi: 10.1080/14650045.2011.562943.

Business Standard (2021) China's debt-trap diplomacy: Pak to seek debt relief for power projects, Business Standard News. Available at: https://www.business-standard.com/article/international/chinas-debt-trap-diplomacy-pak-to-seek-debt-relief-for-power-projects-121022500125_1.html (Accessed: 20 July 2021).

Cai, K. G. (1999) 'Outward Foreign Direct Investment: A Novel Dimension of China's Integration into the Regional and Global Economy', *The China Quarterly*, 160, p. 856. doi: 10.1017/S0305741000001363.

Cai, K. G. (2018) 'The One Belt One Road and the Asian Infrastructure Investment Bank: Beijing's New Strategy of Geoeconomics and Geopolitics', *Journal of Contemporary China*, 00(00), pp. 1–17. doi: 10.1080/10670564.2018.1488101.

Cai, Y. (2000) 'Between State and Peasant: Local Cadres and Statistical Reporting in Rural China', *The China Quarterly*, 163(3), pp. 783–805. doi: 10.1017/S0305741000014661.

Campbell, C. (2017a) *Ports, Pipelines, and Geopolitics: China's New Silk Road Is a Challenge for Washington, Time*. Available at: http://time.com/4992103/china-silk-road-belt-xi-jinping-khorgos-kazakhstan-infrastructure/ (Accessed: 17 May 2018).

Campbell, C. (2017b) Xi Jinping Becomes China's Most Powerful Leader Since Mao Zedong, Time.

Available at: http://time.com/4994618/xi-jinping-china-19th-congress-ccp-mao-zedong-constitution/ (Accessed: 14 November 2017).

Campbell, J. (2018) *China Pledges \$60 Billion in Financing to an Increasingly Debt-Distressed Africa, Council on Foreign Relations*. Available at: https://www.cfr.org/blog/china-pledges-60-billion-financing-increasingly-debt-distressed-africa (Accessed: 7 November 2018).

Causwell, X. (2018) An Alternative Containment Strategy: How to Counter China's Maritime Silk Road Initiative, Georgetown Security Studies Review.

CCTV (2016) 6 lines profitable, high-speed rail sector remains in red, CCTV News. Available at: http://english.cctv.com/2016/12/28/VIDEkvbpP5rAdrxVHXctuelh161228.shtml (Accessed: 22 September 2021).

Chan, G., Lee, P. K. and Chan, L.-H. (2012) *China Engages Global Governance: A New World Order in the Making?* London: Routledge. Available at: https://www.routledge.com/China-Engages-Global-Governance-A-New-World-Order-in-the-Making-1st/Chan-Lee-Chan/p/book/9780415557139.

Chan, L.-H. (2017a) 'Soft balancing against the US "pivot to Asia": China's geostrategic rationale for establishing the Asian Infrastructure Investment Bank', *Australian Journal of International Affairs*, 71(6), pp. 568–590. doi: 10.1080/10357718.2017.1357679.

Chan, L.-H. (2017b) The AIIB and China's Soft Balancing Against the US Pivot to Asia, Australian Outlook.

Chan, M. (2018) *First Djibouti … now Pakistan port earmarked for a Chinese overseas naval base, sources say, South China Morning Post*. Available at: http://www.scmp.com/news/china/diplomacy-defence/article/2127040/first-djibouti-now-pakistan-port-earmarked-chinese (Accessed: 15 February 2018).

Chance, A. (2016) *The 'Belt and Road Initiative' Is Not 'China's Marshall Plan'. Why Not?t, The Diploma*. Available at: https://thediplomat.com/2016/01/the-belt-and-road-initiative-is-not-chinas-marshall-plan-why-not/ (Accessed: 24 October 2018).

Chang, Y.-C. (2018) 'The "21st Century Maritime Silk Road Initiative" and naval diplomacy in China', *Ocean & Coastal Management*, 153(June 2017), pp. 148–156. doi: 10.1016/j.ocecoaman.2017.12.015.

Channel NewsAsia (2018) *Proposed Kra Canal not current government project: Thailand, Channel NewsAsia*. Available at: https://www.channelnewsasia.com/news/asiapacific/proposed-kra-canal-not-current-government-project-thailand-9950434 (Accessed: 19 February 2018).

Chaturvedy, R. R. and Snodgrass, G. M. (2012) *The Geopolitics of Chinese Access Diplomacy*. Washington, D.C. Available at: http://journals.sagepub.com/doi/10.1177/0022146514547328.

Chaziza, M. (2016) 'China's Middle East Policy: The ISIS Factor', *Middle East Policy*, 23(1), pp. 25–33. doi: 10.1111/mepo.12171.

Chaziza, M. (2018) 'China's Mediation Efforts in the Middle East and North Africa: Constructive Conflict Management', *Strategic Analysis*, 42(1), pp. 29–41. doi: 10.1080/09700161.2017.1418956.

Chellaney, B. (2017) *China's Debt-Trap Diplomacy by Brahma Chellaney - Project Syndicate, Project Syndicate.* Available at: https://www.project-syndicate.org/commentary/china-one-belt-one-road-loans-debt-by-brahma-chellaney-2017-01?barrier=accesspaylog (Accessed: 27 November 2018).

Chen Han (2017) China looks to expand its free trade ports, IHS Fairplay. Available at:

https://fairplay.ihs.com/commerce/article/4294561/china-looks-to-expand-its-free-trade-ports (Accessed: 7 February 2018).

Chen, I. and Gao, X. (2018) 'The Geopolitical Implications of the BRI on the EU's Connectivity Strategy | IPSA', in. Available at: https://www.ipsa.org/events/congress/wc2018/paper/geopolitical-implications-bri-eus-connectivity-strategy (Accessed: 12 July 2018).

Chen, K. C. and Jian, C. (1995) 'China's involvement in the Vietnam War, 1964-69', *The China Quarterly*, 142(142), pp. 356–387. doi: 10.1017/S0305741000034974.

Chen, S. (2017) You'll soon save an hour on China's Beijing-Shanghai bullet train ... but there's a catch, South China Morning Post. Available at:

http://www.scmp.com/news/china/society/article/2104396/faster-bullet-trains-beijing-shanghai-line-it-could-mean-fewer (Accessed: 24 January 2018).

Chen, X. and Stone, C. (2013) 'China and Southeast Asia: Unbalanced Development in the Greater Mekong Subregion', *The European Financial Review*, 8–9, pp. 7–11. Available at: https://digitalrepository.trincoll.edu/cgi/viewcontent.cgi?article=1084&context=facpub.

Chen, Y. (2018) *China and India establish "oil buyers' club" to counter OPEC, Global Risk Insights*. Available at: https://globalriskinsights.com/2018/06/china-india-oil-buyers-club-opec/ (Accessed: 25 September 2018).

Chen, Z. (2017) 'Impacts of high-speed rail on domestic air transportation in China', *Journal of Transport Geography*, 62(January), pp. 184–196. doi: 10.1016/j.jtrangeo.2017.04.002.

Cheng, G.-D. and Li, X. (2003) 'Constructing the Qinghai-Tibet Railroad: new challenges to Chinese permafrost scientists', *Permafrost: Proceedings of the 8th International Conference on Permafrost*, 24(1), pp. 131–134. Available at: http://www.arlis.org/docs/vol1/ICOP/55700698/Pdf/Chapter_024.pdf.

Chenyang, L. (2012) 'China–Myanmar Comprehensive Strategic: A Regional Threat?', *Journal of Current Southeast Asian Affairs*, 31(1), pp. 53–72. Available at: http://journals.giga-hamburg.de/index.php/jsaa/article/view/1013/657.

Chi, M. (2017) *China's first home-built icebreaker named Snow Dragon 2, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-09/27/content_32544019.htm (Accessed: 30 November 2017).

Chief of Information (2017) *Navy Fact File: Status of the Navy, United States Navy*. Available at: http://www.navy.mil/navydata/nav_legacy.asp?id=146 (Accessed: 24 November 2017).

China.org.cn (2004) *China Facts & Figures 2004: Economy - Transportation, Post and Telecommunications, China.org.cn.* Available at: http://www.china.org.cn/english/en-shuzi2004/jj/jtys.htm (Accessed: 25 November 2017).

China.org.cn (2018) *Xinjiang's Natural Resources, China.org.cn*. Available at: http://www.china.org.cn/english/MATERIAL/139230.htm (Accessed: 25 January 2018).

China Daily (2017) *China home to 7 of world's top 10 busiest ports, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-06/21/content_29828792.htm (Accessed: 26 November 2017).

China Gas (2009) China proposes Fourth West-East Natural Gas Pipeline, China Daily. Available at:

http://www.chinadaily.com.cn/bizchina/2009-07/16/content_8437078.htm (Accessed: 2 October 2017).

China Post (2013) *Uncle Sam can't beat out the Chinese in Myanmar, The China Post*. Available at: http://www.chinapost.com.tw/editorial/world-issues/2013/08/07/385672/uncle-sam.htm.

Chongqing Today (2014) *Chongqing's Natural Gas Supply Integrating with National Trunk Lines, Chongqing Municipal Government*. Available at: http://en.cq.gov.cn/ChongqingToday/News/2013/10/23/1101562.shtml (Accessed: 2 October 2017).

Chow, J. T. and Easley, L.-E. (2016) 'Persuading Pariahs: Myanmar's Strategic Decision to Pursue Reform and Opening', *Pacific Affairs*, 89(3), pp. 521–542. doi: 10.5509/2016893521.

Chow, J. T. and Easley, L.-E. (2017) *Myanmar's Foreign Policy Rebalance, The Diplomat*. Available at: https://thediplomat.com/2016/09/myanmars-foreign-policy-rebalance/ (Accessed: 27 November 2016).

Chrysopoulos, P. (2021) *China's Extravagant Plan for Canal Trade Route from Greece to Central Europe*, *Greek Reoirter*. Available at: https://greekreporter.com/2021/07/06/china-canal-trade-route-greece-danube/ (Accessed: 27 July 2021).

Chun, K. H. (2009) 'Analysing China's Energy Security: A Source for Conflict?', *The Journal of East Asian Affairs*, 23(1), pp. 89–114. Available at: http://www.jstor.org/stable/23257992 (Accessed: 21 August 2014).

CIA (1949) *Probable Developments in China (ORE-45-49)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001086039.pdf.

CIA (1951) *Trade of Communist China in 1951*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79S01011A000600010035-5.pdf.

CIA (1952) *Relations Between the Chinese Communist Regime and the USSR (NIE-58)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001086032.pdf.

CIA (1953a) *Foreign Trade (SE-37)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400030001-3.pdf.

CIA (1953b) International Trade Syndicatess in China (1950-1951). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80-00809A000700140063-5.pdf.

CIA (1953c) *Trade Agreements and Import of Industrial materials in China, 1950-1951*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80-00809A000700130201-2.pdf.

CIA (1954a) *Communist China's Imports and Exports, 1954: Trade and Transport Involved (EIC-R1-S4).* Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400020002-3.pdf.

CIA (1954b) *Memorandum for Mr. Dulles: Communist China's Imports and Exports, 1954; Trade and Transport Involved (IAC-D-42/11)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85S00362R000400020001-4.pdf.

CIA (1957a) Communist China's Imports and Exports, 1956: Trade and Transport Involved (EIC-R1-S6) (IAC-D-42/13). Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79S01011A000600010035-5.pdf.

CIA (1957b) *Communist China Through 1961 (NIE-13-56)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001098224.pdf.

CIA (1958) Communist China national intelligence estimate (NIE 13-58).

CIA (1959) *Economic Relations of Communist China with the USSR since 1950 (CIA/RR-59-16)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0000313442.pdf.

CIA (1961) The Economic Situation in Communisit China (SNIE 13-61).

CIA (1964) *National Intelligence Estimate (NIE 13-64)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001098204.pdf.

CIA (1965) Communist China's Foreign Policy (NIE-13-9-65).

CIA (1966) *Communist China's Economic prospects (NIE-13-5-66)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001090195.pdf.

CIA (1967) *Economic Outlook for Communist China (NIE 13-5-67)*. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0001095913.pdf.

CIA (1971) *Communist China: Economic Expansion in 1970 (ER IM 71-20)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP85T00875R001600040021-4.pdf.

CIA (1972) *People's Republic of China: Internaional Trade Handbook (A 72-38)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79-00928A000100030002-0.pdf.

CIA (1974) *China: Railroad Construction Since 1970 (ER RP 74-7)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP79T01098A000200130001-0.pdf.

CIA (1978) *China: Foreign Trade Policy in the 1970s (ER 78-10455)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP80T00702A000200060012-0.pdf.

CIA (1979) *China: The Steel Industy in the 1970s and 1980s (ER 79-10245)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP86B00985R000300040017-8.pdf.

CIA (1980) *China: International Trade Quarterly Review Third Quarter, 1979 (ER CIT 80-002)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP86B00985R000300050006-9.pdf.

CIA (1985) *China's Foreign Trade: Patterns and Prospects (EA M 85-10108)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP04T00447R000301730001-0.pdf.

CIA (1987) *China's Trade: Austerity Measures for 1987 (EA M 87-20051)*. Available at: https://www.cia.gov/library/readingroom/docs/CIA-RDP90T00114R000200100001-5.pdf.

Clarke, M. (2016) *China's Terrorist Problem Goes Global, The Diplomat*. Available at: https://thediplomat.com/2016/09/chinas-terrorist-problem-goes-global/ (Accessed: 10 September 2016).

Clover, C. (2017) *China's carmakers develop an appetite for foreign markets, Financial Time*. Available at: https://www.ft.com/content/a482e256-5cd7-11e7-b553-e2df1b0c3220 (Accessed: 17 August 2018).

Coffey, H. (2017) *China announces plans for 'flying train' that can travel up to 2,500mph, The Independent*. Available at: http://www.independent.co.uk/travel/news-and-advice/china-flying-train-2500mph-aerospace-science-and-technology-corporation-elon-musk-hyperloop-a7921541.html (Accessed: 11 October 2017).

Cohen, S. (1982) 'A New Map of Global Geopolitical Equilibrium: A Develop-mental Approach', Political

Geography Quarterly, 1(3), p. 223.

Collins, B. K. (2014) 'Credit and Credibility', *The American Review of Public Administration*, 44(1), pp. 112–123. doi: 10.1177/0275074012460424.

'Communist China Railroads and Selected Roads - June 1961' (1961). Library of Congress.

Comtois, C. (1990) 'Transport and Territorial Development in China 1949-1985', *Modern Asian Studies*, 24(4), pp. 777–818. Available at: http://www.jstor.org/stable/312733.

Condon, M. (2012) 'China in Africa: What the Policy of Nonintervention Adds to the Western Development Dilemma', *Praxis: The Fletcher Journal of Human Security*, 17, pp. 5–25. Available at: http://fletcher.tufts.edu/Praxis/~/media/Fletcher/Microsites/praxis/xxvii/2CondonChinaAfrica.pdf.

Connolly, E., Jääskelä, J. and Merwe, M. Van Der (2013) 'The Performance of Resource-Exporting Economies', *Bulletin*, pp. 19–30.

Coyne, C. J. and Ryan, M. E. (2009) 'With Friends Like These, Who Needs Enemies? Aiding the World's Worst Dictators', *The Independent Review*, 14(1), pp. 26–44. Available at: http://www.independent.org/pdf/tir/tir_14_01_2_coyne.pdf.

CPEC (2017a) CPEC Maps, CPEC. Available at: http://cpec.gov.pk/maps (Accessed: 6 November 2017).

CPEC (2017b) *Introduction: China-Pakistan Economic Corridor (CPEC), CPEC*. Available at: http://cpec.gov.pk/introduction/1 (Accessed: 6 November 2017).

Crooks Ed (2017) *The global importance of China's oil imports, Financial Times*. Available at: https://www.ft.com/content/e7d52260-a1e4-11e7-b797-b61809486fe2 (Accessed: 20 October 2018).

Cropsey, S. and Milikh, A. (2012) 'Mahan's Naval Strategy: China Learned It. Will America Forget It?', *World Affairs*, (April 2012), pp. 85–93. Available at: http://www.worldaffairsjournal.org/article/mahan's-naval-strategy-china-learned-it-will-america-forget-it.

CSIS/AMTI (2017) A Constructive Year for Chinese Base Building, Asia Maritime Transparency Initiative. Available at: https://amti.csis.org/constructive-year-chinese-building/ (Accessed: 8 February 2018).

CSIS (2014) *Perspectives on the South China Sea Diplomatic, Legal, and Security Dimensions of the Dispute*. Edited by M. Hiebert, P. Nguyen, and G. B. Poling. Lanham: Rowman & Littlefield.

CSIS (2018) *How much trade transits the South China Sea?, Center for Strategic & International Studies*. Available at: https://chinapower.csis.org/much-trade-transits-south-china-sea/#easy-footnote-bottom-1 (Accessed: 2 February 2018).

Cunningham, N. (2018) *Bypassing The World's Key Oil Chokepoints, OilPrice*. Available at: https://oilprice.com/Energy/Energy-General/Bypassing-The-Worlds-Key-Oil-Chokepoints.html (Accessed: 22 November 2018).

Dahlman, C. T. (2008) 'Great Powers and Geopolitical Change', *The Professional Geographer*, 60(2), pp. 285–286. doi: 10.1080/00330120701787241.

Daojiong, Z. (2006) 'China's energy security: Domestic and international issues', *Survival*, 48(1), pp. 179–190. doi: 10.1080/00396330600594322.

Davis, E. V. W. (2008) 'Uyghur Muslim Ethnic Separatism in Xinjiang, China', *Asian Affairs*, 35(1), pp. 15–29. Available at: http://www.jstor.org/stable/27821503 Accessed:

Dawn (2014) *China tables railway project linking to Pakistan, Sawn*. Available at: https://www.dawn.com/news/1116104/china-tables-railway-project-linking-to-pakistan (Accessed: 9 November 2017).

Dawn (2015) 'Rs165bn Lahore Metro Train Project Approved', *Dawn*, pp. 9–11. Available at: https://www.dawn.com/news/1180260 (Accessed: 9 November 2017).

Deaton, A. (2013) *The Great Escape: Health, Wealth, and the Origins of Inequality*. Kindle. Princeton and Oxford: Princeton University Press.

Deccan Herald (2016) *Pak approves Russia's request to use strategic Gwadar Port, Deccan Herald*. Available at: https://www.thehindu.com/news/international/Pakistan-approves-Russia's-request-to-use-strategic-Gwadar-Port/article16706441.ece (Accessed: 3 August 2018).

Defence Committee (2018) On Thin Ice: UK Defence in the Arctic. London.

Degang, S. and Zoubir, Y. (2014) 'China-Arab States Strategic Partnership: Myth or Reality?', *Journal of Middle Eastern and Islamic Studies*, 8(3), pp. 70–101. Available at: http://mideast.shisu.edu.cn/_upload/article/c6/74/e0f32e604ae798f68665af714073/4f6eded7-0572-400e-aa64-79b698c7723e.pdf.

Demir, İ. (2012) 'Strategic Importance Of Crude Oil And Natural Gas Pipelines', Australian Journal of Basic and Applied Sciences, 6(3), pp. 87–96.

DeSilva-Ranasinghe, S. (2011) *Why the Indian Ocean Matters, The Diplomat*. Available at: https://thediplomat.com/2011/03/why-the-indian-ocean-matters/ (Accessed: 29 October 2018).

Development Concepts and Doctrine Center (2015) *Strategic Trends Programme, Future Character of Conflict*. Shrivenham. Available at:

http://www.mod.uk/DefenceInternet/MicroSite/DCDC/OurPublications/Concepts/FutureCharacterOfConflict.htm.

Devermont, J. (2019) Assessing the Risks of Chinese Investments in Sub-Saharan African Ports, CSIS. Available at: https://www.csis.org/analysis/assessing-risks-chinese-investments-sub-saharan-african-ports (Accessed: 28 September 2021).

Dews, F. (2014) *MAP: China's Energy Vulnerabilities, Bookings*. Available at: https://www.brookings.edu/blog/brookings-now/2014/04/17/map-chinas-energy-vulnerabilities/ (Accessed: 24 September 2017).

Diana, A. (2015) 'Impact of China's Rise on the Mekong Region ed. by Yos Santasombat (review)', *Contemporary Southeast Asia: A Journal of International and Strategic Affairs*, 37(3), pp. 499–501. doi: 10.1355/cs37-31.

Dienel, H.-L. (2014) *Linking Networks: The Formation of Common Standards and Visions for Infrastructure Development*. Edited by M. Schiefelbusch. Routledge.

Ding, S. and Knight, J. (2011) 'Why has China Grown So Fast? The Role of Physical and Human Capital Formation*', *Oxford Bulletin of Economics and Statistics*, 73(2), pp. 141–174. doi: 10.1111/j.1468-0084.2010.00625.x.

Ding, Y. (2015) 'Consolidation of the PRC's Leadership Succession System from Hu Jintao to Xi Jinping', *China Report*, 51(March 2008), pp. 49–65. doi: 10.1177/0009445514557389.

Dingdu, Y. (2017) *Belt & Road Initiative reaches the Arctic, Xinhua*. Available at: http://news.xinhuanet.com/english/2017-11/03/c_136726129.htm (Accessed: 27 November 2017).

Djankov, S. and Miner, S. (2016) 'China's Belt and Road Initiative: Motives, Scope and Challenges', *Peterson Institute for International Economics Briefing*. Kindle. Edited by S. Djankov and S. Miner, PIE Briefi(PIE Briefing 16-2), pp. 1–34. Available at: http://www.piie.com/publications/briefings/piieb16-2.pdf.

Dobell, G. (2016) *China's Great Wall of 'Denial' in the South China Sea, The National Interest*. Available at: http://nationalinterest.org/blog/the-buzz/chinas-great-wall-denial-the-south-china-sea-16482 (Accessed: 22 November 2016).

Dollar, D. (2016) *China's Engagement with Africa: From Natural Resources to Human Resources*. Washington, D.C: China Center at Brookings. Available at: www.brookings.edu.

Donnan, S. (2015) US Congress moves closer to approving long-stalled IMF reforms, Financial Times. Available at: http://www.ft.com/cms/s/0/%0Abee64f68-a412-11e5-873f-68411a84f346. (Accessed: 17 January 2019).

Donnan, S. (2017) *China moves in as US pulls back from global institutions, Financial Times*. Available at: https://www.ft.com/content/fcbf3ba2-afcc-11e7-aab9-abaa44b1e130 (Accessed: 23 October 2018).

Double stack rail transport (2018) *Alchetron*. Available at: https://alchetron.com/Double-stack-rail-transport (Accessed: 19 September 2021).

Dove, J. (2016) *The AIIB and the NDB: The End of Multilateralism or a New Beginning?, The Diplomat.* Available at: https://thediplomat.com/2016/04/the-aiib-and-the-ndb-the-end-of-multilateralism-or-a-new-beginning/ (Accessed: 5 July 2018).

Downs, E. S. (2004) 'The Chinese Energy Security Debate', *The China Quarterly*, 177(4), pp. 21–41. doi: 10.1017/S0305741004000037.

Dreher, A. and Fuchs, A. (2015) 'Rogue aid? An empirical analysis of China's aid allocation', *Canadian Journal of Economics/Revue canadienne d'économique*, 48(3), pp. 988–1023. doi: 10.1111/caje.12166.

Dreyer, E. L. (2006) *Zheng He: China and the Oceans in the Early Ming Dynasty, 1405-1433*. Pearson. Available at: https://books.google.co.uk/books/about/Zheng_He.html?id=9BeFQgAACAAJ&redir_esc=y.

Du, J. and Zhang, Y. (2017) 'Does One Belt One Road initiative promote Chinese overseas direct investment?', *China Economic Review*, (April), pp. 0–1. doi: 10.1016/j.chieco.2017.05.010.

Dunn, C. (2014) 'Natural Gas Serves a Small, but Growing, Portion of China's Total Energy Demand', *Eia*, pp. 7–8. Available at: https://www.eia.gov/todayinenergy/detail.php?id=17591 (Accessed: 18 June 2017).

Dupont, A. and Baker, C. G. (2014) 'East Asia's Maritime Disputes: Fishing in Troubled Waters', *Washington Quarterly*, 37(1), pp. 79–98. doi: 10.1080/0163660X.2014.893174.

Dwyer, A. M. (2005) *The Xinjiang Conflict: Uyghur Identity, Language Policy, and Political Discourse*. Washington, D.C.: East-West Center. Available at:

https://www.eastwestcenter.org/publications/xinjiang-conflict-uyghur-identity-language-policy-and-political-discourse.

Dyer, G. (2014) The Contest of the Century. New York: Vintage.

Early, S. (1943) *Cairo Communiqué*. National Diet Library. Available at: http://www.ndl.go.jp/constitution/e/shiryo/01/002_46/002_46tx.html (Accessed: 26 October 2018).

Economy, E. C. (2018) *The Third Revolution: Xi Jinping and the New Chinese State*. Kindle Edi. Oxford University Press. Available at: https://www.cfr.org/book/third-revolution.

Edwards, J. (2017) 500 years ago, China Sestroyed its World-Dominating Navy because its Political Wlite was Afraid of Free Trade, Independant. Available at:

http://www.independent.co.uk/news/world/americas/500-years-ago-china-destroyed-its-world-dominating-navy-because-its-political-elite-was-afraid-of-a7612276.html (Accessed: 24 November 2017).

Efferink, L. van (2015) *Saul Cohen: Great powers, shatterbelts, gateways, geostrategic regions, Exploring Geopolitics*. Available at:

http://www.exploringgeopolitics.org/interview_cohen_saul_great_powers_shatterbelts_gateways_geos trategic_regions_derwent_whittlesey/ (Accessed: 13 March 2017).

EIA (2014a) *China, U.S. Energy Information Administration*. Available at: https://www.eia.gov/beta/international/analysis.cfm?iso=CHN (Accessed: 13 March 2015).

EIA (2014b) *EIA China Report, U.S. Energy Information Administration*. Available at: http://www.eia.gov/countries/analysisbriefs/China/china.pdf (Accessed: 13 March 2015).

EIA (2015) China. Available at:

https://energy.gov/sites/prod/files/2016/04/f30/China_International_Analysis_US.pdf.

EIA (2017) *International Energy Outlook 2017 Overview, U.S. Energy Information Administration*. doi: www.eia.gov/forecasts/ieo/pdf/0484(2016).pdf.

Eisenman, J. and Stewart, D. T. (2017) *China's New Silk Road Is Getting Muddy, Foreign Policy*. Available at: http://foreignpolicy.com/2017/01/09/chinas-new-silk-road-is-getting-muddy/ (Accessed: 2 April 2018).

Ejiogu, K. U. (2012) 'Monsoon: The Indian Ocean and the Future of American Power - By Robert D. Kaplan', *Governance*, 25(2), pp. 356–358. doi: 10.1111/j.1468-0491.2012.01575.x.

Embury-Dennis, T. (2017) *China launches first train service to travel all the way to Britain carrying socks to east London, Independent*. Available at: http://www.independent.co.uk/news/world/asia/china-train-britain-freight-london-railway-east-wind-socks-clothes-a7509731.html (Accessed: 11 October 2017).

Erickson, A. S. (2015) 'Showtime: China Reveals Two "Carrier- Killer" Missiles', *The National Interest*, pp. 1–17. Available at: http://nationalinterest.org/feature/showtime-china-reveals-two-carrier-killer-missiles-13769 (Accessed: 13 April 2017).

Erickson, A. S. and Collins, G. B. (2010) 'China's oil security pipe dream: the reality, and strategic consequences, of seaborne imports', *Naval War College Review*, 63(2), pp. 89–111. Available at: http://www.nwc.navy.mil/press.

Erlanger, S. (2020) *Biden Wants to Rejoin Iran Nuclear Deal, but It Won't Be Easy, The New York Times*. Available at: https://www.nytimes.com/2020/11/17/world/middleeast/iran-biden-trump-nuclear-sanctions.html (Accessed: 10 October 2021).

Etzioni, A. (2016) 'The Asian Infrastructure Investment Bank: A Case Study of Multifaceted Containment

Investment Bank', *Asian Perspective*, 40(2), pp. 173–196. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/1790614096?accountid=13460.

Fallon, T. (2014) 'China's Pivot to Europe', American Foreign Policy Interests, 36(3), pp. 175–182. doi: 10.1080/10803920.2014.925342.

Fallon, T. (2015) 'The New Silk Road: Xi Jinping's Grand Strategy for Eurasia', *American Foreign Policy Interests*, 37(3), pp. 140–147. doi: 10.1080/10803920.2015.1056682.

Fan, L.-S. (2009) 'the Economy and Foreign Trade of China', *Development*, 38(2), pp. 249–259.

Far Eastern Economic Review (1992) 'South China Sea: Treacherous Shoals', *Far Eastern Economic Review*, 155(32), pp. 14–17. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/208223671?accountid=13460.

Farquhar, P. (2014) A Cargo Ship Just Completed A Historic Trip Through The Northwest Passage, Business Insider. Available at: http://www.businessinsider.com/a-cargo-ship-just-completed-a-historictrip-through-the-northwest-passage-2014-10?IR=T (Accessed: 30 November 2017).

Farwa, U. and Siddiqa, A. (2017) 'CPEC : Prospects of OBOR and South-South Cooperation', *Strategic Studies*, 37(3), pp. 75–92.

Fazl-e-Haider, S. (2007) *China-Pakistan Rail Link on Horizon, Asian Times*. Available at: http://www.atimes.com/atimes/South_Asia/IB24Df02.html (Accessed: 9 November 2017).

FDFA (2017) *Bilateral relations Switzerland–China, Federal Department of Foreign Affairs*. Available at: https://www.eda.admin.ch/eda/en/home/representations-and-travel-advice/china/switzerland-china.html (Accessed: 24 June 2017).

Fiskesjö, M. (2018) 'Chinese Encounters in Southeast Asia: How People, Money, Ideas from China are Changing a Region Edited by Pál Nyíri and Danielle Tan Seattle, WA and London: University of Washington Press, 2017 xiii + 296 pp. \$30.00 ISBN 978-0-2959-9930-2', *The China Quarterly*, 234, pp. 577–578. doi: 10.1017/S030574101800070X.

Fitch Solutions (2015) *India's Three-Pronged Strategy To Expand Geopolitical Reach, Fitch Solutions*. Available at: https://www.fitchsolutions.com/country-risk-sovereigns/economics/indias-three-pronged-strategy-expand-geopolitical-reach-27-07-2015 (Accessed: 25 October 2018).

FMPRC (2017) Chinese Relations with Sweden, Ministry of Foreign Affairs, the People's Republic of China. Available at: http://www.fmprc.gov.cn/ce/cggb/chn/zrgx/t216965.htm (Accessed: 24 June 2017).

Fravel, M. T. (2014) 'Things Fall Apart: Maritime Disputes and China's Regional Diplomacy'. Available at: https://ssrn.com/abstract=2466488.

Fravel, M. T. and Fravel, M. T. (2017) 'Power Shifts and Escalation: Explaining China's Use of Force in Territorial Disputes', *International Security*, 32(3), pp. 44–83.

Frese, F. (2019) *Belt and Road Initiative (BRI) and repositioning idle containers, Container Xchange*. Available at: https://container-xchange.com/blog/belt-and-road-initiative/ (Accessed: 19 September 2021).

Friedberg, A. L. (2018) 'Globalisation and Chinese Grand Strategy', *Survival*, 60(1), pp. 7–40. doi: 10.1080/00396338.2018.1427362.

Fuhrman, P. (2017) *China-owned port in Sri Lanka could alter trade routes, Financial Times*. Available at: https://www.ft.com/content/f0d88070-9f99-11e7-9a86-4d5a475ba4c5 (Accessed: 9 February 2018).

Fukao, K., Kiyota, K. and Yue, X. (2006) *China's Long-Term International Trade Statistics: By Commodity, 1952-1964 and 1981-2000, Discussion Paper Series*. Tokyo. Available at: http://hi-stat.ier.hit-u.ac.jp/research/discussion/2005/pdf/D05-147.pdf.

G. John Ikenberry and Darren Lim (2007) *China's emerging institutional statecraft, Brookings*. Available at: https://www.brookings.edu/research/chinas-emerging-institutional-statecraft/ (Accessed: 28 July 2018).

Gady, F.-S. (2016) *China Begins Construction of Polar Icebreaker, The Diplomat*. Available at: https://thediplomat.com/2016/12/china-begins-construction-of-polar-icebreaker/ (Accessed: 30 November 2017).

Gao, Z. and Jia, B. B. (2013) 'The nine-dash line in the south china sea: history status and implications', *The American Journal of International Law*, 107(1), pp. 98–124. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/1346762263?accountid=13460.

Garlick, J. (2019) 'China's Economic Diplomacy in Central and Eastern Europe: A Case of Offensive Mercantilism?', *Europe-Asia Studies*, 71(8), pp. 1390–1414. doi: 10.1080/09668136.2019.1648764.

Garver, J. W. (2006) 'Development of China's Overland Transportation Links with Central, South-west and South Asia', *The China Quarterly*, 185(1), p. 1. doi: 10.1017/S0305741006000026.

George, C. A. (2017) *9 Dashed Line- An Introduction to The South China Sea, Global Recon*. Available at: http://www.globalrecon.net/articles/2017/3/28/9-dashed-line-an-introduction-to-the-south-china-sea (Accessed: 23 October 2018).

Gertz, B. (2005) *China Builds up Strategic Sea Lanes, Washington Times*. Available at: http://www.washingtontimes.com/news/2005/jan/17/20050117-115550-1929r/?page=all (Accessed: 22 November 2016).

Gertz, B. (2018) *Inside the Ring: China plans Pakistan military base at Jiwani, Washington Times*. Available at: https://www.washingtontimes.com/news/2018/jan/3/china-plans-pakistan-military-base-at-jiwani/ (Accessed: 15 February 2018).

Gilholm, A. (2018) 'Xi Jinping's New Watchdog', *Foreign Affairs*. Available at: https://www.foreignaffairs.com/articles/china/2018-03-06/xi-jinpings-new-watchdog (Accessed: 9 October 2018).

Gilks, A. (1992) *The Breakdown of the Sino-Vietnamese Alliance: 1970-1979*. University of California Inst of East.

Gils, H. *et al.* (2008) 'Forecasting the pattern and pace of Fagus forest expansion in Majella National Park, Italy', *Applied Vegetation Science*, 11(4), pp. 539–546. doi: 10.3170/2008-7-18568.

Glassner, M. I. and Harm de Blij (1989) *Systematic Political Geography*. 4th edn. New York: John Wiley and Sons.

Global Times (2014) *High-speed rail great boost to Xinjiang growth, Global Times*. Available at: http://www.globaltimes.cn/content/864140.shtml (Accessed: 11 October 2017).

Gong, J. (2012) Need for unified coast guard, China Daily. Available at:

http://usa.chinadaily.com.cn/opinion/2012-10/19/content_15829823.htm (Accessed: 8 February 2018).

Gorman, S. (1982) 'Geopolitics and Peruvian Foreign Policy', *Inter-Ameri-can Economic Affairs*, 36(2), p. 74.

Gov.cn (2012) *Ports, Chinese Government's Official Web Portal*. Available at: http://english1.english.gov.cn/2006-02/08/content_182525.htm (Accessed: 25 November 2017).

Gray, C. S. (2005) *Global Geostrategy: Mackinder and the Defence of the West*. Edited by B. W. Blouet. London: Routledge. Available at: https://books.google.co.uk/books?id=JYeTJy7Oyj8C&lpg.

Gray, C. S. (2013) Perspectives on Strategy. Oxford: Oxford University Press.

Green, M., Hicks, K. and Cancian, M. (2016) *Asia-Pacific Rebalance 2025: Capabilities, Presence, and Partnerships*. Center for Strategic & International Studies. Available at: https://csis-prod.s3.amazonaws.com/s3fs-

public/legacy_files/files/publication/160119_Green_AsiaPacificRebalance2025_Web_0.pdf.

Green, M. J. (2018) *China's Maritime Silk Road: Strategic and Economic Implications for the Indo-Pacific Region, CSIS.* Available at: https://csis-prod.s3.amazonaws.com/s3fs-

public/publication/180404_Szechenyi_ChinaMaritimeSilkRoad.pdf?yZSpudmFyARwcHuJnNx3metxXnEks VX3.

Grote, M. (2015) *What could the 'longue duree' mean for the history of modern sciences?* Boston: Greenstone. Available at: https://halshs.archives-ouvertes.fr/halshs-01171257.

Grygiel, J. (2006) Great Powers and Geopolitical Change. Baltimor: Johns Hopkins University Press.

Gudjonsson, H. and Nielsson, E. T. (2017) *China's Belt and Road Enters the Arctic, The Diplomat.* Available at: https://thediplomat.com/2017/03/chinas-belt-and-road-enters-the-arctic/ (Accessed: 1 December 2017).

Gulf News (2017) Gwadar port to be fully operational in three to four years — Pakistan envoy to China, Gulf News. Available at: https://gulfnews.com/world/asia/pakistan/gwadar-port-to-be-fully-operational-in-three-to-four-years--pakistan-envoy-to-china-1.2078434 (Accessed: 27 November 2018).

Guschin, A. (2013) Understanding China's Arctic Policies, The Diplomat. Available at: https://thediplomat.com/2013/11/understanding-chinas-arctic-policies/ (Accessed: 1 December 2017).

Gutman, J., Sy, A. and Chattopadhyay, S. (2015) *Financing African infrastructure: Can the world deliver?* Washington, D.C. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/AGIFinancingAfricanInfrastructure_FinalWebv2.pdf.

Gyorgy, A. (1943) 'The Geopolitics of War: Total War and Geostrategy', *The Journal of Politics*, 5(4), pp. 347–362. doi: 10.2307/2125293.

Haacke, J. (2010) 'China's role in the pursuit of security by Myanmar's State Peace and Development Council: boon and bane?', *The Pacific Review*, 23(1), pp. 113–137. doi: 10.1080/09512740903501982.

Habib, B. B. and Faulknor, V. (2017) *The Belt and Road Initiative: China's vision for globalisation, Beijing-style, The Conversation*. Available at: https://theconversation.com/the-belt-and-road-initiative-chinas-vision-for-globalisation-beijing-style-77705 (Accessed: 25 January 2018).

Hamilton, C. (2018) Silent Invasion: China's influence in Australia. Hardie Grant.

Haqqani, H. (2020) *Pakistan Discovers the High Cost of Chinese Investment, The Diplomat*. Available at: https://thediplomat.com/2020/05/pakistan-discovers-the-high-cost-of-chinese-investment/ (Accessed: 21 July 2021).

Harsch, E. (2007) 'Big Leap in China-Africa Ties', *Africa Renewal*, 20(January 2007), pp. 10–13. Available at: http://www.un.org/en/africarenewal/vol20no4/204-china-africa-ties.html.

Hatton, C. (2013) *What do Chinese Leaders do when they Retire?, BBC*. Available at: http://www.bbc.co.uk/news/world-asia-china-21783353 (Accessed: 14 November 2017).

Hayton, B. (2015) The South China Sea: The Struggle for Power in Asia. London: Yale University Press.

Hayton, B. (2016) *China's 'Historic Rights' in the South China Sea: Made in America?, The Diplomat.* Available at: https://thediplomat.com/2016/06/chinas-historic-rights-in-the-south-china-sea-made-inamerica/ (Accessed: 4 December 2017).

Heath, T. R., Mazarr, M. J. and Cevallos, A. S. (2018) *Building a Sustainable International Order*. RAND. Available at: https://www.rand.org/pubs/research_reports/RR2423.html.

Henrikson, A. K. (2002) 'Distance and Foreign Policy: A Political Geography Approach', *International Political Science Review*, 23(4), pp. 437–466. Available at: https://www.jstor.org/stable/1601543.

Hensengerth, O. (2015a) 'Global norms in domestic politics: environmental norm contestation in Cambodia's hydropower sector', *The Pacific Review*, 28(4), pp. 505–528. doi: 10.1080/09512748.2015.1012107.

Hensengerth, O. (2015b) 'Where is the power? Transnational networks, authority and the dispute over the Xayaburi Dam on the Lower Mekong Mainstream', *Water International*, 40(5–6), pp. 911–928. doi: 10.1080/02508060.2015.1088334.

Hensengerth, O. (2017) 'Water Governance in the Mekong Basin: Scalar Tradeoffs, Transnational Norms and Chinese Hydropower Investment', in *Chinese Encounters in Southeast Asia: How People, Money, and Ideas from China Are Changing a Region*. Seattle: University of Washington Press. Available at: http://www.washington.edu/uwpress/search/books/NYIHOW.html.

Hey, J. D., Neugebauer, T. and Sadrieh, A. (2009) 'An Experimental Analysis of Optimal Renewable Resource Management: The Fishery', *Environmental and Resource Economics*, 44(2), pp. 263–285. doi: 10.1007/s10640-009-9285-5.

Hill, C. (2012) *China's nine-dashed line in South China Sea, China Daily Mail*. Available at: https://chinadailymail.com/2012/05/25/chinas-nine-dashed-line-in-south-china-sea/ (Accessed: 3 November 2018).

Hillman, J. (2018) *Game of Loans: How China Bought Hambantota | Asia Maritime Transparency Initiative, The Asia Maritime Transparency Initiative*. Available at: https://amti.csis.org/game-of-loans-china-hambantota/ (Accessed: 3 January 2019).

Hillman, J. E. (2018) 'The Rise of China-Europe Railways', *Center for Strategic and International Studies*. doi: 10.1016/j.tre.2017.07.003.

Hochberg, L. and Sloan, G. (2017) 'Mackinder's Geopolitical Perspective Revisited', *Orbis*, 61(4), pp. 575–592. doi: 10.1016/j.orbis.2017.08.007.

Holmes, J. (2012) Why Philippines Stands Up to China, The Diplomat. Available at:

http://thediplomat.com/2012/05/why-philippines-stands-up-to-china/ (Accessed: 14 April 2017).

Holmes, J. R. and Yoshihara, T. (2008) *Chinese Naval Strategy in the 21st Century: The Turn to Mahan*. London: Routledge.

Hong Kong *et al.* (2003) 'Export Performance in Hong Kong — Offshore Trade and Re-exports', (June), pp. 5–19. Available at: http://www.hkma.gov.hk/media/eng/publication-and-research/quarterly-bulletin/qb200306/fa1.pdf.

Hook, L. and Mulligan, M. . (2010) 'Sinopec to put \$7.1bn in Repsol Brasil', *Financial Times*, 2 October, pp. 1–2. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/756111958?accountid=13460.

Hornby, L. (2017) *China and Myanmar open long-delayed oil pipeline, Financial Times*. Available at: https://www.ft.com/content/21d5f650-1e6a-11e7-a454-ab04428977f9 (Accessed: 19 February 2018).

Hornby, L. and Mitchell, T. (2017) *Xi Jinping confirmed as China's most powerful leader since Mao, Financial Times*. Available at: https://www.ft.com/content/5b9f4b96-b86d-11e7-8c12-5661783e5589 (Accessed: 14 November 2017).

Howell, K. (2015) U.S. Sends China Millions in Foreign Aid Despite \$1.3 Trillion Debt, The Washington Times. Available at: http://www.washingtontimes.com/news/2015/feb/12/us-sends-china-millions-inforeign-aid-despite-13-/ (Accessed: 22 November 2016).

Huang, A.-H. (2009a) 'The Maritime Strategy of China in the Asia-Pacific Region: Origins, Development and Impact', (August).

Huang, A.-H. (2009b) *The Maritime Strategy of China in the Asia-Pacific Region, Minerva Access*. The University of Melbourne. Available at:

http://storage.globalcitizen.net/data/topic/knowledge/uploads/20121119112333885060_L2V4bGlicmlz L2R0bC9kM18xL2FwYWNoZV9tZWRpYS8xMjQ4MjE=(1).pdf (Accessed: 9 May 2014).

Huang, Y. (2017) What the West Gets Wrong About China's Economy, Foreign Affairs. Available at: https://www.foreignaffairs.com/articles/china/2017-09-14/what-west-gets-wrong-about-chinas-economy (Accessed: 17 October 2018).

Hui, L. (2018) *Full text: China's Arctic Policy, Xinhua*. Available at: http://www.xinhuanet.com/english/2018-01/26/c_136926498_4.htm (Accessed: 5 December 2018).

Huifeng, H. (2017) *The 'Belt and Road' projects China doesn't want anyone talking about, South China Morning Post*. Available at: http://www.scmp.com/news/china/economy/article/2099973/belt-and-road-projects-china-doesnt-want-anyone-talking-about (Accessed: 26 January 2018).

Human Rights Watch (2019) UN: Unprecedented Joint Call for China to End Xinjiang Abuses, Human Rights Watch. Available at: https://www.hrw.org/news/2019/07/10/un-unprecedented-joint-call-china-end-xinjiang-abuses (Accessed: 22 September 2021).

Hyer, E. (1995) 'The South China Sea Disputes: Implications of China's Earlier Territorial Settlements', *Pacific Affairs*, 68(1), p. 34. doi: 10.2307/2759767.

IEA (2016) *Boosting power in Sub-Saharan Africa - China's Involvement*. Paris. Available at: http://www.iea.org/publications/freepublications/publication/Partner_Country_SeriesChinaBoosting_th e_Power_Sector_in_SubSaharan_Africa_Chinas_Involvement.pdf. IEA (2017) *World Energy Outlook 2017: China, World Energy Outlook.* Available at: https://www.iea.org/weo/china/ (Accessed: 21 January 2019).

Inanloo, B. *et al.* (2016) 'A decision aid GIS-based risk assessment and vulnerability analysis approach for transportation and pipeline networks', *Safety Science*, 84, pp. 57–66. doi: 10.1016/j.ssci.2015.11.018.

Iqbal, A. (2017) Ahsan Iqbal briefing Senate Forum for Policy Research at PIPS, Ministry of Planning, Development & Reform. Available at: http://pc.gov.pk/web/press/get_press/62 (Accessed: 7 November 2017).

Iulia Monica, O.-Șincai (2018) *16+1, a New Issue in China-EU Relations?, China-CEE Institute Budapest*. 88003. Budapest. Available at: https://mpra.ub.uni-muenchen.de/id/eprint/88003.

Jacob L. Shapiro and Xander Snyder (2017) *Geopolitical Theories - Geopolitical Futures [Podcast], Geopolitical Futures*. Available at: https://geopoliticalfutures.com/geopolitical-theories/ (Accessed: 4 December 2018).

Jacob, S. (2018) 'India, China join ranks to negotiate with oil producers for better bargain', *Business Standard News*, pp. 1–5. Available at: https://www.business-standard.com/article/economy-policy/india-china-join-ranks-to-negotiate-with-oil-producers-for-better-bargain-118041201187_1.html.

Jacques, M. (2012) When China Rules The World. second. Penguin.

Jadesimi, A. (2017) *How China's \$60 Billion For Africa Will Drive Global Prosperity, Forbes*. Available at: https://www.forbes.com/sites/amyjadesimi/2017/03/14/how-chinas-60-billion-for-africa-will-drive-global-prosperity/#715643d838a3 (Accessed: 8 October 2017).

Jaishankar, D. (2015) *Myanmar Is Pivoting Away from China, Foreign Policy*. Available at: http://foreignpolicy.com/2015/06/15/myanmar-burma-is-pivoting-away-from-china-aung-san-suu-kyi-xi-jinping-india/ (Accessed: 5 October 2017).

James R. Holmes (2011) *What 'Containing China' Means, The Diplomat*. Available at: https://thediplomat.com/2011/05/what-containing-china-means/ (Accessed: 1 October 2018).

Jasper, L. and Stremlin, B. (2016) 'Review: Great Powers and Geopolitical Change', *Journal of World-Systems Research*, 14(1), pp. 87–90. doi: 10.1080/00330120701787241.

Jedwab, R., Kerby, E. and Moradi, A. (2017) *How colonial railroads defined Africa's economic geography*, *Vox*. Available at: http://voxeu.org/article/how-colonial-railroads-defined-africa-s-economic-geography (Accessed: 10 November 2017).

Jia, W. (2015) 'David Shambaugh, China Goes Global: The Partial Power', *Journal of Chinese Political Science*, 20(1), pp. 101–102. doi: 10.1007/s11366-015-9337-3.

Jiang, W. (2009) 'Fuelling the Dragon: China's Rise and Its Energy and Resources Extraction in Africa', *The China Quarterly*, 199(3), p. 585. doi: 10.1017/S0305741009990117.

Jiangtao, S. (2017) *China boosts arms exports by 74pc, while cutting reliance on outside providers, report finds, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacy-defence/article/2072465/china-boosts-arms-exports-74pc-while-cutting-reliance (Accessed: 23 November 2018).

Johnson, K. (2015) *The Meltdown of the Global Order, Foreign Policy*. Available at: https://foreignpolicy.com/2015/07/23/the-meltdown-of-the-global-order-geopolitics-south-china-sea/

(Accessed: 5 December 2018).

Jonathan Barrett and Sue-Lin Wong (2016) *China warns 'protectionist' Australia on investment after grid deal blocked, Reuters*. Available at: https://www.reuters.com/article/us-australia-privatisation-ausgrid-idUSKCN10R2M1 (Accessed: 15 July 2018).

Jones, B., Steven, D. and Brien, E. O. (2014) *Fueling a New Disorder? The New Geopolitical and Security Consequences of Energy, Project on International Order and Strategy*. Brookings. Available at: http://www.zerohedge.com/news/2014-04-20/fueling-new-world-order-where-does-china-import-its-crude-oil.

Jones, L. and Hameiri, S. (2020) *Debunking the Myth of 'Debt-trap Diplomacy', Chatham House*. Available at: https://www.chathamhouse.org/2020/08/debunking-myth-debt-trap-diplomacy (Accessed: 20 July 2021).

Josephs, J. (2017) All aboard the China-to-London freight train - BBC News, BBC. Available at: https://www.bbc.co.uk/news/business-38654176 (Accessed: 9 July 2018).

Jui-te, C. (1993) 'Technology Transfer in Modern China: The Case of Railway Enterprise (1876-1937)', *Modern Asian Studies*, 27(2), pp. 281–296. Available at: http://www.jstor.org/stable/312770.

Kai, J. (2014) *The US, China, and the 'Containment Trap', The Diplomat*. Available at: https://thediplomat.com/2014/05/the-us-china-and-the-containment-trap/ (Accessed: 26 September 2018).

Kalyanaraman, S. (2013) 'Fear, Interest and Honour: The Thucydidean Trinity and India's Asia Policy', *Strategic Analysis*, 37(4), pp. 381–387. doi: 10.1080/09700161.2013.802510.

Kaplan, R. D. (2011) *Monsoon: The Indian Ocean and the Future of American Power*. Random House Trade Paperbacks.

Kaplan, R. D. *et al.* (2011) *The South China Sea is the Future of Conflict, Foreign Policy*. doi: 10.2307/41353198.

Kaplan, R. D. (2013) *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate.* New York: Random House Trade Paperbacks.

Kaplan, R. D. (2014) *Asia's Cauldron: The South China Sea and the End of a Stable Pacific*. New York: Random House Trade Paperbacks.

Kastner, S. L., Pearson, M. M. and Rector, C. (2016) 'Invest, Hold Up, or Accept? China in Multilateral Governance', *Security Studies*, 25(1), pp. 142–179. doi: 10.1080/09636412.2016.1134193.

Katada, S. N. (2018) *The BRICS and Collective Financial Statecraft*. London. Available at: https://www.eventbrite.co.uk/e/the-brics-and-collective-financial-statecraft-tickets-46655792732#.

Katada, S. N., Roberts, C. and Armijo, L. E. (2017) 'The Varieties of Collective Financial Statecraft: The BRICS and China', *Political Science Quarterly*, 132(3), pp. 403–433. doi: 10.1002/polq.12656.

Kaufman, A. A. (2010) 'The "Century of Humiliation," Then and Now: Chinese Perceptions of the International Order', *Pacific Focus*, 25(1), pp. 1–33. doi: 10.1111/j.1976-5118.2010.01039.x.

Keck, Z. (2014) *China's "Nine-Dash Line" is Dangerous, The Diplomat*. Available at: https://thediplomat.com/2014/02/chinas-nine-dash-line-is-dangerous/ (Accessed: 23 October 2018).

Keeling, D. J. (2007) 'Transportation geography: new directions on well-worn trails', *Progress in Human Geography*, 31(2), pp. 217–225. doi: 10.1177/0309132507075370.

Kelanic, R. A. (2013) *Oil Security and Conventional War: Lessons From a China-Taiwan Air Scenario, Council on Foreign Relations*. Available at: http://www.cfr.org/china/oil-security-conventional-war-lessons-china-taiwan-air-war-scenario/p31578.

Kelly, P. (1986) 'Escalation of Regional Conflict: Testing the Shatterbelt Concept', *Political Geography Quarterly*, 5, pp. 161–180.

Kelly, P. (2011) 'Geopolitics—Part 1', in Agnew, J. and Duncan, J. S. (eds) *The Wiley-Blackwell Companion to Human Geography*. Chichester, West Sussex: Wiley-Blackwell. Available at: https://ebookcentral.proquest.com/lib/reading/reader.action?ppg=1&docID=675202&tm=1519855569 451.

Kelly, P. (2016) *Classical Geopolitics*. Stanford, California: Stanford University Press. Available at: https://books.google.co.uk/books?id=6NsfCwAAQBAJ&dq=978-0-8047-9950-8+isbn&source=gbs_navlinks_s.

Kelly, P. (2017) *Defending Classical Geopolitics*. Oxford University Press. doi: 10.1093/acrefore/9780190228637.013.279.

Khan, Z. (2016) *Port of Gwadar and geopolitics of great powers, Foreign Policy News*. Available at: http://foreignpolicynews.org/2016/04/14/port-gwadar-geopolitics-great-powers/ (Accessed: 27 November 2018).

Khmer Times (2014) *China to speed up construction of new Silk Road: Xi*. Available at: https://www.khmertimeskh.com/news/6038/china-to-speed-up-construction-of-new-silk-road--xi/ (Accessed: 22 October 2018).

Khurana, G. S. (2008) 'China's "String of Pearls" in the Indian Ocean and Its Security Implications', *Strategic Analysis*, 32(1), pp. 1–39. doi: 10.1080/09700160801886314.

Kiernan, P. (2009) *China signs \$10 bln loan-for-oil Petrobras deal, Reuters*. Available at: http://www.reuters.com/article/china-brazil-oil/china-signs-10-bln-loan-for-oil-petrobras-deal-idUSPEK26621320090519 (Accessed: 12 October 2017).

Kissinger, H. (2011) *White House Years: The First Volume of His Classic Memoirs*. London: Simon & Schuster Ltd.

Kissinger, H. (2012) On China, Penguin Books. London: Penguin Books. doi: 10.2753/CSH0009-4633170124.

Kitano, N. and Harada, Y. (2016) 'Estimating China's Foreign Aid 2001-2013', *Journal of International Development*, 28(7), pp. 1050–1074. doi: 10.1002/jid.3081.

Kolcz-Ryan, M. (2009) 'Arctic Race: How the United States' Failure to Ratify the Law of the Sea Convention Could Adversely Affect Its Interests in the Arctic', *University of Dayton Law Review*, 35(1). Available at: http://0-

heinonline.org.pugwash.lib.warwick.ac.uk/HOL/Page?handle=hein.journals/udlr35&id=151&div=&collec tion=journals.

Kong, D. (2016) 'A cash cow indeed! Beijing-Shanghai High-Speed Railway exceeds profits of 6.6 billion

yuan', *People's Daily Online*, pp. 2015–2016. Available at: http://en.people.cn/n3/2016/0719/c98649-9088162.html (Accessed: 24 January 2018).

Koo, M. G. (2010) *Island Disputes and Maritime Regime Building in East Asia*. New York, NY: Springer New York (The Political Economy of the Asia Pacific). doi: 10.1007/978-0-387-89670-0.

KPMG (2009) Infrastructure in China: Foundation for growth.

Kreft, H. (2006) *China's Quest for Energy, Hoover Institution*. Available at: https://www.hoover.org/research/chinas-quest-energy (Accessed: 22 September 2021).

Krupakar, J. (2017) 'China's Naval Base(s) in the Indian Ocean—Signs of a Maritime Grand Strategy?', *Strategic Analysis*, 41(3), pp. 207–222. doi: 10.1080/09700161.2017.1296622.

Kumari, P. (2014) 'Asia's Cauldron: The South China Sea and the End to a Stable Pacific', *Maritime Affairs: Journal of the National Maritime Foundation of India*, 10(1), pp. 143–147. doi: 10.1080/09733159.2014.934098.

Kuo, M. A. (2017) *The Power of Ports: China's Maritime March, The Diplomat*. Available at: https://thediplomat.com/2017/03/the-power-of-ports-chinas-maritime-march/ (Accessed: 27 November 2017).

Kustenbauder, M. (2012) 'Book review: Monsoon: The Indian Ocean and the Future of American Power by Robert Kaplan', *Journal of Asian and African Studies*, 47(2), pp. 250–252. doi: 10.1177/0021909611427677.

Kwon, K. L. and Hanlon, R. J. (2016) 'A Comparative Review for Understanding Elite Interest and Climate Change Policy in China', *Environment, Development and Sustainability*, 18(4), pp. 1177–1193. doi: 10.1007/s10668-015-9696-0.

Kynge, J. (2017) 'Chinese purchases of overseas ports top \$20bn in past year', *Financial Times*, pp. 5–8. Available at: https://www.ft.com/content/e00fcfd4-6883-11e7-8526-7b38dcaef614 (Accessed: 26 November 2017).

Kynge, J. *et al.* (2017) *How China Rules the Waves, Financial Times*. Available at: https://ig.ft.com/sites/china-ports/ (Accessed: 24 November 2017).

Kynge, J., Peel, M. and Bland, B. (2017) *China's railway diplomacy hits the buffers, Financial Times*. Available at: https://www.ft.com/content/9a4aab54-624d-11e7-8814-0ac7eb84e5f1 (Accessed: 22 January 2018).

Lai, H. H. (2007) 'China's oil diplomacy: is it a global security threat?', *Third World Quarterly*, 28(3), pp. 519–537. doi: 10.1080/01436590701192645.

Lam, Wi. (2006) *Chinese Politics in the Hu Jintao Era: New Leaders, New Challenges*. Routledge. Available at: https://www.routledge.com/Chinese-Politics-in-the-Hu-Jintao-Era-New-Leaders-New-Challenges/Lam/p/book/9780765617743.

Lanteigne, M. (2017) 'Who Benefits From China's Belt and Road in the Arctic?', *The Diplomat*, pp. 1–2. Available at: https://thediplomat.com/2017/09/who-benefits-from-chinas-belt-and-road-in-the-arctic/.

LAPSSET (2017a) *Lamu Port – LAPSSET Corridor Development Authority, LAPSSET*. Available at: http://www.lapsset.go.ke/projects/lamu-port/ (Accessed: 17 May 2018).

LAPSSET (2017b) LAPSSET Corridor Development Authority – Building Transformative and Game Changer Infrastructure for a Seamless Connected Africa, LAPSSET. Available at: http://www.lapsset.go.ke/ (Accessed: 17 May 2018).

LaRouchePAC (2017) *Kra Canal Conference a Great Success, LaRouchePAC*. LaRouchePAC. Available at: https://larouchepac.com/20170912/kra-canal-conference-great-success (Accessed: 19 February 2018).

Lawrence, S. V. and Martin, M. F. (2013) *Understanding China's Political System*. Available at: https://fas.org/sgp/crs/row/R41007.pdf.

Lee, T.-W. and Shen, M. (2003) *Shipping in China - Plymouth Studies in Contemporary Shipping and Logistics*. Edited by R. Gray and M. Roe. Taylor & Francis.

Lefort, C. and Kaye, B. (2016) *Australian port sold for \$7.3 billion to consortium; China fund among backers |, Reuters*. Available at: https://www.reuters.com/article/us-australia-privatisation-ports/australian-port-sold-for-7-3-billion-to-consortium-china-fund-among-backers-idUSKCN11P04O (Accessed: 13 July 2018).

Lei, H. (2016) Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on November 26, 2015, Ministry of Foreign Affairs of the People's Republic of China. Available at: http://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1318766.shtml (Accessed: 22 May 2018).

Lei, Z. (2017) '3 sea routes planned for Belt, Road Initiative', *China Daily*, p. 29830837. Available at: http://usa.chinadaily.com.cn/epaper/2017-06/21/content_29830837.htm (Accessed: 8 April 2018).

Lester, R. K. and Steinfeld, E. S. (2006) 'China's Energy Policy: Is anybody really calling the shots?', *Industrial Performance*. Available at: https://ipc.mit.edu/sites/default/files/documents/06-002.pdf.

Levathes, L. (1997) *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433.* Kindle. Oxford University Press.

Li, A. (2016) 'Technology transfer in China–Africa relation: myth or reality', *Transnational Corporations Review*, 8(3), pp. 183–195. doi: 10.1080/19186444.2016.1233718.

Li, D. (2014) 'Railway development and military conflicts in prewar China', *Eurasian Geography and Economics*, 54(5–6), pp. 500–516. doi: 10.1080/15387216.2014.908314.

Li, X. (2016) Modern China (Understanding Modern Nations). Kindle. ABC-CLIO.

Li, X. and Molina, M. (2014) *Oil: A Cultural and Geographic Encyclopedia of Black Gold*. ABC-CLIO. Available at: https://books.google.co.uk/books?id=Vy7TBAAAQBAJ&lpg.

Li Xing (2017) *Russia can be a welcoming presence at CPEC, Global Times*. Available at: http://www.globaltimes.cn/content/1027250.shtml (Accessed: 5 January 2018).

Liberman, P. (1996) 'Trading with the Enemy: Security and Relative Economic Gains', *International Security*, 21(1), p. 147. doi: 10.2307/2539111.

Lim, T. W. *et al.* (2016) *China's One Belt One Road Initiative*. Imperial College Press. Available at: https://books.google.co.uk/books?id=NIf4DAAAQBAJ&printsec=frontcover#v=onepage&q&f=false.

Lin, J. Y. and Yang, D. T. (1998) 'On the Causes of China's Agricultural Crisis and the Great Leap Famine', *China Economic Review*, 9(2), pp. 125–140. doi: 10.1016/S1043-951X(99)80010-8.

Lippit, V. D. (1966) 'Development of Transportation in Communist China', *The China Quarterly*, 27(27), p. 101. doi: 10.1017/S0305741000021718.

Liu, D., Yamaguchi, K. and Yoshikawa, H. (2017) 'Understanding the motivations behind the Myanmar-China energy pipeline: Multiple streams and energy politics in China', *Energy Policy*, 107(May), pp. 403– 412. doi: 10.1016/j.enpol.2017.05.005.

Liu, N. (2017) *China-Russia Trouble on the Arctic Silk Road?, The Diplomat*. Available at: https://thediplomat.com/2017/07/china-russia-trouble-on-the-arctic-silk-road/ (Accessed: 23 May 2018).

Liu, S. (2014) 西气东输四线环评二次公示 计划年输气300亿立方米 [Environmental Assessment for The Second plan for the West-East Gas Pipeline with an annual Capacity of 30 billion cubic meters], Yaxin. Available at: http://news.iyaxin.com/content/2014-05/24/content_4590318.htm (Accessed: 2 October 2017).

Lu, Y. (2009) *Challenges for China's International Communication, Briefing Series*. University of Nottingham. Available at: https://www.nottingham.ac.uk/cpi/documents/briefings/briefing-52-lu-international-communication.pdf.

Luft, G. (2016) *China's New Grand Strategy for the Middle East, Foreign Policy*. Available at: http://foreignpolicy.com/2016/01/26/chinas-new-middle-east-grand-strategy-iran-saudi-arabia-oil-xi-jinping/ (Accessed: 17 September 2016).

Luong, J. D. T. H. (2017) 'Southeast Asia. Impact of China's rise on the Mekong region By Yos Santasombat New York: Palgrave Macmillan, 2015. Pp. 262. Figures, Tables, Notes, Index.', *Journal of Southeast Asian Studies*, 48(02), pp. 315–317. doi: 10.1017/S0022463417000376.

Ma, L. J. C. (2009) 'China's Authoritarian Capitalism: Growth, Elitism and Legitimacy', *International Development Planning Review*, 31(1), pp. i–xii. doi: 10.3828/idpr.31.1.1.

MacDonald, J. A., Donahue, A. and Danyluk, B. (2004) *Energy Futures in Asia*. Washington, D.C.: Booz Allen Hamilton. Available at:

https://books.google.no/books/about/Energy_Futures_in_Asia.html?id=5En2PgAACAAJ&hl=en.

Mackinder, H. J. (1890) 'The physical basis of political geography', *Scottish Geographical Magazine*, 6(2), pp. 78–84. doi: 10.1080/14702549008554692.

Mackinder, S. H. J. (1904) 'The Geographical Pivot of History', *The Geographical Journal*, 23(4), pp. 421–437. Available at: http://www.jstor.org/stable/1775498.

Mackinder, S. H. J. (1919) *Democratic Ideals and Reality*. Washington, D.C.: National Defense Univerity Press. Available at: https://archive.org/details/democraticideals00mackiala.

Mahan, A. T. (1897) *The Interest of America in Sea Power Present and Future*. Boston: Little, Brown, and Company. Available at: http://www.archive.prg/details/interestofseapow00mahauoft.

Malik, M. (2013) *History the Weak Link in Beijing's Maritime Claims | The Diplomat | Page 4, The Diplomat*. Available at: https://thediplomat.com/2013/08/history-the-weak-link-in-beijings-maritime-claims/4/ (Accessed: 23 October 2018).

Malindog, A. R. D. (2012) 'A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia - By Aaron L. Friedberg', *Asian Politics & Policy*, 4(3), pp. 449–451. doi: 10.1111/j.1943-
0787.2012.01352.x.

Manevich, D. (2017) Americans have grown more negative toward China over the past decade, Pew Research Center. Available at: http://www.pewresearch.org/fact-tank/2017/02/10/americans-have-grown-more-negative-toward-china-over-past-decade/ (Accessed: 27 March 2017).

Mangosing, F. (2018) *EXCLUSIVE: New photos show China is nearly done with its militarization of South China Sea, Inquirer*. Available at: http://www.inquirer.net/specials/exclusive-china-militarization-south-china-sea (Accessed: 5 February 2018).

Marantidou, V. (2014) 'Revisiting China's "String of Pearls" Strategy: Places "with Chinese Characteristics" and their Security Implications', *Issues & Insights*, 14(7).

Marc Lanteigne and Mingming Shi (2018) *China Stakes Its Claim to the Arctic, The Diplomat*. Available at: https://thediplomat.com/2018/01/china-stakes-its-claim-to-the-arctic/ (Accessed: 5 December 2018).

Maritime Executive (2018) *China and Vietnam to Settle South China Sea Claims, The Maritime Executive*. Available at: https://www.maritime-executive.com/article/china-and-vietnam-to-settle-south-china-sea-claims (Accessed: 31 December 2018).

Marks, S. and Manji, F. (2007) *African Perspectives on China in Africa*. Oxford: Pambazuka. Available at: https://books.google.co.uk/books/about/African_Perspectives_on_China_in_Africa.html?id=KYkCer-WiVYC.

Marley, D. (2010) *Modern Piracy: A Reference Handbook (Contemporary World Issues), ABC-CLIO*. ABC-CLIO.

Mastro, O. S. (2019) 'The Stealth Superpower How China Hid Its Global Ambitions', *Foreign Affairs*, 98, pp. 1–7.

Mathieson, R. and Ondaatjie, A. A. (2016) 'No Phobia' on Taking Chinese Money, Sri Lanka's Premier Says, Bloomberg. Available at: https://www.bloomberg.com/news/articles/2016-07-17/-no-phobia-on-taking-chinese-money-sri-lanka-s-premier-says (Accessed: 18 February 2018).

Mathur, A. (2015) 'The South China Sea: The Struggle for Power in Asia', *Maritime Affairs: Journal of the National Maritime Foundation of India*, 11(1), pp. 133–136. doi: 10.1080/09733159.2015.1029721.

Maxwell, N. (2017) 'Settlements and Disputes China's Approach to Territorial Issues', *Economic and Political Weekly*, 41(36), pp. 3873–3881.

Mcdevitt, M. (2016) *Becoming a Great "Maritime Power": A Chinese Dream Answering the basic questions raised by China's ambition*. Washington, DC. Available at: https://www.cna.org/cna_files/pdf/irm-2016-u-013646.pdf.

Mcgarrity, J. and Gloystein, H. (2013) *Big freighter traverses Northwest Passage for 1st time, Reuters*. Available at: https://www.reuters.com/article/us-shipping-coal-arctic/big-freighter-traverses-northwest-passage-for-1st-time-idUSBRE98Q0K720130927 (Accessed: 30 November 2017).

Mearsheimer, J. J. (2006) 'Structural Realism', in *International Relations Theories: Discipline and Diversity*, pp. 71–88. doi: 10.1177/0047117809104638.

Melia, N., Haines, K. and Hawkins, E. (2017) *Future of the Sea: Implications from Opening Arctic Sea Routes*. London. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/634437/Future_of_th

e_sea_-_implications_from_opening_arctic_sea_routes_final.pdf.

Melorose, J., Perroy, R. and Careas, S. (2015) 'World population prospects', *United Nations*, 1(6042), pp. 587–92. doi: 10.1017/CBO9781107415324.004.

Menzies, G., Vany, A. De and Menzies, G. (2003) *1421: The Year China Discovered the World*. Kindle. Bantam. doi: 10.1016/B978-0-12-804405-6/00015-4.

Michalopoulos, S. and Papaioannou, E. (2016) 'The Long-Run Effects of the Scramble for Africa', *American Economic Review*, 106(7), pp. 1802–1848. doi: 10.1257/aer.20131311.

Michalopoulos, S. and Papaioannou, E. (2017) *The Long Economic and Political Shadow of History Volume II. Africa and Asia*. Edited by S. Michalopoulos and E. Papaioannou. London, UK: Centre for Economic Policy Research. Available at: www.cepr.org.

Michel, C. (2017) *It's Official: India and Pakistan Join Shanghai Cooperation Organization, The Diplomat*. Available at: https://thediplomat.com/2017/06/its-official-india-and-pakistan-join-shanghai-cooperation-organization/ (Accessed: 21 October 2018).

Miks, J. (2017) *China, Philippines in Standoff, The Diplomat*. Available at: http://thediplomat.com/2012/04/china-philippines-in-standoff/ (Accessed: 14 April 2017).

Mills, G. and Mcnamee, T. (2012) *Fuelling the Dragon*. Available at: https://www.aspi.org.au/publications/special-report-fuelling-the-dragon-natural-resources-and-chinas-development.-an-aspi-brenthurst-foundation-publication/SR_Fuelling_the_dragon_120912.pdf.

Mills, R. (2016) *Risky Routes: Energy Transit in the Middle East*. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/en-energy-transit-security-mills-2.pdf.

Millward, J. (2004) 'Violent Separatism in Xinjiang: A Critical Assessment', *Policy Studies*, (6), pp. ix–54. Available at: http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/3502/PS006.pdf.

Ming, Z., Ximei, L. and Yulong, L. (2014) 'China's Shale Gas Development Outlook and Challenges', *Powermag*. Available at: http://www.powermag.com/chinas-shale-gas-development-outlook-and-challenges (Accessed: 30 September 2017).

Mingjie, W. (2018) *China's top brands see global profile rise, China Daily*. Available at: http://www.chinadaily.com.cn/a/201803/13/WS5aa6b5b9a3106e7dcc141270.html (Accessed: 17 August 2018).

Ministry of Foreign Affairs, the P. R. of C. (2016) *Statement of the Ministry of Foreign Affairs of the People's Republic of China on Settling Disputes Between China and the Philippines in the South China Sea Through Bilateral Negotiation, Ministry of Foreign Affairs, the People's Republic of China*. Available at: http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1370476.shtml (Accessed: 4 December 2017).

Minot-Scheuermann, M. G. (2016) *Chinese Anti-Piracy and the Global Maritime Commons, The Diplomat*. Available at: https://thediplomat.com/2016/02/chinas-anti-piracy-mission-and-the-global-maritime-commons/ (Accessed: 4 November 2018).

Mitchell, T. *et al.* (2016) *Tribunal rules against Beijing in South China Sea dispute, Financial Times*. Available at: https://www.ft.com/content/3cdcbf42-4814-11e6-8d68-72e9211e86ab (Accessed: 8 February 2018).

Mohammed, F. (2018) Can the U.S. and China Avoid the Thucydides Trap?, JSTOR Daily. Available at:

https://daily.jstor.org/can-the-u-s-and-china-avoid-the-thucydides-trap/ (Accessed: 17 September 2021).

Moore, M. C. (2014) *China, Russia and the waning demand for Canadian oil, Alberta Oil*. Available at: https://www.albertaoilmagazine.com/2014/08/closing-gateway-asia/ (Accessed: 24 September 2017).

Moramudali, U. (2019) *Is Sri Lanka Really a Victim of China's 'Debt Trap'?, The Diplomat*. Available at: https://thediplomat.com/2019/05/is-sri-lanka-really-a-victim-of-chinas-debt-trap/ (Accessed: 20 July 2021).

Moramudali, U. (2020) *Sri Lanka's Changing Relationship to Chinese Loans, The Diplomat*. Available at: https://thediplomat.com/2020/10/sri-lankas-changing-relationship-to-chinese-loans/ (Accessed: 20 July 2021).

Moran, T. (2010a) 'Feeding the Dragon', *The Milken Institute Review*, Third Quar, pp. 24–31. Available at: https://assets1c.milkeninstitute.org/assets/Publication/MIReview/PDF/24-31MR47.pdf.

Moran, T. (2010b) *Is China trying to "lock up" the world's natural resources?, VOX, CEPR Policy Portal.* Available at: https://voxeu.org/article/china-trying-lock-world-s-natural-resources (Accessed: 3 October 2018).

Moran, T. (2010c) *Is China Using Its Checkbook to Lock up Natural Resources Around the World?, The Peterson Institute for International Economics*. Available at: https://piie.com/blogs/realtime-economic-issues-watch/china-using-its-checkbook-lock-natural-resources-around-world (Accessed: 3 October 2018).

Morgan, P. and Nicholson, J. (2016) *Does China Have a Looming Africa Problem?*, *The Diplomat*. Available at: http://thediplomat.com/2016/09/does-china-have-a-looming-africa-problem/ (Accessed: 27 November 2016).

Morlin-Yron, S. (2017) *Chinese funded railways to link East Africa, CNN*. Available at: http://edition.cnn.com/2016/11/21/africa/chinese-funded-railways-in-africa/index.html (Accessed: 18 September 2017).

Morrissey, O. (2004) 'Conditionality and Aid Effectiveness Re-evaluated', *The World Economy*, 27(2), pp. 153–171. doi: 10.1111/j.1467-9701.2004.00594.x.

Mouawad, J. (2008) Arctic may hold as much as a fifth of undiscovered oil and gas reserves, The New York Times. Available at: https://www.nytimes.com/2008/07/24/business/worldbusiness/24iht-arctic.4.14767779.html (Accessed: 30 October 2018).

Mroczkowski, I. (2012) *China's Arctic Powerplay, The Diplomat*. Available at: https://thediplomat.com/2012/02/chinas-arctic-powerplay/ (Accessed: 1 December 2017).

Mukherjee, T. (2018) *China's Maritime Quest in the Indian Ocean: New Delhi's Options, The Diplomat*. Available at: https://thediplomat.com/2018/04/chinas-maritime-quest-in-the-indian-ocean-new-delhis-options/ (Accessed: 30 December 2018).

Musharraf (2012) 'Comments by President Musharraf during the ground breaking ceremony of Gwadar Deep Sea Port, 22 March 2002', *Journal of Political Studies*, 19(2), p. 58.

Nagai, O. (2018) *China and Russia battle for North Pole supremacy, Nikkei Asian Review*. Available at: https://asia.nikkei.com/Spotlight/Asia-Insight/China-and-Russia-battle-for-North-Pole-supremacy

(Accessed: 5 December 2018).

Naja, B., Hall, M. and Dietrich, C. (2017) *Arctic continental shelf claims Mapping interests in the circumpolar North*.

Narayanan, P. (2018) https://www.bloomberg.com/news/articles/2018-01-12/world-s-commodityengine-roars-to-another-record-with-xi-at-helm, Bloomberg. Available at: https://www.bloomberg.com/news/articles/2018-01-12/world-s-commodity-engine-roars-to-anotherrecord-with-xi-at-helm (Accessed: 25 September 2018).

Natalie Bridgeman Fields (2018) *China Moves Toward Accountability for Overseas Financing, The Diplomat*. Available at: https://thediplomat.com/2018/02/china-moves-toward-accountability-for-overseas-financing/ (Accessed: 19 July 2018).

National Defence Ministry (2015) 中国的军事战略 [China's Military Strategy (2015)], The State Council Information Office of the People's Republic of China. Available at: https://jamestown.org/wp-content/uploads/2016/07/China's-Military-Strategy-2015.pdf.

National Ocean Economic Program (2021) *Arctic Natural Resources*. Available at: https://www.oceaneconomics.org/arctic/NaturalResources/ (Accessed: 23 October 2021).

Naziha Syed Ali (2014) *Gwadar: on the cusp of greatness?, Dawn*. Available at: https://www.dawn.com/news/1102499 (Accessed: 25 January 2019).

NBS (2017) Railway Business Mileage, National Bureau of Statistics of China. Available at: http://data.stats.gov.cn/search.htm?s=铁路营业里程 (Accessed: 10 September 2017).

Nicholas Trickett (2018) *Russia's Unhappy Energy Marriage with China, The Diplomat*. Available at: https://thediplomat.com/2018/03/russias-unhappy-energy-marriage-with-china/ (Accessed: 5 December 2018).

Northcott, C. (2017) *Dakota Access pipeline: Is the Standing Rock movement defeated?, BBC News*. Available at: http://www.bbc.co.uk/news/world-us-canada-38924160 (Accessed: 26 January 2018).

Notteboom, T. and Yang, Z. (2017) 'Port governance in China since 2004: Institutional layering and the growing impact of broader policies', *Research in Transportation Business & Management*, 22, pp. 184–200. doi: 10.1016/j.rtbm.2016.09.002.

Nyabiage, J. (2021) *China looks to recreate ancient Silk Road with network of African ports, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacy/article/3129966/china-looks-recreate-ancient-silk-road-network-african-ports (Accessed: 28 September 2021).

O'Dowd, E. (2016) 'Special report: How five major African rail projects are supported by China.', *Smartrail World*, 44(0), pp. 1–9. Available at: https://www.smartrailworld.com/five-major-african-projects-supported-by-china (Accessed: 18 September 2017).

O'Neill, J. and Stupnytska, A. (2009) 'The long-term outlook for the BRICs and N-11 post crisis', *Global Economics Paper*, December(192), pp. 1–28. Available at: http://www.goldmansachs.com/our-thinking/archive/brics-at-8/brics-the-long-term-outlook.pdf.

Okolo, A. L. (2015) 'China's Foreign Policy Shift in Africa: From Non-Interference to Preponderance', *International Journal of African Renaissance Studies - Multi-, Inter- and Transdisciplinarity*, 10(2), pp. 32–47. doi: 10.1080/18186874.2015.1107976.

Okuda, H. (2016) 'Chinas "peaceful rise/peaceful development": A case study of media frames of the rise of China', *Global Media and China*, 1(1–2), pp. 121–138. doi: 10.1177/2059436416646275.

Olawale, L. (2012) 'Pariah State System and Enforcement Mechanism of International Law', *Journal of Alternative Perspectives in the Social Sciences*, 4(1), pp. 226–241. Available at: http://www.japss.org/upload/10. pariah state system.pdf.

One Belt, One Road — *and many questions* / *Financial Times* (2017) *Financial Times*. Available at: https://www.ft.com/content/d5c54b8e-37d3-11e7-ac89-b01cc67cfeec (Accessed: 9 July 2018).

Orleans, L. A. (1973) *The Problem of Chinese Statistics*. Available at: https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a07p_0001.htm.

Overton, P. (2016) *Conference hints at potential for Maine's maritime economy, Portland Press Herald*. Available at: http://www.pressherald.com/2016/10/02/conference-hints-at-potential-for-maines-maritime-economy/ (Accessed: 30 November 2017).

Pakistan Today (2016) *27 Trains to be Acquired for Metro Project, Pakistan Today*. Available at: https://www.pakistantoday.com.pk/2016/02/05/27-trains-to-be-acquired-for-metro-project/ (Accessed: 9 November 2017).

Palmer, D. (2016) 'The South China Sea: The Struggle for Power in Asia. London: Yale University Press. 320 pages. \$29.00 (Hardcover) \$23.00 (Paperback) \$14.29 (Kindle). ISBN 978-0-300-18683-3. Bill Hayton. 2014.', *Asian Politics & Policy*, 8(2), pp. 355–357. doi: 10.1111/aspp.12259.

Panda, A. (2017a) *How Much Trade Transits the South China Sea? Not \$5.3 Trillion a Year, The Diplomat.* Available at: https://thediplomat.com/2017/08/how-much-trade-transits-the-south-china-sea-not-5-3-trillion-a-year/ (Accessed: 30 October 2018).

Panda, A. (2017b) *The Chinese Navy's Djibouti Base: A 'Support Facility' or Something More?, The Diplomat.* Available at: https://thediplomat.com/2017/02/the-chinese-navys-djibouti-base-a-support-facility-or-something-more/ (Accessed: 19 February 2018).

Pannell, C. W. (2008) 'China's Economic and Political Penetration in Africa', *Eurasian Geography and Economics*, 49(6), pp. 706–730. doi: 10.2747/1539-7216.49.6.706.

Parker, G. (1985) Western Geopolitical Thought in the Twentieth Century. London: Croom Helm.

Paul, M. (2016) 'A "Great Wall of Sand" in the South China Sea? [translated]', *Stiftung Wissenschaft und Politik*, (July). Available at: http://thediplomat.com/2015/04/us-blasts-chinas-great-wall-of-sand-in-the-south-china-sea/.

PCA (2016) *Press Release – South China Sea Arbitration*. The Hague. Available at: http://www.rspb.org.uk/media/releases/details.aspx?id=tcm:9-242165 (assessed on 4 Dec 2015).

Pehrson, C. J. (2006) *String of Pearls: Meeting the Challenge of China's Rising Power Across the Asian Littoral*. doi: 10.21236/ADA451318.

Pennington, M. (2017) *Myanmar, having warmed to the West, turns to China again, The Spokesman*. Available at: http://www.spokesman.com/stories/2017/may/27/myanmar-having-warmed-to-the-west-turns-to-china-a/ (Accessed: 5 October 2017).

Perlez, J. (2017) China Showers Myanmar With Attention, as Trump Looks Elsewhere 点击查看本文中文版, The NewYork Times. Available at: https://www.nytimes.com/2017/07/19/world/asia/myanmar-

china-us-diplomacy-trump.html (Accessed: 5 October 2017).

Pethiyagoda, K. (2017) *What's driving China's New Silk Road, and how should the West respond?, Bookings*. Available at: https://www.brookings.edu/blog/order-from-chaos/2017/05/17/whats-driving-chinas-new-silk-road-and-how-should-the-west-respond/ (Accessed: 18 September 2017).

Petti, C. (2012) *Technological Entrepreneurship in China: How Does it Work?* Cheltenham, UK: Edward Elgar Pub. Available at:

https://books.google.co.uk/books?id=4ou9kh5xrtgC&lpg=PA11&ots=Rnklr55Mco&dq=The Six %22Speed-Up%22 campaigns (1997–2007)&pg=PA11#v=onepage&q=The Six %22Speed-Up%22 campaigns (1997–2007)&f=false.

Pew Research Center (2011) *China Seen Overtaking U.S. as Global Superpower, Pew Research Center*. Available at: http://www.pewglobal.org/2011/07/13/china-seen-overtaking-us-as-global-superpower/ (Accessed: 27 March 2017).

Phifer, M. (2012) A Handbook of Military Strategy and Tactics. India: VIJ Books.

Phillips, T. (2015) *China Military Parade Shows Might as Xi Jinping Pledges 300,000 Cut in Army, The Guardian*. Available at: https://www.theguardian.com/world/2015/sep/03/xi-jinping-pledges-300000-cut-in-army-even-as-china-shows-military-might (Accessed: 22 November 2016).

PILDAT (2015) *Pakistan Railways: a Performance Analysis*. Islamabad: Pakistan Institute of Legislative Development And Transparency. Available at:

http://www.pildat.org/publications/publication/GovernanceAssessment/PerformanceAnalysisofPakista nRailways.pdf.

Pillalamarri, A. (2015) *Oil Prices Collapsed. Russia Won't., The National Interest.* Available at: http://nationalinterest.org/feature/oil-prices-collapsed-russia-wont-12328 (Accessed: 19 March 2018).

Pilling, D. (2014) "Asia's Cauldron", by Robert Kaplan', pp. 3–5. Available at: https://search-proquestcom.idpproxy.reading.ac.uk/docview/1520650529?accountid=13460.

Pinghui, Z. (2017) Shanghai should turn free-trade zone into global channel, Xi Jinping says, South China Morning Post. Available at: http://www.scmp.com/news/china/policies-politics/article/2076260/shanghai-should-turn-free-trade-zone-global-channel-xi 1/5 (Accessed: 8 February 2018).

Pruyn, J. F. J. (2016) 'Will the Northern Sea Route ever be a viable alternative?', *Maritime Policy & Management*, 43(6), pp. 661–675. doi: 10.1080/03088839.2015.1131864.

PTI (2016) Pakistan approves Russia's request to use strategic Gwadar Port, The Hindu. Available at: http://www.thehindu.com/news/international/Pakistan-approves-Russia's-request-to-use-strategic-Gwadar-Port/article16706441.ece# (Accessed: 3 August 2018).

PTI (2018) Xi Jinping defends BRI; says China has no geo-political calculations -, Times of India. Available at: https://timesofindia.indiatimes.com/world/china/xi-jinping-defends-bri-says-china-has-no-geo-political-

calculations/articleshow/63699683.cms?&utm_source=Articleshow&utm_medium=Organic&utm_camp aign=Related_Stories (Accessed: 12 July 2018).

PwC (2017) Repaving the ancient Silk Routes, PwC Growth Markets Centre – Realising opportunities along the Belt and Road. Available at: https://www.pwc.com/gx/en/growth-markets-

centre/assets/pdf/pwc-gmc-repaving-the-ancient-silk-routes-web-full.pdf.

Qi, L. (2014) *Smelly, Slow, Unforgettable: Bidding Goodbye to China's Green Trains, The Wall Street Journal*. Available at: http://blogs.wsj.com/chinarealtime/2014/07/03/smelly-slow-unforgettable-bidding-goodbye-to-chinas-green-trains/ (Accessed: 8 September 2017).

Qiaoyi, L. (2015) *Making it work, Global Times*. Available at: http://www.globaltimes.cn/content/911258.shtml (Accessed: 6 July 2018).

Qingbai, W. *et al.* (2002) 'A review of recent frozen soil engineering in permafrost regions along Qinghai-Tibet Highway, China', *Permafrost and Periglacial Processes*, 13(3), pp. 199–205. doi: 10.1002/ppp.420.

Radio Pakistan (2016) *Railway line to be laid from Havelian to Khunjerab under CPEC, Radio Pakistan.* Available at: http://www.radio.gov.pk/15-Apr-2016/railway-line-to-be-laid-from-havelian-to-khunjerabunder-cpec-rashid (Accessed: 9 November 2017).

Raftery, A. (2017) *Many Belts, Many Roads: How China's Provinces Will Tweak a Global Project | The Diplomat, The Diplomat.* Available at: https://thediplomat.com/2017/02/many-belts-many-roads-how-chinas-provinces-will-tweak-a-global-project/ (Accessed: 9 July 2018).

Rahman, C. and Tsamenyi, M. (2010) 'A Strategic Perspective on Security and Naval Issues in the South China Sea', *Ocean Development & International Law*, 41(4), pp. 315–333. doi: 10.1080/00908320.2010.499277.

Rahman, N. S. F. A., Saharuddin, A. H. and Rasdi, R. (2014) 'Effect of the Northern Sea Route Opening to the Shipping Activities at Malacca Straits', *International Journal of e-Navigation and Maritime Economy*, 1, pp. 85–98. doi: 10.1016/j.enavi.2014.12.008.

Raine, S. and Miere, C. Le (2013) *Regional Disorder: The South China Sea Disputes*. Kindle. London: Routledge for the International Institute for Strategic Studies.

Rajagopalan, R. (2021) *The China-Pakistan Partnership Continues to Deepen, The Diplomat*. Available at: https://thediplomat.com/2021/07/the-china-pakistan-partnership-continues-to-deepen/ (Accessed: 29 July 2021).

Ramírez-Camacho, J. G. *et al.* (2017) 'Assessing the consequences of pipeline accidents to support landuse planning', *Safety Science*, 97, pp. 34–42. doi: 10.1016/j.ssci.2016.01.021.

Ramya, P. S. (2015) *China's Myanmar Conundrum, The Diplomat*. Available at: http://thediplomat.com/2015/04/chinas-myanmar-conundrum/ (Accessed: 27 November 2016).

Ran, S. (2015) *Development agenda: Lahore metro train gets green signal, The Express Tribune*. Available at: https://tribune.com.pk/story/886037/development-agenda-lahore-metro-train-gets-green-signal/ (Accessed: 9 November 2017).

Rana, K. S. (2016) 'Book Review: China's Future by David Shambaugh', *China Report*, 52(3), pp. 253–256. doi: 10.1177/0009445516646252.

Ranjan, R. (2018) 'Book Review: China's Future China's Future by David Shambaugh', *Political Studies Review*, 16(1), pp. NP94–NP94. doi: 10.1177/1478929917724357.

Rankin, N. (2017) Defending the Rock: How Gibraltar Defeated Hitler. Faber & Faber.

Ratner, E. (2013) 'Rebalancing to Asia with an Insecure China', Washington Quarterly, 36(2), pp. 21–38.

doi: 10.1080/0163660X.2013.791080.

Regilme, S. S. F. *et al.* (2021) 'Comparing US and Chinese Foreign Aid in the Era of Rising Powers', *The International Spectator*, 56(2), pp. 114–131. doi: 10.1080/03932729.2020.1855904.

Rehman, D. (2016) *Russia 'allowed' to use Pakistan's Gwadar Port under CPEC, Daily Pakistan Globe*. Available at: https://en.dailypakistan.com.pk/headline/russia-allowed-to-use-pakistans-gwadar-port-under-cpec/ (Accessed: 3 August 2018).

Reilly, J. (2013) 'China and Japan in Myanmar: Aid, Natural Resources and Influence', *Asian Studies Review*, 37(2), pp. 141–157. doi: 10.1080/10357823.2013.767310.

Ren, M. (2014) 'China's Non-intervention Policy in UNSC Sanctions in the 21st Century: The Cases of Libya, North Korea, and Zimbabwe', *Ritsumeikan International Affairs*, 12(2014), pp. 101–134. Available at: http://www.ritsumei.ac.jp/acd/re/k-rsc/ras/04_publications/ria_en/12_06.pdf.

Reuters (2019) *China, Greece agree to push ahead with COSCO's Piraeus Port investment , Reuters.* Available at: https://www.reuters.com/article/us-greece-china-idUSKBN1XL1KC (Accessed: 27 July 2021).

Reuters (2021) *China to strengthen commodity price controls in five-year plan, Reuters*. Available at: https://www.reuters.com/article/us-china-commodities-idUSKCN2D60A2 (Accessed: 15 September 2021).

Rich, T. S. and Banerjee, V. (2017) *Panama Switch Marks China's Return to Checkbook Diplomacy, The Diplomat*. Available at: https://thediplomat.com/2017/06/panama-switch-marks-chinas-return-to-checkbook-diplomacy/ (Accessed: 18 September 2017).

Richardson, M. (2012) 'Nine dragons stir up South China Sea', *Financial Times*, (June), pp. 1–3. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/1021999400?accountid=13460%0A.

Ripley, W. (2015) *China flexes muscles with World War II military, CNN*. Available at: http://edition.cnn.com/2015/09/02/asia/china-world-war-ii-military-parade/ (Accessed: 13 April 2017).

Robbins, G. (1993) 'The Post-Soviet Heartland: Reconsidering Mackinder', *Global Affairs*, 8, pp. 95–108.

Robert D. Kaplan (2016) *The South China Sea will be the battleground of the future, Business Insider*. Available at: http://uk.businessinsider.com/why-the-south-china-sea-is-so-crucial-2015-2?r=US&IR=T (Accessed: 18 June 2017).

Roberts, C., Armijo, L. and Katada, S. (2018) *The BRICS and Collective Financial Statecraft*. Kindle. New York: Oxford University Press.

Robertson, J. and Pierce, B. (2008) USGS Release: 9090 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic Released, U.S. Geological Survey. Available at: https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=1980.html (Accessed: 30 October 2018).

Rodrigue, J.-P. *et al.* (2013) *The Geography of Transport Systems*. 3rd editio. New York: Routledge. doi: 10.1080/10630732.2011.603579.

Rohrig, B. (2015) 'Smartphones. Smart chemistry', *ChemMatters*, pp. 10–12. Available at: https://www.acs.org/content/acs/en/education/resources/highschool/chemmatters/past-issues/archive-2014-2015/smartphones.html.

Romaniuk, S. N. and Burgers, T. J. (2016) *China's 'Arab Pivot' Signals the End of Non-Intervention, The Diplomat*. Available at: https://thediplomat.com/2016/12/chinas-arab-pivot-signals-the-end-of-non-intervention/ (Accessed: 14 June 2018).

Ronald O'Rourke (2018) China Naval Modernization: Implications for U.S. Navy Capabilities— Background and Issues for Congress, Congressional Research Service 7-5700. Available at: https://fas.org/sgp/crs/row/RL33153.pdf (Accessed: 22 November 2016).

Rønning, H. and Li, S. (2013) 'Winning hearts and minds: Chinese Soft Power Foreign Policy in Africa', *CMI Brief*, 12(3). Available at: https://www.cmi.no/publications/4906-winning-hearts-and-minds.

Rudolph, J. and Szonyi, M. (2018) *The China Questions: Critical Insights into a Rising Power*. Cambridge, MA: Harvard University Press. Available at: http://www.hup.harvard.edu/catalog.php?isbn=9780674979406.

Ruscheinski, S. J. (2002) *China's Energy Securityu and the South China Sea*. University of Illinois at Urbana-Champaign.

Russian foreign ministry (2016) Comment by the Information and Press Department on Pakistani media reports about Russia's alleged involvement in the China-Pakistan Economic Corridor project - News - The Ministry of Foreign Affairs of the Russian Federation, The Ministry of Foreign Affairs of the Russian Federation.

Saeed, S. (2021) *Pakistan learns the cost of an alliance with China, POLITICO*. Available at: https://www.politico.eu/article/pakistan-learns-cost-of-economic-alliance-with-china/ (Accessed: 21 July 2021).

Sajid, S. (2016) *Russia formally requests access to Gwadar Port, Daily Times (Lahore)*. Available at: https://dailytimes.com.pk/44006/russia-formally-requests-access-to-gwadar-port/ (Accessed: 10 November 2017).

Santasombat, Y. (2015) *Impact of China's Rise on the Mekong Region*. Edited by Y. Santasombat. New York: Palgrave Macmillan US. doi: 10.1057/9781137476227.

Sarah Zheng and Kristin Huang (2017) *No free AIIB pass for belt and road projects, bank executive says, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacy-defence/article/2110407/no-free-aiib-pass-belt-and-road-projects-bank-executive (Accessed: 17 January 2019).

Saran, S. and Deo, A. (2018) *Xi Dreams: A Roadmap for Pax-Sinica*. New Delhi. Available at: https://www.orfonline.org/research/xi-dreams-a-roadmap-for-pax-sinica/.

Saxer, M. and Zhang, J. (2017) *The Art of Neighbouring: Making Relations Across China's Borders*. Amsterdam University Press. doi: 10.5117/9789462982581.

Schneider, F. (2013) *Discourse Analysis and Foreign Languages, Politics East Asia*. Available at: http://www.politicseastasia.com/studying/discourse-analysis-and-foreign-languages/ (Accessed: 13 March 2017).

Schuller, M. and Turner, A. (2005) 'Global companies: Chinese companies spread their wings', *China Aktuell*, 4(May), pp. 1–14.

SCMP (2017) China to unveil Shanghai free-trade port plan 'in coming months', South China Morning

Post. Available at: http://www.scmp.com/news/china/economy/article/2121365/china-unveil-shanghai-free-trade-port-plan-coming-months (Accessed: 7 February 2018).

Scott, D. (2006) 'India's "Grand Strategy" for the Indian Ocean: Mahanian Visions', *Asia-Pacific Review*, 13(2), pp. 97–129. doi: 10.1080/13439000601029048.

Selth, A. (2007) 'Burma, China and the Myth of Military Bases', *Asian Security*, 3(3), pp. 279–307. doi: 10.1080/14799850701568929.

Selth, A. (2008a) *Burma's Coco Islands: rumours and realities in the Indian Ocean*. Hong Kong. doi: 10.1111/j.1467-629X.1980.tb00220.x.

Selth, A. (2008b) 'Burma's Mythical Isles', *Australian Quarterly*, 80(6), pp. 24–28. Available at: http://www.jstor.org/stable/20638594.

Sempa, F. (2006) 'Spykman's World', *American Diplomacy*. Available at: http://www.unc.edu/depts/diplomat/item/2006/0406/semp/sempa_spykman.html.

Sengupta, K. (2018) *How China's Belt and Road Initiative became a huge geopolitical controversy, The Independent*. Available at: https://www.independent.co.uk/news/long_reads/pakistan-imran-khan-belt-and-road-debt-trap-china-pakistan-economic-corridor-a8622351.html (Accessed: 27 November 2018).

Seversky, A. de (1950) Air Power: Key to Survival. New York: Simon and Schuster.

Shambaugh, D. (2013) Tangled Titans: The United States and China. Rowman & Littlefield Publishers.

Shambaugh, D. (2014) China Goes Global: The Partial Power. Oxford: Oxford University Press.

Shambaugh, D. (2016) China's Future. Cambridge: Polity Press.

Shaofeng, C. (2011) 'Has China's Foreign Energy Quest Enhanced Its Energy Security?', *The China Quarterly*, 207(386), pp. 600–625. doi: 10.1017/S0305741011000671.

Shapiro, J. L. and Snyder, X. (2017) 'Geopolitical Theories: November 10, 2017'. Available at: https://geopoliticalfutures.com/geopolitical-theories/.

Shen, S. (2016) *How China's 'Belt and Road' Compares to the Marshall Plan, The Diplomat*. Available at: https://thediplomat.com/2016/02/how-chinas-belt-and-road-compares-to-the-marshall-plan/ (Accessed: 2 October 2018).

Shepard, W. (2016) *The Real Role Of The AIIB In China's New Silk Road, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/07/15/the-real-role-of-the-aiib-in-chinas-new-silk-road/#31ba994c7472 (Accessed: 17 January 2019).

Shepard, W. (2017a) *Trains Are The New Pandas: The Real Impact That The New China-UK Rail Line Will Have, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/01/06/the-story-behind-the-new-china-to-uk-train/ (Accessed: 21 September 2021).

Shepard, W. (2017b) *What Happened On China's New Silk Road In 2017, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/12/20/what-happened-on-chinas-new-silk-road-in-2017/#73892c6372e9 (Accessed: 22 November 2018).

Shi, Y. (2018) *All aboard: China's high-speed rail 10 years on, Xinhua*. Available at: http://www.xinhuanet.com/english/2018-08/01/c_137361580.htm (Accessed: 15 October 2018).

Shippubg, Z. (2002) 'Crossing the Political Minefields of Succession: From Jiang Zemin to Hu Jintao', in *China's Post-Jiang Leadership Succession*. CO-PUBLISHED WITH SINGAPORE UNIVERSITY PRESS, pp. 59–85. doi: 10.1142/9789812706508_0003.

Sidhu, J. S. and Rogers, R. A. (2015) 'China's Strategic Ambitions in the Indian Ocean Region, India's Anxiety and the United States' Concerns', *Malaysian Journal of International Relations*, 3(December), pp. 75–104.

Silk, M. and Malish, R. (2006) 'Are Chinese Companies Taking Over the World?', *Chicago Journal of International Law*, 7, pp. 105–131.

Singh, A. (2015) 'Blue-Water' Navies in the Indian Ocean Region, The Diplomat. Available at: https://thediplomat.com/2015/01/blue-water-navies-in-the-indian-ocean-region/ (Accessed: 22 November 2016).

Sloan, G. (2017) *Geopolitics, Geography and Strategic History, Geopolitics, Geography and Strategic History*. London: Routledge. doi: 10.4324/9780203489482.

Smith, J. (2015) *The US-China South China Sea Showdown, The Diplomat*. Available at: http://thediplomat.com/2015/10/the-us-china-south-china-sea-showdown/ (Accessed: 13 April 2017).

Smith, K. (2015) *China Signs Funding Agreement for Lahore Metro, International Railway Journal.* Available at: http://www.railjournal.com/index.php/asia/funding-agreed-for-lahore-metro-line.html (Accessed: 9 November 2017).

Smith Stegen, K. (2015) 'Understanding China's global energy strategy', *International Journal of Emerging Markets*, 10(2), pp. 194–208. doi: 10.1108/IJOEM-04-2014-0059.

Song, D.-W. (2002) 'Regional container port competition and co-operation: the case of Hong Kong and South China', *Journal of Transport Geography*, 10(2), pp. 99–110. doi: https://doi.org/10.1016/S0966-6923(02)00003-0.

Song, Y. and Tønnesson, S. (2013) 'The Impact of the Law of the Sea Convention on Conflict and Conflict Management in the South China Sea', *Ocean Development & International Law*, 44(3), pp. 235–269. doi: 10.1080/00908320.2013.808935.

Spinetta, L. (2006) *The Malacca Dilemma - Countering China's 'String of Pearls' with Land-Based Airpower*. Available at: http://www.dtic.mil/get-tr-doc/pdf?AD=ADA476931.

Spykman, N. J. (1938) 'Geography and Foreign Policy I', American Political Science Review, 32, pp. 28–50.

Srinivasan, M. (2021) *China extends \$500 million loan to Lanka, The Hindu*. Available at: https://www.thehindu.com/news/international/china-extends-500-million-loan-to-lanka/article34305277.ece (Accessed: 20 July 2021).

Stacey, K. (2017) *China signs 99-year lease on Sri Lanka's Hambantota port, Financial Times*. Available at: https://www.ft.com/content/e150ef0c-de37-11e7-a8a4-0a1e63a52f9c (Accessed: 18 February 2018).

Staden, C. van (2018) 'Can China Realize Africa's Dream of an East-West Transport Link?', *China Brief*, 18(6), pp. 9–12.

Stanslas, P. T. (2010) 'Asia Pacific Bulletin', Asia Pacific Bulletin, (88), pp. 2009–2010.

Stashwick, S. (2017) US Navy Plans to Deploy Two Littoral Combat Ships to Singapore in 2018, The

Diplomat. Available at: https://thediplomat.com/2017/06/us-navy-plans-to-deploy-two-littoral-combat-ships-to-singapore-in-2018/ (Accessed: 21 December 2018).

Stashwick, S. (2018) *China's Security Gambit in the Indian Ocean, The Diplomat*. Available at: https://thediplomat.com/2018/05/chinas-security-gambit-in-the-indian-ocean/ (Accessed: 29 October 2018).

Statista (2017) *Cargo handling in China 2016, by port type, Statista*. Available at: https://www.statista.com/statistics/258323/volume-of-handled-goods-in-chinese-seaports-and-river-ports/ (Accessed: 25 November 2017).

Steinmüller, H. (2014) 'China's growing influence in Latin America', in *South America, Central America and the Caribbean 2015*. 23rd edn. Abingdon, UK: Routledge, pp. 19–22. Available at: http://eprints.lse.ac.uk/59990/.

Stephens, H. L. (2012) *Breaking the Ice: China's Emerging Arctic Strategy, The Diplomat*. Available at: https://thediplomat.com/2012/08/breaking-the-ice-chinas-emerging-arctic-strategy/ (Accessed: 1 December 2017).

Stephens, P. (2017) *A train that proclaims China's global ambition, Financial Times*. Available at: https://www.ft.com/content/ed033dae-6c69-11e7-b9c7-15af748b60d0 (Accessed: 22 November 2018).

Stevens, A. (2015) *Pakistan lands \$46 billion investment from China, CNN*. Available at: http://money.cnn.com/2015/04/20/news/economy/pakistan-china-aid-infrastucture/ (Accessed: 6 November 2017).

Stevens, J. (1711) A New Collection of Voyages and Travels. Oxford University Press.

Stewart M. Patrick (2018) *AIIB: Is the Chinese-led Development Bank a Role Model?, Council of Councils*. Available at: https://www.cfr.org/blog/aiib-chinese-led-development-bank-role-model (Accessed: 5 July 2018).

Stokes, D. (2018) 'Trump, American hegemony and the future of the liberal international order', *International Affairs*, 94(1), pp. 133–150. doi: 10.1093/ia/iix238.

Sturgeon, J. C. (2018) 'The Art of Neighbouring: Making Relations across China's Borders [review]', *The China Quarterly*, 234, pp. 573–575. doi: 10.1017/S0305741018000681.

Sudworth, J. (2013) *Shanghai free-trade zone launched*, *BBC News*. Available at: http://www.bbc.co.uk/news/business-24322313 (Accessed: 7 February 2018).

Sun, D. and Zoubir, Y. (2018) 'China's participation in conflict resolution in the Middle East and North Africa: A case of quasi-mediation diplomacy?', *Journal of Contemporary China*, 27(110), pp. 224–243. doi: 10.1080/10670564.2018.1389019.

Sun, T. (Guorui) and Payette, A. (2017) *China's Two Oceans's Strategy: controlling waterways and the new silk road, Iris*. Paris. Available at: http://www.iris-france.org/wp-content/uploads/2017/05/Asia-Focus-31.pdf.

Sverdrup-Thygeson, B., Lindgren, W. Y. and Lanteigne, M. (eds) (2017) *China and Nordic Diplomacy*. Routledge. Available at: https://www.routledge.com/China-and-Nordic-Diplomacy/Sverdrup-Thygeson-Yennie-Lindgren-Lanteigne/p/book/9781138501034.

Syrrakos, D. (2019) China's relationships with Greece and Italy are deepening – EU is reaping exactly

what it sowed, The Conversation. Available at: https://theconversation.com/chinas-relationships-with-greece-and-italy-are-deepening-eu-is-reaping-exactly-what-it-sowed-127087 (Accessed: 23 July 2021).

Tang, J. (2006) With the Grain or Against the Grain? Energy Security and Chinese Foreign policy in the Hu Jin Tao Era. Available at: http://www.brookings.edu/fp/cnaps/papers/tang2006.pdf.

Tao, X. (2017) *How Did Myanmar's Reforms Change Its Relations With China?, The Diplomat*. Available at: https://thediplomat.com/2017/03/how-did-myanmars-reforms-change-its-relations-with-china/ (Accessed: 5 October 2017).

Tata, S. (2017) *Deconstructing China's Energy Security Strategy, The Diplomat*. Available at: http://thediplomat.com/2017/01/deconstructing-chinas-energy-security-strategy/ (Accessed: 25 April 2017).

Taylor, B. (2014) 'The South China Sea is Not a Flashpoint', *The Washington Quarterly*, 37(1), pp. 99–111. doi: 10.1080/0163660X.2014.893176.

Taylor, I. (2014) 'China's New Diplomacy: Rationale, Strategies and Significance', *The Round Table*, 103(1), pp. 133–133. doi: 10.1080/00358533.2013.876837.

Teggart, F. J. and Mackinder, H. J. (1919) 'Geography as an Aid to Statecraft: An Appreciation of Mackinder's "Democratic Ideals and Reality", *Geographical Review*, 8(4/5), p. 227. doi: 10.2307/207838.

Tharoor, I. (2009) *A Brief History of the Uighurs - TIME, Time*. Available at: http://content.time.com/time/world/article/0,8599,1909416,00.html (Accessed: 31 March 2018).

Tharoor, I. (2015) What China's and Pakistan's Special Friendship Means, The Washington Poast. Available at: https://www.washingtonpost.com/news/worldviews/wp/2015/04/21/what-china-and-pakistans-special-friendship-means/ (Accessed: 7 November 2017).

Tharoor, S. (2016) An Era of Darkness: The British Empire in India. Kindle. New Delhi: Alphen Book.

The Economist (2013a) *Faster than a speeding bullet, The Economist*. Available at: https://www.economist.com/news/china/21589447-chinas-new-rail-network-already-worlds-longest-will-soon-stretch-considerably-farther-faster.

The Economist (2013b) *The new masters and commanders - China's foreign ports, The Economist*. Available at: https://www.economist.com/news/international/21579039-chinas-growing-empire-ports-abroad-mainly-about-trade-not-aggression-new-masters (Accessed: 4 December 2017).

The Economist (2014a) *At the double - China's military spending, The Economist*. Available at: https://www.economist.com/china/2014/03/15/at-the-double (Accessed: 30 October 2018).

The Economist (2014b) *Frozen conflict - Denmark claims the North Pole, The Economist*. Available at: https://www.economist.com/news/international/21636756-denmark-claims-north-pole-frozen-conflict (Accessed: 30 November 2017).

The Economist (2016) *China v the rest - The South China Sea, The Economist*. Available at: http://www.economist.com/news/asia/21695565-sea-becomes-more-militarised-risks-conflict-grow-china-v-rest (Accessed: 8 February 2018).

The Economist (2017a) *China has built the world's largest bullet-train network, The Economist*. Available at: https://www.economist.com/news/china/21714383-and-theres-lot-more-come-it-waste-money-china-has-built-worlds-largest (Accessed: 8 September 2017).

The Economist (2017b) *Inner Mongolia has become China's model of assimilation, The Economist*. Available at: https://www.economist.com/news/china/21722853-chinese-mongolians-are-still-asserting-their-identity-inner-mongolia-has-become-chinas-model (Accessed: 10 November 2017).

The Economist (2017c) *The Arctic as it is known today is almost certainly gone, The Economist*. Available at: https://www.economist.com/news/leaders/21721379-current-trends-arctic-will-be-ice-free-summer-2040-arctic-it-known-today (Accessed: 30 November 2017).

The Economist (2018a) *China is rapidly developing its clean-energy technology, The Economist*. Available at: https://www.economist.com/special-report/2018/03/15/china-is-rapidly-developing-its-clean-energy-technology (Accessed: 8 October 2018).

The Economist (2018b) *What's in it for the Belt-and-Road countries?, The Economist*. Available at: https://www.economist.com/the-economist-explains/2018/04/19/whats-in-it-for-the-belt-and-road-countries (Accessed: 3 December 2018).

The Economist (2018c) *Will China's Belt and Road Initiative outdo the Marshall Plan?, The Economist*. Available at: https://www.economist.com/finance-and-economics/2018/03/08/will-chinas-belt-and-road-initiative-outdo-the-marshall-plan (Accessed: 2 October 2018).

The Emerging Arctic: Risks and Economic Opportunities (2014) Council on Foreign Relations . Available at: https://www.cfr.org/interactives/emerging-arctic#!/%23Diplomacy and Security (Accessed: 24 May 2018).

The National (2017) *Orange Line not part of CPEC, The National*. Available at: http://nation.com.pk/17-Jan-2017/orange-line-lahore-not-part-of-cpec-na-body (Accessed: 9 November 2017).

Thiha, A. (2018) *Can Myanmar Afford China's Belt and Road?, The Diplomat*. Available at: https://thediplomat.com/2018/08/can-myanmar-afford-chinas-belt-and-road/ (Accessed: 29 October 2018).

Thorne, D. and Spevack, B. (2018) *Harbored Ambitions - How China's Port Investments are Strategically Reshaping the Indo-Pacific*. C4ADS. Available at: www.c4ads.org.

Tiezze, S. (2014) In Africa, Li Keqiang Refutes Charge of Chinese 'Neo-Colonialism' | The Diplomat, The Diplomat. Available at: https://thediplomat.com/2014/05/in-africa-li-keqiang-refutes-charge-of-chinese-neo-colonialism/ (Accessed: 8 June 2018).

Tiezzi, S. (2014) 'The Maritime Silk Road Vs. The String of Pearls', *The Diplomat*. Available at: http://thediplomat.com/2014/02/the-maritime-silk-road-vs-the-string-of-pearls/ (Accessed: 22 November 2016).

Tiezzi, S. (2015) *Revealed: China's Reasons for Island-Building in the South China Sea, The Diplomat*. Available at: http://thediplomat.com/2015/04/revealed-chinas-reasons-for-island-building-in-the-south-china-sea/ (Accessed: 22 November 2016).

Tiezzi, S. (2016) *China: Tribunal Ruling 'Null and Void', Will Not Affect South China Sea Claims, The Diplomat*. Available at: https://thediplomat.com/2016/07/china-tribunal-ruling-null-and-void-will-not-affect-south-china-sea-claims/ (Accessed: 8 February 2018).

Trans-Siberian Rail Routes (2018). Available at: http://www.baikalcomplex.com/images/common/map1.jpg (Accessed: 21 August 2018).

Trickett, N. and Thomas, O. (2017) *China, Russia, Iran: Ports and Power Along the Belt and Road, The Diplomat*. Available at: https://thediplomat.com/2017/03/china-russia-iran-ports-and-power-along-the-belt-and-road/ (Accessed: 3 August 2018).

Tsirbas, M. (2016) *What Does the Nine-Dash Line Actually Mean?, The Diplomat*. Available at: https://thediplomat.com/2016/06/what-does-the-nine-dash-line-actually-mean/ (Accessed: 3 December 2017).

Tuathail, G. Ó. (2000) 'The Postmodern Geopolitical Condition: States, Statecraft, and Security at the Millennium', *Annals of the Association of American Geographers*, 90(1), pp. 166–178. Available at: https://www.jstor.org/stable/1515387.

Turner, B. S. (2010) 'Martin Jacques When China Rules the World. The End of the Western World and the Birth of a New Global Order', *Society*, 47(6), pp. 565–567. doi: 10.1007/s12115-010-9379-2.

UN ESCAP (1999) Development of The Trans-Asian Railway: Trans-Asian Railway in the Southern Corridor of Asia-Europe routes. New York. Available at: http://www.unescap.org/sites/default/files/tarsc-fulltext_1980.pdf.

UNCTAD (2017) UNCTAD Review of Maritime Transport 2017, UNCTAD. United Nations Publications. Available at: http://unctad.org/en/PublicationsLibrary/rmt2017_en.pdf.

Urban, F., Siciliano, G. and Nordensvard, J. (2017) 'China's dam-builders: their role in transboundary river management in South-East Asia', *International Journal of Water Resources Development*, 0627, pp. 1–24. doi: 10.1080/07900627.2017.1329138.

US DoD (2010) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2010, Office of the Secretary of Defense. Available at: papers3://publication/uuid/098E27EA-5553-477B-83D8-2AE68DFB6DED.

US DoD (2011) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011, Office of the Secretary of Defense. Available at: https://www.defense.gov/Portals/1/Documents/pubs/2011_CMPR_Final.pdf.

US DoD (2012) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012, Office of the Secretary of Defense.

US DoD (2013) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013, Office of the Secretary of Defense.

US DoD (2014) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2014, Office of the Secretary of Defense.

US DoD (2015) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2015, Office of the Secretary of Defense. Available at: papers3://publication/uuid/098E27EA-5553-477B-83D8-2AE68DFB6DED.

US DoD (2016) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2016, Office of the Secretary of Defense.

US DoD (2017) Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2017, Office of the Secretary of Defense. Available at: https://www.defense.gov/Portals/1/Documents/pubs/2017_China_Military_Power_Report.PDF.

US Legal (2017) *Trading with the Enemy Act [TWEA] Law and Legal Definition, US Legal*. Available at: https://definitions.uslegal.com/t/trading-with-the-enemy-act-twea/ (Accessed: 24 October 2017).

USCC (2016) USCC 2016 Annual Report. Washington, D.C. Available at: http://origin.www.uscc.gov/sites/default/files/annual_reports/2016 Annual Report to Congress.pdf.

USCC (2017) USCC 2017 Annual Report. Washington, D.C. Available at: https://www.uscc.gov/sites/default/files/annual_reports/2017_Annual_Report_to_Congress.pdf.

Usman, A. (2016) *China financing Orange Line Metro Train: Shahbaz Sharif, The Express Tribune*. Available at: https://tribune.com.pk/story/1081669/china-financing-orange-line-metro-train-shahbaz-sharif/ (Accessed: 11 September 2017).

Vego, M. N. (2003) Naval Strategy and Operations in Narrow Seas. 2nd edn. London: Frank Cass.

Voutsa, M. E. and Borovas, G. (2015) 'The Role of the Bretton Woods Institutions in Global Economic Governance', *Procedia Economics and Finance*, 19(15), pp. 37–50. doi: 10.1016/S2212-5671(15)00006-4.

Vu, K. and Nguyen, M. (2018) *China and Vietnam call for maritime disputes to be settled, Reuters*. Available at: https://www.reuters.com/article/us-vietnam-china-politics/china-and-vietnam-call-for-maritime-disputes-to-be-settled-idUSKCN1H81AO (Accessed: 31 December 2018).

Wang, J. (2016) *China and Saudi Arabia: A New Alliance?, The Diplomat*. Available at: https://thediplomat.com/2016/09/china-and-saudi-arabia-a-new-alliance/ (Accessed: 13 October 2017).

Wang, L. et al. (2008) Qinghai-Tibet Railway, China and the Solutions to Its Major Geotechnical Problems for Construction, International Conference on Case Histories in Geotechnical Engineering. Missouri. Available at: http://scholarsmine.mst.edu/icchge/6icchge/session13/9.

Ward, J. D. T. (2017) *The Emerging Geopolitics of the Indian Ocean Region, Asia Pacific Bulletin*. Washington, DC. Available at: http://hdl.handle.net/10125/47310.

Washington Post (2016) *Country Guide: China, Washington Post*. Available at: http://www.washingtonpost.com/wp-srv/world/countries/china.html (Accessed: 25 November 2017).

Watts, J. (2005) *The railway across the roof of the world, The Guardian*. Available at: https://www.theguardian.com/world/2005/sep/20/china.jonathanwatts (Accessed: 11 October 2017).

Wei, R. (2016) Seven more provinces to join China's free-trade zone club, bringing total to 11, South China Morning Post. Available at: http://www.scmp.com/news/china/economy/article/2011915/seven-more-provinces-join-chinas-free-trade-zone-club (Accessed: 8 February 2018).

Wenjuan, N. (2018) 'China's domestic strategic debate and confusion over the South China Sea issue', *The Pacific Review*, 31(2), pp. 188–204. doi: 10.1080/09512748.2017.1370608.

Wenmao, C. (1988) 'The development of civil aviation in new China', *Transport Reviews*, 8(2), pp. 89–99. doi: 10.1080/01441648808716678.

West, J., Schandl, H. and Heyenga, S. (2013) *Resource efficiency: economics and outlook for China*. Bangkok. Available at: https://wedocs.unep.org/handle/20.500.11822/8119.

Whibley, J. (2013) 'A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia. By Aaron L. Friedberg. New York: W. W. Norton, 2011. 360 pp. \$27.95 (cloth).', *Journal of East Asian Studies*, 13(01), pp. 168–170. doi: 10.1017/S1598240800008572.

Wike, R. (2011) *From Hyperpower to Declining Power, Pew Research Center*. Available at: http://www.pewglobal.org/2011/09/07/from-hyperpower-to-declining-power/ (Accessed: 27 March 2017).

Wikimedia (2008) *1947 Nanhai Zhudao, Wikimedia Commons*. Available at: https://commons.wikimedia.org/wiki/Category:Maps_of_the_South_China_Sea#/media/File:1947_Nan hai_Zhudao.png (Accessed: 10 September 2018).

Wikimedia Commons (2018) 1958 Diplomatic note from Pham Van Dong to Zhou Enlai, Wikimedia Commons. Available at:

https://commons.wikimedia.org/wiki/File:1958_diplomatic_note_from_phamvandong_to_zhouenlai.jpg (Accessed: 23 October 2018).

Wohlstetter, A. (1968) 'Illusions of Distance', Foreign affairs, 46(2), pp. 242–255.

Wong, C. H. (2016a) For China's Leaders, Age Cap Is but a Moving Number, The Wall Street Journal. Available at: https://blogs.wsj.com/chinarealtime/2016/11/01/for-chinas-leaders-age-cap-is-but-a-moving-number/ (Accessed: 14 November 2017).

Wong, C. H. (2016b) *Nine-Dash Line's Ambiguity a Good Thing, Argues Chinese Military Academic, The Wall Street Journal*. Available at: https://blogs.wsj.com/chinarealtime/2016/06/05/nine-dash-lines-ambiguity-a-good-thing-argues-chinese-military-academic/ (Accessed: 8 February 2018).

Wood Mackenzie (2019) *China Economic Slowdown, Wood Mackenzie*. Available at: https://www.woodmac.com/news/feature/china-economic-slowdown-3-reasons-why-its-different-this-time/ (Accessed: 15 September 2021).

Worden, R. L., Savada, A. M. and Dolan, R. E. (1988) *China: a Country Study*. Washington, D.C: Federal Research Division, Library of Congress. Available at: https://www.loc.gov/resource/frdcstdy.chinacountrystud00word.

World Bank (2010) *Projects : Shandong Ecological Afforestation | The World Bank, Wordl Bank*. Available at: http://projects.worldbank.org/P112759/shandong-ecological-afforestation?lang=en (Accessed: 25 September 2018).

World Bank (2016) *China Trade at a Glance: Most Recent Values, World Bank*. Available at: http://wits.worldbank.org/CountrySnapshot/en/CHN (Accessed: 22 November 2016).

World Bank (2017) *China Launches New Poverty Reduction Case Database, World Bank*. Available at: http://www.worldbank.org/en/news/press-release/2017/05/26/china-launches-new-poverty-reduction-case-database (Accessed: 8 June 2018).

World Shipping Council (2018) *Top 50 World Container Ports /, World Shipping Council*. Available at: http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports (Accessed: 16 November 2018).

Wu, D. (2017) China and Russia Sign Military Cooperation Roadmap, The Diplomat. Available at: https://thediplomat.com/2017/06/china-and-russia-sign-military-cooperation-roadmap/ (Accessed: 29 January 2018).

Wu, K. (2012) 'China's Oil Supply Security: Imports, Strategic Stockpiling and Overseas Investment', in *China Energy Issues in the 12th Five Year Plan and Beyond COnference*. Singapore. Available at: http://esi.nus.edu.sg/docs/event/wu-kang.pdf.

Wu, K. (2014) 'China's energy security: Oil and gas', *Energy Policy*, 73, pp. 4–11. doi: 10.1016/j.enpol.2014.05.040.

Xiang, L. (2004) 'China's Eurasian Experiment', *Survival*, 46(2), pp. 109–121. doi: 10.1093/survival/46.2.109.

Xiaoping Yang (2018) When India's Strategic Backyard Meets China's Strategic Periphery: The View From Beijing, War on the Rocks. Available at: https://warontherocks.com/2018/04/when-indias-strategic-backyard-meets-chinas-strategic-periphery-the-view-from-beijing/ (Accessed: 27 November 2018).

Xinhua (2007) *Strong Wind Derails Train, Killing 4, China.org.cn*. Available at: http://www.china.org.cn/english/China/200975.htm (Accessed: 11 October 2017).

Xinhua (2011) 新疆喀和铁路客运通车 [Kahe Railway Opens], The Central Government of China. Available at: http://www.gov.cn/jrzg/2011-06/28/content_1895133.htm (Accessed: 9 November 2017).

Xinhua (2015) *Highlights of proposals for China's 13th Five-Year Plan, Xinhuanet*. Available at: http://news.xinhuanet.com/english/photo/2015-11/04/c_134783513.htm (Accessed: 13 October 2017).

Xinhua (2016a) *Full Text: China Adheres to the Position of Settling Through Negotiation the Relevant Disputes Between China and the Philippines in the South China Sea, English.news.c.* Available at: http://www.xinhuanet.com/english/china/2016-07/13/c_135509153_3.htm (Accessed: 26 October 2018).

Xinhua (2016b) SCO supports peace and stability in South China Sea, China.org.cn. Available at: http://www.china.org.cn/world/2016-05/25/content_38530226.htm (Accessed: 4 December 2017).

Xinhua (2017a) *Backgrounder: Economic corridors under Belt and Road Initiative, English.news.cn.* Available at: http://www.xinhuanet.com/english/2017-05/09/c_136268314.htm (Accessed: 26 February 2018).

Xinhua (2017b) China natural gas imports surge in 2017, Chinadaily.com.cn. Available at: http://www.chinadaily.com.cn/a/201801/12/WS5a588227a3102c394518ee71.html (Accessed: 8 February 2018).

Xinhua (2017c) *China plans 2.6 trillion yuan of transport investment in 2017, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-02/27/content_28366691.htm (Accessed: 8 October 2017).

Xinhua (2017d) *China proposes 'blue economic passages' for maritime, Xinhuanet*. Available at: http://news.xinhuanet.com/english/2017-06/20/c_136380391.htm (Accessed: 26 November 2017).

Xinhua (2017e) *China to speed up bullet trains on Beijing-Shanghai route in Sept, Xinhua*. Available at: http://www.chinadaily.com.cn/business/2017-08/21/content_30899812.htm (Accessed: 18 September 2017).

Xinhua (2017f) Chinese contractor to complete first berth of Kenya's Lamu port in mid 2018 - Business - Chinadaily.com.cn, China Daily. Available at: http://www.chinadaily.com.cn/business/2017-04/07/content_28831548.htm (Accessed: 17 May 2018).

Xinhua (2017g) *Vision for Maritime Cooperation under the Belt and Road Initiative, Xinhua*. Available at: http://news.xinhuanet.com/english/2017-06/20/c_136380414.htm (Accessed: 26 November 2017).

Xinhua (2017h) Xi Jinping's keynote speech at the World Economic Forum, China.org.cn. Available at: http://www.china.org.cn/node_7247529/content_40569136.htm (Accessed: 24 November 2017).

Xinhua (2018) *China's Arctic Policy White Paper, The State Council of the People's Republic of China*. Available at: http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm (Accessed: 24 May 2018).

Xinhua (2917) *China sets up base in Djibouti - Xinhua | English.news.cn, XinhuaNet*. Available at: http://www.xinhuanet.com/english/2017-07/11/c_136435716.htm (Accessed: 18 May 2018).

Xu, M. and Mason, J. (2017) *China's energy demand to peak in 2040 as transportation demand grows: CNPC, Reuters*. Available at: http://www.reuters.com/article/us-china-cnpc-outlook/chinas-energy-demand-to-peak-in-2040-as-transportation-demand-grows-cnpc-idUSKCN1AW0DF?il=0 (Accessed: 2 October 2017).

Xue, L. (2016) '美國再平衡戰略與中國"一帶一路" [US rebalance strategy and China's "One Belt, One Road"]', *世界經濟與政治*[World Economics and Politics], 5, pp. 56–73.

Xue, M. (2021) *China's arms trade: which countries does it buy from and sell to?, South China Morning Post*. Available at: https://www.scmp.com/news/china/military/article/3139603/how-china-grew-buyer-major-arms-trade-player (Accessed: 21 July 2021).

Xue, X., Schmid, F. and Smith, R. A. (2002) 'An introduction to China's rail transport part 1: History, present and future of China's railways', *Journal of Rail and Rapid Transit*, 216(3), pp. 153–163. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/213111394?accountid=13460.

Yahuda, M. (2013) 'China's New Assertiveness in the South China Sea', *Journal of Contemporary China*, 22(81), pp. 446–459. doi: 10.1080/10670564.2012.748964.

Yan, H. and Feng, D. H. (1968) *How Myanmar's understanding of China is paving the way for economic success, South China Morning Post*. Available at: http://www.scmp.com/comment/insight-opinion/article/2113082/how-myanmars-understanding-china-paving-way-economic-success (Accessed: 5 October 2017).

Yang, K. (2006) 'Mao Zedong and the Indochina Wars', in Roberts, P. (ed.) *In Behind the Bamboo Curtain: China, Vietnam, and the World beyond Asia*. Washington, D.C: Woodrow Wilson Center Press, pp. 55–96.

Yao, M. (2018) *In-depth: How China becomes third-largest supplier of weapons worldwide? - China Military, China Mail.* Available at: http://eng.chinamil.com.cn/view/2018-02/27/content_7953754.htm (Accessed: 23 November 2018).

Yung, C. D. et al. (2014) "Not an Idea We Have to Shun": Chinese Overseas. Basing Requirements in the 21st Century, Institute for National Strategic Studies. Edited by P. C. Saunders. Washington, D.C: National Defense University Press. Available at:

http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-7.pdf.

Yung, C. D. (2015) *Burying China's 'String of Pearls', The Diplomat*. Available at: https://thediplomat.com/2015/01/burying-chinas-string-of-pearls/ (Accessed: 31 October 2017).

Zhai, Q. (2000) *China and the Vietnam Wars, 1950-1975*. Edited by J. L. Gaddis. Chapel Hill and London: The University of North Carolina Press.

Zhang, Q., Yang, H. and Wang, Q. (2017) 'Impact of high-speed rail on China's Big Three airlines', *Transportation Research Part A: Policy and Practice*, 98, pp. 77–85. doi: 10.1016/j.tra.2017.02.005.

Zhang, X. (1999) 'China's interests in the Middle East: Present and future', *Middle East Policy*, 6(3), pp. 150–159. doi: 10.1111/j.1475-4967.1999.tb00332.x.

Zhang, Y. (2011) 'The Successor's Dilemma in China's Single Party Political System', *European Journal of Political Economy*, 27(4), pp. 674–680. doi: 10.1016/j.ejpoleco.2011.05.004.

Zhenxing, L. (2013) 'Perspectives on China-Africa Oil Ties', in *A Trilateral Dialogue on the United States, Africa and China*. Brookings, pp. 1–12. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/All-China-Oil-Papers-2.pdf.

Zhixin, Z. (2014) *Why China Has Good Reason to Worry About the US Rebalance Strategy?, China-US Focus*. Available at: http://www.chinausfocus.com/foreign-policy/%0Awhy-china-has-good-reason-to-worry-about-the-us-rebalance-strategy/ (Accessed: 19 August 2018).

Zhou, L. (2017) *How a Chinese investment boom is changing the face of Djibouti, South China Morning Post*. Available at: http://www.scmp.com/news/china/diplomacy-defence/article/2087374/how-chinese-investment-boom-changing-face-djibouti (Accessed: 20 May 2018).

Zweig, D. and Jianhai, B. (2005) 'China's Global Hunt for Energy', *Foreign Affairs*, 84(5), p. 25. doi: 10.2307/20031703.

Kaplan, R. D. (2011a) Monsoon: The Indian Ocean and the Future of American Power. Random House

Kaplan, R. D. (2012) *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate.* New York: Random House.

Kaplan, R. D. (2014) *Asia's Cauldron: The South China Sea and the End of a Stable Pacific*. New York: Random House Trade Paperbacks.

Kelly, P. (2011) 'Geopolitics—Part 1', in Agnew, J. and Duncan, J. S. (eds) *The Wiley-Blackwell Companion to Human Geography*. Chichester, West Sussex: Wiley-Blackwell. Available at:

https://ebookcentral.proquest.com/lib/reading/reader.action?ppg=1&docID=675202&tm=1519855569 451.

Kelly, P. (2016) *Classical Geopolitics*. Stanford, California: Stanford University Press. Available at: https://books.google.co.uk/books?id=6NsfCwAAQBAJ&dq=978-0-8047-9950-8+isbn&source=gbs_navlinks_s.

Kelly, P. (2017) *Defending Classical Geopolitics*. Oxford University Press. doi: 10.1093/acrefore/9780190228637.013.279.

Kissinger, H. (2011) White House Years: The First Volume of His Classic Memoirs. London: Simon & Schuster Ltd.

Kissinger, H. (2012) On China, Penguin Books. London: Penguin Books. doi: 10.2753/CSH0009-4633170124.

Koo, M. G. (2010) *Island Disputes and Maritime Regime Building in East Asia*. New York, NY: Springer New York (The Political Economy of the Asia Pacific). doi: 10.1007/978-0-387-89670-0.

Lam, Wi. (2006) *Chinese Politics in the Hu Jintao Era: New Leaders, New Challenges*. Routledge. Available at: https://www.routledge.com/Chinese-Politics-in-the-Hu-Jintao-Era-New-Leaders-New-Challenges/Lam/p/book/9780765617743.

Lee, T.-W. and Shen, M. (2003) *Shipping in China - Plymouth Studies in Contemporary Shipping and Logistics*. Edited by R. Gray and M. Roe. Taylor & Francis.

Levathes, L. (1997) *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433*. Kindle. Oxford University Press.

Li, X. (2016) Modern China (Understanding Modern Nations). Kindle. ABC-CLIO.

Li, X. and Molina, M. (2014) *Oil: A Cultural and Geographic Encyclopedia of Black Gold*. ABC-CLIO. Available at: https://books.google.co.uk/books?id=Vy7TBAAAQBAJ&lpg.

Lim, T. W. *et al.* (2016) *China's One Belt One Road Initiative*. Imperial College Press. Available at: https://books.google.co.uk/books?id=NIf4DAAAQBAJ&printsec=frontcover#v=onepage&q&f=false.

MacDonald, J. A., Donahue, A. and Danyluk, B. (2004) *Energy Futures in Asia*. Washington, D.C.: Booz Allen Hamilton. Available at:

https://books.google.no/books/about/Energy_Futures_in_Asia.html?id=5En2PgAACAAJ&hl=en.

Mackinder, S. H. J. (1919) *Democratic Ideals and Reality*. Washington, D.C.: National Defense Univerity Press. Available at: https://archive.org/details/democraticideals00mackiala.

Marks, S. and Manji, F. (2007) *African Perspectives on China in Africa*. Oxford: Pambazuka. Available at: https://books.google.co.uk/books/about/African_Perspectives_on_China_in_Africa.html?id=KYkCer-WiVYC.

Marley, D. (2010) *Modern Piracy: A Reference Handbook (Contemporary World Issues), ABC-CLIO*. ABC-CLIO.

Palmer, D. (2016) 'The South China Sea: The Struggle for Power in Asia. London: Yale University Press.
320 pages. \$29.00 (Hardcover) \$23.00 (Paperback) \$14.29 (Kindle). ISBN 978-0-300-18683-3. Bill Hayton.
2014.', Asian Politics & Policy, 8(2), pp. 355–357. doi: 10.1111/aspp.12259.

Parker, G. (1985) Western Geopolitical Thought in the Twentieth Century. London: Croom Helm.

Petti, C. (2012) *Technological Entrepreneurship in China: How Does it Work?* Cheltenham, UK: Edward Elgar Pub. Available at:

https://books.google.co.uk/books?id=4ou9kh5xrtgC&lpg=PA11&ots=Rnklr55Mco&dq=The Six %22Speed-Up%22 campaigns (1997–2007)&pg=PA11#v=onepage&q=The Six %22Speed-Up%22 campaigns (1997–2007)&f=false.

Phifer, M. (2012) A Handbook of Military Strategy and Tactics. India: VIJ Books.

Raine, S. and Miere, C. Le (2013) *Regional Disorder: The South China Sea Disputes*. Kindle. London: Routledge for the International Institute for Strategic Studies.

Rankin, N. (2017) Defending the Rock: How Gibraltar Defeated Hitler. Faber & Faber.

Roberts, C., Armijo, L. and Katada, S. (2018) *The BRICS and Collective Financial Statecraft*. Kindle. New York: Oxford University Press.

Rodrigue, J.-P. *et al.* (2013) *The Geography of Transport Systems*. 3rd editio. New York: Routledge. doi: 10.1080/10630732.2011.603579.

Rudolph, J. and Szonyi, M. (2018) *The China Questions: Critical Insights into a Rising Power*. Cambridge, MA: Harvard University Press. Available at:

http://www.hup.harvard.edu/catalog.php?isbn=9780674979406.

Ruscheinski, S. J. (2002) *China's Energy Security and the South China Sea*. University of Illinois at Urbana-Champaign.

Santasombat, Y. (2015) *Impact of China's Rise on the Mekong Region*. Edited by Y. Santasombat. New York: Palgrave Macmillan US. doi: 10.1057/9781137476227.

Saran, S. and Deo, A. (2018) *Xi Dreams: A Roadmap for Pax-Sinica*. New Delhi. Available at: https://www.orfonline.org/research/xi-dreams-a-roadmap-for-pax-sinica/.

Saxer, M. and Zhang, J. (2017) *The Art of Neighbouring: Making Relations Across China's Borders*. Amsterdam University Press. doi: 10.5117/9789462982581.

Selth, A. (2008a) *Burma's Coco Islands: rumours and realities in the Indian Ocean*. Hong Kong. doi: 10.1111/j.1467-629X.1980.tb00220.x.

Seversky, A. de (1950) Air Power: Key to Survival. New York: Simon and Schuster.

Shambaugh, D. (2013) Tangled Titans: The United States and China. Rowman & Littlefield Publishers.

Shambaugh, D. (2014) China Goes Global: The Partial Power. Oxford: Oxford University Press.

Shambaugh, D. (2016) China's Future. Cambridge: Polity Press.

Sloan, G. (2017) *Geopolitics, Geography and Strategic History, Geopolitics, Geography and Strategic History*. London: Routledge. doi: 10.4324/9780203489482.

Steinmüller, H. (2014) 'China's growing influence in Latin America', in *South America, Central America and the Caribbean 2015*. 23rd edn. Abingdon, UK: Routledge, pp. 19–22. Available at: http://eprints.lse.ac.uk/59990/.

Stevens, J. (1711) A New Collection of Voyages and Travels. Oxford University Press.

Sverdrup-Thygeson, B., Lindgren, W. Y. and Lanteigne, M. (eds) (2017) *China and Nordic Diplomacy*. Routledge. Available at: https://www.routledge.com/China-and-Nordic-Diplomacy/Sverdrup-Thygeson-Yennie-Lindgren-Lanteigne/p/book/9781138501034.

Tharoor, S. (2016) An Era of Darkness: The British Empire in India. Kindle. New Delhi: Alphen Book.

Thorne, D. and Spevack, B. (2018) 'Harbored Ambitions - How China's Port Investments are Strategically Reshaping the Indo-Pacific', C4ADS.

Vego, M. N. (2003) Naval Strategy and Operations in Narrow Seas. 2nd edn. London: Frank Cass.

Zhai, Q. (2000) *China and the Vietnam Wars, 1950-1975*. Edited by J. L. Gaddis. Chapel Hill and London: The University of North Carolina Press.

Articles

A. Thayer, C. (2011) 'The Tyranny of Geography: Vietnamese Strategies to Constrain China in the South China Sea', *Contemporary Southeast Asia*, 33(3), p. 348. doi: 10.1355/cs33-3d.

Acemoglu, B. D., Johnson, S. and Robinson, J. A. (2001) 'The Colonial Origins of Comparative Development: An Empirical Investigation', 91(5), pp. 1369–1401. Available at: https://www.jstor.org/stable/2677930.

Acemoglu, D., Johnson, S. and Robinson, J. A. (2005) 'Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth', in, pp. 385–472. doi: 10.1016/S1574-0684(05)01006-3.

Acemoglu, D. and Robinson, J. A. (2002) 'Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution', *Quarterly Journal of Economics*, 117(4), pp. 1231–1294. doi: 10.1162/003355302320935025.

Agnew, J. (2010) 'Emerging China and Critical Geopolitics: Between World Politics and Chinese Particularity', *Eurasian Geography and Economics*, 51(5), pp. 569–582. doi: 10.2747/1539-7216.51.5.569.

Agnew, J. (2012) 'Looking Back to Look Forward: Chinese Geopolitical Narratives and China's Past', *Eurasian Geography and Economics*, 53(3), pp. 301–314. doi: 10.2747/1539-7216.53.3.301.

Ankudinov, A., Ibragimov, R. and Lebedev, O. (2017) 'Sanctions and the Russian stock market', *Research in International Business and Finance*, 40, pp. 150–162. doi: 10.1016/j.ribaf.2017.01.005.

Arant, R. (2011) 'Monsoon: The Indian Ocean and the Future of American Power, by Robert D. Kaplan, is reviewed', *Journal of International Affairs*, 64(2), p. 284.

Arase, D. (2015) 'China's Two Silk Roads Initiative What It Means for Southeast Asia', *Southeast Asian Affairs*, pp. 25–45. doi: 10.1108/17506200710779521.

Arewa, O. B. (2016) 'Constructing Africa: Chinese Investment, Infrastructure Deficits, and Development', *Cornell International Law Journal*, 49(1), pp. 101–139. Available at: http://papers.ssrn.com/abstract=2695155.

Ash, R. F. and Kueh, Y. Y. (1993) 'Economic Integration within Greater China: Trade and Investment Flows Between China, Hong Kong and Taiwan', *The China Quarterly*, 136(1), p. 711. doi: 10.1017/S0305741000032318. Ayapbergenovna, T. Z. (2015) 'China's approach in territorial disputes settlement', *Asian Social Science*, 11(16), pp. 278–283. doi: 10.5539/ass.v11n16p278.

Bijian, Z. (2005) 'China's "Peaceful Rise" to Great-Power Status', *Foreign Affairs*, 84(5), p. 18. doi: 10.2307/20031702.

Bird, K. J. *et al.* (2008) 'Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle', *USGS Fact Sheet 2008-3049*, 2008–3049, pp. 1–4. doi: USGS Fact Sheet 2008-3049.

Blanchard, J.-M. F. (2017) 'Probing China's Twenty-First-Century Maritime Silk Road Initiative (MSRI): An Examination of MSRI Narratives', *Geopolitics*, 22(2), pp. 246–268. doi: 10.1080/14650045.2016.1267147.

Blanchard, J.-M. F. and Flint, C. (2017) 'The Geopolitics of China's Maritime Silk Road Initiative', *Geopolitics*, 22(2), pp. 223–245. doi: 10.1080/14650045.2017.1291503.

Brewster, D. (2014a) 'Beyond the "String of Pearls": is there really a Sino-Indian security dilemma in the Indian Ocean?', *Journal of the Indian Ocean Region*, 10(2), pp. 133–149. doi: 10.1080/19480881.2014.922350.

Brewster, D. (2015a) 'An Indian Ocean dilemma: Sino-Indian rivalry and China's strategic vulnerability in the Indian Ocean', *Journal of the Indian Ocean Region*, 11(May), pp. 37–41. doi: 10.1080/19480881.2014.994822.

Brewster, D. (2015b) 'Indian Strategic Thinking About the Indian Ocean: Striving Towards Strategic Leadership', *India Review*, 14(2), pp. 221–237. doi: 10.1080/14736489.2015.1030198.

Brewster, D. (2017) 'Silk Roads and Strings of Pearls: The Strategic Geography of China's New Pathways in the Indian Ocean', *Geopolitics*, 22(2), pp. 269–291. doi: 10.1080/14650045.2016.1223631.

Burgos Cáceres, S. and Ear, S. (2012) 'The Geopolitics of China's Global Resources Quest', *Geopolitics*, 17(1), pp. 47–79. doi: 10.1080/14650045.2011.562943.

Cai, K. G. (1999) 'Outward Foreign Direct Investment: A Novel Dimension of China's Integration into the Regional and Global Economy', *The China Quarterly*, 160, p. 856. doi: 10.1017/S0305741000001363.

Cai, K. G. (2018) 'The One Belt One Road and the Asian Infrastructure Investment Bank: Beijing's New Strategy of Geoeconomics and Geopolitics', *Journal of Contemporary China*, 00(00), pp. 1–17. doi: 10.1080/10670564.2018.1488101.

Cai, Y. (2000) 'Between State and Peasant: Local Cadres and Statistical Reporting in Rural China', *The China Quarterly*, 163(3), pp. 783–805. doi: 10.1017/S0305741000014661.

Causwell, X. (2018) An Alternative Containment Strategy: How to Counter China's Maritime Silk Road Initiative, Georgetown Security Studies Review.

Chan, L.-H. (2017a) 'Soft balancing against the US "pivot to Asia": China's geostrategic rationale for establishing the Asian Infrastructure Investment Bank', *Australian Journal of International Affairs*, 71(6), pp. 568–590. doi: 10.1080/10357718.2017.1357679.

Chan, L.-H. (2017b) The AIIB and China's Soft Balancing Against the US Pivot to Asia, Australian Outlook.

Chang, Y.-C. (2018) 'The "21st Century Maritime Silk Road Initiative" and naval diplomacy in China', *Ocean & Coastal Management*, 153(June 2017), pp. 148–156. doi: 10.1016/j.ocecoaman.2017.12.015.

Chaturvedy, R. R. and Snodgrass, G. M. (2012) *The Geopolitics of Chinese Access Diplomacy*. Washington, D.C. Available at: http://journals.sagepub.com/doi/10.1177/0022146514547328.

Chaziza, M. (2016) 'China's Middle East Policy: The ISIS Factor', *Middle East Policy*, 23(1), pp. 25–33. doi: 10.1111/mepo.12171.

Chaziza, M. (2018) 'China's Mediation Efforts in the Middle East and North Africa: Constructive Conflict Management', *Strategic Analysis*, 42(1), pp. 29–41. doi: 10.1080/09700161.2017.1418956.

Chen, K. C. and Jian, C. (1995) 'China's involvement in the Vietnam War, 1964-69', *The China Quarterly*, 142(142), pp. 356–387. doi: 10.1017/S0305741000034974.

Chen, Z. (2017) 'Impacts of high-speed rail on domestic air transportation in China', *Journal of Transport Geography*, 62(January), pp. 184–196. doi: 10.1016/j.jtrangeo.2017.04.002.

Chow, J. T. and Easley, L.-E. (2016) 'Persuading Pariahs: Myanmar's Strategic Decision to Pursue Reform and Opening', *Pacific Affairs*, 89(3), pp. 521–542. doi: 10.5509/2016893521.

Chun, K. H. (2009) 'Analysing China's Energy Security: A Source for Conflict?', *The Journal of East Asian Affairs*, 23(1), pp. 89–114. Available at: http://www.jstor.org/stable/23257992 (Accessed: 21 August 2014).

Cohen, S. (1982) 'A New Map of Global Geopolitical Equilibrium: A Develop-mental Approach', *Political Geography Quarterly*, 1(3), p. 223.

Collins, B. K. (2014) 'Credit and Credibility', *The American Review of Public Administration*, 44(1), pp. 112–123. doi: 10.1177/0275074012460424.

Comtois, C. (1990) 'Transport and Territorial Development in China 1949-1985', *Modern Asian Studies*, 24(4), pp. 777–818. Available at: http://www.jstor.org/stable/312733.

Connolly, E., Jääskelä, J. and Merwe, M. Van Der (2013) 'The Performance of Resource-Exporting Economies', *Bulletin*, pp. 19–30.

Cropsey, S. and Milikh, A. (2012) 'Mahan's Naval Strategy: China Learned It. Will America Forget It?', *World Affairs*, (April 2012), pp. 85–93. Available at: http://www.worldaffairsjournal.org/article/mahan'snaval-strategy-china-learned-it-will-america-forget-it.

Dahlman, C. T. (2008) 'Great Powers and Geopolitical Change', *The Professional Geographer*, 60(2), pp. 285–286. doi: 10.1080/00330120701787241.

Daojiong, Z. (2006) 'China's energy security: Domestic and international issues', *Survival*, 48(1), pp. 179–190. doi: 10.1080/00396330600594322.

Davis, E. V. W. (2008) 'Uyghur Muslim Ethnic Separatism in Xinjiang, China', *Asian Affairs*, 35(1), pp. 15–29. Available at: http://www.jstor.org/stable/27821503 Accessed:

Degang, S. and Zoubir, Y. (2014) 'China-Arab States Strategic Partnership: Myth or Reality?', *Journal of Middle Eastern and Islamic Studies*, 8(3), pp. 70–101. Available at:

http://mideast.shisu.edu.cn/_upload/article/c6/74/e0f32e604ae798f68665af714073/4f6eded7-0572-400e-aa64-79b698c7723e.pdf.

Demir, İ. (2012) 'Strategic Importance Of Crude Oil And Natural Gas Pipelines', Australian Journal of Basic and Applied Sciences, 6(3), pp. 87–96.

Diana, A. (2015) 'Impact of China's Rise on the Mekong Region ed. by Yos Santasombat (review)', Contemporary Southeast Asia: A Journal of International and Strategic Affairs, 37(3), pp. 499–501. doi: 10.1355/cs37-31.

Ding, S. and Knight, J. (2011) 'Why has China Grown So Fast? The Role of Physical and Human Capital Formation*', *Oxford Bulletin of Economics and Statistics*, 73(2), pp. 141–174. doi: 10.1111/j.1468-0084.2010.00625.x.

Ding, Y. (2015) 'Consolidation of the PRC's Leadership Succession System from Hu Jintao to Xi Jinping', *China Report*, 51(March 2008), pp. 49–65. doi: 10.1177/0009445514557389.

Downs, E. S. (2004) 'The Chinese Energy Security Debate', *The China Quarterly*, 177(4), pp. 21–41. doi: 10.1017/S0305741004000037.

Dreher, A. and Fuchs, A. (2015) 'Rogue aid? An empirical analysis of China's aid allocation', *Canadian Journal of Economics/Revue canadienne d'économique*, 48(3), pp. 988–1023. doi: 10.1111/caje.12166.

Du, J. and Zhang, Y. (2017) 'Does One Belt One Road initiative promote Chinese overseas direct investment?', *China Economic Review*, (April), pp. 0–1. doi: 10.1016/j.chieco.2017.05.010.

Dupont, A. and Baker, C. G. (2014) 'East Asia's Maritime Disputes: Fishing in Troubled Waters', *Washington Quarterly*, 37(1), pp. 79–98. doi: 10.1080/0163660X.2014.893174.

Erickson, A. S. and Collins, G. B. (2010) 'China's oil security pipe dream: the reality, and strategic consequences, of seaborne imports', *Naval War College Review*, 63(2), pp. 89–111. Available at: http://www.nwc.navy.mil/press.

Etzioni, A. (2016) 'The Asian Infrastructure Investment Bank: A Case Study of Multifaceted Containment Investment Bank', *Asian Perspective*, 40(2), pp. 173–196. Available at: https://search-proquestcom.idpproxy.reading.ac.uk/docview/1790614096?accountid=13460.

Fallon, T. (2014) 'China's Pivot to Europe', *American Foreign Policy Interests*, 36(3), pp. 175–182. doi: 10.1080/10803920.2014.925342.

Fallon, T. (2015) 'The New Silk Road: Xi Jinping's Grand Strategy for Eurasia', *American Foreign Policy Interests*, 37(3), pp. 140–147. doi: 10.1080/10803920.2015.1056682.

Fan, L.-S. (2009) 'the Economy and Foreign Trade of China', Development, 38(2), pp. 249–259.

Far Eastern Economic Review (1992) 'South China Sea: Treacherous Shoals', *Far Eastern Economic Review*, 155(32), pp. 14–17. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/208223671?accountid=13460.

Farwa, U. and Siddiqa, A. (2017) 'CPEC : Prospects of OBOR and South-South Cooperation', *Strategic Studies*, 37(3), pp. 75–92.

Fiskesjö, M. (2018) 'Chinese Encounters in Southeast Asia: How People, Money, Ideas from China are Changing a Region'. Edited by Pál Nyíri and Danielle Tan Seattle, WA and London: University of Washington Press, 2017 ISBN 978-0-2959-9930-2', *The China Quarterly*, 234, pp. 577–578. doi: 10.1017/S030574101800070X.

Fravel, M. Taylor. (2015) 'Things Fall Apart: Maritime Disputes and China's Regional Diplomacy', *China's Challenges*, edited by Jacques deLisle and Avery Goldstein, University of Pennsylvania Press, pp. 204-226.

Fravel, M. T. and Fravel, M. T. (2017) 'Power Shifts and Escalation: Explaining China's Use of Force in Territorial Disputes', *International Security*, 32(3), pp. 44–83.

Friedberg, A. L. (2018) 'Globalisation and Chinese Grand Strategy', *Survival*, 60(1), pp. 7–40. doi: 10.1080/00396338.2018.1427362.

Gao, Z. and Jia, B. B. (2013) 'The nine-dash line in the south china sea: history status and implications', *The American Journal of International Law*, 107(1), pp. 98–124. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/1346762263?accountid=13460.

Garlick, J. (2019) 'China's Economic Diplomacy in Central and Eastern Europe: A Case of Offensive Mercantilism?', *Europe-Asia Studies*, 71(8), pp. 1390–1414. doi: 10.1080/09668136.2019.1648764.

Garver, J. W. (2006) 'Development of China's Overland Transportation Links with Central, South-west and South Asia', *The China Quarterly*, 185(1), p. 1. doi: 10.1017/S0305741006000026.

Gils, H. *et al.* (2008) 'Forecasting the pattern and pace of Fagus forest expansion in Majella National Park, Italy', *Applied Vegetation Science*, 11(4), pp. 539–546. doi: 10.3170/2008-7-18568.

Gorman, S. (1982) 'Geopolitics and Peruvian Foreign Policy', *Inter-Ameri-can Economic Affairs*, 36(2), p. 74.

Gyorgy, A. (1943) 'The Geopolitics of War: Total War and Geostrategy', *The Journal of Politics*, 5(4), pp. 347–362. doi: 10.2307/2125293.

Haacke, J. (2010) 'China's role in the pursuit of security by Myanmar's State Peace and Development Council: boon and bane?', *The Pacific Review*, 23(1), pp. 113–137. doi: 10.1080/09512740903501982.

Henrikson, A. K. (2002) 'Distance and Foreign Policy: A Political Geography Approach', *International Political Science Review*, 23(4), pp. 437–466. Available at: https://www.jstor.org/stable/1601543.

303

Hensengerth, O. (2015a) 'Global norms in domestic politics: environmental norm contestation in Cambodia's hydropower sector', *The Pacific Review*, 28(4), pp. 505–528. doi: 10.1080/09512748.2015.1012107.

Hensengerth, O. (2015b) 'Where is the power? Transnational networks, authority and the dispute over the Xayaburi Dam on the Lower Mekong Mainstream', *Water International*, 40(5–6), pp. 911–928. doi: 10.1080/02508060.2015.1088334.

Hey, J. D., Neugebauer, T. and Sadrieh, A. (2009) 'An Experimental Analysis of Optimal Renewable Resource Management: The Fishery', *Environmental and Resource Economics*, 44(2), pp. 263–285. doi: 10.1007/s10640-009-9285-5.

Hillman, J. E. (2018) 'The Rise of China-Europe Railways', *Center for Strategic and International Studies*. doi: 10.1016/j.tre.2017.07.003.

Hochberg, L. and Sloan, G. (2017) 'Mackinder's Geopolitical Perspective Revisited', *Orbis*, 61(4), pp. 575–592. doi: 10.1016/j.orbis.2017.08.007.

Hyer, E. (1995) 'The South China Sea Disputes: Implications of China's Earlier Territorial Settlements', *Pacific Affairs*, 68(1), p. 34. doi: 10.2307/2759767.

Inanloo, B. *et al.* (2016) 'A decision aid GIS-based risk assessment and vulnerability analysis approach for transportation and pipeline networks', *Safety Science*, 84, pp. 57–66. doi: 10.1016/j.ssci.2015.11.018.

Jasper, L. and Stremlin, B. (2016) 'Review: Great Powers and Geopolitical Change', *Journal of World-Systems Research*, 14(1), pp. 87–90. doi: 10.1080/00330120701787241.

Jia, W. (2015) 'David Shambaugh, China Goes Global: The Partial Power', *Journal of Chinese Political Science*, 20(1), pp. 101–102. doi: 10.1007/s11366-015-9337-3.

Jiang, W. (2009) 'Fuelling the Dragon: China's Rise and Its Energy and Resources Extraction in Africa', *The China Quarterly*, 199(3), p. 585. doi: 10.1017/S0305741009990117.

Jui-te, C. (1993) 'Technology Transfer in Modern China: The Case of Railway Enterprise (1876-1937)', *Modern Asian Studies*, 27(2), pp. 281–296. Available at: http://www.jstor.org/stable/312770.

Kalyanaraman, S. (2013) 'Fear, Interest and Honour: The Thucydidean Trinity and India's Asia Policy', *Strategic Analysis*, 37(4), pp. 381–387. doi: 10.1080/09700161.2013.802510.

Kaplan, R. D. (2011b) *The South China Sea is the Future of Conflict, Foreign Policy*. Retrieved from: https://foreignpolicy.com/2011/08/15/the-south-china-sea-is-the-future-of-conflict/

Kastner, S. L., Pearson, M. M. and Rector, C. (2016) 'Invest, Hold Up, or Accept? China in Multilateral Governance', *Security Studies*, 25(1), pp. 142–179. doi: 10.1080/09636412.2016.1134193.

Katada, S. N., Roberts, C. and Armijo, L. E. (2017) 'The Varieties of Collective Financial Statecraft: The BRICS and China', *Political Science Quarterly*, 132(3), pp. 403–433. doi: 10.1002/polq.12656.

Kaufman, A. A. (2010) 'The "Century of Humiliation," Then and Now: Chinese Perceptions of the International Order', *Pacific Focus*, 25(1), pp. 1–33. doi: 10.1111/j.1976-5118.2010.01039.x.

Keeling, D. J. (2007) 'Transportation geography: new directions on well-worn trails', *Progress in Human Geography*, 31(2), pp. 217–225. doi: 10.1177/0309132507075370.

Kelly, P. (1986) 'Escalation of Regional Conflict: Testing the Shatterbelt Concept', *Political Geography Quarterly*, 5, pp. 161–180.

Khurana, G. S. (2008) 'China's "String of Pearls" in the Indian Ocean and Its Security Implications', *Strategic Analysis*, 32(1), pp. 1–39. doi: 10.1080/09700160801886314.

Kitano, N. and Harada, Y. (2016) 'Estimating China's Foreign Aid 2001-2013', *Journal of International Development*, 28(7), pp. 1050–1074. doi: 10.1002/jid.3081.

Kolcz-Ryan, M. (2009) 'Arctic Race: How the United States' Failure to Ratify the Law of the Sea Convention Could Adversely Affect Its Interests in the Arctic', *University of Dayton Law Review*, 35(1). Available at: http://0-

heinonline.org.pugwash.lib.warwick.ac.uk/HOL/Page?handle=hein.journals/udlr35&id=151&div=&collec tion=journals.

Krupakar, J. (2017) 'China's Naval Base(s) in the Indian Ocean—Signs of a Maritime Grand Strategy?', *Strategic Analysis*, 41(3), pp. 207–222. doi: 10.1080/09700161.2017.1296622.

Kumari, P. (2014) 'Asia's Cauldron: The South China Sea and the End to a Stable Pacific', *Maritime Affairs: Journal of the National Maritime Foundation of India*, 10(1), pp. 143–147. doi: 10.1080/09733159.2014.934098.

Kustenbauder, M. (2012) 'Book reviewMonsoon: The Indian Ocean and the Future of American Power by Robert Kaplan. New York: Random House, 2010, 366 pp, *Journal of Asian and African Studies*, 47(2), pp. 250–252. doi: 10.1177/0021909611427677.

Kwon, K. L. and Hanlon, R. J. (2016) 'A Comparative Review for Understanding Elite Interest and Climate Change Policy in China', *Environment, Development and Sustainability*, 18(4), pp. 1177–1193. doi: 10.1007/s10668-015-9696-0.

Krupakar, J. (2017) 'China's naval base(s) in the Indian Ocean—Signs of a maritime grand strategy?', *Strategic Analysis*, 41(3), pp. 207–222. doi: 10.1080/09700161.2017.1296622.

Lai, H. H. (2007) 'China's oil diplomacy: is it a global security threat?', *Third World Quarterly*, 28(3), pp. 519–537. doi: 10.1080/01436590701192645.

Li, A. (2016) 'Technology transfer in China–Africa relation: myth or reality', *Transnational Corporations Review*, 8(3), pp. 183–195. doi: 10.1080/19186444.2016.1233718.

Li, D. (2014) 'Railway development and military conflicts in prewar China', *Eurasian Geography and Economics*, 54(5–6), pp. 500–516. doi: 10.1080/15387216.2014.908314.

Liberman, P. (1996) 'Trading with the Enemy: Security and Relative Economic Gains', *International Security*, 21(1), p. 147. doi: 10.2307/2539111.

Lin, J. Y. and Yang, D. T. (1998) 'On the Causes of China's Agricultural Crisis and the Great Leap Famine', *China Economic Review*, 9(2), pp. 125–140. doi: 10.1016/S1043-951X(99)80010-8.

Lippit, V. D. (1966) 'Development of Transportation in Communist China', *The China Quarterly*, 27(27), p. 101. doi: 10.1017/S0305741000021718.

Liu, D., Yamaguchi, K. and Yoshikawa, H. (2017) 'Understanding the motivations behind the Myanmar-China energy pipeline: Multiple streams and energy politics in China', *Energy Policy*, 107(May), pp. 403– 412. doi: 10.1016/j.enpol.2017.05.005.

Luong, J. D. T. H. (2017) 'Southeast Asia. Impact of China's rise on the Mekong region By Yos Santasombat New York: Palgrave Macmillan, 2015. Pp. 262. Figures, Tables, Notes, Index.', *Journal of Southeast Asian Studies*, 48(02), pp. 315–317. doi: 10.1017/S0022463417000376.

Ma, L. J. C. (2009) 'China's Authoritarian Capitalism: Growth, Elitism and Legitimacy', *International Development Planning Review*, 31(1), pp. i–xii. doi: 10.3828/idpr.31.1.1.

Mackinder, H. J. (1890) 'The physical basis of political geography', *Scottish Geographical Magazine*, 6(2), pp. 78–84. doi: 10.1080/14702549008554692.

Mackinder, S. H. J. (1904) 'The Geographical Pivot of History', *The Geographical Journal*, 23(4), pp. 421–437. Available at: http://www.jstor.org/stable/1775498.

Malindog, A. R. D. (2012) 'A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia - By Aaron L. Friedberg', *Asian Politics & Policy*, 4(3), pp. 449–451. doi: 10.1111/j.1943-0787.2012.01352.x.

Marantidou, V. (2014) 'Revisiting China's "String of Pearls" Strategy: Places "with Chinese Characteristics" and their Security Implications', *Issues & Insights*, 14(7).

Mastro, O. S. (2019) 'The Stealth Superpower How China Hid Its Global Ambitions', *Foreign Affairs*, 98, pp. 1–7.

Mathur, A. (2015) 'The South China Sea: The Struggle for Power in Asia', *Maritime Affairs: Journal of the National Maritime Foundation of India*, 11(1), pp. 133–136. doi: 10.1080/09733159.2015.1029721.

Maxwell, N. (2017) 'Settlements and Disputes China's Approach to Territorial Issues', *Economic and Political Weekly*, 41(36), pp. 3873–3881.

Mearsheimer, John J. (2006) 'Structural Realism', in *International Relations Theories: Discipline and Diversity*, pp. 71–88. doi: 10.1177/0047117809104638.

Melorose, J., Perroy, R. and Careas, S. (2015) 'World population prospects', *United Nations*, 1(6042), pp. 587–92. doi: 10.1017/CBO9781107415324.004.

Menzies, G., Vany, A. De and Menzies, G. (2003) *1421: The Year China Discovered the World*. Kindle. Bantam. doi: 10.1016/B978-0-12-804405-6/00015-4.

Michalopoulos, S. and Papaioannou, E. (2016) 'The Long-Run Effects of the Scramble for Africa', *American Economic Review*, 106(7), pp. 1802–1848. doi: 10.1257/aer.20131311.

Morrissey, O. (2004) 'Conditionality and Aid Effectiveness Re-evaluated', *The World Economy*, 27(2), pp. 153–171. doi: 10.1111/j.1467-9701.2004.00594.x.

Musharraf (2012) 'Comments by President Musharraf during the ground breaking ceremony of Gwadar Deep Sea Port, 22 March 2002', *Journal of Political Studies*, 19(2), p. 58.

Notteboom, T. and Yang, Z. (2017) 'Port governance in China since 2004: Institutional layering and the growing impact of broader policies', *Research in Transportation Business & Management*, 22, pp. 184–200. doi: 10.1016/j.rtbm.2016.09.002.

Okolo, A. L. (2015) 'China's Foreign Policy Shift in Africa: From Non-Interference to Preponderance', International Journal of African Renaissance Studies - Multi-, Inter- and Transdisciplinarity, 10(2), pp. 32– 47. doi: 10.1080/18186874.2015.1107976.

Okuda, H. (2016) 'Chinas "peaceful rise/peaceful development": A case study of media frames of the rise of China', *Global Media and China*, 1(1–2), pp. 121–138. doi: 10.1177/2059436416646275.

Pannell, C. W. (2008) 'China's Economic and Political Penetration in Africa', *Eurasian Geography and Economics*, 49(6), pp. 706–730. doi: 10.2747/1539-7216.49.6.706.

Pehrson, C. J. (2006) *String of Pearls: Meeting the Challenge of China's Rising Power Across the Asian Littoral*. doi: 10.21236/ADA451318.

Pilling, D. (2014) "Asia's Cauldron", by Robert Kaplan', pp. 3–5. Available at: https://search-proquestcom.idpproxy.reading.ac.uk/docview/1520650529?accountid=13460.

Pruyn, J. F. J. (2016) 'Will the Northern Sea Route ever be a viable alternative?', *Maritime Policy & Management*, 43(6), pp. 661–675. doi: 10.1080/03088839.2015.1131864.

Qingbai, W. *et al.* (2002) 'A review of recent frozen soil engineering in permafrost regions along Qinghai-Tibet Highway, China', *Permafrost and Periglacial Processes*, 13(3), pp. 199–205. doi: 10.1002/ppp.420.

Rahman, C. and Tsamenyi, M. (2010) 'A Strategic Perspective on Security and Naval Issues in the South China Sea', *Ocean Development & International Law*, 41(4), pp. 315–333. doi: 10.1080/00908320.2010.499277.

Rahman, N. S. F. A., Saharuddin, A. H. and Rasdi, R. (2014) 'Effect of the Northern Sea Route Opening to the Shipping Activities at Malacca Straits', *International Journal of e-Navigation and Maritime Economy*, 1, pp. 85–98. doi: 10.1016/j.enavi.2014.12.008.

Ramírez-Camacho, J. G. *et al.* (2017) 'Assessing the consequences of pipeline accidents to support landuse planning', *Safety Science*, 97, pp. 34–42. doi: 10.1016/j.ssci.2016.01.021.

Rana, K. S. (2016) 'Book Review: China's Future by David Shambaugh (Cambridge, UK: Polity Press, 2015)', *China Report*, 52(3), pp. 253–256. doi: 10.1177/0009445516646252.

Ranjan, R. (2018) 'Book Review: China's Future China's Future by David Shambaugh. Cambridge: Polity Press, 2016. ISBN 9781509507146', *Political Studies Review*, 16(1), pp. NP94–NP94. doi: 10.1177/1478929917724357.

Ratner, E. (2013) 'Rebalancing to Asia with an Insecure China', *Washington Quarterly*, 36(2), pp. 21–38. doi: 10.1080/0163660X.2013.791080.

Regilme, S. S. F. *et al.* (2021) 'Comparing US and Chinese Foreign Aid in the Era of Rising Powers', *The International Spectator*, 56(2), pp. 114–131. doi: 10.1080/03932729.2020.1855904.

Reilly, J. (2013) 'China and Japan in Myanmar: Aid, Natural Resources and Influence', *Asian Studies Review*, 37(2), pp. 141–157. doi: 10.1080/10357823.2013.767310.

Richardson, M. (2012) 'Nine dragons stir up South China Sea', *Financial Times*, (June), pp. 1–3. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/1021999400?accountid=13460%0A.

Robbins, G. (1993) 'The Post-Soviet Heartland: Reconsidering Mackinder', Global Affairs, 8, pp. 95–108.

Schuller, M. and Turner, A. (2005) 'Global companies: Chinese companies spread their wings', *China Aktuell*, 4(May), pp. 1–14.

Scott, D. (2006) 'India's "Grand Strategy" for the Indian Ocean: Mahanian Visions', *Asia-Pacific Review*, 13(2), pp. 97–129. doi: 10.1080/13439000601029048.

Selth, A. (2007) 'Burma, China and the Myth of Military Bases', *Asian Security*, 3(3), pp. 279–307. doi: 10.1080/14799850701568929.

Selth, A. (2008b) 'Burma's Mythical Isles', *Australian Quarterly*, 80(6), pp. 24–28. Available at: http://www.jstor.org/stable/20638594.

Shaofeng, C. (2011) 'Has China's Foreign Energy Quest Enhanced Its Energy Security?', *The China Quarterly*, 207(386), pp. 600–625. doi: 10.1017/S0305741011000671.

Shippubg, Z. (2002) 'Crossing the Political Minefields of Succession: From Jiang Zemin to Hu Jintao', in *China's Post-Jiang Leadership Succession*. CO-PUBLISHED WITH SINGAPORE UNIVERSITY PRESS, pp. 59–85. doi: 10.1142/9789812706508_0003.

Sidhu, J. S. and Rogers, R. A. (2015) 'China's Strategic Ambitions in the Indian Ocean Region, India's Anxiety and the United States' Concerns', *Malaysian Journal of International Relations*, 3(December), pp. 75–104.

Silk, M. and Malish, R. (2006) 'Are Chinese Companies Taking Over the World?', *Chicago Journal of International Law*, 7, pp. 105–131.

Smith Stegen, K. (2015) 'Understanding China's global energy strategy', *International Journal of Emerging Markets*, 10(2), pp. 194–208. doi: 10.1108/IJOEM-04-2014-0059.

Song, D.-W. (2002) 'Regional container port competition and co-operation: the case of Hong Kong and South China', *Journal of Transport Geography*, 10(2), pp. 99–110. doi: https://doi.org/10.1016/S0966-6923(02)00003-0.

Song, Y. and Tønnesson, S. (2013) 'The Impact of the Law of the Sea Convention on Conflict and Conflict Management in the South China Sea', *Ocean Development & International Law*, 44(3), pp. 235–269. doi: 10.1080/00908320.2013.808935.

Spykman, N. J. (1938) 'Geography and Foreign Policy I', American Political Science Review, 32, pp. 28–50.

Staden, C. van (2018) 'Can China Realize Africa's Dream of an East-West Transport Link?', *China Brief*, 18(6), pp. 9–12.

Stanslas, P. T. (2010) 'Asia Pacific Bulletin', Asia Pacific Bulletin, (88), pp. 2009–2010.

Stokes, D. (2018) 'Trump, American hegemony and the future of the liberal international order', *International Affairs*, 94(1), pp. 133–150. doi: 10.1093/ia/iix238.

Sturgeon, J. C. (2018) 'The Art of Neighbouring: Making Relations across China's Borders [review]', *The China Quarterly*, 234, pp. 573–575. doi: 10.1017/S0305741018000681.

Sun, D. and Zoubir, Y. (2018) 'China's participation in conflict resolution in the Middle East and North Africa: A case of quasi-mediation diplomacy?', *Journal of Contemporary China*, 27(110), pp. 224–243. doi: 10.1080/10670564.2018.1389019.

Taylor, B. (2014) 'The South China Sea is Not a Flashpoint', *The Washington Quarterly*, 37(1), pp. 99–111. doi: 10.1080/0163660X.2014.893176.
Taylor, I. (2014) 'China's New Diplomacy: Rationale, Strategies and Significance', *The Round Table*, 103(1), pp. 133–133. doi: 10.1080/00358533.2013.876837.

Teggart, F. J. and Mackinder, H. J. (1919) 'Geography as an Aid to Statecraft: An Appreciation of Mackinder's "Democratic Ideals and Reality", *Geographical Review*, 8(4/5), p. 227. doi: 10.2307/207838.

Tuathail, G. Ó. (2000) 'The Postmodern Geopolitical Condition: States, Statecraft, and Security at the Millennium', *Annals of the Association of American Geographers*, 90(1), pp. 166–178. Available at: https://www.jstor.org/stable/1515387.

Turner, B. S. (2010) 'Martin Jacques When China Rules the World. The End of the Western World and the Birth of a New Global Order', *Society*, 47(6), pp. 565–567. doi: 10.1007/s12115-010-9379-2.

Urban, F., Siciliano, G. and Nordensvard, J. (2017) 'China's dam-builders: their role in transboundary river management in South-East Asia', *International Journal of Water Resources Development*, 0627, pp. 1–24. doi: 10.1080/07900627.2017.1329138.

Voutsa, M. E. and Borovas, G. (2015) 'The Role of the Bretton Woods Institutions in Global Economic Governance', *Procedia Economics and Finance*, 19(15), pp. 37–50. doi: 10.1016/S2212-5671(15)00006-4.

Wenjuan, N. (2018) 'China's domestic strategic debate and confusion over the South China Sea issue', *The Pacific Review*, 31(2), pp. 188–204. doi: 10.1080/09512748.2017.1370608.

Wenmao, C. (1988) 'The development of civil aviation in new China', *Transport Reviews*, 8(2), pp. 89–99. doi: 10.1080/01441648808716678.

Whibley, J. (2013) 'A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia. By Aaron L. Friedberg. New York: W. W. Norton, 2011. 360 pp. \$27.95 (cloth).', *Journal of East Asian Studies*, 13(01), pp. 168–170. doi: 10.1017/S1598240800008572.

Wohlstetter, A. (1968) 'Illusions of Distance', Foreign affairs, 46(2), pp. 242–255.

Wu, K. (2014) 'China's energy security: Oil and gas', *Energy Policy*, 73, pp. 4–11. doi: 10.1016/j.enpol.2014.05.040.

Xiang, L. (2004) 'China's Eurasian Experiment', *Survival*, 46(2), pp. 109–121. doi: 10.1093/survival/46.2.109.

Xue, X., Schmid, F. and Smith, R. A. (2002) 'An introduction to China's rail transport part 1: History, present and future of China's railways', *Journal of Rail and Rapid Transit*, 216(3), pp. 153–163. Available at: https://search-proquest-com.idpproxy.reading.ac.uk/docview/213111394?accountid=13460.

Yahuda, M. (2013) 'China's New Assertiveness in the South China Sea', *Journal of Contemporary China*, 22(81), pp. 446–459. doi: 10.1080/10670564.2012.748964.

Yang, K. (2006) 'Mao Zedong and the Indochina Wars', in Roberts, P. (ed.) *In Behind the Bamboo Curtain: China, Vietnam, and the World beyond Asia*. Washington, D.C: Woodrow Wilson Center Press, pp. 55– 96.

Zhang, Q., Yang, H. and Wang, Q. (2017) 'Impact of high-speed rail on China's Big Three airlines', *Transportation Research Part A: Policy and Practice*, 98, pp. 77–85. doi: 10.1016/j.tra.2017.02.005.

Zhang, X. (1999) 'China's Interests in the Middle East: Present and Future', *Middle East Policy*, 6(3), pp. 150–159. doi: 10.1111/j.1475-4967.1999.tb00332.x.

Zhang, Y. (2011) 'The Successor's Dilemma in China's Single Party Political System', *European Journal of Political Economy*, 27(4), pp. 674–680. doi: 10.1016/j.ejpoleco.2011.05.004.

Zweig, D. and Jianhai, B. (2005) 'China's Global Hunt for Energy', *Foreign Affairs*, 84(5), p. 25. doi: 10.2307/20031703.

Online

AAPA (2017) *Port Industry Statistics, American Association of Port Authorities*. Available at: http://www.aapa-ports.org/unifying/content.aspx?ItemNumber=21048 (Accessed: 26 November 2017).

Abrar, M. (2015) *Between the devil and deep Gwadar waters, Pakistan Today*. Available at: https://www.pakistantoday.com.pk/2015/12/05/between-the-devil-and-deep-gwadar-waters/ (Accessed: 25 January 2019).

Aglionby, J. and Kerr, S. (2017) *Djibouti finalising deal for Saudi Arabian military base* / *Financial Times*, *Financial Times*. Available at: https://www.ft.com/content/c8f63492-dc14-11e6-9d7c-be108f1c1dce (Accessed: 25 October 2018).

Albert, E. (2016) *Competition in the Indian Ocean, Council on Foreign Relations*. Available at: https://www.cfr.org/backgrounder/competition-indian-ocean (Accessed: 25 October 2018).

Albert, E. and Xu, B. (2018) *The Chinese Communist Party, Council on Foreign Relations*. Available at: https://www.cfr.org/backgrounder/chinese-communist-party (Accessed: 29 November 2018).

Allison, S. (2018) *Djibouti's greatest threat may come from within, Mail & Guardian*. Available at: https://mg.co.za/article/2018-03-02-00-djiboutis-greatest-threat-may-come-from-within (Accessed: 25 October 2018).

Almond, R. G. (2017) *U.S. Ratification of the Law of the Sea Convention, The Diplomat*. Available at: https://thediplomat.com/2017/05/u-s-ratification-of-the-law-of-the-sea-convention/ (Accessed: 30 November 2017).

Amaro, S. (2019) *China wants to turn Greece's Piraeus port into Europe's biggest, CNBC*. Available at: https://www.cnbc.com/2019/11/15/china-wants-to-turn-greece-piraeus-port-into-europe-biggest.html (Accessed: 27 July 2021).

AMTI (2017) *Chinese Occupied Features, Asia Maritime Transparency Initiative*. Available at: https://amti.csis.org/island-tracker/chinese-occupied-features/ (Accessed: 31 March 2017).

Anderlini, J. (2017) *Xi Jinping's anti-corruption drive mimics a Ming obsession, Financial Times*. Available at: https://www.ft.com/content/39860d76-d9b3-11e7-a039-c64b1c09b482 (Accessed: 9 October 2018).

Aneez, S. (2017) 'Exclusive: Sri Lanka's cabinet "clears port deal" with China firm after concerns addressed', *Reuters*, pp. 2–5. Available at: https://www.reuters.com/article/us-sri-lanka-china-port/exclusive-sri-lankas-cabinet-clears-port-deal-with-china-firm-after-concerns-addressed-idUSKBN1AA0PI (Accessed: 18 February 2018).

Aneez, S. and Sirilal, R. (2014) *Chinese submarine docks in Sri Lanka despite Indian concerns, Reuters*. Available at: https://www.reuters.com/article/us-sri-lanka-china-submarine/chinese-submarine-docksin-sri-lanka-despite-indian-concerns-idUSKBN0IM0LY20141102 (Accessed: 18 February 2018).

Aneja, A. (2015) *Xi comes calling to Pakistan, bearing gifts worth \$45 billion, The Hindu*. Available at: https://www.thehindu.com/news/international/xi-jinping-visit-to-pakistan-preview/article7114980.ece (Accessed: 28 October 2018).

APP (2014a) Good news on track: Lahore to get Pakistan's first metro train, The Tribute Express. Available at: https://tribune.com.pk/story/711864/good-news-on-track-lahore-to-get-pakistans-firstmetro-train/ (Accessed: 11 September 2017). APP (2014b) *Pakistan, China sign pact on Lahore Orange Line metro project, Dawn*. Available at: https://www.dawn.com/news/1107936 (Accessed: 9 November 2017).

Arnold, M. (2018) Western banks race to win China's Belt and Road Initiative deals, Financial Times. Available at: https://www.ft.com/content/d9fbf8a6-197d-11e8-aaca-4574d7dabfb6 (Accessed: 17 January 2019).

Arteh, A. (2017) *Djibouti breaks ground on massive Chinese-backed free trade zone, Reuters*. Available at: https://www.reuters.com/article/china-djibouti/djibouti-breaks-ground-on-massive-chinese-backed-free-trade-zone-idUSL4N1F649H (Accessed: 20 May 2018).

Asia, C. (2015) *30 Heads of State Will Watch China's Military Parade Next Week Who is Going to China's Military Parade?, The Diplomat*. Available at: http://thediplomat.com/2015/08/30-heads-of-state-will-watch-chinas-military-parade-next-week/ (Accessed: 13 April 2017).

Basu, T. (2018) *Japan's Belt and Road Puzzle, Decoded, The Diplomat*. Available at: https://thediplomat.com/2018/02/japans-belt-and-road-puzzle-decoded/ (Accessed: 10 July 2018).

BBC (2006) *First Beijing train reaches Lhasa, BBC*. Available at: http://news.bbc.co.uk/1/hi/world/asia-pacific/5140514.stm (Accessed: 11 October 2017).

BBC (2010) *Brazil Finds Massive Oil Field, BBC*. Available at: http://www.bbc.co.uk/news/world-latin-america-11659582 (Accessed: 12 October 2017).

BBC (2017) *Xi Jinping 'most powerful Chinese leader since Mao Zedong', BBC*. Available at: http://www.bbc.co.uk/news/world-asia-china-41730948 (Accessed: 14 November 2017).

Beech, H. (2016) *South China Sea: Where Did China Get Its Nine-Dash Line?, Time*. Available at: http://time.com/4412191/nine-dash-line-9-south-china-sea/ (Accessed: 23 October 2018).

Bender, J. (2015) *These 8 narrow chokepoints are critical to the world's oil trade, Business Insider India*. Available at: http://www.businessinsider.in/These-8-narrow-chokepoints-are-critical-to-the-worlds-oil-trade/articleshow/46775193.cms (Accessed: 25 April 2017).

Bent, M., Kadeřávek, P. and Pernička, J. (2007) *Carriages for the Railway over the Roof of the World*, *Hubner*. Available at: http://www.hubner-

group.com/en/Carriages+for+the+Railway+over+the+roof+of+the+world.html# (Accessed: 11 October 2017).

Bernstein, R. (2017) *China's Mekong Plans Threaten Disaster for Countries Downstream – Foreign Policy, Foreign Policy*. Available at: https://foreignpolicy.com/2017/09/27/chinas-mekong-plans-threaten-disaster-for-countries-downstream/ (Accessed: 16 July 2018).

Bharat Karnad. (2017) *China narrows the South China Sea – Asia Dialogue, Asia Dialogue*. Available at: http://theasiadialogue.com/2017/10/06/china-narrows-the-south-china-sea/ (Accessed: 27 October 2018).

Bin, G. (2018) *The Belt and Road Initiative is not China's Marshall Plan, Financial Times*. Available at: https://www.ft.com/content/29dedffe-9a1c-11e8-88de-49c908b1f264 (Accessed: 2 October 2018).

Björkell, S. (2017) *The development of China's aviation industry, gbtimes*. Available at: https://gbtimes.com/development-chinas-aviation-industry (Accessed: 16 October 2018).

Bland, B. (2016) *Hong Kong: One country, two economies, Financial Times*. Available at: https://www.ft.com/content/eb0e795a-3d17-11e6-9f2c-36b487ebd80a (Accessed: 5 February 2018).

Blas, J. (2018) *Saudis Suspend Oil Shipments Via Bab el-Mandeb After Attack, Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2018-07-25/saudis-halt-oil-shipments-via-bab-el-mandeb-strait-after-attack (Accessed: 22 November 2018).

Bloomberg (2020) *China Halts Some U.S. Farm Imports, Threatening Trade Deal, Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2020-06-01/china-halts-some-u-s-farm-imports-threatening-trade-deal (Accessed: 15 September 2021).

Bloomberg (2021) *China's Campaign to Control Commodities Goes into Overdrive, Business Standard*. Available at: https://www.business-standard.com/article/international/china-s-campaign-to-controlcommodities-goes-into-overdrive-121061601356_1.html (Accessed: 15 September 2021).

Brennan, H. (2017) *Global Risks Forecast, Verisk Maplecroft*. Verisk Maplecroft. Available at: https://www.maplecroft.com/portfolio/new-analysis/2017/06/29/chinas-belt-road-one-initiative-many-questions/ (Accessed: 31 October 2018).

Brewster, D. (2018a) *China's new network of Indian Ocean bases, Lowy Institute*. Available at: https://www.lowyinstitute.org/the-interpreter/chinas-new-network-indian-ocean-bases (Accessed: 9 February 2018). Brînză, A. (2016) *How a Greek Port Became a Chinese 'Dragon Head', The Diplomat*. Available at: https://thediplomat.com/2016/04/how-a-greek-port-became-a-chinese-dragon-head/ (Accessed: 26 October 2017).

Brown, K. (2017) *China's World: What Does China Want*. London: I.B.Tauris. Available at: https://www.ibtauris.com/books/humanities/history/regional national history/asian history/chinas world the global aspiration of the next superpower (Accessed: 17 October 2018).

Buckley, Nicholas, Simon, Brown, M. (2018) 'China 2017 Review, World's Second-Biggest Economy Continues to Drive Global Trends in Energy Investment', (January). Available at: http://ieefa.org/wpcontent/uploads/2018/01/China-Review-2017.pdf (Accessed: 17 May 2018).

Business Standard (2021) *China's debt-trap diplomacy: Pak to seek debt relief for power projects, Business Standard News*. Available at: https://www.business-standard.com/article/international/chinas-debt-trap-diplomacy-pak-to-seek-debt-relief-for-power-projects-121022500125_1.html (Accessed: 20 July 2021).

Campbell, C. (2017a) *Ports, Pipelines, and Geopolitics: China's New Silk Road Is a Challenge for Washington, Time*. Available at: http://time.com/4992103/china-silk-road-belt-xi-jinping-khorgos-kazakhstan-infrastructure/ (Accessed: 17 May 2018).

Campbell, C. (2017b) *Xi Jinping Becomes China's Most Powerful Leader Since Mao Zedong, Time*. Available at: http://time.com/4994618/xi-jinping-china-19th-congress-ccp-mao-zedong-constitution/ (Accessed: 14 November 2017).

Campbell, J. (2018) *China Pledges \$60 Billion in Financing to an Increasingly Debt-Distressed Africa, Council on Foreign Relations*. Available at: https://www.cfr.org/blog/china-pledges-60-billion-financingincreasingly-debt-distressed-africa (Accessed: 7 November 2018).

CCTV (2016) 6 lines profitable, high-speed rail sector remains in red, CCTV News. Available at: http://english.cctv.com/2016/12/28/VIDEkvbpP5rAdrxVHXctuelh161228.shtml (Accessed: 22 September 2021).

Chan, M. (2018) First Djibouti ... now Pakistan port earmarked for a Chinese overseas naval base, sources say, South China Morning Post. Available at: http://www.scmp.com/news/china/diplomacy-defence/article/2127040/first-djibouti-now-pakistan-port-earmarked-chinese (Accessed: 15 February 2018).

Chance, A. (2016) *The 'Belt and Road Initiative' Is Not 'China's Marshall Plan'. Why Not?t, The Diploma*. Available at: https://thediplomat.com/2016/01/the-belt-and-road-initiative-is-not-chinas-marshall-plan-why-not/ (Accessed: 24 October 2018).

Channel NewsAsia (2018) *Proposed Kra Canal not current government project: Thailand, Channel NewsAsia*. Available at: https://www.channelnewsasia.com/news/asiapacific/proposed-kra-canal-not-current-government-project-thailand-9950434 (Accessed: 19 February 2018).

Chellaney, B. (2017) *China's Debt-Trap Diplomacy by Brahma Chellaney - Project Syndicate, Project Syndicate, Project Syndicate*. Available at: https://www.project-syndicate.org/commentary/china-one-belt-one-road-loans-debt-by-brahma-chellaney-2017-01?barrier=accesspaylog (Accessed: 27 November 2018).

Chen Han (2017) *China looks to expand its free trade ports, IHS Fairplay*. Available at: https://fairplay.ihs.com/commerce/article/4294561/china-looks-to-expand-its-free-trade-ports (Accessed: 7 February 2018).

Chen, I. and Gao, X. (2018) 'The Geopolitical Implications of the BRI on the EU's Connectivity Strategy | IPSA', in. Available at: https://www.ipsa.org/events/congress/wc2018/paper/geopolitical-implicationsbri-eus-connectivity-strategy (Accessed: 12 July 2018).

Chen, S. (2017) You'll soon save an hour on China's Beijing-Shanghai bullet train ... but there's a catch, South China Morning Post. Available at:

http://www.scmp.com/news/china/society/article/2104396/faster-bullet-trains-beijing-shanghai-line-itcould-mean-fewer (Accessed: 24 January 2018).

Chen, X. and Stone, C. (2013) 'China and Southeast Asia: Unbalanced Development in the Greater Mekong Subregion', *The European Financial Review*, 8–9, pp. 7–11. Available at: https://digitalrepository.trincoll.edu/cgi/viewcontent.cgi?article=1084&context=facpub (Accessed: 25 September 2018).

Chen, Y. (2018) *China and India establish "oil buyers' club" to counter OPEC, Global Risk Insights*. Available at: https://globalriskinsights.com/2018/06/china-india-oil-buyers-club-opec/ (Accessed: 25 September 2018).

Cheng, G.-D. and Li, X. (2003) 'Constructing the Qinghai-Tibet Railroad: new challenges to Chinese permafrost scientists', *Permafrost: Proceedings of the 8th International Conference on Permafrost*, 24(1),

pp. 131–134. Available at: http://www.arlis.org/docs/vol1/ICOP/55700698/Pdf/Chapter_024.pdf (Accessed: 25 January 2018).

Chenyang, L. (2012) 'China–Myanmar Comprehensive Strategic: A Regional Threat?', *Journal of Current Southeast Asian Affairs*, 31(1), pp. 53–72. Available at: http://journals.giga-hamburg.de/index.php/jsaa/article/view/1013/657 (Accessed: 25 January 2018).

Chi, M. (2017) *China's first home-built icebreaker named Snow Dragon 2, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-09/27/content_32544019.htm (Accessed: 30 November 2017).

China.org.cn (2004) *China Facts & Figures 2004: Economy - Transportation, Post and Telecommunications, China.org.cn.* Available at: http://www.china.org.cn/english/en-shuzi2004/jj/jtys.htm (Accessed: 25 November 2017).

China.org.cn (2018) *Xinjiang's Natural Resources, China.org.cn*. Available at: http://www.china.org.cn/english/MATERIAL/139230.htm (Accessed: 25 January 2018).

China Daily (2017) *China home to 7 of world's top 10 busiest ports, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-06/21/content_29828792.htm (Accessed: 26 November 2017).

China Gas (2009) *China proposes Fourth West-East Natural Gas Pipeline, China Daily*. Available at: http://www.chinadaily.com.cn/bizchina/2009-07/16/content_8437078.htm (Accessed: 2 October 2017).

China Post (2013) Uncle Sam can't beat out the Chinese in Myanmar, The China Post. Available at: http://www.chinapost.com.tw/editorial/world-issues/2013/08/07/385672/uncle-sam.htm (Accessed: 25 January 2018).

Chongqing Today (2014) Chongqing's Natural Gas Supply Integrating with National Trunk Lines, Chongqing Municipal Government. Available at:

http://en.cq.gov.cn/ChongqingToday/News/2013/10/23/1101562.shtml (Accessed: 2 October 2017).

Chow, J. T. and Easley, L.-E. (2017) *Myanmar's Foreign Policy Rebalance, The Diplomat*. Available at: https://thediplomat.com/2016/09/myanmars-foreign-policy-rebalance/ (Accessed: 27 November 2016).

Chrysopoulos, P. (2021) *China's Extravagant Plan for Canal Trade Route from Greece to Central Europe*, *Greek Reoirter*. Available at: https://greekreporter.com/2021/07/06/china-canal-trade-route-greece-danube/ (Accessed: 27 July 2021).

Clarke, M. (2016) *China's Terrorist Problem Goes Global, The Diplomat*. Available at: https://thediplomat.com/2016/09/chinas-terrorist-problem-goes-global/ (Accessed: 10 September 2016).

Clover, C. (2017) *China's carmakers develop an appetite for foreign markets, Financial Time*. Available at: https://www.ft.com/content/a482e256-5cd7-11e7-b553-e2df1b0c3220 (Accessed: 17 August 2018).

Coffey, H. (2017) *China announces plans for 'flying train' that can travel up to 2,500mph, The Independent*. Available at: http://www.independent.co.uk/travel/news-and-advice/china-flying-train-2500mph-aerospace-science-and-technology-corporation-elon-musk-hyperloop-a7921541.html (Accessed: 11 October 2017).

Condon, M. (2012) 'China in Africa: What the Policy of Nonintervention Adds to the Western Development Dilemma', *Praxis: The Fletcher Journal of Human Security*, 17, pp. 5–25. Available at: http://fletcher.tufts.edu/Praxis/~/media/Fletcher/Microsites/praxis/xxvii/2CondonChinaAfrica.pdf (Accessed: 6 November 2017).

Coyne, C. J. and Ryan, M. E. (2009) 'With Friends Like These, Who Needs Enemies? Aiding the World's Worst Dictators', *The Independent Review*, 14(1), pp. 26–44. Available at: http://www.independent.org/pdf/tir/tir_14_01_2_coyne.pdf.

CPEC (2017a) CPEC Maps, CPEC. Available at: http://cpec.gov.pk/maps (Accessed: 6 November 2017).

CPEC (2017b) *Introduction: China-Pakistan Economic Corridor (CPEC), CPEC*. Available at: http://cpec.gov.pk/introduction/1 (Accessed: 6 November 2017).

Crooks Ed (2017) *The global importance of China's oil imports, Financial Times*. Available at: https://www.ft.com/content/e7d52260-a1e4-11e7-b797-b61809486fe2 (Accessed: 20 October 2018).

Cunningham, N. (2018) *Bypassing The World's Key Oil Chokepoints, OilPrice*. Available at: https://oilprice.com/Energy/Energy-General/Bypassing-The-Worlds-Key-Oil-Chokepoints.html (Accessed: 22 November 2018).

Dawn (2014) China tables railway project linking to Pakistan, Sawn. Available at: https://www.dawn.com/news/1116104/china-tables-railway-project-linking-to-pakistan (Accessed: 9 November 2017).

Dawn (2015) 'Rs165bn Lahore Metro Train Project Approved', *Dawn*, pp. 9–11. Available at: https://www.dawn.com/news/1180260 (Accessed: 9 November 2017).

Deccan Herald (2016) *Pak approves Russia's request to use strategic Gwadar Port, Deccan Herald*. Available at: https://www.thehindu.com/news/international/Pakistan-approves-Russia's-request-to-use-strategic-Gwadar-Port/article16706441.ece (Accessed: 3 August 2018).

DeSilva-Ranasinghe, S. (2011) *Why the Indian Ocean Matters, The Diplomat*. Available at: https://thediplomat.com/2011/03/why-the-indian-ocean-matters/ (Accessed: 29 October 2018).

Dingdu, Y. (2017) *Belt & Road Initiative reaches the Arctic, Xinhua*. Available at: http://news.xinhuanet.com/english/2017-11/03/c_136726129.htm (Accessed: 27 November 2017).

Dobell, G. (2016) *China's Great Wall of 'Denial' in the South China Sea, The National Interest*. Available at: http://nationalinterest.org/blog/the-buzz/chinas-great-wall-denial-the-south-china-sea-16482 (Accessed: 22 November 2016).

Dollar, D. (2016) *China's Engagement with Africa: From Natural Resources to Human Resources*. Washington, D.C: China Center at Brookings. Available at: https://www.brookings.edu/research/chinasengagement-with-africa-from-natural-resources-to-human-resources/ (Accessed: 6 November 2017).

Donnan, S. (2015) US Congress moves closer to approving long-stalled IMF reforms, Financial Times. Available at: http://www.ft.com/cms/s/0/%0Abee64f68-a412-11e5-873f-68411a84f346. (Accessed: 17 January 2019).

Donnan, S. (2017) *China moves in as US pulls back from global institutions, Financial Times*. Available at: https://www.ft.com/content/fcbf3ba2-afcc-11e7-aab9-abaa44b1e130 (Accessed: 23 October 2018).

Double stack rail transport (2018) *Alchetron*. Available at: https://alchetron.com/Double-stack-rail-transport (Accessed: 19 September 2021).

Dove, J. (2016) *The AIIB and the NDB: The End of Multilateralism or a New Beginning?, The Diplomat*. Available at: https://thediplomat.com/2016/04/the-aiib-and-the-ndb-the-end-of-multilateralism-or-a-new-beginning/ (Accessed: 5 July 2018). Dunn, C. (2014) 'Natural Gas Serves a Small, but Growing, Portion of China's Total Energy Demand', *Eia*, pp. 7–8. Available at: https://www.eia.gov/todayinenergy/detail.php?id=17591 (Accessed: 18 June 2017).

Dwyer, A. M. (2005) *The Xinjiang Conflict: Uyghur Identity, Language Policy, and Political Discourse*. Washington, D.C.: East-West Center. Available at:

https://www.eastwestcenter.org/publications/xinjiang-conflict-uyghur-identity-language-policy-and-political-discourse (Accessed: 6 November 2017).

Early, S. (1943) *Cairo Communiqué*. National Diet Library. Available at: http://www.ndl.go.jp/constitution/e/shiryo/01/002_46/002_46tx.html (Accessed: 26 October 2018).

Edwards, J. (2017) 500 years ago, China Destroyed its World-Dominating Navy because its Political Elite was Afraid of Free Trade, Independant. Available at:

http://www.independent.co.uk/news/world/americas/500-years-ago-china-destroyed-its-worlddominating-navy-because-its-political-elite-was-afraid-of-a7612276.html (Accessed: 24 November 2017).

Efferink, L. van (2015) *Saul Cohen: Great powers, shatterbelts, gateways, geostrategic regions, Exploring Geopolitics*. Available at:

http://www.exploringgeopolitics.org/interview_cohen_saul_great_powers_shatterbelts_gateways_geos trategic_regions_derwent_whittlesey/ (Accessed: 13 March 2017).

Eisenman, J. and Stewart, D. T. (2017) *China's New Silk Road Is Getting Muddy, Foreign Policy*. Available at: http://foreignpolicy.com/2017/01/09/chinas-new-silk-road-is-getting-muddy/ (Accessed: 2 April 2018).

Embury-Dennis, T. (2017) *China launches first train service to travel all the way to Britain carrying socks to east London, Independent*. Available at: http://www.independent.co.uk/news/world/asia/china-train-britain-freight-london-railway-east-wind-socks-clothes-a7509731.html (Accessed: 11 October 2017).

Erickson, A. S. (2015) 'Showtime: China Reveals Two "Carrier- Killer" Missiles', *The National Interest*, pp. 1–17. Available at: http://nationalinterest.org/feature/showtime-china-reveals-two-carrier-killer-missiles-13769 (Accessed: 13 April 2017).

Erlanger, S. (2020) *Biden Wants to Rejoin Iran Nuclear Deal, but It Won't Be Easy, The New York Times*. Available at: https://www.nytimes.com/2020/11/17/world/middleeast/iran-biden-trump-nuclearsanctions.html (Accessed: 10 October 2021).

Farquhar, P. (2014) *A Cargo Ship Just Completed A Historic Trip Through The Northwest Passage, Business Insider*. Available at: http://www.businessinsider.com/a-cargo-ship-just-completed-a-historictrip-through-the-northwest-passage-2014-10?IR=T (Accessed: 30 November 2017).

Fazl-e-Haider, S. (2007) *China-Pakistan Rail Link on Horizon, Asian Times*. Available at: http://www.atimes.com/atimes/South_Asia/IB24Df02.html (Accessed: 9 November 2017).

FDFA (2017) *Bilateral relations Switzerland–China, Federal Department of Foreign Affairs*. Available at: https://www.eda.admin.ch/eda/en/home/representations-and-travel-advice/china/switzerland-china.html (Accessed: 24 June 2017).

Fitch Solutions (2015) *India's Three-Pronged Strategy To Expand Geopolitical Reach, Fitch Solutions*. Available at: https://www.fitchsolutions.com/country-risk-sovereigns/economics/indias-three-pronged-strategy-expand-geopolitical-reach-27-07-2015 (Accessed: 25 October 2018).

Frese, F. (2019) *Belt and Road Initiative (BRI) and repositioning idle containers, Container Xchange*. Available at: https://container-xchange.com/blog/belt-and-road-initiative/ (Accessed: 19 September 2021).

Fuhrman, P. (2017) *China-owned port in Sri Lanka could alter trade routes, Financial Times*. Available at: https://www.ft.com/content/f0d88070-9f99-11e7-9a86-4d5a475ba4c5 (Accessed: 9 February 2018).

Fukao, K., Kiyota, K. and Yue, X. (2006) *China's Long-Term International Trade Statistics: By Commodity, 1952-1964 and 1981-2000, Discussion Paper Series*. Tokyo. Available at: http://hi-stat.ier.hitu.ac.jp/research/discussion/2005/pdf/D05-147.pdf (Accessed: 6 November 2017).

G. John Ikenberry and Darren Lim (2007) *China's emerging institutional statecraft, Brookings*. Available at: https://www.brookings.edu/research/chinas-emerging-institutional-statecraft/ (Accessed: 28 July 2018).

Gady, F.-S. (2016) *China Begins Construction of Polar Icebreaker, The Diplomat*. Available at: https://thediplomat.com/2016/12/china-begins-construction-of-polar-icebreaker/ (Accessed: 30 November 2017).

George, C. A. (2017) *9 Dashed Line- An Introduction to The South China Sea, Global Recon*. Available at: http://www.globalrecon.net/articles/2017/3/28/9-dashed-line-an-introduction-to-the-south-china-sea (Accessed: 23 October 2018).

Gertz, B. (2005) China Builds up Strategic Sea Lanes, Washington Times. Available at: http://www.washingtontimes.com/news/2005/jan/17/20050117-115550-1929r/?page=all (Accessed: 22 November 2016).

Gertz, B. (2018) *Inside the Ring: China plans Pakistan military base at Jiwani, Washington Times*. Available at: https://www.washingtontimes.com/news/2018/jan/3/china-plans-pakistan-military-baseat-jiwani/ (Accessed: 15 February 2018).

Gilholm, A. (2018) 'Xi Jinping's New Watchdog', *Foreign Affairs*. Available at: https://www.foreignaffairs.com/articles/china/2018-03-06/xi-jinpings-new-watchdog (Accessed: 9 October 2018).

Global Times (2014) *High-speed rail great boost to Xinjiang growth, Global Times*. Available at: http://www.globaltimes.cn/content/864140.shtml (Accessed: 11 October 2017).

Gong, J. (2012) *Need for unified coast guard, China Daily*. Available at: http://usa.chinadaily.com.cn/opinion/2012-10/19/content_15829823.htm (Accessed: 8 February 2018).

Gov.cn (2012) *Ports, Chinese Government's Official Web Portal*. Available at: http://english1.english.gov.cn/2006-02/08/content_182525.htm (Accessed: 25 November 2017).

Grote, M. (2015) *What could the 'longue duree' mean for the history of modern sciences?* Boston: Greenstone. Available at: https://halshs.archives-ouvertes.fr/halshs-01171257 (Accessed: 6 November 2017).

Gudjonsson, H. and Nielsson, E. T. (2017) *China's Belt and Road Enters the Arctic, The Diplomat*. Available at: https://thediplomat.com/2017/03/chinas-belt-and-road-enters-the-arctic/ (Accessed: 1 December 2017).

Gulf News (2017) *Gwadar port to be fully operational in three to four years* — *Pakistan envoy to China*, *Gulf News*. Available at: https://gulfnews.com/world/asia/pakistan/gwadar-port-to-be-fully-operationalin-three-to-four-years--pakistan-envoy-to-china-1.2078434 (Accessed: 27 November 2018). Guschin, A. (2013) Understanding China's Arctic Policies, The Diplomat. Available at: https://thediplomat.com/2013/11/understanding-chinas-arctic-policies/ (Accessed: 1 December 2017).

Habib, B. B. B. and Faulknor, V. (2017) *The Belt and Road Initiative: China's vision for globalisation, Beijing-style, The Conversation*. Available at: https://theconversation.com/the-belt-and-road-initiativechinas-vision-for-globalisation-beijing-style-77705 (Accessed: 25 January 2018).

at: https://thediplomat.com/2020/05/pakistan-discovers-the-high-cost-of-chinese-investment/ (Accessed: 21 July 2021).

Harsch, E. (2007) 'Big Leap in China-Africa Ties', *Africa Renewal*, 20(January 2007), pp. 10–13. Available at: http://www.un.org/en/africarenewal/vol20no4/204-china-africa-ties.html (Accessed: 6 November 2017).

Hatton, C. (2013) *What do Chinese Leaders do when they Retire?, BBC*. Available at: http://www.bbc.co.uk/news/world-asia-china-21783353 (Accessed: 14 November 2017).

Hayton, B. (2016) *China's 'Historic Rights' in the South China Sea: Made in America?, The Diplomat*. Available at: https://thediplomat.com/2016/06/chinas-historic-rights-in-the-south-china-sea-made-inamerica/ (Accessed: 4 December 2017).

Haqqani. Hussain (2020) *Pakistan Discovers the High Cost of Chinese Investment, The Diplomat*. Available: https://thediplomat.com/2020/05/pakistan-discovers-the-high-cost-of-chinese-investment/ (Accessed: 3 November 2020).

Hill, C. (2012) *China's nine-dashed line in South China Sea, China Daily Mail*. Available at: https://chinadailymail.com/2012/05/25/chinas-nine-dashed-line-in-south-china-sea/ (Accessed: 3 November 2018).

Hillman, J. (2018) *Game of Loans: How China Bought Hambantota | Asia Maritime Transparency Initiative, The Asia Maritime Transparency Initiative*. Available at: https://amti.csis.org/game-of-loans-china-hambantota/ (Accessed: 3 January 2019).

Holmes, J. (2012) Why Philippines Stands Up to China, The Diplomat. Available at: http://thediplomat.com/2012/05/why-philippines-stands-up-to-china/ (Accessed: 14 April 2017). Hong Kong *et al.* (2003) 'Export Performance in Hong Kong — Offshore Trade and Re-exports', (June), pp. 5–19. Available at: http://www.hkma.gov.hk/media/eng/publication-and-research/quarterly-bulletin/qb200306/fa1.pdf (Accessed: 6 November 2017).

Hook, L. and Mulligan, M. . (2010) 'Sinopec to put \$7.1bn in Repsol Brasil', *Financial Times*, 2 October, pp. 1–2. Available at: https://search-proquest-

com.idpproxy.reading.ac.uk/docview/756111958?accountid=13460.

Hornby, L. (2017) *China and Myanmar open long-delayed oil pipeline, Financial Times*. Available at: https://www.ft.com/content/21d5f650-1e6a-11e7-a454-ab04428977f9 (Accessed: 19 February 2018).

Hornby, L. and Mitchell, T. (2017) *Xi Jinping confirmed as China's most powerful leader since Mao*, *Financial Times*. Available at: https://www.ft.com/content/5b9f4b96-b86d-11e7-8c12-5661783e5589 (Accessed: 14 November 2017).

Howell, K. (2015) U.S. Sends China Millions in Foreign Aid Despite \$1.3 Trillion Debt, The Washington Times. Available at: http://www.washingtontimes.com/news/2015/feb/12/us-sends-china-millions-in-foreign-aid-despite-13-/ (Accessed: 22 November 2016).

Huang, A.-H. (2009b) *The Maritime Strategy of China in the Asia-Pacific Region, Minerva Access*. The University of Melbourne. Available at:

http://storage.globalcitizen.net/data/topic/knowledge/uploads/20121119112333885060_L2V4bGlicmlz L2R0bC9kM18xL2FwYWNoZV9tZWRpYS8xMjQ4MjE=(1).pdf (Accessed: 9 May 2014).

Huang, Y. (2017) *What the West Gets Wrong About China's Economy, Foreign Affairs*. Available at: https://www.foreignaffairs.com/articles/china/2017-09-14/what-west-gets-wrong-about-chinas-economy (Accessed: 17 October 2018).

Hui, L. (2018) Full text: China's Arctic Policy, Xinhua . Available at:

http://www.xinhuanet.com/english/2018-01/26/c_136926498_4.htm (Accessed: 5 December 2018).

Huifeng, H. (2017) *The 'Belt and Road' projects China doesn't want anyone talking about, South China Morning Post*. Available at: http://www.scmp.com/news/china/economy/article/2099973/belt-and-road-projects-china-doesnt-want-anyone-talking-about (Accessed: 26 January 2018).

Human Rights Watch (2019) UN: Unprecedented Joint Call for China to End Xinjiang Abuses, Human Rights Watch. Available at: https://www.hrw.org/news/2019/07/10/un-unprecedented-joint-call-china-end-xinjiang-abuses (Accessed: 22 September 2021).

Iulia Monica, O.-Șincai (2018) *16+1, a New Issue in China-EU Relations?, China-CEE Institute Budapest.* 88003. Budapest. Available at: https://mpra.ub.uni-muenchen.de/id/eprint/88003 (Accessed: 6 November 2019).

Jacob L. Shapiro and Xander Snyder (2017) *Geopolitical Theories - Geopolitical Futures* [Podcast], *Geopolitical Futures*. Available at: https://geopoliticalfutures.com/geopolitical-theories/ (Accessed: 4 December 2018).

Jacob, S. (2018) 'India, China join ranks to negotiate with oil producers for better bargain', *Business Standard News*, pp. 1–5. Available at: https://www.business-standard.com/article/economy-policy/india-china-join-ranks-to-negotiate-with-oil-producers-for-better-bargain-118041201187_1.html (Accessed: 6 November 2019).

Jadesimi, A. (2017) *How China's \$60 Billion For Africa Will Drive Global Prosperity, Forbes*. Available at: https://www.forbes.com/sites/amyjadesimi/2017/03/14/how-chinas-60-billion-for-africa-will-drive-global-prosperity/#715643d838a3 (Accessed: 8 October 2017).

Jaishankar, D. (2015) *Myanmar Is Pivoting Away from China, Foreign Policy*. Available at: http://foreignpolicy.com/2015/06/15/myanmar-burma-is-pivoting-away-from-china-aung-san-suu-kyixi-jinping-india/ (Accessed: 5 October 2017).

James R. Holmes (2011) *What 'Containing China' Means, The Diplomat*. Available at: https://thediplomat.com/2011/05/what-containing-china-means/ (Accessed: 1 October 2018).

Jedwab, R., Kerby, E. and Moradi, A. (2017) *How colonial railroads defined Africa's economic geography*, *Vox*. Available at: http://voxeu.org/article/how-colonial-railroads-defined-africa-s-economic-geography (Accessed: 10 November 2017).

Jiangtao, S. (2017) *China boosts arms exports by 74pc, while cutting reliance on outside providers, report finds, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacy-defence/article/2072465/china-boosts-arms-exports-74pc-while-cutting-reliance (Accessed: 23 November 2018).

Johnson, K. (2015) *The Meltdown of the Global Order, Foreign Policy*. Available at: https://foreignpolicy.com/2015/07/23/the-meltdown-of-the-global-order-geopolitics-south-china-sea/ (Accessed: 5 December 2018).

Jonathan Barrett and Sue-Lin Wong (2016) *China warns 'protectionist' Australia on investment after grid deal blocked, Reuters*. Available at: https://www.reuters.com/article/us-australia-privatisation-ausgrid-idUSKCN10R2M1 (Accessed: 15 July 2018).

Jones, B., Steven, D. and Brien, E. O. (2014) *Fueling a New Disorder? The New Geopolitical and Security Consequences of Energy, Project on International Order and Strategy*. Brookings. Available at: http://www.zerohedge.com/news/2014-04-20/fueling-new-world-order-where-does-china-import-itscrude-oil (Accessed: 6 November 2019).

Jones, L. and Hameiri, S. (2020) *Debunking the Myth of 'Debt-trap Diplomacy', Chatham House*. Available at: https://www.chathamhouse.org/2020/08/debunking-myth-debt-trap-diplomacy (Accessed: 20 July 2021).

Josephs, J. (2017) *All aboard the China-to-London freight train - BBC News, BBC*. Available at: https://www.bbc.co.uk/news/business-38654176 (Accessed: 9 July 2018).

Kai, J. (2014) *The US, China, and the 'Containment Trap', The Diplomat*. Available at: https://thediplomat.com/2014/05/the-us-china-and-the-containment-trap/ (Accessed: 26 September 2018).

Keck, Z. (2014) *China's "Nine-Dash Line" is Dangerous, The Diplomat*. Available at: https://thediplomat.com/2014/02/chinas-nine-dash-line-is-dangerous/ (Accessed: 23 October 2018).

Kelanic, R. A. (2013) *Oil Security and Conventional War: Lessons From a China-Taiwan Air Scenario, Council on Foreign Relations*. Available at: http://www.cfr.org/china/oil-security-conventional-war-lessons-china-taiwan-air-war-scenario/p31578 (Accessed: 23 October 2018).

Khan, Z. (2016) *Port of Gwadar and geopolitics of great powers, Foreign Policy News*. Available at: http://foreignpolicynews.org/2016/04/14/port-gwadar-geopolitics-great-powers/ (Accessed: 27 November 2018).

Khmer Times (2014) *China to speed up construction of new Silk Road: Xi*. Available at: https://www.khmertimeskh.com/news/6038/china-to-speed-up-construction-of-new-silk-road--xi/ (Accessed: 22 October 2018).

Kiernan, P. (2009) *China signs \$10 bln loan-for-oil Petrobras deal, Reuters*. Available at: http://www.reuters.com/article/china-brazil-oil/china-signs-10-bln-loan-for-oil-petrobras-deal-idUSPEK26621320090519 (Accessed: 12 October 2017).

Kong, D. (2016) 'A cash cow indeed! Beijing-Shanghai High-Speed Railway exceeds profits of 6.6 billion yuan', *People's Daily Online*, pp. 2015–2016. Available at: http://en.people.cn/n3/2016/0719/c98649-9088162.html (Accessed: 24 January 2018).

KPMG (2016) *Infrastructure in China: Foundation for growth*. Available at: https://silo.tips/download/infrastructure-in-china-foundation-for-growth (Accessed: 22 January 2017).

Kreft, H. (2006) *China's Quest for Energy, Hoover Institution*. Available at: https://www.hoover.org/research/chinas-quest-energy (Accessed: 22 September 2021).

Kuo, M. A. (2017) *The Power of Ports: China's Maritime March, The Diplomat*. Available at: https://thediplomat.com/2017/03/the-power-of-ports-chinas-maritime-march/ (Accessed: 27 November 2017).

Kynge, J. (2017) 'Chinese purchases of overseas ports top \$20bn in past year', *Financial Times*, pp. 5–8. Available at: https://www.ft.com/content/e00fcfd4-6883-11e7-8526-7b38dcaef614 (Accessed: 26 November 2017).

Kynge, J. *et al.* (2017) *How China Rules the Waves, Financial Times*. Available at: https://ig.ft.com/sites/china-ports/ (Accessed: 24 November 2017).

Kynge, J., Peel, M. and Bland, B. (2017) *China's railway diplomacy hits the buffers, Financial Times*. Available at: https://www.ft.com/content/9a4aab54-624d-11e7-8814-0ac7eb84e5f1 (Accessed: 22 January 2018).

Kynge, J. (2017) 'Chinese purchases of overseas ports top \$20bn in past year', *Financial Times*, pp. 5–8. Available at: https://www.ft.com/content/e00fcfd4-6883-11e7-8526-7b38dcaef614 (Accessed: 26 November 2017). Lanteigne, M. (2017) *Who Benefits From China's Belt and Road in the Arctic?, The Diplomat*. Available at: https://thediplomat.com/2017/09/who-benefits-from-chinas-belt-and-road-in-the-arctic/ (Accessed: 26 November 2017).

LAPSSET (2017a) *Lamu Port – LAPSSET Corridor Development Authority, LAPSSET*. Available at: http://www.lapsset.go.ke/projects/lamu-port/ (Accessed: 17 May 2018).

LAPSSET (2017b) LAPSSET Corridor Development Authority – Building Transformative and Game Changer Infrastructure for a Seamless Connected Africa, LAPSSET. Available at: http://www.lapsset.go.ke/ (Accessed: 17 May 2018).

LaRouchePAC (2017) *Kra Canal Conference a Great Success, LaRouchePAC*. LaRouchePAC. Available at: https://larouchepac.com/20170912/kra-canal-conference-great-success (Accessed: 19 February 2018).

Lawrence, S. V. and Martin, M. F. (2013) *Understanding China's Political System*. Available at: https://fas.org/sgp/crs/row/R41007.pdf (Accessed: 19 February 2018).

Lefort, C. and Kaye, B. (2016) *Australian port sold for \$7.3 billion to consortium; China fund among backers /, Reuters*. Available at: https://www.reuters.com/article/us-australia-privatisation-ports/australian-port-sold-for-7-3-billion-to-consortium-china-fund-among-backers-idUSKCN11P04O (Accessed: 13 July 2018).

Lei, H. (2016) Foreign Ministry Spokesperson Hong Lei's Regular Press Conference on November 26, 2015, Ministry of Foreign Affairs of the People's Republic of China. Available at: http://www.fmprc.gov.cn/mfa_eng/xwfw_665399/s2510_665401/t1318766.shtml (Accessed: 22 May 2018).

Lei, Z. (2017) '3 sea routes planned for Belt, Road Initiative', *China Daily*, p. 29830837. Available at: http://usa.chinadaily.com.cn/epaper/2017-06/21/content_29830837.htm (Accessed: 8 April 2018).

Lester, R. K. and Steinfeld, E. S. (2006) 'China's Energy Policy: Is anybody really calling the shots?', *Industrial Performance*. Available at: https://ipc.mit.edu/sites/default/files/documents/06-002.pdf (Accessed: 19 February 2018).

Li Xing (2017) Russia can be a welcoming presence at CPEC, Global Times. Available at: http://www.globaltimes.cn/content/1027250.shtml (Accessed: 5 January 2018).

Liu, N. (2017) China-Russia Trouble on the Arctic Silk Road?, The Diplomat. Available at: https://thediplomat.com/2017/07/china-russia-trouble-on-the-arctic-silk-road/ (Accessed: 23 May 2018).

Liu, S. (2014) 西气东输四线环评二次公示 计划年输气 300 亿立方米 [Environmental Assessment for The Second plan for the West-East Gas Pipeline with an annual Capacity of 30 billion cubic meters], Yaxin. Available at: http://news.iyaxin.com/content/2014-05/24/content_4590318.htm (Accessed: 2 October 2017).

Lu, Y. (2009) *Challenges for China's International Communication, Briefing Series*. University of Nottingham. Available at: https://www.nottingham.ac.uk/cpi/documents/briefings/briefing-52-lu-international-communication.pdf (Accessed: 17 September 2016).

Luft, G. (2016) *China's New Grand Strategy for the Middle East, Foreign Policy*. Available at: http://foreignpolicy.com/2016/01/26/chinas-new-middle-east-grand-strategy-iran-saudi-arabia-oil-xijinping/ (Accessed: 17 September 2016).

Mahan, A. T. (1897) *The Interest of America in Sea Power Present and Future*. Boston: Little, Brown, and Company. Available at: http://www.archive.prg/details/interestofseapow00mahauoft (Accessed: 17 September 2016).

Malik, M. (2013) *History the Weak Link in Beijing's Maritime Claims | The Diplomat | Page 4, The Diplomat*. Available at: https://thediplomat.com/2013/08/history-the-weak-link-in-beijings-maritime-claims/4/ (Accessed: 23 October 2018).

Manevich, D. (2017) *Americans have grown more negative toward China over the past decade, Pew Research Center*. Available at: http://www.pewresearch.org/fact-tank/2017/02/10/americans-have-grown-more-negative-toward-china-over-past-decade/ (Accessed: 27 March 2017).

Mangosing, F. (2018) *EXCLUSIVE: New photos show China is nearly done with its militarization of South China Sea, Inquirer*. Available at: http://www.inquirer.net/specials/exclusive-china-militarization-south-china-sea (Accessed: 5 February 2018).

Marc Lanteigne and Mingming Shi (2018) *China Stakes Its Claim to the Arctic, The Diplomat*. Available at: https://thediplomat.com/2018/01/china-stakes-its-claim-to-the-arctic/ (Accessed: 5 December 2018).

Maritime Executive (2018) *China and Vietnam to Settle South China Sea Claims, The Maritime Executive.* Available at: https://www.maritime-executive.com/article/china-and-vietnam-to-settle-south-china-seaclaims (Accessed: 31 December 2018).

Mathieson, R. and Ondaatjie, A. A. (2016) '*No Phobia' on Taking Chinese Money, Sri Lanka's Premier Says, Bloomberg*. Available at: https://www.bloomberg.com/news/articles/2016-07-17/-no-phobia-on-taking-chinese-money-sri-lanka-s-premier-says (Accessed: 18 February 2018).

Mcdevitt, M. (2016) *Becoming a Great "Maritime Power": A Chinese Dream Answering the basic questions raised by China's ambition*. Washington, DC. Available at: https://www.cna.org/cna files/pdf/irm-2016-u-013646.pdf (Accessed: 17 September 2017).

Mcgarrity, J. and Gloystein, H. (2013) *Big freighter traverses Northwest Passage for 1st time, Reuters*. Available at: https://www.reuters.com/article/us-shipping-coal-arctic/big-freighter-traverses-northwest-passage-for-1st-time-idUSBRE98Q0K720130927 (Accessed: 30 November 2017).

Melia, N., Haines, K. and Hawkins, E. (2017) *Future of the Sea: Implications from Opening Arctic Sea Routes*. London. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/634437/Future_of_th e_sea_-_implications_from_opening_arctic_sea_routes_final.pdf (Accessed: 17 September 2018).

Michalopoulos, S. and Papaioannou, E. (2017) *The Long Economic and Political Shadow of History Volume II. Africa and Asia*. Edited by S. Michalopoulos and E. Papaioannou. London, UK: Centre for Economic Policy Research. Available at: https://voxeu.org/content/long-economic-and-political-shadowhistory-volume-2 (Accessed: 17 September 2018).

Michel, C. (2017) *It's Official: India and Pakistan Join Shanghai Cooperation Organization, The Diplomat.* Available at: https://thediplomat.com/2017/06/its-official-india-and-pakistan-join-shanghaicooperation-organization/ (Accessed: 21 October 2018).

Miks, J. (2017) *China, Philippines in Standoff, The Diplomat*. Available at: http://thediplomat.com/2012/04/china-philippines-in-standoff/ (Accessed: 14 April 2017).

Mills, G. and Mcnamee, T. (2012) *Fuelling the Dragon*. Available at: https://www.aspi.org.au/publications/special-report-fuelling-the-dragon-natural-resources-and-chinasdevelopment.-an-aspi-brenthurst-foundation-publication/SR_Fuelling_the_dragon_120912.pdf

(Accessed: 17 September 2016).

Mills, R. (2016) *Risky Routes: Energy Transit in the Middle East*. Available at: https://www.brookings.edu/wp-content/uploads/2016/07/en-energy-transit-security-mills-2.pdf (Accessed: 17 September 2016).

Millward, J. (2004) 'Violent Separatism in Xinjiang: A Critical Assessment', *Policy Studies*, (6), pp. ix–54. Available at: http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/3502/PS006.pdf (Accessed: 17 September 2016).

Ming, Z., Ximei, L. and Yulong, L. (2014) 'China's Shale Gas Development Outlook and Challenges', *Powermag*. Available at: http://www.powermag.com/chinas-shale-gas-development-outlook-and-challenges (Accessed: 30 September 2017).

Mingjie, W. (2018) *China's top brands see global profile rise, China Daily*. Available at: http://www.chinadaily.com.cn/a/201803/13/WS5aa6b5b9a3106e7dcc141270.html (Accessed: 17 August 2018).

Minot-Scheuermann, M. G. (2016) *Chinese Anti-Piracy and the Global Maritime Commons, The Diplomat*. Available at: https://thediplomat.com/2016/02/chinas-anti-piracy-mission-and-the-global-maritime-commons/ (Accessed: 4 November 2018).

Mitchell, T. *et al.* (2016) *Tribunal rules against Beijing in South China Sea dispute, Financial Times.* Available at: https://www.ft.com/content/3cdcbf42-4814-11e6-8d68-72e9211e86ab (Accessed: 8 February 2018).

Mohammed, F. (2018) *Can the U.S. and China Avoid the Thucydides Trap?, JSTOR Daily*. Available at: https://daily.jstor.org/can-the-u-s-and-china-avoid-the-thucydides-trap/ (Accessed: 17 September 2021).

Moore, M. C. (2014) *China, Russia and the waning demand for Canadian oil, Alberta Oil*. Available at: https://www.albertaoilmagazine.com/2014/08/closing-gateway-asia/ (Accessed: 24 September 2017).

Moramudali, U. (2019) *Is Sri Lanka Really a Victim of China's 'Debt Trap'?, The Diplomat*. Available at: https://thediplomat.com/2019/05/is-sri-lanka-really-a-victim-of-chinas-debt-trap/ (Accessed: 20 July 2021).

Moramudali, U. (2020) *Sri Lanka's Changing Relationship to Chinese Loans, The Diplomat*. Available at: https://thediplomat.com/2020/10/sri-lankas-changing-relationship-to-chinese-loans/ (Accessed: 20 July 2021).

Moran, T. (2010a) 'Feeding the Dragon', *The Milken Institute Review*, Third Quar, pp. 24–31. Available at: https://assets1c.milkeninstitute.org/assets/Publication/MIReview/PDF/24-31MR47.pdf (Accessed: 17 September 2015).

Moran, T. (2010b) *Is China trying to "lock up" the world's natural resources?, VOX, CEPR Policy Portal.* Available at: https://voxeu.org/article/china-trying-lock-world-s-natural-resources (Accessed: 3 October 2018).

Moran, T. (2010c) *Is China Using Its Checkbook to Lock up Natural Resources Around the World?, The Peterson Institute for International Economics*. Available at: https://piie.com/blogs/realtime-economicissues-watch/china-using-its-checkbook-lock-natural-resources-around-world (Accessed: 3 October 2018).

Morgan, P. and Nicholson, J. (2016) *Does China Have a Looming Africa Problem?*, *The Diplomat*. Available at: http://thediplomat.com/2016/09/does-china-have-a-looming-africa-problem/ (Accessed: 27 November 2016).

Morlin-Yron, S. (2017) *Chinese funded railways to link East Africa, CNN*. Available at: http://edition.cnn.com/2016/11/21/africa/chinese-funded-railways-in-africa/index.html (Accessed: 18 September 2017).

Mouawad, J. (2008) Arctic may hold as much as a fifth of undiscovered oil and gas reserves, The New York Times. Available at: https://www.nytimes.com/2008/07/24/business/worldbusiness/24iht-arctic.4.14767779.html (Accessed: 30 October 2018).

Mroczkowski, I. (2012) *China's Arctic Powerplay, The Diplomat*. Available at: https://thediplomat.com/2012/02/chinas-arctic-powerplay/ (Accessed: 1 December 2017).

Mukherjee, T. (2018) *China's Maritime Quest in the Indian Ocean: New Delhi's Options, The Diplomat*. Available at: https://thediplomat.com/2018/04/chinas-maritime-quest-in-the-indian-ocean-new-delhisoptions/ (Accessed: 30 December 2018). Nagai, O. (2018) *China and Russia battle for North Pole supremacy, Nikkei Asian Review*. Available at: https://asia.nikkei.com/Spotlight/Asia-Insight/China-and-Russia-battle-for-North-Pole-supremacy (Accessed: 5 December 2018).

Narayanan, P. (2018) https://www.bloomberg.com/news/articles/2018-01-12/world-s-commodityengine-roars-to-another-record-with-xi-at-helm, Bloomberg. Available at: https://www.bloomberg.com/news/articles/2018-01-12/world-s-commodity-engine-roars-to-anotherrecord-with-xi-at-helm (Accessed: 25 September 2018).

Natalie Bridgeman Fields (2018) *China Moves Toward Accountability for Overseas Financing, The Diplomat*. Available at: https://thediplomat.com/2018/02/china-moves-toward-accountability-for-overseas-financing/ (Accessed: 19 July 2018).

National Defence Ministry (2015) 中国的军事战略 [China's Military Strategy (2015)], The State Council Information Office of the People's Republic of China. Available at: https://jamestown.org/wp-content/uploads/2016/07/China's-Military-Strategy-2015.pdf (Accessed: 17 September 2016).

National Ocean Economic Program (2021) *Arctic Natural Resources*. Available at: https://www.oceaneconomics.org/arctic/NaturalResources/ (Accessed: 23 October 2021).

Naziha Syed Ali (2014) *Gwadar: on the cusp of greatness?, Dawn*. Available at: https://www.dawn.com/news/1102499 (Accessed: 25 January 2019).

NBS (2017) Railway Business Mileage, National Bureau of Statistics of China. Available at: http://data.stats.gov.cn/search.htm?s=铁路营业里程 (Accessed: 10 September 2017).

Nicholas Trickett (2018) *Russia's Unhappy Energy Marriage with China, The Diplomat*. Available at: https://thediplomat.com/2018/03/russias-unhappy-energy-marriage-with-china/ (Accessed: 5 December 2018).

Northcott, C. (2017) *Dakota Access pipeline: Is the Standing Rock movement defeated?, BBC News.* Available at: http://www.bbc.co.uk/news/world-us-canada-38924160 (Accessed: 26 January 2018).

Nyabiage, J. (2021) *China looks to recreate ancient Silk Road with network of African ports, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacy/article/3129966/china-looks-recreate-ancient-silk-road-network-african-ports (Accessed: 28 September 2021).

O'Dowd, E. (2016) 'Special report: How five major African rail projects are supported by China.', *Smartrail World*, 44(0), pp. 1–9. Available at: https://www.smartrailworld.com/five-major-african-projects-supported-by-china (Accessed: 18 September 2017).

O'Neill, J. and Stupnytska, A. (2009) 'The long-term outlook for the BRICs and N-11 post crisis', *Global Economics Paper*, December(192), pp. 1–28. Available at: http://www.goldmansachs.com/our-thinking/archive/brics-at-8/brics-the-long-term-outlook.pdf (Accessed: 17 September 2014).

Olawale, L. (2012) 'Pariah State System and Enforcement Mechanism of International Law', *Journal of Alternative Perspectives in the Social Sciences*, 4(1), pp. 226–241. Available at: http://www.japss.org/upload/10. pariah state system.pdf (Accessed: 17 September 2016).

One Belt, One Road — *and many questions* | *Financial Times* (2017) *Financial Times*. Available at: https://www.ft.com/content/d5c54b8e-37d3-11e7-ac89-b01cc67cfeec (Accessed: 9 July 2018).

Orleans, L. A. (1973) *The Problem of Chinese Statistics*. Available at: https://www.cia.gov/library/centerfor-the-study-of-intelligence/kent-csi/vol16no4/html/v17i1a07p_0001.htm (Accessed: 17 September 2016).

Overton, P. (2016) *Conference hints at potential for Maine's maritime economy, Portland Press Herald*. Available at: http://www.pressherald.com/2016/10/02/conference-hints-at-potential-for-mainesmaritime-economy/ (Accessed: 30 November 2017).

Pakistan Today (2016) *27 Trains to be Acquired for Metro Project, Pakistan Today*. Available at: https://www.pakistantoday.com.pk/2016/02/05/27-trains-to-be-acquired-for-metro-project/ (Accessed: 9 November 2017).

Panda, A. (2017a) *How Much Trade Transits the South China Sea? Not \$5.3 Trillion a Year, The Diplomat.* Available at: https://thediplomat.com/2017/08/how-much-trade-transits-the-south-china-sea-not-5-3trillion-a-year/ (Accessed: 30 October 2018).

Panda, A. (2017b) *The Chinese Navy's Djibouti Base: A 'Support Facility' or Something More?, The Diplomat*. Available at: https://thediplomat.com/2017/02/the-chinese-navys-djibouti-base-a-support-facility-or-something-more/ (Accessed: 19 February 2018).

Paul, M. (2016) 'A "Great Wall of Sand" in the South China Sea? [translated]', *Stiftung Wissenschaft und Politik*, (July). Available at: http://thediplomat.com/2015/04/us-blasts-chinas-great-wall-of-sand-in-the-south-china-sea/ (Accessed: 17 September 2018).

PCA (2016) *Press Release – South China Sea Arbitration*. The Hague. Available at: http://www.rspb.org.uk/media/releases/details.aspx?id=tcm:9-242165 (accessed on 4 Dec 2015).

Pennington, M. (2017) *Myanmar, having warmed to the West, turns to China again, The Spokesman*. Available at: http://www.spokesman.com/stories/2017/may/27/myanmar-having-warmed-to-the-west-turns-to-china-a/ (Accessed: 5 October 2017).

Perlez, J. (2017) *China Showers Myanmar With Attention, as Trump Looks Elsewhere 点击查看本文中文 版, The NewYork Times*. Available at: https://www.nytimes.com/2017/07/19/world/asia/myanmar-china-us-diplomacy-trump.html (Accessed: 5 October 2017).

Pethiyagoda, K. (2017) *What's driving China's New Silk Road, and how should the West respond?, Bookings*. Available at: https://www.brookings.edu/blog/order-from-chaos/2017/05/17/whats-drivingchinas-new-silk-road-and-how-should-the-west-respond/ (Accessed: 18 September 2017).

Pew Research Center (2011) *China Seen Overtaking U.S. as Global Superpower, Pew Research Center*. Available at: http://www.pewglobal.org/2011/07/13/china-seen-overtaking-us-as-global-superpower/ (Accessed: 27 March 2017).

Phillips, T. (2015) *China Military Parade Shows Might as Xi Jinping Pledges 300,000 Cut in Army, The Guardian*. Available at: https://www.theguardian.com/world/2015/sep/03/xi-jinping-pledges-300000-cut-in-army-even-as-china-shows-military-might (Accessed: 22 November 2016).

PILDAT (2015) *Pakistan Railways: a Performance Analysis*. Islamabad: Pakistan Institute of Legislative Development And Transparency. Available at:

http://www.pildat.org/publications/publication/GovernanceAssessment/PerformanceAnalysisofPakista nRailways.pdf (Accessed: 22 November 2016).

Pillalamarri, A. (2015) *Oil Prices Collapsed. Russia Won't., The National Interest*. Available at: http://nationalinterest.org/feature/oil-prices-collapsed-russia-wont-12328 (Accessed: 19 March 2018).

Pinghui, Z. (2017) Shanghai should turn free-trade zone into global channel, Xi Jinping says, South China Morning Post. Available at: http://www.scmp.com/news/china/policiespolitics/article/2076260/shanghai-should-turn-free-trade-zone-global-channel-xi 1/5 (Accessed: 8 February 2018).

PTI (2018) Xi Jinping defends BRI; says China has no geo-political calculations -, Times of India. Available at: https://timesofindia.indiatimes.com/world/china/xi-jinping-defends-bri-says-china-has-no-geopolitical-calculations/articleshow/63699683.cms (Accessed: 12 July 2018).

PwC (2017) Repaving the ancient Silk Routes, PwC Growth Markets Centre – Realising opportunities along the Belt and Road. Available at: https://www.pwc.com/gx/en/growth-marketscentre/assets/pdf/pwc-gmc-repaving-the-ancient-silk-routes-web-full.pdf (Accessed: 22 November 2016).

Qi, L. (2014) *Smelly, Slow, Unforgettable: Bidding Goodbye to China's Green Trains, The Wall Street Journal*. Available at: http://blogs.wsj.com/chinarealtime/2014/07/03/smelly-slow-unforgettable-bidding-goodbye-to-chinas-green-trains/ (Accessed: 8 September 2017).

Qiaoyi, L. (2015) *Making it work, Global Times*. Available at: http://www.globaltimes.cn/content/911258.shtml (Accessed: 6 July 2018).

PTI (2016) *Pakistan approves Russia's request to use strategic Gwadar Port, The Hindu*. Available at: http://www.thehindu.com/news/international/Pakistan-approves-Russia's-request-to-use-strategic-Gwadar-Port/article16706441.ece# (Accessed: 3 August 2018).

Radio Pakistan (2016) *Railway line to be laid from Havelian to Khunjerab under CPEC, Radio Pakistan*. Available at: http://www.radio.gov.pk/15-Apr-2016/railway-line-to-be-laid-from-havelian-to-khunjerabunder-cpec-rashid (Accessed: 9 November 2017).

Raftery, A. (2017) *Many Belts, Many Roads: How China's Provinces Will Tweak a Global Project | The Diplomat, The Diplomat.* Available at: https://thediplomat.com/2017/02/many-belts-many-roads-how-chinas-provinces-will-tweak-a-global-project/ (Accessed: 9 July 2018).

Rehman, D. (2016) *Russia 'allowed' to use Pakistan's Gwadar Port under CPEC, Daily Pakistan Globe*. Available at: https://en.dailypakistan.com.pk/headline/russia-allowed-to-use-pakistans-gwadar-portunder-cpec/ (Accessed: 3 August 2018). Rajagopalan, R. (2021) *The China-Pakistan Partnership Continues to Deepen, The Diplomat*. Available at: https://thediplomat.com/2021/07/the-china-pakistan-partnership-continues-to-deepen/ (Accessed: 29 July 2021).

Ramya, P. S. (2015) *China's Myanmar Conundrum, The Diplomat*. Available at: http://thediplomat.com/2015/04/chinas-myanmar-conundrum/ (Accessed: 27 November 2016).

Ran, S. (2015) *Development agenda: Lahore metro train gets green signal, The Express Tribune*. Available at: https://tribune.com.pk/story/886037/development-agenda-lahore-metro-train-gets-green-signal/ (Accessed: 9 November 2017).

Ren, M. (2014) 'China's Non-intervention Policy in UNSC Sanctions in the 21st Century: The Cases of Libya, North Korea, and Zimbabwe', *Ritsumeikan International Affairs*, 12(2014), pp. 101–134. Available at: http://www.ritsumei.ac.jp/acd/re/k-rsc/ras/04_publications/ria_en/12_06.pdf.

Reuters (2019) *China, Greece agree to push ahead with COSCO's Piraeus Port investment , Reuters*. Available at: https://www.reuters.com/article/us-greece-china-idUSKBN1XL1KC (Accessed: 27 July 2021).

Reuters (2021) *China to strengthen commodity price controls in five-year plan, Reuters*. Available at: https://www.reuters.com/article/us-china-commodities-idUSKCN2D60A2 (Accessed: 15 September 2021).

Rich, T. S. and Banerjee, V. (2017) *Panama Switch Marks China's Return to Checkbook Diplomacy, The Diplomat*. Available at: https://thediplomat.com/2017/06/panama-switch-marks-chinas-return-to-checkbook-diplomacy/ (Accessed: 18 September 2017).

Ripley, W. (2015) *China flexes muscles with World War II military, CNN*. Available at: http://edition.cnn.com/2015/09/02/asia/china-world-war-ii-military-parade/ (Accessed: 13 April 2017).

Kaplan, Robert D. (2016) *The South China Sea will be the battleground of the future, Business Insider*. Available at: http://uk.businessinsider.com/why-the-south-china-sea-is-so-crucial-2015-2?r=US&IR=T (Accessed: 18 June 2017).

Rohrig, B. (2015) 'Smartphones. Smart chemistry', *ChemMatters*, pp. 10–12. Available at: https://www.acs.org/content/acs/en/education/resources/highschool/chemmatters/past-issues/archive-2014-2015/smartphones.html (Accessed: 18 June 2017).

Romaniuk, S. N. and Burgers, T. J. (2016) *China's 'Arab Pivot' Signals the End of Non-Intervention, The Diplomat*. Available at: https://thediplomat.com/2016/12/chinas-arab-pivot-signals-the-end-of-non-intervention/ (Accessed: 14 June 2018).

Ronald O'Rourke (2018) *China Naval Modernization: Implications for U.S. Navy Capabilities*— *Background and Issues for Congress, Congressional Research Service 7-5700.* Available at: https://fas.org/sgp/crs/row/RL33153.pdf (Accessed: 22 November 2016).

Rønning, H. and Li, S. (2013) 'Winning hearts and minds: Chinese Soft Power Foreign Policy in Africa', *CMI Brief*, 12(3). Available at: https://www.cmi.no/publications/4906-winning-hearts-and-minds (Accessed: 18 June 2017).

Saeed, S. (2021) *Pakistan learns the cost of an alliance with China, POLITICO*. Available at: https://www.politico.eu/article/pakistan-learns-cost-of-economic-alliance-with-china/ (Accessed: 21 July 2021).

Sajid, S. (2016) *Russia formally requests access to Gwadar Port, Daily Times (Lahore)*. Available at: https://dailytimes.com.pk/44006/russia-formally-requests-access-to-gwadar-port/ (Accessed: 10 November 2017).

Sarah Zheng and Kristin Huang (2017) *No free AIIB pass for belt and road projects, bank executive says, South China Morning Post*. Available at: https://www.scmp.com/news/china/diplomacydefence/article/2110407/no-free-aiib-pass-belt-and-road-projects-bank-executive (Accessed: 17 January 2019).

Schneider, F. (2013) *Discourse Analysis and Foreign Languages, Politics East Asia*. Available at: http://www.politicseastasia.com/studying/discourse-analysis-and-foreign-languages/ (Accessed: 13 March 2017).

SCMP (2017) China to unveil Shanghai free-trade port plan 'in coming months', South China Morning *Post*. Available at: http://www.scmp.com/news/china/economy/article/2121365/china-unveil-shanghai-free-trade-port-plan-coming-months (Accessed: 7 February 2018).

Sempa, F. (2006) 'Spykman's World', *American Diplomacy*. Available at: http://www.unc.edu/depts/diplomat/item/2006/0406/semp/sempa_spykman.html (Accessed: 7 February 2018). Sengupta, K. (2018) *How China's Belt and Road Initiative became a huge geopolitical controversy, The Independent*. Available at: https://www.independent.co.uk/news/long_reads/pakistan-imran-khan-belt-and-road-debt-trap-china-pakistan-economic-corridor-a8622351.html (Accessed: 27 November 2018).

Shapiro, J. L. and Snyder, X. (2017) 'Geopolitical Theories: November 10, 2017'. Available at: https://geopoliticalfutures.com/geopolitical-theories/ (Accessed: 7 February 2018).

Shen, S. (2016) *How China's 'Belt and Road' Compares to the Marshall Plan, The Diplomat*. Available at: https://thediplomat.com/2016/02/how-chinas-belt-and-road-compares-to-the-marshall-plan/ (Accessed: 2 October 2018).

Shepard, W. (2016) *The Real Role Of The AIIB In China's New Silk Road, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/07/15/the-real-role-of-the-aiib-in-chinas-new-silk-road/#31ba994c7472 (Accessed: 17 January 2019).

Shepard, W. (2017a) *Trains Are The New Pandas: The Real Impact That The New China-UK Rail Line Will Have, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/01/06/the-story-behind-the-new-china-to-uk-train/ (Accessed: 21 September 2021).

Shepard, W. (2017b) *What Happened On China's New Silk Road In 2017, Forbes*. Available at: https://www.forbes.com/sites/wadeshepard/2017/12/20/what-happened-on-chinas-new-silk-road-in-2017/#73892c6372e9 (Accessed: 22 November 2018).

Shi, Y. (2018) All aboard: China's high-speed rail 10 years on, Xinhua. Available at: http://www.xinhuanet.com/english/2018-08/01/c_137361580.htm (Accessed: 15 October 2018).

Singh, A. (2015) 'Blue-Water' Navies in the Indian Ocean Region, The Diplomat. Available at: https://thediplomat.com/2015/01/blue-water-navies-in-the-indian-ocean-region/ (Accessed: 22 November 2016).

Smith, J. (2015) *The US-China South China Sea Showdown, The Diplomat*. Available at: http://thediplomat.com/2015/10/the-us-china-south-china-sea-showdown/ (Accessed: 13 April 2017).

Smith, K. (2015) *China Signs Funding Agreement for Lahore Metro, International Railway Journal.* Available at: http://www.railjournal.com/index.php/asia/funding-agreed-for-lahore-metro-line.html (Accessed: 9 November 2017). Spinetta, L. (2006) *The Malacca Dilemma - Countering China's 'String of Pearls' with Land-Based Airpower*. Available at: http://www.dtic.mil/get-tr-doc/pdf?AD=ADA476931 (Accessed: 7 February 2018).

Srinivasan, M. (2021) *China extends \$500 million loan to Lanka, The Hindu*. Available at: https://www.thehindu.com/news/international/china-extends-500-million-loan-to-lanka/article34305277.ece (Accessed: 20 July 2021).

Stacey, K. (2017) *China signs 99-year lease on Sri Lanka's Hambantota port, Financial Times*. Available at: https://www.ft.com/content/e150ef0c-de37-11e7-a8a4-0a1e63a52f9c (Accessed: 18 February 2018).

Stashwick, S. (2017) US Navy Plans to Deploy Two Littoral Combat Ships to Singapore in 2018, The Diplomat. Available at: https://thediplomat.com/2017/06/us-navy-plans-to-deploy-two-littoral-combat-ships-to-singapore-in-2018/ (Accessed: 21 December 2018).

Stashwick, S. (2018) *China's Security Gambit in the Indian Ocean, The Diplomat*. Available at: https://thediplomat.com/2018/05/chinas-security-gambit-in-the-indian-ocean/ (Accessed: 29 October 2018).

Statista (2017) *Cargo handling in China 2016, by port type, Statista*. Available at: https://www.statista.com/statistics/258323/volume-of-handled-goods-in-chinese-seaports-and-river-ports/ (Accessed: 25 November 2017).

Stephens, H. L. (2012) *Breaking the Ice: China's Emerging Arctic Strategy, The Diplomat*. Available at: https://thediplomat.com/2012/08/breaking-the-ice-chinas-emerging-arctic-strategy/ (Accessed: 1 December 2017).

Stephens, P. (2017) *A train that proclaims China's global ambition, Financial Times*. Available at: https://www.ft.com/content/ed033dae-6c69-11e7-b9c7-15af748b60d0 (Accessed: 22 November 2018).

Stevens, A. (2015) *Pakistan lands \$46 billion investment from China, CNN*. Available at: http://money.cnn.com/2015/04/20/news/economy/pakistan-china-aid-infrastucture/ (Accessed: 6 November 2017).

Stewart M. Patrick (2018) *AIIB: Is the Chinese-led Development Bank a Role Model?, Council of Councils*. Available at: https://www.cfr.org/blog/aiib-chinese-led-development-bank-role-model (Accessed: 5 July 2018). Sudworth, J. (2013) *Shanghai free-trade zone launched, BBC News*. Available at: http://www.bbc.co.uk/news/business-24322313 (Accessed: 7 February 2018).

Sun, T. (Guorui) and Payette, A. (2017) *China's Two Oceans's Strategy: controlling waterways and the new silk road, Iris*. Paris. Available at: http://www.iris-france.org/wp-content/uploads/2017/05/Asia-Focus-31.pdf (Accessed: 7 February 2018).

Syrrakos, D. (2019) *China's relationships with Greece and Italy are deepening – EU is reaping exactly what it sowed, The Conversation*. Available at: https://theconversation.com/chinas-relationships-with-greece-and-italy-are-deepening-eu-is-reaping-exactly-what-it-sowed-127087 (Accessed: 23 July 2021).

Tang, J. (2006) With the Grain or Against the Grain? Energy Security and Chinese Foreign policy in the Hu Jin Tao Era. Available at: http://www.brookings.edu/fp/cnaps/papers/tang2006.pdf (Accessed: 7 February 2018).

Tao, X. (2017) *How Did Myanmar's Reforms Change Its Relations With China?, The Diplomat*. Available at: https://thediplomat.com/2017/03/how-did-myanmars-reforms-change-its-relations-with-china/ (Accessed: 5 October 2017).

Tata, S. (2017) *Deconstructing China's Energy Security Strategy, The Diplomat*. Available at: http://thediplomat.com/2017/01/deconstructing-chinas-energy-security-strategy/ (Accessed: 25 April 2017).

Tharoor, I. (2009) A Brief History of the Uighurs - TIME, Time. Available at: http://content.time.com/time/world/article/0,8599,1909416,00.html (Accessed: 31 March 2018).

Tharoor, I. (2015) What China's and Pakistan's Special Friendship Means, The Washington Poast. Available at: https://www.washingtonpost.com/news/worldviews/wp/2015/04/21/what-china-and-pakistans-special-friendship-means/ (Accessed: 7 November 2017).

The Economist (2013a) *Faster than a speeding bullet, The Economist*. Available at: https://www.economist.com/news/china/21589447-chinas-new-rail-network-already-worlds-longest-will-soon-stretch-considerably-farther-faster (Accessed: 7 February 2018).

The Economist (2013b) *The new masters and commanders - China's foreign ports, The Economist.* Available at: https://www.economist.com/news/international/21579039-chinas-growing-empire-portsabroad-mainly-about-trade-not-aggression-new-masters (Accessed: 4 December 2017). The Economist (2014a) *At the double - China's military spending, The Economist*. Available at: https://www.economist.com/china/2014/03/15/at-the-double (Accessed: 30 October 2018).

The Economist (2014b) *Frozen conflict - Denmark claims the North Pole, The Economist*. Available at: https://www.economist.com/news/international/21636756-denmark-claims-north-pole-frozen-conflict (Accessed: 30 November 2017).

The Economist (2016) *China v the rest - The South China Sea, The Economist*. Available at: http://www.economist.com/news/asia/21695565-sea-becomes-more-militarised-risks-conflict-grow-china-v-rest (Accessed: 8 February 2018).

The Economist (2017a) *China has built the world's largest bullet-train network, The Economist*. Available at: https://www.economist.com/news/china/21714383-and-theres-lot-more-come-it-waste-money-china-has-built-worlds-largest (Accessed: 8 September 2017).

The Economist (2017b) *Inner Mongolia has become China's model of assimilation, The Economist.* Available at: https://www.economist.com/news/china/21722853-chinese-mongolians-are-stillasserting-their-identity-inner-mongolia-has-become-chinas-model (Accessed: 10 November 2017).

The Economist (2017c) *The Arctic as it is known today is almost certainly gone, The Economist*. Available at: https://www.economist.com/news/leaders/21721379-current-trends-arctic-will-be-ice-free-summer-2040-arctic-it-known-today (Accessed: 30 November 2017).

The Economist (2018a) *China is rapidly developing its clean-energy technology, The Economist*. Available at: https://www.economist.com/special-report/2018/03/15/china-is-rapidly-developing-its-clean-energy-technology (Accessed: 8 October 2018).

The Economist (2018b) *What's in it for the Belt-and-Road countries?, The Economist*. Available at: https://www.economist.com/the-economist-explains/2018/04/19/whats-in-it-for-the-belt-and-road-countries (Accessed: 3 December 2018).

The Economist (2018c) *Will China's Belt and Road Initiative outdo the Marshall Plan?, The Economist.* Available at: https://www.economist.com/finance-and-economics/2018/03/08/will-chinas-belt-and-road-initiative-outdo-the-marshall-plan (Accessed: 2 October 2018). The Emerging Arctic: Risks and Economic Opportunities (2014) Council on Foreign Relations . Available at: https://www.cfr.org/interactives/emerging-arctic#!/%23Diplomacy and Security (Accessed: 24 May 2018).

The National (2017) *Orange Line not part of CPEC, The National*. Available at: http://nation.com.pk/17-Jan-2017/orange-line-lahore-not-part-of-cpec-na-body (Accessed: 9 November 2017).

Thiha, A. (2018) *Can Myanmar Afford China's Belt and Road?, The Diplomat*. Available at: https://thediplomat.com/2018/08/can-myanmar-afford-chinas-belt-and-road/ (Accessed: 29 October 2018).

Tiezze, S. (2014) In Africa, Li Keqiang Refutes Charge of Chinese 'Neo-Colonialism' | The Diplomat, The Diplomat. Available at: https://thediplomat.com/2014/05/in-africa-li-keqiang-refutes-charge-of-chinese-neo-colonialism/ (Accessed: 8 June 2018).

Tiezzi, S. (2014) 'The Maritime Silk Road Vs. The String of Pearls', *The Diplomat*. Available at: http://thediplomat.com/2014/02/the-maritime-silk-road-vs-the-string-of-pearls/ (Accessed: 22 November 2016).

Tiezzi, S. (2015) *Revealed: China's Reasons for Island-Building in the South China Sea, The Diplomat.* Available at: http://thediplomat.com/2015/04/revealed-chinas-reasons-for-island-building-in-the-southchina-sea/ (Accessed: 22 November 2016).

Tiezzi, S. (2016) *China: Tribunal Ruling 'Null and Void', Will Not Affect South China Sea Claims, The Diplomat*. Available at: https://thediplomat.com/2016/07/china-tribunal-ruling-null-and-void-will-not-affect-south-china-sea-claims/ (Accessed: 8 February 2018).

Trans-Siberian Rail Routes (2018). Available at:

http://www.baikalcomplex.com/images/common/map1.jpg (Accessed: 21 August 2018).

Trickett, N. and Thomas, O. (2017) *China, Russia, Iran: Ports and Power Along the Belt and Road, The Diplomat*. Available at: https://thediplomat.com/2017/03/china-russia-iran-ports-and-power-along-the-belt-and-road/ (Accessed: 3 August 2018).

Tsirbas, M. (2016) *What Does the Nine-Dash Line Actually Mean?, The Diplomat*. Available at: https://thediplomat.com/2016/06/what-does-the-nine-dash-line-actually-mean/ (Accessed: 3 December 2017).

Usman, A. (2016) *China financing Orange Line Metro Train: Shahbaz Sharif, The Express Tribune*. Available at: https://tribune.com.pk/story/1081669/china-financing-orange-line-metro-train-shahbaz-sharif/ (Accessed: 11 September 2017).

Vu, K. and Nguyen, M. (2018) *China and Vietnam call for maritime disputes to be settled, Reuters*. Available at: https://www.reuters.com/article/us-vietnam-china-politics/china-and-vietnam-call-formaritime-disputes-to-be-settled-idUSKCN1H81AO (Accessed: 31 December 2018).

Wang, J. (2016) *China and Saudi Arabia: A New Alliance?, The Diplomat*. Available at: https://thediplomat.com/2016/09/china-and-saudi-arabia-a-new-alliance/ (Accessed: 13 October 2017).

Wang, L. et al. (2008) Qinghai-Tibet Railway, China and the Solutions to Its Major Geotechnical Problems for Construction, International Conference on Case Histories in Geotechnical Engineering. Missouri. Available at: http://scholarsmine.mst.edu/icchge/6icchge/session13/9 (Accessed: 13 October 2017).

Ward, J. D. T. (2017) *The Emerging Geopolitics of the Indian Ocean Region, Asia Pacific Bulletin*. Washington, DC. Available at: http://hdl.handle.net/10125/47310 (Accessed: 13 October 2017).

Washington Post (2016) *Country Guide: China, Washington Post*. Available at: http://www.washingtonpost.com/wp-srv/world/countries/china.html (Accessed: 25 November 2017).

Watts, J. (2005) *The railway across the roof of the world, The Guardian*. Available at: https://www.theguardian.com/world/2005/sep/20/china.jonathanwatts (Accessed: 11 October 2017).

Wei, R. (2016) Seven more provinces to join China's free-trade zone club, bringing total to 11, South China Morning Post. Available at: http://www.scmp.com/news/china/economy/article/2011915/seven-more-provinces-join-chinas-free-trade-zone-club (Accessed: 8 February 2018).

West, J., Schandl, H. and Heyenga, S. (2013) *Resource efficiency: economics and outlook for China*. Bangkok. Available at: https://wedocs.unep.org/handle/20.500.11822/8119 (Accessed: 13 October 2017).

Wike, R. (2011) *From Hyperpower to Declining Power, Pew Research Center*. Available at: http://www.pewglobal.org/2011/09/07/from-hyperpower-to-declining-power/ (Accessed: 27 March 2017). Wikimedia (2008) 1947 Nanhai Zhudao, Wikimedia Commons. Available at:

https://commons.wikimedia.org/wiki/Category:Maps_of_the_South_China_Sea#/media/File:1947_Nan hai_Zhudao.png (Accessed: 10 September 2018).

Wikimedia Commons (2018) *1958 Diplomatic note from Pham Van Dong to Zhou Enlai, Wikimedia Commons*. Available at:

https://commons.wikimedia.org/wiki/File:1958_diplomatic_note_from_phamvandong_to_zhouenlai.jpg (Accessed: 23 October 2018).

Wong, C. H. (2016a) For China's Leaders, Age Cap Is but a Moving Number, The Wall Street Journal. Available at: https://blogs.wsj.com/chinarealtime/2016/11/01/for-chinas-leaders-age-cap-is-but-amoving-number/ (Accessed: 14 November 2017).

Wong, C. H. (2016b) *Nine-Dash Line's Ambiguity a Good Thing, Argues Chinese Military Academic, The Wall Street Journal*. Available at: https://blogs.wsj.com/chinarealtime/2016/06/05/nine-dash-lines-ambiguity-a-good-thing-argues-chinese-military-academic/ (Accessed: 8 February 2018).

Wood Mackenzie (2019) *China Economic Slowdown, Wood Mackenzie*. Available at: https://www.woodmac.com/news/feature/china-economic-slowdown-3-reasons-why-its-different-thistime/ (Accessed: 15 September 2021).

Worden, R. L., Savada, A. M. and Dolan, R. E. (1988) *China: a Country Study*. Washington, D.C: Federal Research Division, Library of Congress. Available at:

https://www.loc.gov/resource/frdcstdy.chinacountrystud00word (Accessed: 13 October 2017).

World Bank (2010) *Projects : Shandong Ecological Afforestation | The World Bank, Wordl Bank*. Available at: http://projects.worldbank.org/P112759/shandong-ecological-afforestation?lang=en (Accessed: 25 September 2018).

World Bank (2016) *China Trade at a Glance: Most Recent Values, World Bank*. Available at: http://wits.worldbank.org/CountrySnapshot/en/CHN (Accessed: 22 November 2016).

World Bank (2017) *China Launches New Poverty Reduction Case Database, World Bank*. Available at: http://www.worldbank.org/en/news/press-release/2017/05/26/china-launches-new-poverty-reduction-case-database (Accessed: 8 June 2018).

World Shipping Council (2018) *Top 50 World Container Ports /, World Shipping Council*. Available at: http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports (Accessed: 16 November 2018).

Wu, D. (2017) *China and Russia Sign Military Cooperation Roadmap, The Diplomat*. Available at: https://thediplomat.com/2017/06/china-and-russia-sign-military-cooperation-roadmap/ (Accessed: 29 January 2018).

Wu, K. (2012) 'China's Oil Supply Security: Imports, Strategic Stockpiling and Overseas Investment', in *China Energy Issues in the 12th Five Year Plan and Beyond COnference*. Singapore. Available at: http://esi.nus.edu.sg/docs/event/wu-kang.pdf (Accessed: 13 October 2017).

Xiaoping Yang (2018) When India's Strategic Backyard Meets China's Strategic Periphery: The View From Beijing, War on the Rocks. Available at: https://warontherocks.com/2018/04/when-indias-strategicbackyard-meets-chinas-strategic-periphery-the-view-from-beijing/ (Accessed: 27 November 2018).

Xinhua (2007) *Strong Wind Derails Train, Killing 4, China.org.cn*. Available at: http://www.china.org.cn/english/China/200975.htm (Accessed: 11 October 2017).

Xinhua (2011) 新疆喀和铁路客运通车 [Kahe Railway Opens], The Central Government of China. Available at: http://www.gov.cn/jrzg/2011-06/28/content_1895133.htm (Accessed: 9 November 2017).

Xinhua (2015) *Highlights of proposals for China's 13th Five-Year Plan, Xinhuanet*. Available at: http://news.xinhuanet.com/english/photo/2015-11/04/c_134783513.htm (Accessed: 13 October 2017).

Xinhua (2016a) Full Text: China Adheres to the Position of Settling Through Negotiation the Relevant Disputes Between China and the Philippines in the South China Sea, English.news.c. Available at: http://www.xinhuanet.com/english/china/2016-07/13/c_135509153_3.htm (Accessed: 26 October 2018).

Xinhua (2016b) SCO supports peace and stability in South China Sea, China.org.cn. Available at: http://www.china.org.cn/world/2016-05/25/content_38530226.htm (Accessed: 4 December 2017).

Xinhua (2017a) *Backgrounder: Economic corridors under Belt and Road Initiative, English.news.cn.* Available at: http://www.xinhuanet.com/english/2017-05/09/c_136268314.htm (Accessed: 26 February 2018). Xinhua (2017b) *China natural gas imports surge in 2017, Chinadaily.com.cn*. Available at: http://www.chinadaily.com.cn/a/201801/12/WS5a588227a3102c394518ee71.html (Accessed: 8 February 2018).

Xinhua (2017c) *China plans 2.6 trillion yuan of transport investment in 2017, China Daily*. Available at: http://www.chinadaily.com.cn/china/2017-02/27/content_28366691.htm (Accessed: 8 October 2017).

Xinhua (2017d) *China proposes 'blue economic passages' for maritime, Xinhuanet*. Available at: http://news.xinhuanet.com/english/2017-06/20/c_136380391.htm (Accessed: 26 November 2017).

Xinhua (2017e) *China to speed up bullet trains on Beijing-Shanghai route in Sept, Xinhua*. Available at: http://www.chinadaily.com.cn/business/2017-08/21/content_30899812.htm (Accessed: 18 September 2017).

Xinhua (2017f) *Chinese contractor to complete first berth of Kenya's Lamu port in mid 2018 - Business - Chinadaily.com.cn, China Daily*. Available at: http://www.chinadaily.com.cn/business/2017-04/07/content_28831548.htm (Accessed: 17 May 2018).

Xinhua (2017g) Vision for Maritime Cooperation under the Belt and Road Initiative, Xinhua. Available at: http://news.xinhuanet.com/english/2017-06/20/c_136380414.htm (Accessed: 26 November 2017).

Xinhua (2017h) *Xi Jinping's keynote speech at the World Economic Forum, China.org.cn*. Available at: http://www.china.org.cn/node_7247529/content_40569136.htm (Accessed: 24 November 2017).

Xinhua (2018) *China's Arctic Policy White Paper, The State Council of the People's Republic of China*. Available at: http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm (Accessed: 24 May 2018).

Xinhua (2917) *China sets up base in Djibouti - Xinhua | English.news.cn, XinhuaNet*. Available at: http://www.xinhuanet.com/english/2017-07/11/c_136435716.htm (Accessed: 18 May 2018).

Xu, M. and Mason, J. (2017) *China's energy demand to peak in 2040 as transportation demand grows: CNPC, Reuters*. Available at: http://www.reuters.com/article/us-china-cnpc-outlook/chinas-energydemand-to-peak-in-2040-as-transportation-demand-grows-cnpc-idUSKCN1AW0DF?il=0 (Accessed: 2 October 2017).

Xue, L. (2016) '美國再平衡戰略與中國"一帶一路" [US rebalance strategy and China's "One Belt, One Road"]', 世界經濟與政治[World Economics and Politics], 5, pp. 56–73 (Accessed: 13 October 2017).

Xue, M. (2021) *China's arms trade: which countries does it buy from and sell to?, South China Morning Post*. Available at: https://www.scmp.com/news/china/military/article/3139603/how-china-grew-buyermajor-arms-trade-player (Accessed: 21 July 2021).

Yan, H. and Feng, D. H. (1968) *How Myanmar's understanding of China is paving the way for economic success, South China Morning Post*. Available at: http://www.scmp.com/comment/insight-opinion/article/2113082/how-myanmars-understanding-china-paving-way-economic-success (Accessed: 5 October 2017).

Yao, M. (2018) *In-depth: How China becomes third-largest supplier of weapons worldwide? - China Military, China Mail.* Available at: http://eng.chinamil.com.cn/view/2018-02/27/content_7953754.htm (Accessed: 23 November 2018).

Yung, C. D. et al. (2014) "Not an Idea We Have to Shun": Chinese Overseas. Basing Requirements in the 21st Century, Institute for National Strategic Studies. Edited by P. C. Saunders. Washington, D.C: National Defense Univerity Press. Available at:

http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-7.pdf.

Yung, C. D. (2015) *Burying China's 'String of Pearls', The Diplomat*. Available at: https://thediplomat.com/2015/01/burying-chinas-string-of-pearls/ (Accessed: 31 October 2017).

Zhenxing, L. (2013) 'Perspectives on China-Africa Oil Ties', in *A Trilateral Dialogue on the United States, Africa and China*. Brookings, pp. 1–12. Available at: https://www.brookings.edu/wpcontent/uploads/2016/07/All-China-Oil-Papers-2.pdf (Accessed: 13 October 2017).

Zhixin, Z. (2014) *Why China Has Good Reason to Worry About the US Rebalance Strategy?*, *China-US Focus*. Available at: http://www.chinausfocus.com/foreign-policy/%0Awhy-china-has-good-reason-to-worry-about-the-us-rebalance-strategy/ (Accessed: 19 August 2018).

Zhou, L. (2017) *How a Chinese investment boom is changing the face of Djibouti, South China Morning Post*. Available at: http://www.scmp.com/news/china/diplomacy-defence/article/2087374/howchinese-investment-boom-changing-face-djibouti (Accessed: 20 May 2018).