

# **A ‘Bandung’ View of the World: The Political Economy of Sino-South African Megaprojects**



A thesis submitted in accordance with the requirements  
for the degree of Doctor of Philosophy

Ricardo Reboredo

School of Natural Sciences,  
Department of Geography

Trinity College Dublin

2020

## Declaration

I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and it is entirely my own work.

I agree to deposit this thesis in the University's open access institutional repository or allow the Library to do so on my behalf, subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement.

b) In the case of a thesis for which the work has been carried out jointly; the declaration must have a statement that it includes the unpublished and/or published work of others, duly acknowledged in the text wherever included.

c) Open access electronic theses are freely available over the World Wide Web for users to read, copy, download, and distribute subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement. Withheld access will be implemented, as applicable, according to the terms in Calendar Part III section 1, paragraph 114.

d) A digital repository is an online, searchable, web-accessible database containing works of research deposited by scholars, the purpose of which is both increased access to scholarship and long-term preservation.

A handwritten signature in blue ink, written over a horizontal line. The signature is stylized and appears to be 'N. Kelly'.

## Summary of Methods and Findings

This thesis aims to understand how the practices and processes of Chinese-inflected globalization, a specific type of *state-led* globalization, have been utilized by South African state actors operating across different levels in order to realize their politico-ideological objectives. Likewise, it examines how these actions have led to the grounding and furthering of China's broad geopolitical/geoeconomic initiatives as well as precipitated a reconstitution of power relations between the two countries.

South Africa was chosen for the study as it is arguably China's most significant partner on the African continent. This is evidenced by the extent to which diplomatic and economic ties have developed over the last decade. During this time period, South Africa has joined China in the BRICS grouping, participated in several Forums on China Africa Cooperation (FOCAC), and become China's largest trading partner on the continent. Moreover, the South African state beginning with the Zuma administration has started shaping a vision of what Alden and Wu (2016, p.3-4) term a 'new South African identity' that is increasingly defined by its 'Southward' orientation and thus looks to China for political and developmental support.

To address the overarching research goals, this study adopted a qualitative research design, specifically a case study methodology in which three Chinese-backed megaprojects were chosen and analysed. The study used megaprojects as its primary unit of analysis as these have become some of the principal instruments through which the reconfiguration of the South African state has taken place. The case study projects were selected largely for their significance to both South Africa's economy and the Sino-South African relationship as a whole. The empirical data for the research was drawn from three separate sources: a comprehensive literature review undertaken during the first year of the project, in-depth interviews with key stakeholders and informed parties, and an analysis of relevant state and corporate documents. Of the three sources, the most significant data came from the 66 separate interviews undertaken during the fieldwork phase. Respondents included corporate officials directly connected with each of the main case studies, consultants, industry insiders, journalists, and government officials from the Department of Trade and Industry (DTI), Department of International Relations and Cooperation (DIRCO), the Limpopo

Economic Development Agency (LEDA), the City of Johannesburg, the Industrial Development Corporation (IDC), and the Coega Development Corporation (CDC), among others.

The core argument in this study is that South Africa's elite-led pivot towards China has allowed state actors to pursue an ideological, economic, and political restructuring away from neoliberalism as practiced under the GEAR macro-economic suite of policies and towards a 'developmental state' approach (as set out by the Zuma administration). However, the embedding of Chinese actors and capital into strategically significant positions within South Africa's socio-technical systems (e.g., productive capacity, energy generation) has led to the creation of novel configurations of dependence which tie the country's political economy to the Chinese state. The specific forms of these configurations are contextually-dependent and showcase how the ultimate results of megaproject construction are contingent on a wide variety of actors and circumstances that defy 'top-down' conceptualization.

Beyond these main conclusions, several trends emerged from the research. First among these is the largely state-led nature of megaproject development in South Africa. As per the 'developmental state' rubric, South African actors have sought to incentivize the internationalization of Chinese firms – this has taken the form an 'entrepreneurial state' approach in which actors operating at different levels strike out on their own to bring in investment. A second major theme is the paucity of large-scale projects relative to what is reported in the media or agreed upon at multilateral conferences. This is largely due to the dysfunctional patterns of governance exhibited by the Zuma administration, some of which have continued into the early Ramaphosa era. Finally, the research has documented how megaprojects have become some of the main instruments through which Chinese influence is created and expressed in South Africa. This is due to a growing sector-specific dependence on state-led, megaproject-sized initiatives. The projects serve to entrench Chinese interests into host country politico-economic systems and create conditions of (inter)dependence. Moreover, they can advance the Chinese state's strategic developmental discourses by providing tangible examples of the benefits that come from cooperation.

## Preface

Parts of Chapter 3 have been published in the journal *African Geographical Review*.  
Reboredo, R. (2019) 'A panacea for development? Megaprojects and the construction of state legitimacy in post-apartheid South Africa', *African Geographical Review*.

Data collected throughout the fieldwork process was published in the journal *Urban Forum*. Brill, F. and Reboredo, R. (2019) 'Failed fantasies in a South African context: The case of Modderfontein, Johannesburg', *Urban Forum* 30, 2: 171-189.

Research for this dissertation was undertaken according to the guidelines set out by the Trinity College School of Natural Science's Research Ethics Policy.

## Acknowledgements

I am deeply indebted to a huge number of people, without whom this research would not have been possible.

Foremost thanks and heartfelt gratitude go to my supervisor, Dr. Pdraig Carmody for his extraordinary guidance and patience. Many thanks also go to Dr. Martin Sokol and Dr. Cian O'Callaghan for their assistance during my confirmation and beyond. I would also like to thank Cian for listening to my presentations on a number of occasions and helping improve them each time. Thanks also go to Dr. Philip Lawton and Dr. Giles Mohan for serving as my Viva examiners.

This research would not have been possible without the generous funding I received from Trinity College Dublin. Many thanks go to everyone at that institution, staff and graduate students alike. Thanks, in particular, must go to Dr. Gayle McGlynn, Dr. Mark Hennessy, Dr. Mary Bourke, Immanuel Darkwa, Jane Feeney, Dr. Chris Chevallier, Maedhbh Nic Lochlainn, and Nivelton Alves.

In South Africa I owe an enormous debt of gratitude to Ribka, Aman, Lungile, and Sipiwe, as they are some of the kindest people I've ever met. Without them my fieldwork experience would have assuredly been much more difficult and unpleasant. My deepest gratitude also goes to Frances Brill, Romain Dittgen, Phillip Harrison, Chris Rogerson, Patrick Bond, Cobus van Staden, Bob Wekesa, Barry van Wyk, Mark Allix, and the nearly 70 people (who must remain nameless) who volunteered their time and whose efforts and insights form the core of this thesis.

Finally, I am grateful for Emily and Archie, who put up with me through the good and the bad; Danny, Sean, and Nick, for keeping me grounded; and for Dr. Richard Grant, without whom I would never have become a geographer in the first place.

This thesis is dedicated to my parents in gratitude for all they have done to make sure no opportunity was out of reach.

## Table of Contents

A ‘Bandung’ View of the World: The Political Economy of Sino-South African Megaprojects.....	I
Declaration.....	II
Summary of Methods and Findings.....	III
Preface .....	V
Acknowledgements.....	VI
Table of Contents.....	VII
List of Tables .....	X
List of Figures .....	XI
List of Abbreviations .....	XII
Chapter 1: Introduction.....	1
1.1 Impetus for the Research.....	5
1.1.1 Why South Africa? .....	6
1.2 Central Research Question.....	8
1.3 Thesis Structure.....	10
Chapter 2 – Chinese-Inflected Globalization and the Emergence of Sino-African Megaprojects.....	13
2.1 Globalization with Chinese Characteristics? .....	16
2.1.1 Characteristics of Chinese State Capital.....	18
2.2 Understanding Megaprojects .....	21
2.2.1 Why Build Megaprojects?.....	22
2.2.2 Dangers of the Megaproject Approach.....	25
2.3 Chinese Megaprojects in Africa.....	27
2.3.1 Infrastructure Projects .....	31
2.3.2 Extractive Projects.....	35
2.3.3 Consumption Projects.....	38
2.3.4 Production Projects.....	41
2.3.5 Ceremonial Projects.....	47
2.4 Conclusion.....	49
Chapter 3 – A Panacea for Development? Megaprojects and South Africa’s Post-Apartheid Economic Policy .....	52

3.1 A Brief History of South Africa’s Post-Apartheid Economic Trajectory .....	53
3.1.1 Neoliberalism from Within? The ANC’s Economic Policy 1994-2007.....	53
3.1.2 Zuma’s Developmental State: 2008 – Present.....	59
3.2 Megaprojects and the South African State .....	62
3.2.1 State Building and Legitimacy .....	64
3.2.2 Political Symbolism: Legacy and Nation Building .....	67
3.2.3 Megaprojects as Instruments of South African Foreign Policy.....	72
3.3 Conclusion.....	76
Chapter 4 – Methodology .....	78
4.1 Case Study Research.....	80
4.2 Case Study Selection.....	82
4.3 Data Collection.....	90
4.4 Data Analysis .....	96
4.5 Limitations .....	97
Chapter 5 – ‘Catching the Value in the Value Chain’: The BAIC Automotive Factory .....	99
5.1 South Africa’s Automotive Industry .....	102
5.1.1 The Early Industry: LCPs to the Democratic Transition.....	102
5.1.2 Global Integration: From MIDP to APDP and Beyond .....	105
5.2 – Project Background and Specifications.....	110
5.2.1 Primary Stakeholders.....	111
5.2.2 Plant Specifications .....	114
5.3 Logics, Drivers, and Developmental Mechanisms.....	117
5.3.1 Primary Drivers .....	118
5.3.2 BAIC and Sino-South African Relations.....	121
5.4 Challenges and Economic Viability .....	123
5.5 Conclusion.....	130
Chapter 6 – ‘The Quote that Killed the Project’: The Modderfontein New City .....	132
6.1 Johannesburg – From Apartheid to ‘World Class’ City.....	136
6.1.1 The Post-Apartheid City.....	140
6.2 Project Background and Specifications.....	143
6.3 Logics, Rationales, and Developmental Mechanisms.....	149
6.3.1 Primary Logics .....	149



6.3.2 Modderfontein and Sino-South African Relations .....	157
6.4 Conclusion.....	159
Chapter 7 – ‘The Market is There’: The Energy Metallurgical Special Economic Zone...	161
7.1 Project Background and Specifications .....	163
7.2 Logics, Rationales, and Developmental Mechanisms.....	170
7.2.1 Project Development Timeline.....	171
7.2.2 South African Imperatives.....	173
7.2.3 The Role of Chinese Firms and ICC .....	177
7.3 Challenges and Economic Viability.....	180
7.4 EMSEZ and Sino-South African Relations.....	183
7.5 Conclusion.....	185
Chapter 8 – Geopolitics and Geoeconomics in the Global South: BRI, Megaprojects, and (Inter)dependence .....	187
8.1 – Chinese Commercial Expansion and State Influence in the Global South .....	189
8.1.1 ‘Global China’ in the African Context .....	193
8.2 ‘A Gateway to the Continent’ – Situating South Africa in the Context of Chinese Politico-Economic Expansionism .....	195
8.3 Sino-South African Megaprojects – Legitimization and Dependency .....	199
8.3.1 Project Formation and the Creation of Transnational Assemblages .....	200
8.3.2 Territorialisation Strategies: State and Non-State Spaces .....	204
8.4 Conclusion.....	206
Chapter 9 – Conclusions .....	209
9.1 Megaprojects as Politico-Economic Instruments.....	211
9.2 Findings and Emerging Themes.....	214
9.3 Contribution to the Literature and Future Research Pathways .....	219
Bibliography .....	221

## List of Tables

<b>Table 2:1</b>	<i>Megaproject Typology</i>	14
<b>Table 2:2</b>	<i>China's OEECZs in Africa</i>	44
<b>Table 3:1</b>	<i>Private Sector Manufacturing Employment</i>	56
<b>Table 4:1</b>	<i>Original List of Projects Compiled for Study</i>	83
<b>Table 4:2</b>	<i>Project Information</i>	87
<b>Table 4:3</b>	<i>Interview Spread</i>	94
<b>Table 5:1</b>	<i>Tariff Reductions 1995 – 2006 Under MIDP</i>	106
<b>Table 5:2</b>	<i>South African Passenger Car Production and Exports 1995 – 2012</i>	107
<b>Table 5:3</b>	<i>BAIC Plant Employment Estimates</i>	116
<b>Table 5:4</b>	<i>Best Selling Passenger Vehicles 2017 South Africa</i>	124
<b>Table 5:5</b>	<i>Best Selling Light Commercial Vehicles 2017</i>	125
<b>Table 7:1</b>	<i>Job Creation Estimates EMSEZ</i>	175
<b>Table 7:2</b>	<i>List of Large-Scale Chinese Firms/Banks with Direct Contacts to EMSEZ as of April 2019</i>	179
<b>Table 7:3</b>	<i>Planned Steel Interventions Post-2015</i>	181
<b>Table 7:4</b>	<i>African Steel Usage</i>	182

## List of Figures

<b>Figure 2:1</b>	<i>Chinese Investments in Africa vs Completed Contracts 2003 - 2016</i>	31
<b>Figure 3:1</b>	<i>Location of Planned Housing Developments in the Context of Gauteng's Economic Footprint</i>	66
<b>Figure 3:2</b>	<i>Average Growth in GDP Per Capita</i>	71
<b>Figure 3:3</b>	<i>South Africa's FDI Inflow's 2000 – 2017</i>	73
<b>Figure 4:1</b>	<i>Special Issue of 'Business Day' Released by the Chinese Embassy Celebrating the 68th Anniversary of the Founding of the PRC</i>	86
<b>Figure 4:2</b>	<i>Project Location</i>	89
<b>Figure 5:1</b>	<i>Map of the Coega SEZ</i>	115
<b>Figure 5:2</b>	<i>Passenger Car Sales in Africa Between 2005 and 2017</i>	127
<b>Figure 5:3</b>	<i>New Vehicle Sales Per Country, 2017</i>	128
<b>Figure 6:1</b>	<i>General Apartheid-era Racial Zoning Model</i>	137
<b>Figure 6:2</b>	<i>Johannesburg's Racial Zoning Patterns circa 1970</i>	138
<b>Figure 6:3</b>	<i>Area Sold to Zendai by AECI</i>	145
<b>Figure 6:4</b>	<i>Modderfontein Master Plan</i>	148
<b>Figure 6:5</b>	<i>The MT Development Site with Waterfall City in the Background</i>	157
<b>Figure 7:1</b>	<i>DTI Plans for Musina Makhado Special Economic Zone</i>	165
<b>Figure 7:2</b>	<i>EMSEZ Initial Plan</i>	167

## **List of Abbreviations**

AECI	African Explosives and Chemical Industries
AGOA	African Growth and Opportunity Act
AIS	Automotive Investment Scheme
ANC	African National Congress
APDP	Automotive Production Development Programme
BAIC	Beijing Automotive Industry Holding Co.
BAIC SA	Beijing Automotive Industry Holding Co. South Africa
BAW	Beijing Automobile Works Co.
BEE	Black Economic Empowerment
BIDR	Beijing Industrial Designing and Research Institute
BRI	Belt and Road Initiative
BRICS	Brazil, Russia, India, China, and South Africa
BRT	Bus Rapid Transit
CAD Fund	China-Africa Development Fund
CARI	China Africa Research Initiative
CBD	Central Business District
CCP	Chinese Communist Party
CDC	Coega Development Corporation
CKD	Complete Knock-Down (Kit)
COAMC	China Orient Asset Management Co.
COSATU	Congress of South Africa Trade Unions
CSIR	Council for Scientific and Industrial Research
DFA	Development Facilitation Act
DFI	Development Finance Institution
DIRCO	Department of International Relations and Cooperation
DRC	Democratic Republic of the Congo

DTI	Department of Trade and Industry
EDD	Economic Development Department
EIZ	Eastern Industrial Zone
EMSEZ	Energy Metallurgical Special Economic Zone
EPC	Engineering, Procurement, and Construction
EXIM Bank	Export-Import Bank
FAW	First Automobile Works
FDI	Foreign Direct Investment
FIRE	Finance Insurance and Real Estate
FOCAC	Forum on China-Africa Cooperation
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
GJMC	Greater Johannesburg Metropolitan Council
GVC	Global Value Chain
ICBC	Industrial and Commercial Bank of China
ICC	International Capacity Cooperation
ICT	Information and Communications Technology
IDZ	Industrial Development Zone
IEP	Integrated Energy Plan
IMF	International Monetary Fund
IPAP	Industrial Policy Action Plan
IPP	Independent Power Producer
ISCOR	South African Iron and Steel Industrial Corporation
ISI	Import Substitution Industrialization
JV	Joint Venture
LCP	Local Content Policies
LEDA	Limpopo Economic Development Agency
LGTA	Local Government Transition Area

MEC	Minerals Energy Complex
MFA	Ministry of Foreign Affairs
MIDP	Motor Industry Development Programme
MNC	Multinational Corporation
MOFCOM	Ministry of Commerce
MOU	Memorandum of Understanding
NDP	National Development Plan
NDRC	National Development and Reform Commission
NGP	New Growth Plan
OECCZ	Overseas Economic and Commercial Cooperation Zones
OECD	Organization for Economic Co-operation and Development
OEM	Original Equipment Manufacturer
POE	Privately-Owned Enterprise
PPP	Public-Private Partnership
PRASA	Passenger Rail Agency of South Africa
PRC	People's Republic of China
RDP	Reconstruction and Development Plan
ROC	Republic of China
SAAM	South African Automotive Masterplan
SADC	Southern African Development Community
SAEMB	South Africa Energy Metallurgical Base
SAIIA	South African Institute of International Affairs
SAPS	South African Police Service
SARB	South African Reserve Bank
SASAC	State-Owned Assets Supervision and Administration Commission
SDF	Spatial Development Framework
SDI	Spatial Development Initiatives
SEZ	Special Economic Zone

SGR	Standard Gauge Railway
SIPs	Strategic Integrated Projects
SKD	Semi-Knockdown (Kit)
SME	Small to Medium-sized Enterprises
SMME	Small, Medium, and Micro Enterprises
SNG	Sub-National Government
SOE	State-Owned Enterprise
SSA	Sub-Saharan Africa
TISCO	Taiyuan Iron and Steel Group Co.
UIM	Urban Integrated Megaproject
WTO	World Trade Organization





## Chapter 1: Introduction

The People's Republic of China<sup>1</sup> has emerged as a major player in Africa's political economy over the last several decades. While China has had ties with a number of African countries since the Mao era, the scope of engagement has significantly increased with its integration into global capitalism and subsequent 'rise' as an economic power (Lin, 2010; Taylor, 2010). In 2009, China overtook the United States as the continent's largest trading partner, and its state-run policy banks have subsequently become major financiers for African development projects. This economic ascendancy has been leveraged by the Chinese state as it pursues greater political influence. As of 2019, 53 of the 54 African countries have established diplomatic relations with China (as opposed to Taiwan), with eSwatini being the lone holdout. Moreover, 51 African leaders attended the 2018 Forum on China Africa Cooperation (FOCAC), which took place in Beijing (Dahir, 2018).

Contemporary Sino-African engagement is part of a larger, multifaceted, and expansionist moment – what Lee (2017, p.xii) terms 'Global China'<sup>2</sup> – which in turn is driven by a confluence of domestic politico-economic factors and an increasingly assertive foreign policy (Breslin, 2009; Lim, 2010). Three decades of explosive export-led growth beginning in the late 1980s have led to successive 'umbrella projects'<sup>3</sup> undertaken by the Chinese state with the overarching goals of maintaining high rates of economic growth (via the geographic expansion of Chinese firms and goods), acquiring strategically significant resources, recycling China's massive foreign exchange (forex) reserves through profitable overseas investments, and emerging as a norm-creating power within the global political order (Carmody and Owusu, 2007; Breslin, 2018). These umbrella projects thus blur the line between politics and economics, yet it is important to note that in terms of structure,

---

<sup>1</sup> In this thesis, the People's Republic of China (PRC) is referred to as 'China' – while the Republic of China (ROC) is referred to as 'Taiwan'.

<sup>2</sup> Lee uses 'Global China' as a shorthand for the entirety of China's economic expansion and globalizing strategy. As such, it comprises a wide range of activities (e.g. media, migration, scientific research, NGOs) which may not always be state-led.

<sup>3</sup> Zhang, (2017, p.6) defines these as high priority initiatives under which 'almost all other major international policies are supposed to be framed'. The main umbrella projects since the year 2000 are 'Go Out' (走出去) and 'Belt and Road' (一带一路).

they are more akin to loose ‘policy envelopes’ (Jones and Zeng, 2019, p.2), than ‘master plans’. Indeed, they are kept deliberately vague in order to accommodate the diverse interests involved and give these a wide latitude to influence specific policy (Zeng, 2019). Accordingly, despite their official framing (which often presents them as centrally controlled, top-down initiatives – see Taylor [2012]), they unfold in a fragmented, disjointed fashion and their articulations are subject to a variety of context-specific factors (Jones and Zeng, 2019).

China’s expansionist moment and the initiatives through which it manifests geographically at once reinforce and transform certain aspects of globalization and global capitalism and can be conceptualized as having particular sets of characteristics and mechanisms of engagement (from here on known as *Chinese-inflected globalization*<sup>4</sup>). As per Lim (2010; 2013), the export-led growth rates of the so-called ‘China miracle’ were co-produced by the state’s proactive reorganization of space to accommodate the fixing (Harvey, 1981) of transnational capital looking to profit from the country’s labour regime (initially through its special economic zones (SEZs) as part of Deng Xiaoping’s ‘ladder step’ program [Yeh and Wharton, 2016, p.287]), as well as structural changes to global capitalism itself (e.g. the profusion of globalized production networks). As such, despite being an ostensibly socialist country, China’s engagement with the global economy, as well as its contemporary reshaping of transnational geoeconomic configurations, occurs within the system of variegated capitalism (Lim, 2010). In Africa, the specific configurations and manifestations of Chinese expansion have had significant effects on the continent’s economic and political landscapes.

The latest phase of Sino-African engagement has been precipitated by a concerted campaign instituted by the Chinese state of both high-level bilateral cooperation and exchanges, and multilateral engagement via events like FOCAC. As per French (2014), the comprehensiveness of China’s approach to engagement, as well as its willingness to take risks (relative to Western states) endear it to African heads of state. While small-scale private Chinese enterprises have certainly become more numerous throughout Africa in

---

<sup>4</sup> Specifically, Chinese-inflected globalization is a type of state-led globalization that results from the interface of host country governments and the mechanisms and processes of Chinese firm internationalization operating within the country’s state capitalism model.

recent years (Sun, 2018), as a whole, Sino-African ties are driven by a broad *top-down* diplomacy which places strategic emphasis on the use of ‘South-South’, and other ‘assumed equality’ developmental discourses<sup>5</sup>, disseminated through the aforementioned mechanisms of engagement. This allows the Chinese state to implement an economic and political framework of uneven power relations to the benefit of its (often uncoordinated) economic actors (Taylor, 2012). However, as documented by Corkin (2011), Kragelund and Carmody (2016), Lee (2017) and others, contextually-specific conditions can give African *elites* a certain amount of power/agency to attain their own goals.

Observing Sino-African ties through Kaplinsky’s (2008) three vectors of interaction – trade, aid, and foreign investment – allows one to conceptualize how the economic relationship has grown over the last few decades and details the profound, yet varied and uneven, effects of increased engagement. As per the China-Africa Research Initiative (CARI) (2018), Sino-African trade steadily increased between 2002 and 2014; however, overall values have since fallen somewhat as weak commodity prices have severely affected the value of African exports to China (which has in turn contributed to China’s growing trade surplus with the continent). Indeed, despite a discursive strategy which emphasizes ‘win-win’ cooperation, African exports to China have generally been primary resources (e.g., oil, metals, minerals) originating from a relatively small number of countries (Kaplinsky, McCormick, Morris, 2007). China’s growing role in African economies has thus not led to either diversification or significant changes in the continent’s position of primary resource exporter within the international division of labour, though certain countries like Ethiopia have leveraged Chinese ties toward the creation of effective industrial policy.

In terms of investment, Chinese FDI flows to Africa remains small, especially when compared to the volumes directed towards Europe and North America. Indeed, As Lee (2017, p.2) notes, China’s FDI stock in Africa represents only 3.82% of the country’s total outward stock. FDI projects are largely concentrated in the extractive sector and built in order to meet growing Chinese demand for mineral resources. However, a number of

---

<sup>5</sup> In this thesis, *discourse* refers to a ‘historically emergent collection of objects, concepts, and practices’ that ‘mutually constitute’ each other to cohere into stable meaning-systems’ (Doulton and Brown, 2009 quoted from Sovacool and Hess, 2017, p.714).

productive sector projects built by firms seeking to expand internationally have emerged in recent years (MOFCOM, 2018, p.25).<sup>6</sup>

The final vector, aid, takes a variety of forms, including turnkey<sup>7</sup> and technical cooperation projects, as well as concessional loans and agricultural assistance. As will be detailed later in this thesis, the majority of Chinese economic activity in Africa is in service provision (which is often characterized in official Chinese documents as aid), specifically construction projects. While these projects are often financed by Chinese policy bank loans, they are ultimately owned by African governments.

Megaprojects, whether built as investment or service provision, have become some of the primary instruments through which engagement is expressed in this latest phase of Sino-African relations. As Flyvbjerg (2014) notes, megaprojects are much more than magnified versions of smaller designs. Rather, given their costs, logics<sup>8</sup>, and the multitude of actors required to successfully deliver a project, they represent an entirely different type of venture in terms of aspirations, complexities, and placemaking strategies. Throughout Africa, these sorts of projects, which include the Kenyan Standard Gauge Railway (SGR), the Addis Ababa-Djibouti Railway, and the Kilamba Kiayi New City in Angola, are being planned and built in significant numbers (in what Kanai and Schindler (2018) term an ‘infrastructure scramble’<sup>9</sup>), and are spurring academic and popular debates about neo-colonialism, ‘debt-trap’ diplomacy (i.e., the systematic use of predatory loan practices), the agency and power of African actors, and the nature of globalization and development. As such, megaprojects constitute one of the most visible and significant aspects of the latest phase of engagement, and in many ways drive popular and academic discussion on the topic. This thesis will contribute to the growing literature on this topic by interrogating the logics behind Chinese-backed megaprojects in South Africa, China’s key ally (Alden and Wu, 2016), largest trading partner, and biggest investment destination on the continent (National Bureau of Statistics of China, 2017).

---

<sup>6</sup> As per a recent UNCTAD (2019) report, China’s current FDI stock (\$43 billion) makes it the 5<sup>th</sup> largest investor economy in Africa behind France, the Netherlands, the United States, and the United Kingdom.

<sup>7</sup> Turnkey projects are those which material, technology, and services are brought in from abroad (Yeh and Wharton, 2015).

<sup>8</sup> The term ‘logics’ refers to the rationales, imperatives, and justifications behind specific projects (Ballard and Rubin, 2017).

<sup>9</sup> Though not all megaprojects are infrastructure projects (see Chapter 2).

Before continuing, it is important to note that while the term ‘megaproject’ has numerous definitions throughout the literature and is often flexibly applied to a variety of projects and schemes, this thesis will work with a modified version of Fiori and Kovaka’s (2005) holistic definition which highlights five key characteristics of megaprojects: cost, risk, complexity, visibility, and ideals. A megaproject will therefore be defined as:

*A construction project, or aggregate of projects, characterized by: magnified cost, extreme complexity, increased risk, lofty ideals, and high visibility, in a combination that represents a significant challenge to the stakeholders, and has a significant impact on the community.*

This definition allows for a conceptualization of megaprojects which considers context and allows for comparison in a way that looking at simple figures does not. In the study of megaprojects, the full impact of any given project may extend far beyond the price tag. For example, the African Union headquarters building in Addis Ababa, Ethiopia. While its final price tag (\$200 million) pales in comparison to that of many other projects, its significance and symbolism are enormously important to the current era of ‘South-South’ cooperation. Donated to the African Union by the Chinese government, the building has been used in the official discourse to represent China’s political commitment to Africa and its intentions to enhance economic linkages with the continent (BBC, 2012).

## **1.1 Impetus for the Research**

In recent years, a small but increasing number of studies have begun analysing the effects of large-scale Chinese development projects in Africa (Wissenbach and Wang, 2017; Lee, 2017; Kanai and Schindler, 2018; Brill and Reboredo, 2018). Yet many of these contemporary studies either focus on the construction process and subsequent local-level results (Kanai and Kutz, 2011; Benazeraf and Alves, 2014; Murray 2015), or limit their scope to a single sector (Ballard and Rubin, 2017; Harrison and Todes, 2017; van Noorloos and Leung, 2018).

The literature on South African megaprojects is similarly structured. The specific sectoral ramifications of South Africa’s megaprojects have been analysed by a growing literature (Sutherland, Sim and Scott, 2014; Hannan and Sutherland, 2014; Welman and

Ferreira, 2014; Murray, 2015; Ballard Dittgen, Harrison, and Todes, 2017) which this thesis seeks to contribute to in the form of its case studies. However, most of these do not consider the broad geopolitical or geoeconomic dimensions that Chinese-backed megaprojects share. Thus, while the literatures on Sino-African relations and megaprojects have grown independently of each other, few studies have combined the two and explored the logics of particular projects in combination with how these can ultimately ground China's extant initiatives and reconfigure power relations between countries.

### *1.1.1 Why South Africa?*

This research focuses on South Africa for variety of reasons. Foremost amongst these is the increasing significance (both domestic and international) of its relationship/partnership with China, which makes it an ideal test case to understand how the processes and practices of Chinese-inflected globalization can play out. Despite being only two decades old, diplomatic relations<sup>10</sup> between the two countries have become highly important for South Africa's economic and political trajectory, with China recently becoming the country's largest trading partner and a close ally in terms of international relations (Landsberg, 2010; Alden and Wu, 2016). Moreover, beginning with the Jacob Zuma administration (2009-2018) the African National Congress (ANC), South Africa's governing party, has leveraged cooperation with China to bring about an ideological shift within high-level government circles. President Zuma, who as one analyst noted, had a decidedly anti-western, or 'Bandung'<sup>11</sup> view of the world, sought to move the country away from the West's political and economic influence, and instead cultivate linkages with the emerging powers of the Global South, specifically China<sup>12</sup> (Interview, Analyst, October 2017, Johannesburg) in what Alden and Wu (2016, p.3) term a 'Southward' reorientation.

Following this pivot, certain departments, agencies, and offices within the South African state have begun to view China as being representative of a new development paradigm and have aggressively sought to bring in Chinese investment (Interview, LEDA,

---

<sup>10</sup> Official relations were established in January of 1998.

<sup>11</sup> Referencing the 1955 meeting between African and Asian states.

<sup>12</sup> It is important to note that this shift took place in the wake of the global financial crisis, when the Global South was buoyed by China's demand for commodities and emerging markets appeared to be ascending (see Kiely, 2016).

November 2017, Johannesburg; Interview, CDC Representative 2, January 2018, Johannesburg; Interview, IDC, February 2018, Johannesburg). Zuma's successor, Cyril Ramaphosa, has also sought to leverage the relationship and his recent state visit to China led to the signing of several prominent development cooperation agreements (Stone, 2018), on top of earlier agreements signed at the 2018 FOCAC. Likewise, President Ramaphosa has stated that he will present Chinese state actors with what he terms a 'book of investable projects'<sup>13</sup> (Mokone, 2018) and has characterized the relationship as being crucial for South African development by asserting that 'at the centre of our engagement with China is the task of creating jobs for South Africans' (DIRCO, 2018).

China has thus emerged as South Africa's key partner, one which the state looks to when international support is needed for its political and developmental agendas (Alden and Wu, 2016). Indeed, given the growing dependence on China for politico-economic support both domestically (in terms of financing and development projects) and internationally, the South African state's legitimacy now at least partly rests on its relationship with the country via great power attachment. As per Woods (quoted in Carmody 2017c, p.866), South African officials regularly serve as an 'echo of China' in high-level multilateral meetings. Moreover, according to one analyst interviewed for this research, certain ministries within the state have developed strong 'ideological commitments' (i.e., shared interests, ideas, and outlooks) to China (Interview, Analyst, October 2017, Pretoria).

On the other side of the equation, the Chinese state and its representatives in South Africa portray the country as a 'gateway to Africa' given its advanced financial and logistical capabilities (Interview, Analyst, October 2017, Pretoria). South Africa is thus presented in the official discourse as being crucial for the expanded reproduction of Chinese-based capital on the continent.<sup>14</sup> Additionally, Chinese actors often characterize the country as 'Africa's representative' in wider multilateral assemblies, a description which has been echoed by some members of the South African government (Interview, Analyst, September 2017, Johannesburg), but disavowed by others (Interview, DIRCO,

---

<sup>13</sup> Likely referring to backlogged state-led development projects like the Mzimvubu Water Project.

<sup>14</sup> China is also dependent on South African minerals such as chrome (60% of imports in 2016), platinum (62% of imports in 2016) (OEC, 2019a; OEC, 2019b).

October 2017, Pretoria).<sup>15</sup>

These developments are significant for broader African development given that South Africa is one of the continent's largest economies and has functioned since its apartheid era as a 'sub-imperial state' (Bond, 2013, p.2), which seeks to promote economic liberalization and transnational capital flows in order to facilitate regional market access by its (trans)national corporations, while concomitantly being influenced by larger actors (Carmody 2013). As such, the Sino-South African partnership affects all of southern Africa. Indeed, linkages between the two countries have already facilitated the integration of Chinese capital into the region through pre-existing South African corporate networks (Carmody, 2017c) and have transformed the character and function of southern Africa's consumer markets (Carmody and Murphy, 2017; Murphy and Carmody, 2019). As Carmody and Murphy (2017) explain, the influx of BRICS (largely South African and Chinese) commodities into the region's markets has resulted in a consumption regime where imports are more accessible than domestically-produced goods. Moreover, certain profitable sectors of the economy (e.g., tourism) are becoming dominated by foreign (BRICS) capital. These shifts have led to declining domestic production, the displacement of local businesses, and the increasing prevalence of informal livelihood strategies.

## **1.2 Central Research Question**

At its core, this thesis aims to understand how the practices and processes of Chinese-inflected globalization have been leveraged by South African state actors in order to realize their politico-ideological objectives, specifically the adoption of a 'developmental state' approach. Likewise, it examines how these actions have led to the grounding/furthering of China's geopolitical/geoeconomic initiatives and reconstituted power relations between the two countries. The study uses megaprojects as the primary unit of analysis since these projects form central hubs where global flows of capital, expertise, and ideology interface with local circuits of power – as such they represent some of the most significant and visible politico-economic instruments of the latest phase of Sino-

---

<sup>15</sup> This reflects the broad uncertainty and dysfunction within the South African government (see Chapter 8). One analyst interviewed noted that 'there is no 'South African' perspective, every [government] department seemingly has a different idea/perspective' (Interview, Analyst, October 2017, Johannesburg).



South African (and more broadly Sino-African) engagement. Moreover, given the high-level linkages, transnational networks, and discursive practices required for state-led megaproject delivery, exploring Sino-South African ties through this lens can illuminate the specific connections, flows, and dynamics that ultimately help shape relations.

Taking inspiration from Corkin's (2011; 2016) study on Sino-Angolan relations, the analysis takes place on two levels: a practical examination which delineates the specific actors involved in each of the case studies, and a theoretical analysis which examines what the projects can tell us about both the Sino-South African relationship and the character of Chinese-inflected globalization. The specific questions that guided this research are as follows:

- What are the logics of Chinese-backed megaprojects in South Africa?
- What politico-economic networks are created and what social or political embedding occurs through project implementation?
- What are the discourses used to legitimize and help embed these projects?
- What effects have Chinese-backed megaprojects had on Sino-South African relations?
- What can these mechanisms of engagement reveal about Chinese-inflected globalization?

The central argument that runs throughout this thesis is that the elite-led re-orientation towards China and the subsequent leveraging of that country's considerable financial and diplomatic capacities has allowed South Africa to pursue a political, economic, and ideological restructuring that would otherwise not have been possible. In essence, the pivot toward China has allowed the state to move away from the previous phase of neoliberal development (instituted as the Growth, Employment and Redistribution (GEAR) suite of macro-economic policies – see Chapter 3) and helped legitimize the 'developmental state' approach. However, the embedding of Chinese capital into key nodes within South Africa's socio-technical systems has led to the creation of novel configurations of dependence which tie the country's political economy to the Chinese state.

While the relationship between the two countries is articulated through a number of

vectors, South Africa's embrace of (and growing sector-specific dependence on) the megaproject framework throughout its democratic era means that Sino-South African megaprojects have become some of the principal instruments through which the reconfiguration of the South African state has taken place. The case studies presented in this research highlight how a myriad of South African state actors (e.g., central, provincial, parastatal) have attempted to create the conditions for the embedding of Chinese capital in the form of megaprojects in order to meet their objectives within the context of the state's developmentalist agenda. However, the case studies also show that the geographies of Chinese engagement vis-à-vis the outcomes of any given project emerge from its particularities and situational characteristics and that their specific territorial forms are subject to a multitude of fragmented, multi-level imperatives which link sub-national spaces to transnational capital flows.

### **1.3 Thesis Structure**

This thesis is organized into two major sections: research design/background literature (Chapters 1-4) and major findings/conclusions (Chapters 5-9). The first section has been designed to provide the necessary context for the research as well as explain the choices made in terms of study design and fieldwork. The second section then gives specific insight into the logics, rationales, and developmental mechanisms behind three Chinese-backed projects in South Africa.

Chapters two and three will comprise the literature review section of the thesis. Chapter two will explore the existing literature on Chinese megaprojects throughout the African continent, detailing how the contemporary wave of projects is both part of China's broader internationalization strategies and representative of the different economic complementarities available to Chinese actors. Additionally, it will delve into the global megaproject literature, detailing why projects have become some of the most ubiquitous instruments for Global South elites in the pursuit of a variety of political, ideological, or economic objectives. Chapter three will provide context in terms of South Africa. It will explore how capitalism in the country has changed since the end of apartheid, specifically detailing the shift from the neoliberal GEAR macro-economic strategy to the Zuma administration's 'developmental state' approach. In addition, the chapter will analyse the

effect of large-scale projects on South Africa's politico-economic trajectory throughout the democratic period and explain why certain industries have become reliant on state-led, megaproject-based initiatives over the last decade.

Chapter four will discuss this thesis' overall research design and detail the specific methodological processes and decisions used in data collection, organization, and analysis. Topics covered will include the decision to use a case study research strategy, why each of the specific case studies was chosen, the importance of elite interviews, triangulation of data sources, and ethical considerations. Additionally, it will discuss the limitations of the study.

Chapters five, six, and seven contain the specific case studies, and along with chapter eight comprise the analysis section of the thesis. The case study chapters will function as the practical examination, interrogating the specific actors, contexts, and logics behind each project. Chapter five presents a detailed portrait of the Beijing Automotive Industry Holding Co. (BAIC) automobile factory in the Coega Special Economic Zone (SEZ) near Port Elizabeth. It will briefly examine the trajectory of South Africa's automotive industry before detailing the project's specifications, logics, and developmental mechanisms. Chapter six will investigate the now-defunct Modderfontein New City project and analyse its failure within the context of Johannesburg's shifting urban regulatory environment. Chapter seven will examine the Energy Metallurgical Special Economic Zone (EMSEZ) at Musina-Makhado, interrogating project development within the context of South Africa's increasingly dysfunctional steel sector. Chapter eight will contain the theoretical analysis. It will argue that despite often being driven by commercial imperatives, megaprojects form a constitutive part of Chinese geopolitics and the creation of Chinese influence throughout the Global South. It will then detail how the leveraging of these projects by South African state actor serves to create and territorialize novel configurations of dependency which are based on each project's specific context and characteristics. In this fashion, the chapter will attempt to answer Glassman's (2011 quoted in Flint and Zhu, 2019, p.95) call and link the 'messiness' of local-level project implementation to the 'simplicity' of high-level geopolitical initiatives. Finally, chapter nine will state the conclusions, synthesize the arguments put forth in earlier chapters, place

this thesis within the growing literature on Sino-South African relations, and lay out implications for future research.

## **Chapter 2 – Chinese-Inflected Globalization and the Emergence of Sino-African Megaprojects**

Sino-African megaprojects are the result of dynamic, transnational processes. These projects, while spatially and politically complex, provide significant insight into both the modalities of engagement of Chinese actors and the strategies used by African elites to leverage the wide-ranging processes of Chinese internationalization. Likewise, they highlight how the interests of both African and Chinese actors can coalesce and generate novel configurations of power and influence.

In order to gain a fuller understanding of how megaprojects come about and what effects they may have, this thesis conceptualizes them as ‘assemblages’ - a collection of things, places, and processes brought together by a central or material entity (Sneddon, 2015, p.6). This characterization helps emphasize that projects are not merely technical and scientific achievements, but more complex sites which articulate globalized flows of capital, ideology, expertise, and technology. While Sneddon’s research (Isaacman and Sneddon, 2000; Sneddon, 2015) focuses on large hydropower projects, his conclusions – that projects act ‘as central hubs that draw together, or assemble, various kinds of networks’ and represent ‘crucial spatial and temporal nodes’ of transnational (techno)politics, can be extended to megaprojects as a whole (Sneddon, 2015, p.8 – 9).

In the African context, Chinese-backed megaprojects bring together an assortment of actors which can include central state-owned enterprises (SOEs), provincial SOEs, private investors, policy banks, governmental departments, multinational corporations (MNCs), economic migrants, small-to-medium enterprises (SMEs), and international agencies. These actors are motivated by differentiated sets of imperatives and operate/interface in diverse ways. As such, the outcomes of any given megaproject emerge from its particularities and the specific configurations of each project are best analysed at the local-level. Nevertheless, several overarching themes regarding Sino-African megaprojects have emerged from the literature. Foremost among these is the involvement of the Chinese state either as project initiator (directly proposing the project) or facilitator (e.g. preferential financing, construction) (Cain, 2014; Wissenbach and Wang, 2017; Brautigam and Hwang, 2017), an element that is reflective of both the scale and capital

requirements of megaprojects and the economic complementarities which exist between the different sets of actors involved (Alves, 2013). As will be explored in this chapter, the role of Chinese banks and SOEs represents a blurring between the commercial and geopolitical - a distinctive characteristic of Chinese-inflected globalization.

Building on Gellert and Lynch’s (2013) analytical typology, this thesis argues that five distinct categories of Chinese-backed megaprojects can be observed on the African continent (Table 2:1).

Type	Examples
Infrastructure Projects	Energy Installations, Ports, Roads, Railways, Sanitation Systems
Extractive Projects	Mining, Oil, Gas Installations
Production Projects	Manufacturing Zones, Overseas Economic and Commercial Cooperation Zones (OECCZs), Special Economic Zones (SEZs) Industrial Parks
Consumption Projects	Urban Integrated Megaprojects (UIMs) <sup>16</sup> , Mega-Malls, Skyscrapers
Ceremonial Projects	Palaces, Stadia, Cultural Centres

**Table 2:1 Megaproject Typology**

<sup>16</sup> This refers to large-scale, privately-owned, masterplanned developments which include a mix of housing, commercial enterprise, and infrastructure (Shatkin, 2011).

The projects, while diverse in aims (e.g., commercial, political, or a combination of the two), financing, and construction, are built and ‘brought together’ by a central phenomenon – China’s expansionist moment, and the myriad actors (both state and non-state), imperatives, processes, and networks involved.

For the Chinese state, each of the categories (while not necessarily driven by statist logics) play a different role in its geostrategic and geoeconomic designs. In terms of diplomacy, it is important to note that megaprojects are just one of a variety of instruments which can be leveraged by Chinese state actors in the practice of economic statecraft with others including foreign aid, political support through a South-South Cooperation framework, and ‘mutual benefit loans’ (Brautigam and Tang, 2014, p.799). The application and use of these instruments as strategic levers form a key part of the Chinese government’s ‘flexigemony’ – their geopolitical/geoeconomic strategy on the continent (Carmody and Taylor, 2010). Flexigemony, essentially a system of geographically differentiated engagement policies adapted to the specific historico-political characteristics of the host country, allows the Chinese state to cultivate the support of extant institutions and political formations while concomitantly achieving its varied objectives (e.g., resource extraction, access to new markets for Chinese-based capital). Yet despite being one of several instruments available, megaprojects’ popularity among continental elites, combined with a growing demand throughout Africa for both infrastructure and large-scale service delivery, means that these projects have emerged as some of the most significant vectors of Chinese influence and developmental cooperation on the continent. As such, they can be characterized as being key politico-economic instruments within Chinese inflected-globalization as a whole.

This chapter will detail the broad logics, developmental mechanisms and roles of Chinese-backed megaprojects in Africa and will be divided into 3 separate sections. The first will examine the emergence of China’s African megaprojects within the context of Chinese-inflected globalization, a specific type of *state-led* globalization that has developed as part of the country’s expansionist moment. Specifically, this section will detail the particular set of characteristics that differentiate this type of globalization and subsequently illustrate how these inform the construction of Chinese-backed projects throughout the continent. The second section will then contextualize the use of

megaprojects as politico-economic instruments throughout Africa's recent history and detail why large-scale projects are favoured by the continent's governing elites. Finally, section 3 will analyse each of the specific types of Chinese-backed projects on the continent.

## **2.1 Globalization with Chinese Characteristics?**

Globalization is one of the most consequential socio-economic processes of contemporary society (though it arguably has existed for hundreds of years if not longer). In its broadest form, it is best conceptualized as increased interconnectedness between places (Carmody, 2019). As a multidimensional phenomenon with a variety of forms, globalization includes economic, political, and cultural aspects (among others). In its economic sphere, it has led to the integration of previously disconnected (or less-connected) geographical regions into global capitalism and market-based economies. Over the last three decades, economic globalization has largely been associated with the spread of neoliberalism, a theory of politico-economic practices (Harvey, 2005) which calls for the reconfiguration of power relations to allow for 'free' trade, increased commodification, and economic liberalisation (Tickell and Peck, 2003 quoted from Anwar, 2012, p.22). While first popularized in the 1980s<sup>17</sup>, neoliberalism was entrenched throughout much of the world following the end of the Cold War (though its spread was uneven, hybrid, and locally constructed), through a series of policies collectively known as the 'Washington Consensus'<sup>18</sup> (Williamson, 1989). This expansion was both shaped and driven by material interests as 'free' markets allowed for increased access by Western-based capital to resources and production opportunities.

While space limitations prohibit an exhaustive examination of the topic, a number of academics have argued that global capitalism under neoliberalism has been marked by the erosion of the power of the state to control and regulate transnational capital flows

---

<sup>17</sup> Though prior to this it was put into practice in Chile by the dictator Augusto Pinochet (Harvey, 2005, quoted from Carmody, 2019).

<sup>18</sup> The features of the Washington Consensus are: Fiscal discipline, redirection of public expenditure away from subsidies, tax reform (lower marginal tax), interest rate liberalization, competitive exchange rates, trade liberalization, liberalization of FDI inflow, privatization of state assets, deregulation, secure property rights (Roccu, 2013).



(Reich, 1990; Cable, 1995 quoted in Weiss, 2000). Proponents of globalization contend that its processes have resulted in the dissolution of national capitalisms and their specific institutional arrangements, industrial policies and welfare systems, and that capitalism has become ungoverned (Strange, 1996). Yet this view has been increasingly questioned in academia, and a more nuanced, critical understanding of globalization, global capitalism, and the nature of the state has arisen. This understanding conceptualizes the proposed dichotomy between nation-state and global market as being oversimplified or erroneous. As Breslin (2009) notes, economic systems are constructed to serve specific ends, and it is state actors who often generate the space for non-state actors to flourish. For instance, Chinese integration into the global economy was instigated by state elites who determined that ‘opening up’ would serve their political interests - specifically the reconstitution of political legitimacy (ibid.). Shirk (1993, quoted from Breslin 1996, p.689) terms this the ‘political logic of economic reform’.

In their study on Chinese influence and *geogovernance* in Zambia, Carmody, Hampwaye, and Sakala (2012) assert that rather than weakening the state wholesale, globalization has instead increased the economic reach and political power of certain states. China is one such case, and the policies and processes of its extant expansionist moment are emblematic of a hybrid type of economic globalization which is embedded within the variegated system of global capitalism but whose capital is perceived as ‘unnatural’<sup>19</sup> (Lee, 2017, p.1) by those in the neoliberal world order given the prominent role of the state.

China’s expansionist moment is, in essence, the internationalization of its domestic ‘state-orchestrated market capitalism’ (Ayers, 2013, quoted in Mohan and Tan-Mullins, 2018, p.5).<sup>20</sup> As noted in Chapter 1, this has been enabled by ‘umbrella’ projects like ‘Go Out’ and the ‘Belt and Road Initiative’. These multi-level, politico-economic initiatives have created the financial, discursive, and diplomatic architectures for firm internationalization with the ultimate goals of resource access and the expanded accumulation of Chinese-based capital. While these channels were at first restricted to large-scale SOEs, in recent years a number of provincial SOEs and even private actors have been able to leverage them for their own, largely commercial, purposes (see Chapter 8

---

<sup>19</sup> That is, with imperatives beyond profit maximization.

<sup>20</sup> Which Lim (2013) refers to as ‘socialism with Chinese characteristics’.

for further discussion on this topic) (Jones and Zeng, 2019; Zeng, 2019).

At their core, China's umbrella projects form a program of regime maintenance as the CCP is highly dependent on growth and accumulation for domestic legitimization (Breslin, 2009; Carmody and Taylor, 2010). In the post-Mao Chinese system<sup>21</sup>, political stability is largely created through the monopolization of the political sphere (and thus the state apparatus) by the CCP. The broader populace mostly tolerates (with notable exceptions) this monopolization in exchange for sustained economic growth - a system that Breslin (2009, p.43) terms 'legitimacy through performance'. Yet beyond the economic aspects, the CCP also perceives a space of political opportunity in the transnational expansion of Chinese firms and has sought to leverage this to become a norm-creating power. Indeed, the formation of new international linkages has allowed the Chinese state to 'rise' and project its authority far beyond its borders (Carmody, Hampwaye, and Sakala, 2012). Presenting itself as a 'responsible great power' (Breslin, 2010, p.2), the CCP has used a variety of politico-economic instruments, discourses, and mechanisms of engagement to legitimize and universalize Chinese state interests (Chin, 2015). Before continuing, it is important to note that China's expansionist moment takes a variety of forms, and not all of these are enmeshed within the Chinese state apparatus (e.g., individual firms seeking to expand overseas, Chinese nationals operating in Africa striking out on their own upon identifying market opportunities). However, given the emphasis on megaprojects in this thesis, the main focus of this analysis will be on the state or state-linked actors, including large-scale SOEs (both central and provincial), policy banks, and multilateral financial institutions, that ultimately drive project development.

### *2.1.1 Characteristics of Chinese State Capital*

In a broad sense, Chinese capital<sup>22</sup> moving abroad can be differentiated from that of Western states as it is roughly separated into private and state subdivisions, with the former serving the interests of stakeholders and the latter owned by, and ostensibly serving the interests of the government (either central or provincial) (Lee, 2017). However,

---

<sup>21</sup> Which is best characterized as a dictatorship of the party-state (Breslin, 1996).

<sup>22</sup> That is, capital originating in the PRC.

disaggregating the accumulative logics and corporate practices of large-scale SOEs reveals that while state capital *can* be charged with state-led objectives, this is not always the case.<sup>23</sup> As Kernén and Lam (2014), Gu et al., (2016), and others have shown, state ownership does not necessarily equate to state dominance over the prosaics of corporate behaviour. Yi-Chong's (2014) findings highlight how even while the state encourages and incentivizes the international expansion of Chinese firms, it has limited capacity to control and regulate them overseas. Indeed, given the sprawling nature of Chinese state capitalism (to illustrate, the State-owned Assets Supervision and Administration Commission (SASAC) is charged with overseeing approximately 117 different companies, some of which have over 100 subsidiaries), central control is essentially impossible, and significant power is delegated to corporate actors in order to ensure smooth firm operations. In comparable fashion, Mohan and Tan Mullins (2018, p.5) characterize the internationalization model of Chinese SOEs as being 'mercantilist' – that is, the state supports commercial ventures but does not necessarily steer them.<sup>24</sup>

Gu et al. (2016, p.25) expand on the idea that the state's role within internationalization strategies is typically contextual<sup>25</sup>, rather than directive. In their study on large-scale Chinese SOEs, they identify 4 principal politico-economic dimensions in the state-corporate relationship. First, the state provides the 'context, authority and legitimacy' for overseas expansion through its broad frameworks and discourses. Initiatives such as 'Go Out', 'Go West', and 'Belt and Road' provide the necessary discursive cover, incentives, and financial architecture for firm expansion. Second, the state, through instruments such as policy banks, high-level diplomatic exchanges, and domestic support agencies, provides 'practical support' to outgoing enterprises. Third, the state paves the way for smooth operation through multilateral and bilateral diplomacy. In Africa, multilateral diplomacy is exemplified by the triennial FOCAC summits, while bilateral diplomacy is driven by high-level meetings, official tours, and cooperation agreements on

---

<sup>23</sup> Similarly, Milhaupt and Zheng (2015) document how large-scale POEs often behave like SOEs in that they may be involved in policy implementation or receive subsidies and preferential market access. Furthermore, as Carmody, Hampway and Sakala (2012, p.18) note, 'while many Chinese actors are relatively autonomous of the Chinese state, they are often linked to it multiple and complex ways'.

<sup>24</sup> Brautigam (2010, p.180) terms this the 'guiding hand of government' which provides extra boosts for champion firms.

<sup>25</sup> Essentially creating the context and providing the means for expansion.

everything from cultural exchanges to loans and technical assistance. Finally, Chinese business interests benefit from over 50 years of ‘South-South’ cooperation, anti-imperialist rhetoric, and ‘win-win’ narratives which are meant to separate them from Western firms while concurrently making them more attractive to Global South partners. Nevertheless, while central (or provincial) state ministries or agencies are typically not directly involved in everyday operations, under specific circumstances, they can affect the broad strategies of certain types of Chinese firms throughout Africa. In her study on Chinese SOEs in Zambia, Lee (2017, p.10) describes how Chinese state capital (loaned through policy or development banks) can be tasked with ‘multidimensional’ objectives which affect a firm’s accumulative logics, production strategies, and managerial ethos. She coins the term ‘encompassing accumulation’ to describe the strategy, which eschews the maximization of profit in order to achieve other types of returns, including political influence or access to raw materials. This politico-economic dynamic has been documented in major firms in the finance, extractive, and production sectors and can be considered similar in character to the dual mandate of developmental finance institutions - who must turn *some* profit but also provide ‘additionality’ or unique value (Runde and Baruda, 2018). As will be detailed in Chapter 5, these types of overarching linkages can exist at the top levels of champion firms and high-level executives are occasionally required to ‘give updates’ to state elites (in this case the ambassador) in exchange for state-backed funding and discursive support (Interview, BAIC SA, February 2018, Johannesburg).

It is within this context of hybrid, semi-directed, state-led capitalism that Chinese-backed megaprojects have emerged in Africa. As a whole, the projects are the result of what Alves (2013) terms ‘economic complementarities’ or the convergence of needs, interests, and proficiencies between Chinese and African actors. Though need is particularly evident in the infrastructure sector, large-scale Chinese firms, operating through the frameworks set up by the state, have been able to find multi-sectoral opportunities for megaproject construction. Yet to fully grasp why these opportunities exist, it is necessary to understand Africa’s history with megaprojects, the specific factors that drive their construction, and what it is that makes them so appealing to the continent’s elites.

## 2.2 Understanding Megaprojects

Megaprojects are a global phenomenon and are considered by both scholars and policymakers as being crucial to modernization and development (Isaacman and Sneddon, 2000; Seth, 2009; Pritchard, 2012). Today, these projects are used to deliver goods and services across a wide variety of sectors including manufacturing, information and communications technology (ICT), and energy. Yet a review of the relevant literature offers numerous definitions for the term ‘megaproject’, ranging from ‘large scale projects which transform landscapes rapidly, intentionally, and profoundly in very visible ways’ (Gellert and Lynch, 2013, p.15) to projects measured in ‘billions of dollars’ (Flyvbjerg, 2014, p.6) and projects of substantial complexity and uncertainty (Salet, Bertolini, and Mendel, 2013). In fact, there is no formal definition for the term and as Ballard et al. (2017) note, it is often applied flexibly to a variety of projects and schemes. However, a common thread throughout the literature is that megaprojects are shaped by a far larger variety of actors (political, institutional, economic, and regulatory) than ‘ordinary scale’ or ‘micro’ projects.<sup>26</sup> Additionally, megaprojects are generally ‘trait-making’ as opposed to ‘trait-taking’, that is, projects are designed to ambitiously transform the structure of society as opposed to existing within established frameworks (Hirschman, quoted in Flyvbjerg, 2014, p.6). African projects such as the Gautrain in Johannesburg, Kilamba Kiaxi New City, and Standard Gauge Railway in Kenya all exemplify this quality and have had profound effects on multi-scalar politico-economic structures.

As previously noted, this research will work with a modified version of Fiori and Kovaka’s (2005) holistic definition which highlights five key characteristics of megaprojects: cost, risk, complexity, visibility, and ideals. A megaproject will therefore be defined as:

*A construction project, or aggregate of projects, characterized by: magnified cost, extreme complexity, increased risk, lofty ideals, and high visibility, in a combination that represents a significant challenge to the stakeholders, and has a significant impact on the community.*

---

<sup>26</sup> Which reinforces Sneddon’s (2015) conceptualization of megaprojects as assemblages.

### 2.2.1 Why Build Megaprojects?

Siemiatycki (2017) contends that megaproject construction occurs in cycles driven by a multifaceted combination of economics, technological innovation, ideologies, and interest groups; and that we are currently in the midst of one such cycle. Estimates from the McKinsey Global Institute place worldwide infrastructure spending at \$3.4 trillion per year, with most of this being delivered in the form of megaprojects. Additionally, if non-infrastructure megaprojects are added, the number jumps to nearly \$6 trillion. Moreover, the institute forecasts a 60% increase in infrastructure spending over the next several decades (Dobbs et al., 2013).

At the local level, support for megaprojects is driven largely by what Flyvbjerg (2014, p.8) terms the ‘4 sublimes’, these are:

- *Political – The positive attention and visibility that politicians receive from building large construction projects.*
- *Economic – The expectation of job creation that comes from large projects.*
- *Technological – The excitement that engineers and architects get in pushing the technological envelope to create bigger/longer/taller structures, often leading to projects that are over budget.*
- *Aesthetic – The adulation that is given to actors upon completion of an iconic structure that can represent a city or country*

van der Westhuizen (2007) expands on this concept by suggesting that megaprojects leave lasting legacies for the actors involved, reinforce chosen national or modernist discourses and act as sources of power and legitimacy (see Chapter 3). Studies of projects such as the Gautrain (Johannesburg), King Shaka International Airport (Durban), Moses Mabhida stadium (Durban), and the Dar es Salaam Rapid Transit scheme (Dar es Salaam, Tanzania) all highlight the importance of political considerations and symbolism within the construction process (Van der Westhuizen, 2007; Hannan and Sutherland, 2015; Rizzo, 2015; Robbins, 2015). Furthermore, research (van Wijk and

Fischhendler, 2017, p.469) has shown that megaprojects are often orchestrated through what has been termed an ‘urgency discourse’ or ‘rhetoric of urgency’ which evokes a crisis framing in order to create momentum for the project, facilitate the implementation process, and bypass institutional mechanisms and regulations (social, environmental, or technical) that may slow down the construction process. Worldwide, both government and private sector actors have been shown to manufacture this discourse at opportune moments. In fact, the rhetoric of urgency has been documented in the development of the Yamuna river floodplain in Delhi, the building of natural gas processing centres in Israel, and in the run-up to the Olympic games in Rio de Janeiro (Sanchez and Broudehoux 2013; Fischhendler and Nathan 2014; Follmann 2015). Yet while these drivers combine to create the local-level political determination and coalition of stakeholders that bring about megaproject development, for a broader understanding of why and how these projects are built, it is necessary to conceptualize them within historical developmental trends and in the context of the global capitalist system.

During Africa’s colonial era, megaprojects such as railways, ports, and mines were largely built to service the extractive and military needs of the ruling power. Colonial infrastructure therefore created networks with extensive rather than intensive linkages (that is, linking distant strategic points as opposed to providing networked coverage within a territory) (Arewa, 2016; Jedwab and Storeygard, 2017). As core-periphery trade was emphasized over continent-wide trade, cross-border linkages were underfunded, ultimately contributing to today’s weak regional integration and the sharp infrastructural disparities among African countries.<sup>27</sup> This dynamic, along with other facets of colonial administration, also solidified the continent’s position as a raw material exporter within the global division of labour (Arewa, 2016).

The post-World War II years and subsequent end of colonialism saw a megaproject boom across the continent as newly independent states perceived large-scale construction projects as the most viable way to ensure growth, modernity, and legitimacy. Principally buoyed by high commodity prices throughout the 1950s and 1960s, millions were spent on

---

<sup>27</sup> One of the better examples of how colonial rivalry has shaped Africa’s infrastructure is the lack of a bridge over the Congo near Kinshasa and Brazzaville. Both capitals were built as ports to deliver raw materials from the interior so there was no incentive to connect them.

projects such as the Aswan Dam and the capital city relocation programs of Malawi, Tanzania, Nigeria, and Botswana, among others (Abubakar and Doan, 2017).

As top-down initiatives, the capital city relocation programs were driven by national governments, and sought to create symbols of national pride, modernity, and development for newly independent states. Indelibly tied to discourses of state and nation building<sup>28</sup>, new capitals would not only serve administrative functions but were also meant to spur development, provide housing and basic services for millions, and wipe away the imprint of colonialism (Potts 1985; Kironde 1993; Mosha 1996; Abubakar and Doan, 2017). Despite corresponding with the developmental theories of the time, specifically the idea of ‘growth poles’ as nodes of development (Cain, 2014, p.562), these programs largely failed to bring about their promised benefits and did nothing to change Africa’s status as a commodity exporter. New cities were often overwhelmed (in terms of service provision) by rapid, informal urbanization, which exacerbated existing social divisions. Furthermore, the programs burdened governments with debt and diverted investment from economic and social projects.

A sizeable number of post-colonial era megaprojects were also explicitly tied to Cold-War geopolitics. Sneddon (2015, p.139) documents how the United States used large projects to curry favour with newly independent states and ‘demonstrate the benefits of capitalist ideologies’ as part of its effort to contain the spread of communism. Meanwhile the Soviet Union sought to replicate its own industrial development in allied nations. Indeed, China’s first steps towards what would become South-South cooperation, as well as its self-described role as the ‘leader of the developing world’, began with ideologically motivated projects such as the Tanzania-Zambia (TAZARA) railway (Taylor, 2010, p.20). Yet megaprojects are inherently risky endeavours, and as the number of failed projects and *white elephants* mounted, Western aid turned to capacity building - social services, health, poverty alleviation, and education (Lee, 2014; Yeh and Wharton, 2016). By 2004, infrastructure aid from OECD countries had dropped from 53% in the early 1990s to 31% (Glennie, 2010).

---

<sup>28</sup> *Nation building* refers to the ‘process whereby the inhabitants of a state . . .[become] loyal citizens of that state’ (Bloom, 1993, p.55) and should not be confused with *State building* which refers to the capacity and reach of the state apparatus.



Beyond changing developmental narratives and practices, the dynamic processes of global capitalism have also had substantial effects on trends in megaproject construction. Neoliberalizing practices (as prescribed by the ‘Washington Consensus’), the development of new poles of accumulation, the expansion of global value chains/transnational corporate geographies, and commodity price fluctuations (specifically the commodity super cycle which peaked in 2011) have all influenced the availability of capital for projects.

Projects such as the Gautrain in Johannesburg, Cyberabad in Hyderabad, the Dharavi redevelopment program (DRP) in Mumbai, and the Shanghai expo centre are partly a result of these structural changes to capitalism. These projects are largely driven by urban neoliberal reform, articulated in a policy and planning sense as entrepreneurial urbanism, where cities compete for investment opportunities from transnational actors (Graham and Marvin, 2001; Das, 2015; Adama, 2018). These processes are also visible in the creation of ‘smart’ or ‘new’ cities throughout Africa, a form of privately-driven, elite-focused, ex-urbanization that threatens to exacerbate existing spatial polarization and inequality throughout the continent by creating exclusive enclaves amongst underfunded, decaying cityscapes (Murray, 2015; Carmody and Owusu, 2016). As Swyngedouw et al. (2002, p.546) explain, megaprojects are among ‘the most visible and ubiquitous urban revitalization strategies’ initiated by elites in search of growth, legitimacy, and prestige. However, these developments can result in what has been termed ‘splintering urbanism’, a process whereby assemblages are connected both physically and symbolically to international centres of accumulation and power, but delinked from their immediate surroundings (Graham and Marvin, 2001). Capital then coalesces at these sites of engagement while devaluing the territories ‘in between’. Thus, notwithstanding visions of megaprojects as instruments to ‘suture the disconnect between the first and second economy’ (Desai, 2015, p.28), their elite-led style of planning often exacerbates and crystallizes extant inequalities while relegating marginalized populations to informal livelihood practices (Grant, 2015).

### *2.2.2 Dangers of the Megaproject Approach*

Despite their appeal as catalysts of growth and development, megaprojects are precarious undertakings that require long-term planning, massive amounts of capital, and

can create societal tension among differently affected groups. Projects are typically launched with confidence and fanfare but given their extended timeframes, reversals are common (Ballard et al., 2017). The vast majority of projects face cost overrun, and up to 50% face benefit shortfalls (Flyvbjerg, 2014). It is also important to note that overruns have remained constant for a period of approximately 70 years, and all countries for which there is data are affected. Data suggests that poor project-level outcomes can quickly turn into macroeconomic risk as accumulating debt, lost investment opportunities, and non-performing loans can contribute to economic instability and underperformance (Ansar, Flyvbjerg, Budzier, and Lunn, 2016). This is especially dangerous in the developing world since countries often borrow heavily or set aside resources/strategic assets as collateral to fund megaprojects. Compounding the risk, Swyngedouw et al. (2002, p.561) note that megaproject focused policy often leads to a less democratic, elite-driven style of planning due to the autonomy bestowed to managing organizations. Moreover, Altshuler and Luberoff (2003) found that given their dependence on public funds, megaprojects are often resented by the broader populace and can become spaces of contestation and societal friction. Finally, megaprojects are also synonymous with large-scale land conversion, demographic displacement, and the exacerbation of uneven power relations (Gellert and Lynch, 2003; Ren and Weinstein, 2013). As such, a string of failed projects can quickly lose elections for incumbents or compromise the legitimacy of developing-world governments.

At the time of writing (July 2019), research has already observed the socio-economic effects of the first phase of Belt and Road projects in Africa (Wissenbach and Wang, 2017), and economists and geographers alike have documented how a glut of projects designed to enhance economic competitiveness via increased connectivity have led to spiking debt ratios in countries such as Kenya, Ethiopia, and Djibouti (Kodongo, 2018; Patey, 2018; Kanai and Schindler, 2018). This has significant implications for livelihood strategies throughout east Africa in terms of urban property markets, the redirection of government funds, and a lack of focus on the minutia of daily governance (Goodfellow, 2018; Meagher, 2018).

### 2.3 Chinese Megaprojects in Africa

Megaprojects have long functioned as important politico-economic instruments for the Chinese state, with their use mirroring China's own developmental experiences, as well as the country's broader geopolitical strategies and aspirations. Beginning in the 1950s, high visibility projects such as government offices, conference halls, institutional headquarters, stadia, national theatres, schools, and hospitals were presented to ideologically comparable states in exchange for political or diplomatic support (Ding and Xue, 2015).

The TAZARA railway project, China's largest and most prominent aid project in Africa until the 2000s, is emblematic of this early stage of what would eventually become known as South-South cooperation. After the Arusha Declaration<sup>29</sup> of 1967, Tanzania launched large-scale socialist reforms and strengthened its political ties with China. Positioning itself as a bastion of socialism against capitalist Kenya and authoritarian Uganda, Tanzania sought to augment its regional linkages by building a railway connecting land-locked Zambia to the Indian Ocean coast. Zambia required the railway as its previous export routes were compromised once South Rhodesia's (modern-day Zimbabwe) white-minority government declared independence in 1965. Sensing an opportunity to build solidarity and enhance their international standing, the Chinese government provided a \$400 million-dollar, interest free loan (\$1.7 billion today) for the project, and sent thousands of engineers, experts, and laborers to build the railroad, establish farms, upgrade ports, and train local technicians (Song, 2017). Throughout its construction, the project was draped in proto-south south rhetoric, heavily referencing the struggle of colonized states and the 'spirit of Bandung'. Monson (2009, p.2) describes how the railway was characterized as being intrinsically 'socialist' given its state-funded, centrally managed construction. The project was finalized in 1976, yet it did not bring about a new era of Sino-African cooperation. Instead, a combination of domestic factors (largely to do with the country's post-Mao political uncertainty) saw China's aid pledges fall from \$100.9 million to \$13.8 million between 1976 and 1982 (Roskam, 2015).

Concomitant with the structural changes to China's domestic economy, the 1980s

---

<sup>29</sup> The Arusha Declaration outlines the principles of 'Ujamaa' or African socialism.

saw the adoption of the ‘Four Principles on Sino-African Economic and Technical Cooperation’, which stressed mutual benefit, equality, an emphasis on practical results, and common development. Despite overlapping with the aforementioned inward shift, these narratives have remained a key part of Chinese win-win rhetoric in Africa. While ceremonial projects, also known as ‘architectural aid’, such as the national theatre of Ghana and the national conference building in Bamako, continued throughout the early 1990s, the current phase (i.e., the primary patterns of engagement/construction) of Chinese-backed megaproject construction began in the early 2000s.

This phase was initially driven by the Chinese state’s ‘Go-Out’ initiative which responded to changes in the country’s position in the global economy, namely conditions of overaccumulation, by incentivizing international investment and market expansion for major state-owned firms (Ding and Xue, 2015). ‘Go Out’ incentives were divided into two categories: fiscal incentives and financial inducements. The former category included tax and tariff exceptions, while the latter included access to low interest (subsidized) credit and the extension of service-tied preferential loans to developing countries as an opportunity for ‘national champion’ SOEs (Alves, 2013). As Zhang (2017) explains, while ‘Go Out’ is typically portrayed in terms of resource extraction, at its core it was a joint effort between the Chinese state and Chinese-based capital (generally in the form of large-scale SOEs, though this is not always the case) to further capital accumulation.

Given these imperatives, the new phase exhibits a markedly different set of logics and rationales than the previous era. ‘Go-Out’ is also emblematic of contemporary China’s dualistic global politico-economic strategy: on the one hand the country strictly regulates its domestic financial system while on the other it selectively adopts neoliberal principles abroad in order to gain market access.

Ceremonial projects have remained a part of this new phase, yet the focus in Africa has shifted towards extractive, production, and infrastructure projects, as these allow for the creation of a ‘spatial fix’ while simultaneously filling areas of need for the continent (thus having both push and pull factors). On the African side, elites have embraced Chinese-backed projects as these generally support existing distributions of power and patterns of neopatrimonial governance (Carmody and Taylor, 2010).

The Chinese state’s approaches to the use/structuring of megaprojects as modalities

of engagement have been largely shaped by their own developmental experiences. One example is the adoption of commodity-backed loans to fund projects. The use of these loans mirrors China's experiences during the 1970s when Japanese firms negotiated agreements to transfer high-tech equipment for oil and coal extraction, with repayment secured through the export of the commodities themselves. In the African context, this barter-like system has been used to fund projects such as the Bui Dam (partially paid for through the export of cocoa beans), the Kenyan railway project (in which the requisite loan was secured through an escrow account into which the operator will deposit revenues from rail traffic), and a wide variety of projects secured through oil (Brautigam, Hwang, and Wang, 2015; Brautigam and Hwang, 2016). These schemes have also provided lending security for a substantial percentage of the credit lines extended to African states. The purpose of the system is not to acquire total ownership of the commodities themselves, but to reduce the risk to the lender, permitting for projects to be financed at more reasonable rates and allowing for investments in unstable countries (Johnston, 2016).

These sorts of pragmatic, 'win-win' agreements are pervasive throughout Sino-African economic engagement and are reinforced by over 40 years of largely unchanged political discourse. Unlike Western aid and assistance; Chinese aid, trade, and investment (and the megaprojects that go along with these) are explicitly linked in the discourse and framed as parts of broader economic partnership and development agreements (Johnston and Rudyak, 2016, quoted from Johnston, 2016). By offering concessional loans, emphasizing bilateral relations, prioritizing economic concerns through what Godement (2017) has designated as a valueless foreign policy (i.e., one largely without moralizing discourses or conditionalities), and working through existing institutions, China has been successful in increasing its influence throughout Africa.

In terms of the projects themselves, it is important to note that 'Chinese involvement' must be disaggregated into three separate activities - investment vs financing vs service provision (Pairault, 2018a). These different types of engagement are too often conflated in both popular discourse and scholarly articles, leading to a monolithic or confused understanding of the activities of Chinese actors on the continent and of Chinese involvement in African megaprojects. Chinese actors have roles in many projects throughout the continent, yet the roles they play can vary significantly, and often diverge

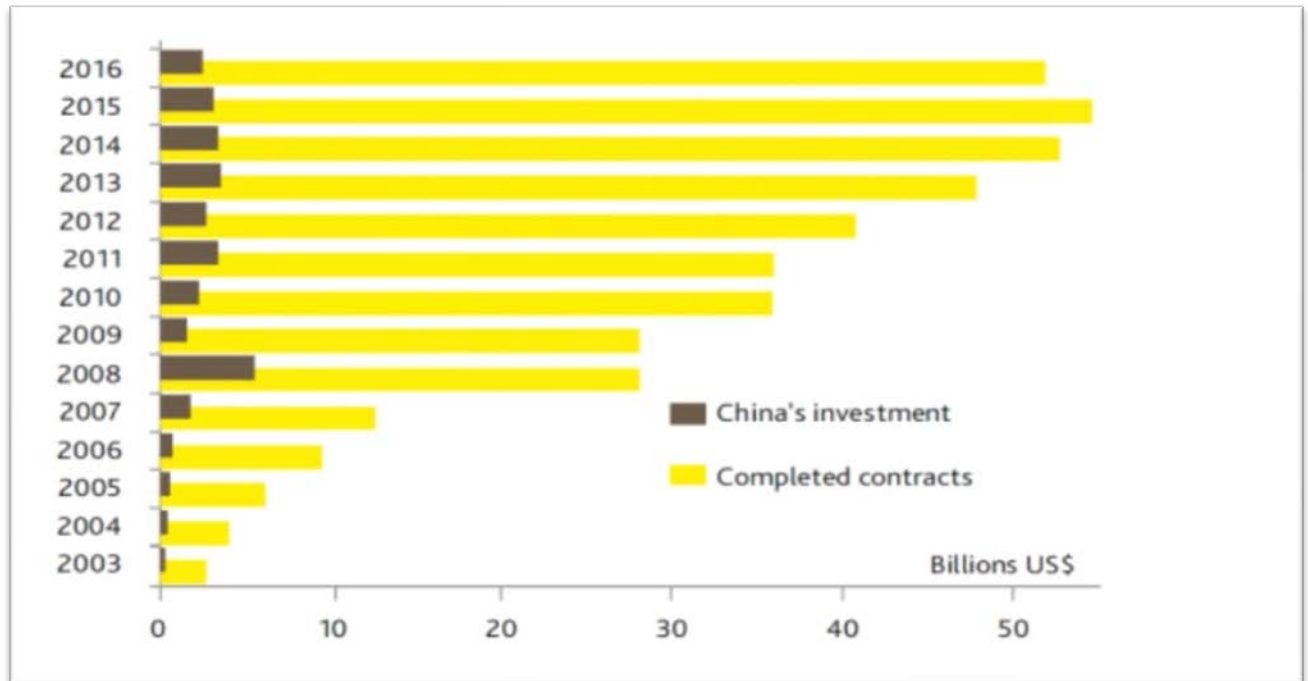
on a sectoral basis. For instance, Chinese firms generally do not invest in infrastructure in Africa, rather they build (provide a service) and/or finance (provide loans – which can take a range of forms) these projects.

Chinese construction projects abroad fall under the umbrella term ‘Chinese overseas contracted projects’ (COPs) and can be financed either by Chinese loans, international organizations, or local governments (Wolf, 2016, p.258). As per Yi-Chong’s (2014) study, nearly half of all projects undertaken by Chinese SOEs in Africa were underwritten by multilateral or non-Chinese donors, with approximately 40% financed through loans, export credits or other Chinese government-run schemes.

Returning to the Bui Dam example, I have explained how a Chinese policy bank (China EXIM bank) largely funded the project, and it was built (as a build-operate-transfer (BoT) agreement) by Sinohydro, a Chinese SOE. However, the dam itself is owned by the Bui Power Authority (BPA), a Ghanaian company. Similarly, the Kilamba New City, a consumption project, was funded and built by Chinese firms (EXIM Bank and ICBC) but is owned and marketed by an Angolan SOE (Brautigam, 2014). Investment, on the other hand, specifically involves the acquisition or creation of assets as a way to generate future income. China’s ministry of Finance (MOFCOM) adheres to the IMF definition of foreign direct investment (FDI), which is as follows:

*FDI is an activity in which an investor resident in one country obtains a lasting interest in, and a significant influence on the management of an entity resident in another country. This may involve either creating an entirely new enterprise (so-called "greenfield" investment) or, more typically, changing the ownership of existing enterprises (via mergers and acquisitions). Other types of financial transactions between related enterprises, like reinvesting the earnings of the FDI enterprise or other capital transfers, are also defined as foreign direct investment (OECD, 2003 quoted from Pairault, 2018b).*

While Chinese actors do sometimes invest in projects in Africa, this activity is typically confined to ventures in the productive or extractive sectors and does not account for a large percentage of Chinese economic activity on the continent.



**Figure 2:1 Chinese Investments in Africa vs Completed Contracts 2003 - 2016 (Pairault, 2018c).**

As Figure 2:1 shows, on the whole, China is primarily a service provider rather than an investor, and African countries are largely consumers as opposed to partners (Pairault, 2018c). For example, in 2013, COPs accounted for \$40 billion worth of projects in sub-Saharan Africa (SSA) compared to just \$3.1 billion in FDI flows (Wolf, 2016). Moreover, Africa’s share of Chinese FDI has been falling since 2011. In 2016, China’s FDI into the whole of Africa was equal to 14.1% of what it invests into the US and approximately equal to what it invests in Germany (Pairault, 2018c). South Africa, the African country with the highest investment totals and FDI stock, received approximately 0.4% of total Chinese FDI (MofCOM, 2016). In order to better unpack these trends, the chapter will now turn to the specific categories of megaproject found on the continent.

### *2.3.1 Infrastructure Projects*

While several categories of megaproject are products of a convergence of needs, interests, and proficiencies, no type is as emblematic of the economic complementarities

between China and Africa as infrastructure projects. The Chinese economy is heavily dependent on a variety of African raw materials including Angolan oil, Congolese copper, and South African platinum, among many others. Additionally, given the rapid nature of its own industrialization and infrastructural development, China has one of the world's most developed and dynamic construction sectors, with a specialization in civil works and large projects (Foster et al., 2009).

As per Roskam (2015), 7 of the world's 25 largest construction companies are Chinese, including 4 of the top 6. The international competitiveness of the sector can be seen in the fact that between 2007-2015, Chinese firms won approximately 30% of World Bank infrastructural projects in Africa, the highest winning percentage of any single country (up from 18% between 2000 and 2006). Nearly 75% of these contracts were won by 7 central government-owned SOEs (China Geo-engineering Corporation, CHICO, CCCC, China International Water and Electric Corporation, CICO, China Jiangxi Corporation for International Economic and Technical Development), though 4 of the companies were eventually debarred by the World Bank due to procurement irregularities and misconduct (Farrell, 2016).

On the other hand, Africa currently faces a massive infrastructure deficit of approximately \$130 billion a year, with a financing gap of between \$68-\$108 billion (African Development Bank, 2018).<sup>30</sup> This shortfall extends from sanitation systems to all manner of transportation infrastructures (road, rail, port, and air networks), telecommunications, and energy. The deficit is rooted in the historical development of the continent as a primary resource exporter during the colonial period, which not only led to a lack of non-extractive physical infrastructure, but also significant gaps in institutional structures as well as a lack of knowledge and technology transfer. In turn, these deeply affected infrastructural development, maintenance, and servicing after independence. The deficit was then further exacerbated by neoliberal reforms and structural adjustment programs, which imposed strict controls on government spending.

In their study on projects in Brazil and Tanzania, Kanai and Schindler (2018, p.1) suggest that in 'less connected' parts of the world (such as parts of Africa), infrastructure

---

<sup>30</sup> The African Development Bank (2018, p.92) defines 'financing gap' as 'infrastructure investment needs minus the total amount of financing commitment made by all donors to resorb the infrastructure deficit'.



megaprojects are conceptualized by elites as doing more than merely address inequities, rather projects can actively induce the development of connectivity nodes and thus create productive transnational linkages. Additionally, elites often perceive physical infrastructure as the most effective and cost-efficient way to boost material well-being, advance discourses of modernity, and give tangible examples of governance in the quest to secure domestic support (Lee, 2014).

Kanai and Schindler (2018) describe the proliferation of state-led infrastructure megaproject construction as an *infrastructure scramble*. However, the *scramble* approach can lead to the prioritization of the global over the local as expressed through the rolling out of plans by central entities in collaboration primarily with transnational capital and supranational and multi-lateral agencies. This in turn can marginalize local actors and decision makers and have deleterious effects on economic conditions and livelihood strategies. Thus, while the infrastructure deficit must be dealt with, using megaprojects as the preferred modality of engagement can be fraught with risk.

#### *2.3.1.1 Unpacking Africa's Infrastructure Deficit*

One of the more pressing aspects of the infrastructure deficit facing the continent is that of integrated transport infrastructure. Beyond South Africa and Egypt, few countries have adequate logistical networks with which to move goods and people (The Economist, 2015). In sub-Saharan Africa (SSA), road densities are less than a third of that of South Asia's and only a quarter of all roads are paved. This results in travel times along key corridors in SSA that are approximately 2 to 3 times longer than comparable corridors in Asia, and road freight which costs between 2 and 4 times as much per kilometre as in the United States (Foster et al., 2009). As per Jedwab and Storeygard (2017) there are only 3,700 km of fully paved highways in SSA, compared to 111,900 km in China and 24,000 km in India. Additionally, while there are 55,000 km of rail line throughout SSA, the vast majority of it dates from the colonial era (ibid.). For example, Kenya's Standard Gauge Railway (SGR), connecting Nairobi and Mombasa, was the country's largest project since independence and its first new rail line in nearly 100 years. However, the SGR was not without controversy, and as Wissenbach and Wang (2017) note, its economic viability, contracting practices, and financing arrangements have all been heavily criticized. Aside

from Kenya's SGR, Chinese actors are also involved in the financing and construction of rail projects in Mali, Nigeria, Uganda, Ivory Coast, Angola, Ethiopia, and Djibouti as well as the provision of locomotives for TRANSNET, South Africa's state-owned rail, port, and pipeline corporation.<sup>31</sup>

Beyond road and rail, the continent also requires major upgrades to its port and airport facilities. Chinese firms have been active in the construction/upgrading of Lamu and Bagamoyo, two mega-ports in East Africa, with China Communications Construction Company (CCCC) winning the bid to construct the first three berths at Lamu (Anthony, 2013). Bagamoyo has proven to be a more difficult challenge, with construction impeded since 2013 by regulatory instability, funding impasses, and last-minute changes to the original schematics (Kanai and Schindler, 2018). However as of June 2018, a new financing deal is expected and construction on the project and its adjacent Special Economic Zone may finally begin (Nдалу, 2018). In addition to these (and other) ports, Chinese construction firms have built airports in Kenya, Mali, Republic of the Congo, and Mozambique as part of the China-Africa Regional Aviation Cooperation plan (CARAC) (China Daily, 2015).

Yet Africa's largest deficit is in the power sector, which is plagued by a lack of grid interconnectivity and frequent power outages. Generational capacity in Africa is approximately half of that in Southeast Asia, and per the International Energy Agency (IEA), 50% of the population of 24 countries in SSA lacks access to grid-based energy (The Economist, 2015). This sector has attracted large amounts of Chinese financing and services, with much of it concentrated on 16 separate hydropower schemes in 12 countries. Hydropower projects are typically built through Engineering – Procurement – Construction (EPC) agreements<sup>32</sup>, which necessitate that the host government provide 10% of the cost upfront, and require EXIM bank appraisal and approval (Brautigam, Hwang, and Wang, 2015). Foster et al, (2009) estimate that of the \$5 billion spent on these schemes until 2009, \$3.3 billion was financed by Chinese policy banks.

---

<sup>31</sup> This deal has been beset by allegations of impropriety and price inflation. Media reports indicate that TRANSNET will likely seek to restructure.

<sup>32</sup> EPC agreements typically also require host governments to publish pre-qualification documents, carry out preliminary studies, and cover all of the disciplines in the technical, legal and guarantee areas (Cosin, 2016).

### 2.3.2 *Extractive Projects*

While Chinese demand for African raw materials played a major part in the latest commodity super cycle (2003 – 2011), Chinese actors did not begin wide-spread investment in African extractive projects until the mid-2000s, after the incentivization strategies of the ‘Go Out’ initiative (Garnaut, 2006). As such, large-scale Chinese projects and fixed-capital investment in Africa’s extractive industries are a fairly recent phenomenon and remain small in comparison to Chinese extractive investment in other regions. However, it is important to note that investment has grown rapidly and between 2005 and 2016 approximately 1/3<sup>rd</sup> of all outbound funds for Chinese extractive projects went to SSA (Kuo, 2017).

Principally driven by the need to secure natural resources for national development in the face of rapid domestic depletion, China’s extractive megaprojects are part of what Fessehaie and Morris (2013, p.539) term ‘inward-oriented outward investment’, or investment geared towards achieving domestic goals. Institutionally, state-owned Chinese mining conglomerates operate with flexible, pragmatic approaches (including the acquisition of human assets from the international market, and a willingness to undertake joint ventures in order to develop organizational capacity) which allow them to embed themselves within various host country institutions. This approach mirrors the Chinese government’s broader geostrategic ‘flexigemony’, and suggests a concerted level of direction among the larger extractive firms from the Chinese government (Cooke et al., 2015). As such, extractive investments generally follow what Lee (2017, p.10) has coined ‘encompassing accumulation logics’ which prioritize political returns, as well as profits, and can operate on longer time frames than western corporations.

Given that China has only recently (late 1990s on) started searching for overseas extractive investments, firms have been largely limited to acquiring existing mines and hard to reach deposits. Recent purchases include the Chambishi mine in Zambia, which now includes a Special Economic Zone and functions as a hub for Chinese investment in the country (Kragelund, 2009), the Husab project in Namibia, which contains one of the world’s largest uranium deposits, the Kamao Copper deposit in the DRC, and a series of smaller mines throughout South Africa including the Bakubung platinum mine and SAIL

mining group's Black Chrome mine (Interview, Mining Executive, October 2017, Johannesburg). Additionally, Chinese SOEs have poured millions into foundries and processing plants throughout the continent, including a recent \$700 million investment in an iron ore processing plant in Sierra Leone (Corcoran, 2017).

Reflecting the uncertainty of African extractive investments, as well as the global competition for resources among MNCs, deals can rise and fall (and rise again) at astonishing speeds. One recent example is Sinopec's purchase of Chevron's South African assets. The deal was reportedly completed in 2017, yet it quickly fell apart when Glencore launched a similar (though smaller) bid conjointly with Chevron's Black Economic Empowerment (BEE)<sup>33</sup> partners. However, in 2018 reports surfaced that Ebrahim Patel, South Africa's Minister of Economic Development was backing a new Sinopec bid, resurrecting the deal, which now appears to be on the verge of completion (Njobeni, 2018). Johnston (2017) details a similarly perilous agreement between Chinalco, Rio Tinto, the Government of Guinea, and the International Finance Corporation (IFC) to extract iron-ore from Guinea's notorious Simandou region. Simandou is home to an estimated 2.4 billion tons of iron-ore - whose extraction would make Guinea the world's 3<sup>rd</sup> largest exporter. However, political volatility and government instability have made mining in Simandou an incredibly high-risk venture. Under the most recent agreement, extraction is conditional on the construction of a huge infrastructure package, consisting of 35 bridges, 24 km of tunnels, a new port, and 650 km of heavy-haul rail lines. The package forms the core of Guinea's national redevelopment plan, and nearly \$20 billion will need to be spent if the entire project is to be successful. Though it is difficult to tell whether full implementation will ever happen, the Simandou scheme is representative of how Chinese actors are willing to package a wide variety of economic instruments in order to accomplish their strategic goals.

Due to the capital-intensive nature of extraction, large-scale operations and extractive megaprojects in Africa are typically only undertaken by state-owned or state-connected firms. As Cooke et al, (2015) detail, private mining firms in China remain relatively small and have little capacity for prospecting or excavation abroad; additionally,

---

<sup>33</sup> Black Economic Empowerment is South Africa's affirmative action program, in extractives a designated percent of each project must be owned by BEE groups.

they are excluded from government policy support mechanisms.<sup>34</sup> Large SOEs are generally the only firms that can both organize resources and raise enough political support to attain the necessary subsidies, tax incentives, and market intelligence to undertake such projects (Fessehaie and Morris, 2013). Empirical research (Buckley et al, 2007; Lee, 2017) suggests that the government support given to large Chinese firms differentiates their operational practices (e.g., accumulative, managerial, and labour) from those of western firms. However, as previously indicated, this allows the state to hold considerable influence on firm decision-making (Fessehai and Morris, 2013).

While extractive industries may inject much needed capital into the continent, from the perspective of industrialization trajectories, renewed interest in extraction may simply reinforce the continent's dependence on natural resource exports. As Taylor (2016) notes, of the 49 countries in SSA, 11 rely on a single commodity for 50% of export earnings, while more than 30 rely on at least 3 commodities for 50% or more of export earnings. Structural transformation, as expressed through the sophistication of exports or the creation of high labour productivity sectors, simply has not happened on a large scale throughout SSA. Research into the topic, (Kragelund, 2009, Fessehai and Morris, 2013; Lee, 2014; 2017) as well as interviews conducted for this thesis (Interview, Mining Executive, October 2017, Johannesburg), have shown that due to cost factors and difficulties in input procurement in parts of SSA, Chinese mining firms typically import most inputs from abroad (with the majority coming from China itself). This procurement strategy can marginalize the role of local suppliers in the mining value chain, minimize opportunities for technology transfer, and create vertically integrated enclave developments. Additionally, Lee (2017) details that while mining labour is often local, managerial roles in mining firms are generally filled by Chinese nationals, which can reduce opportunities for skills transfer. As Lopes (2019) notes however, the question is not whether Africa can or should industrialize without using its commodities, rather it is how it can use them to induce value addition, technology transfer, and the introduction of new services. These concepts will be discussed further in Chapter 7, which will analyse the Energy

---

<sup>34</sup> However, a variety of independent Chinese corporate actors have been active in Africa since the early 2000s. While these do not finance their own projects, they operate as facilitators and experts in the sector (for more see Chapter 7).

Metallurgical Special Economic Zone (EMSEZ), South Africa's attempt to internalise the beneficiation of minerals as well as create a new stainless-steel production plant.

### *2.3.3 Consumption Projects*

Africa's consumption megaprojects are the product of a wide range of networks and processes. The continent is facing the prospect of large-scale urban growth, and as entrepreneurial modes of governance have replaced managerial approaches (largely due to the neoliberalization of urban governance), policy makers throughout Africa have relied on megaprojects to attain developmental goals (Kanai and Kutz, 2011; McCann and Ward 2011; Hannan and Sutherland, 2015; Murray, 2015; Adama 2018).

Concomitant with the spread of policy ideas (also termed 'policy mobilities' by McCann and Ward, 2011, p.102) through the internationalization of development practices (Brill, 2018), African municipalities have begun looking at Asian cities as possible models to base their growth upon. Yet the creation of the Asian-inspired satellite cities, exclusive commercial enclaves, and massive private shopping/living centres that generally make up African consumption megaprojects does not address the problems facing much of the urban population of the continent, which lives in deep poverty, with minimal access to urban services.<sup>35</sup>

Urbanization can substantially contribute to economic and social development given that cities function as administrative and commercial centres which are home to large, differentiated labour markets. Industry and government can also benefit from high population densities, as they allow for savings in transport costs and infrastructure spending (Carmody and Owusu, 2016). Yet Africa's contemporary consumption megaprojects, specifically 'New' or 'Smart City' initiatives, are elite-driven projects that are disconnected from the needs of most urban residents and instead serve to entrench extant spatial and social inequalities (Watson 2014). Draped in narratives of modernity,

---

<sup>35</sup> It is important to note that elite-centred urbanism is not unique to Africa. Indeed, these sorts of urban consumption megaprojects are popping up throughout the world, and Chinese firms are both financing and building these projects everywhere from eastern and southern Asia to parts of Europe (Shepard, 2017). However, the specific articulations of this phenomenon in the African continent can be deeply damaging to the existing urban fabric (due to the redirection of municipal funding, shifting tax bases, and possible large-scale displacement) and will likely not contribute to the sustainable, equitable development sought by many African governments.

sustainability, and ‘world class’ development, Africa’s consumption megaprojects promise to turn cities into transnationally connected gateways for investors, while simultaneously providing them with ‘iconic’ modernist monuments – a process Carmody and Owusu (2016) describe as combating deepening informalization through the cultivation of connections with the global economy. Developments such as ‘Eko-Atlantic’ in Nigeria, ‘Tatu City’ and ‘Kenzo Techno’ city in Kenya, ‘Kigali new city’ in Rwanda, ‘Hope City’ in Ghana, ‘Kigamboni’ in Tanzania, and ‘Cite le Fleuve’ in DRC, are symptomatic of neoliberal urban reform, interurban competition, and speculative urbanism (Watson, 2014; Cain, 2014; van Noorloos and Kloosterboer, 2018). While ostensibly similar to the capital relocation programs of the 1960s, which also sought to create large-scale utopian urban centres with little regard to public involvement, the ‘New city’ or ‘Smart city’ projects are tied to a separate set of logics and developmental mechanisms.

Coined ‘City Doubles’ as they are mirror opposites of existing urban environments, these developments epitomize the ‘logic of capsularization’, or the formation of spatial enclosures that provide shelter from the perceived dangers of the outside world (Lieven de Cauter, 2001 in Murray, 2015). The projects are largely led by the private sector under public-private partnership (PPP) frameworks, though the state plays an active role via land acquisition and infrastructure/service requirements. As per Adama (2018), PPP are characterized by the privatization and outsourcing of services and the restructuring of state agencies. African governments view PPP as viable ways of attracting funding, expertise, and innovation from the private sector to address policy problems. However, scholars have noted that using the PPP framework for megaprojects serves to exclude those who cannot pay for services as the projects are built on a for-profit basis (Fainstein, 2008; Shatkin, 2011).

Like their older counterparts, the ‘new cities’ are meant to shine as beacons of modernity and further discourses and visions of a ‘new Africa’; however, contemporary developments are also closely tied to ‘world class’ city branding strategies and specifically seek to market themselves to the global elite/cosmopolitan classes. As ‘world class city’ discourses often focus on comparative aspects of urbanism (i.e., the construction of iconic or unique monuments and skylines) as opposed to functional ones, they ignore the fundamental gap between the proposed vision for the new city and the reality of poverty

and informality which exists on the ground (Watson, 2015). Ma and Wu (2005, p.7) theorize how such urban disconnections can detach and differentiate the spaces of a city itself, leading to a hodgepodge built-environment which consists of ‘spaces of elitist consumption’ (supermarkets, shopping malls, elite enclaves), ‘spaces of globalization’ (industrial parks, convention centres, office space) and ‘spaces of marginalization’ (informal commercial and residential areas and slums) among others (see Chapter 6).

Chinese firms have taken up roles building and/or financing several of these megaprojects, including Kilamba New City near Luanda, ‘New Cairo’ in Egypt, the Kigali New City in Rwanda, and the now defunct Modderfontein New City in South Africa. These megaprojects complement smaller developments including apartment complexes and shopping centres throughout the continent (see Dittgen, 2017). However, unlike smaller projects, which are driven by purely economic logics, political linkages and relationships are highly visible in the new city developments.

The Kilamba Kiayi New City project is emblematic of how Chinese-inflected globalization can manifest in the form of consumption megaprojects. The development, located outside of Luanda, was part of Angolan President Jose Dos Santos’ pledge to build more than a million new homes to deal with the country’s chronic housing shortage. The project was financed by the Industrial and Commercial Bank of China (ICBC) through oil-backed concessional loans and built largely by Chinese companies (CCCC built the ICT grid, while China Road and Bridge Corporation did the infrastructure) under the direction of the Pierson Capital Group, an international firm. The government of Angola provided land, forcibly removed any previous occupants, and led marketing operations through a branch of Sonangol, Angola’s state-owned oil company. Unlike other elite-led developments, Kilamba was marketed as a ‘social project’ and a ‘progress project’, yet despite the rhetoric, the Angolan government had to subsidize a rent-to-purchase scheme for residents, as the apartments were initially out of the price range of all but the wealthiest Angolans (Cain, 2014). While the initiative has ensured habitation, the new city remains accessible only to Luanda’s middle class (van Noorloos and Kloosterboer, 2018).

A visit by Xi Jinping in 2013 attests to the political symbolism of the project, which is painted in the official discourse as a ‘Sino-Angolan project across the board’ and has served to strengthen relations between the two governments (Brautigam, 2014). Yet



Kilamba's peripheral position and lack of integration into Luanda's urban fabric limits opportunities for residents without consistent access to transportation and brings its overall sustainability into question. Moreover, the new city has a dedicated power substation so as to avoid load-shedding/ brownouts and operates its own water and sewage systems. As such, state spending will likely skew towards the development, to the detriment of the rest of the city. Finally, any large-scale retreat of elites into the new development will also take away tax revenue from existing municipalities, exacerbating urban decline and degradation (Watson, 2013; Benazeraf, 2014).

### *2.3.4 Production Projects*

China's financing of, and investment in, production megaprojects throughout Africa is intimately tied to the restructuring of the country's economy from a low-value export-based model to one focused on domestic consumption, outward investment, and the geographic expansion of Chinese production networks. As noted, contemporary China is undergoing a massive economic reform program (expressed both domestically via initiatives such as supply-side reform and internationally through the aforementioned umbrella projects [see Kenderdine, 2018 for more]) as its old development model has begun to show acute signs of stagnation, overcapacity in traditional industries<sup>36</sup>, and cyclical decline<sup>37</sup> (Zhang, 2017; Kenderdine and Ling, 2018).

China's experience with production megaprojects goes back to the country-wide industrialization initiatives launched by Mao in the aftermath of the CCP's rise to power, yet it is the country's strategic use of Special Economic Zones (SEZs) as part of its reform-era integration into the global economy that has caught the attention of policy makers throughout the Global South.<sup>38</sup> As per Giannechini and Taylor (2018), the term 'Special Economic Zone' is a sort of blanket phrase which can describe a variety of economic initiatives including Free Trade Zones (FTZs), Export Processing Zones (EPZs) and Free Ports, among others. The crux of these initiatives is that they are spatially delineated areas

---

<sup>36</sup> These include cement, steel, and aluminium among others (Zhang, 2017).

<sup>37</sup> As evidenced by declining return on investment and rising debt levels. As Zhang (2017) describes, China's capital output ratio (the ratio of investment to growth) has doubled since 2007.

<sup>38</sup> Though it is important to consider that the use of SEZs is in no way uniquely Chinese.

designed to attract foreign investment (and thus ‘spatially fix’ mobile capital) through fiscal, customs, and legal incentives (Pairault, 2019). Generally regarded as long-term projects, most zones place strong emphasis on technology-transfer, the creation of backwards linkages (that is, linkages to domestic producers), and eventually encourage domestic private investment (Giannechini and Taylor, 2018). As per Carter and Harding (2010), SEZs are, at their best, an incubator of ideas and policies which maximize the comparative advantages of host countries and can later be used to accelerate the wider economy and induce structural transformation. In China’s case, SEZs such as Shenzhen were crucial components of Deng Xiaoping’s ‘ladder step’ project which sought to create geographically uneven concentrations of wealth along strategic coastal areas that would eventually spread westwards (which has hitherto happened only to varying degrees). The original zones have become deeply embedded in the global economy, though their distinctiveness has diminished with China’s entry into the World Trade Organization (WTO)

SEZs are increasingly being put forth as solutions to Africa’s industrialization problem and are being built throughout the continent. As per UNCTAD (2019), Africa currently has 237 SEZs (51 of which are under construction), with 53 additional zones currently in the planning stages. The hope in African policy circles is that, beyond attracting investment from the Global North, the zones will be able to absorb the labour-intensive, export-based, manufacturing that China and other middle-income countries (MICs) are attempting to shed (in order to move up the value chain), thus igniting local industrialization (Wolf, 2016). However, in the study of African economic zones, distinctions must be made between independent SEZ programs (such as South Africa’s) and China’s ‘Overseas Economic and Commercial Cooperation Zones’ (OECCZs) on the continent.

#### *2.3.4.1 China’s Overseas Economic and Commercial Cooperation Zones in Africa*

Although OECCZs are in essence industrial parks<sup>39</sup> that incentivize the fixing of

---

<sup>39</sup> The official definition as per MOFCOM (2015, quoted from Pairault, 2019, p.6) is as follows: ‘the term Overseas Economic and Commercial Cooperation Zone will refer to an industrial park under a holding company with Chinese capital (the principal) incorporated within the national territory of the People’s Republic of China (excluding Hong Kong, Macao and Taiwan) which, through a Chinese owned entity

foreign capital, these zones in fact operate as enclaves designed to create ‘a haven in another country’s territory to accommodate Chinese companies and therefore boost Chinese economic development’ (Pairault, 2019, p.4). This differentiates them from other SEZs on the continent, which generally make no distinction between the investment’s country of origin. Li Chunding (quoted from Pairault, 2019, p.6) explains the specific objectives of the OECCZs:

*OECCZs are a strategy for Chinese companies to “go out”, they are conducive to the formation of industrial clusters and alleviate the implementation of subsidy policies. [...They allow] Chinese companies to group together and pool to invest abroad; when such areas are created and after an audit has been carried out, the [Chinese] government may grant public aid of 40 million dollars [per company] and longterm loans of up to 350 million dollars [per company].*

The OECCZs importance thus lies in their ability to entice Chinese companies to move abroad, as well as their strategic use as accumulation points within larger networks of production. The Chinese government offers incentives for manufacturers to move their production to Africa through programs granting tariff-free entry on a variety of products (Brautigam and Tang, 2014). Additionally, China’s infrastructure development program minimizes costs and risk for potential investors as it provides outlets and port access for Chinese holdings throughout the continent. This system has been used to great effect in Ethiopia, where Chinese manufacturers can export to the US tax-free under the AGOA program, while using the newly built Addis-Djibouti Railway to minimize logistical costs. Giannechinni and Taylor (2018) detail how Chinese investors have flocked to the Eastern Industrial Zone (EIZ), located just outside of Addis Ababa. As with other OECCZs in Africa, EIZ was funded by Chinese policy banks and built entirely by Chinese firms working under the Qiyuan group, who now holds the operator license.

---

incorporated abroad (the agent), invests in the construction [of this industrial park] with a complete infrastructure, a clear industrial orientation, comprehensive functional public services and ensuring the clustering and dissemination [of Chinese enterprises]’.

China's Overseas Economic and Commercial Cooperation Zones (OECCZs) in Africa

Country – Location/Name	Size	Date of Certification	Lead Developer	Industrial Focus
Zambia – Chambishi	11.58 km <sup>2</sup>	2006	China Nonferrous Metals Corporation	Copper and cobalt processing
Egypt – Suez	5.08 km <sup>2</sup>	2007	Tianjin TEDA Co.	Textiles and garments, petroleum equipment, automobile assembly, electronics
Nigeria – Lekki	30 km <sup>2</sup>	2006	CCECC	Transportation equipment, textile and light industries, home appliances and telecommunication. Possible oil refinery.
Nigeria – Ogun	100 km <sup>2</sup>	2006	Guangdong XinGuang Group	Construction materials and ceramics, ironware, furniture, wood processing, medicine, computers, lighting

Mauritius – Jinfei	2.11 km <sup>2</sup>	2006	Three Shanxi companies	Manufacturing (textile, garment, machinery, hi- tech), trade, services  (tourism, finance, education)
Ethiopia – Eastern	2 km <sup>2</sup>	2007	Qiyuan Investment Group	Electric machinery, steel and metallurgy and construction materials
Algeria – Jiangling	5 km <sup>2</sup>	2007	Jiangling Automobile Co	Automobile assembly, construction materials

**Table 1:2 China's OEECZs in Africa (compiled from Brautigam and Tang, 2012; Tang, 2015; and Pairault, 2019).**

While the OECCZs are all at least partly funded by the Chinese government, the specificities of funding are highly varied. Some zones are backed by provincial governments, some by the central government, and some are joint ventures (JV). For certain zones, Chinese developers have been allowed to seek grants from EXIM bank. The Zambian SEZ (Zambia-China Economic and Trade Cooperation Zone – ZCCZ) for example, was issued a \$208 million concessional loan to build its on-site processing facility. Given their varied characteristics, these zones exemplify the highly fragmented and often ambiguous politico-economic frameworks of China's state-business relationships (Gu, et al., 2016).

#### *2.3.4.2 Independent SEZ Programs*

As previously noted, country-specific SEZ programs (such as South Africa's) as

well as non-Chinese owned/operated zones are also increasing throughout the continent. China's domestic SEZs such as Shenzhen and Pudong have grown in the global governmental imaginary, and research (Cartier, 2002; Breslin, 2005) has documented how both their built environments and the structural transformation they produced in their local regions (transforming them from peripheral agricultural areas to global financial hubs) have become something to copy or aspire to. However, as Ren and Weinstein (2013) and Cartier (2002) explain, few politicians, planners, or civic administrators attempting to turn their city or region into the 'next Shenzhen' have more than a rudimentary understanding of what the processes behind the transformations entailed as many have never been to China nor studied its development. Disregarding the integral backroom political reforms, they instead focus on the megaproject aspect (e.g., large-scale housing/commercial developments and infrastructure projects), playing up discourses of modernity and development without engaging the policy element. Indeed, one of the factors often overlooked in the success of China's SEZs is the reshuffling and devolution of administrative powers which occurred concomitantly with zone expansion. Despite it being a key component in the efficacy of the original SEZs, this and other institutional reforms are too often ignored by planners attempting to follow the so-called 'China-model'.

With SEZs, the success or failure of a specific zone is very much dependent on host country policy, and whether or not they are part of coordinated, government-wide programs. The failure of South Africa's Industrial Development Zone (IDZ) program underscores the narrow view habitually taken by national and local administrators in Africa with regards to these sorts of projects. As Nel and Rogerson (2014) describe, despite a broad ambition to decentralize industrial development and reintegrate historically marginalized areas into the economy, South Africa's IDZs lacked clear policy guidance, comprehensive frameworks, or strategic planning. They relied exclusively on government ownership and management and did not feature prominent private sector involvement. Moreover, there were few special incentives for zone investors, reducing their attractiveness. Unlike China's SEZs, which were a small part of a multi-scalar, comprehensive plan to create growth multipliers and attract export-led investment, South Africa's IDZs were essentially one-off attempts to bring in investment and were 'caught between market-driven and Keynesian redistributive logics' (McCallum, 2011, p.15 quoted

in Nel and Rogerson, 2014). The new SEZ program, launched in 2014, hopes to reverse the failure of the IDZs. The SEZs have so far succeeded in attracting two megaproject-size investments (see Chapters 5 and 7) from enterprising Chinese firms and conglomerates. However, their ability to maximize the transformative effects of these projects remains uncertain given structural issues (e.g., skills shortages), and uncertain market conditions (Interview, LEDA, November 2017, Johannesburg; Interview, Analyst, February 2018, Johannesburg).

While large SEZs with well-managed linkages can foster innovation and promote technology/skills transfer to local populations, their developmental outcomes are tied to the specific policies put forward by host countries. Some, including Zambia and Egypt, consider their zones as pivotal parts of their macro-economic strategy, while others lack the policy mechanisms to optimize growth via zone development (Antonio and Ma, 2015). Both OECCZs and independent SEZs can also face significant challenges in terms of political instability, a lack of suitable infrastructure, and deficient industrial frameworks (Pairault, 2019). In Ethiopia and South Africa, state operatives are attempting to localize value chains and promote export-oriented growth. However, given the current conditions, the bulk of EIZ's workforce will remain low-skilled and low-paid, with few opportunities for upgrading; a story that research shows is being repeated throughout Africa's special economic zones (Brautigam and Tang, 2014; Giannechinni and Taylor, 2018).

### *2.3.5 Ceremonial Projects*

During the first three decades or so of contemporary Sino-African relations (comprising the late Mao era to the 1990s), ceremonial megaprojects, or 'architectural aid', were at the core of Chinese foreign policy in Africa. After the end of the High Cultural Revolution (1966 – 1969), China's foreign policy shifted from emphasis on far-left militancy with the specific goal of an armed workers revolution to a pragmatic approach focused on peaceful development (Song, 2017). Despite widespread rural poverty, in the 1960s, China's population (the largest in the world at the time), and abundance of resources made it the 6<sup>th</sup> largest economy in the world by Gross Domestic Product (GDP). However, per capita, China's production was approximately the same as Nigeria and Benin, two newly independent countries. As Roskam (2015) describes, this statistical dissonance

allowed China to play a two-level rhetorical game; at once claiming that it was a poor, developing country, while concomitantly touting its industrial prowess and the transformative properties of its state-led developmental model. This dual discourse is used to this day.

Brautigam (2009) describes how Mao-era aid programs served overt ideological and political strategies, essentially becoming articulations of the ‘three-worlds’ perspective, which categorized states as being in either the first, second, and third world.<sup>40</sup> Under this model, China sought to position itself and project power within the third world sphere, as well as participate in the internationally recognized ‘non-aligned movement’. Ceremonial megaprojects became a central medium through which China could establish and promote its ideological agenda within these policy spaces (Roskam, 2015).

Ceremonial projects such as the Palace of the People in Comoros, Friendship Hall in Sudan, and the National Assembly of Guinea not only supported development and visions of modernity in recipient countries, but also sought to foster trade, expand Chinese cultural influences, and ensure the domestic and international legitimacy of the CCP (Ding and Xue, 2015). Additionally, these projects were part of a concerted effort by the Chinese state to promote (via associated industrial exhibitions) its manufactured goods around the world (in places such as Havana, Damascus, Khartoum, and Yangon) to ease the domestic economic turmoil caused by the Great Leap Forward (1958-61) (Roskam, 2015).

Early projects were generally financed via simple commodity credit agreements, where an amount of Chinese goods equivalent to the value of a particular loan could be imported into the partner country. Other loans were secured through the purchase of Chinese products or materials. This loose arrangement largely informs contemporary ‘flexigemonic’ practices.

China’s aforementioned inward retreat and economic restructuring throughout the early 1980s meant that African ceremonial megaprojects were largely discontinued, and renewed engagement only began after Tiananmen Square. After the massacre, Chinese leaders, feeling ostracized by the West, once again turned to anti-imperialist rhetoric, and

---

<sup>40</sup> It must be noted that Mao’s usage of these terms was different from the conventional one. He conceptualized the first world as being comprised of the US and Soviet Union, the second of Europe, Japan, and Canada, and the third of Asia (bar Japan) and Latin America (Gillespie, 2004).



sought to position the country as the ‘leader of the developing world’ (Taylor, 2010, p.20). The CCP’s attempts to carve out this international policy space were bolstered by projects such as Ghana’s national theatre and Bamako’s national conference building.

China’s use of ceremonial projects has continued into the current phase of Sino-African engagement. Projects often remain politically motivated, as opposed to profit-seeking in nature and serve to both strengthen bonds between governments and promote public diplomacy (what Ding and Xue [2015, p.145] term a ‘charm offensive’ to enhance China’s soft power). Additionally, they advance the win-win and developmental partnership narratives put forth by the Chinese state. Contemporary examples of government-built projects include the aforementioned African Union building in Addis Ababa (a \$200 million project which was built entirely out of Chinese-sourced materials), Ethiopia’s national football stadium, the presidential palaces of Mozambique and Sudan, and the Grand Theatre in Dakar.

Perhaps the most visible example of modern Chinese-led ceremonial megaprojects is ‘stadium diplomacy’, an ambitious campaign stretching over 25 years which has led to the construction of 140 stadiums in 61 countries. Ninety of these stadiums have been built in Africa, with most having been either donated to their host countries or paid for via concessional loans (Vondracek, 2015).

Though government-sponsored ceremonial megaprojects have somewhat fallen out of favour, Chinese construction companies are winning bids and contracts to build similar projects throughout Africa. This fact again stresses the international competitiveness of the sector as well as the shift from political to economic considerations.

## **2.4 Conclusion**

This chapter has demonstrated how megaprojects have become one of the most significant and visible vectors of China’s expansionist moment in Africa. It has shown how a convergence between the needs, interests, proficiencies, and capabilities of African and Chinese actors has led to engagement practices which are often articulated on the ground in the form of five separate categories of megaproject. Each of these categories (infrastructure, extractive, consumption, production, and ceremonial) plays a separate role in China’s geostrategic designs and presents unique opportunities for a range of Chinese

actors, which can include central SOEs, regional SOEs, private investors, policy banks, governmental departments, MNCs, economic migrants, small-to-medium enterprises (SMEs), and international agencies. Megaprojects thus serve to bring together a variety of noteworthy players and act as some of the main assemblages of Chinese influence and developmental cooperation, while simultaneously strengthening the win-win cooperation frameworks espoused by the Chinese state. Yet the reasons why engagement is so often articulated in the form of megaprojects are varied and complex. Megaprojects are a global phenomenon and are becoming some of the main delivery systems in a variety of fields. At the local level, Flyvbjerg (2014) has identified what he calls the ‘4 sublimes’ (political, economic, technological, aesthetic) of megaproject construction, or the factors that drive support for projects even in the face of more economically viable options. Additionally, in Africa, research has shown that elites conceptualize megaprojects as being able to create strategically important linkages. Similarly, they often see the projects as being the most effective ways to boost their constituency’s material well-being, give tangible examples of governance, and advance discourses of modernity.

Chinese actors have leveraged their ability to provide the funding or expertise needed for megaprojects in order to achieve their broader goals. Infrastructure projects, as a whole, are the result of China’s world-class construction sector (as well as the state connections and resources that the sector can bring to bear) combined with Africa’s legacy of infrastructural underdevelopment and \$130 billion deficit. Extractive projects on the other hand, are largely driven by China’s demand for resources for its domestic economy. Meanwhile, consumption projects are generally driven by African demand for new cities or urban integrated megaprojects (UIMs) to accommodate the continent’s rapidly urbanizing population. In contrast, the impetus for production projects generally comes from both China’s need to expand its corporate footprint and create transnational production networks, and Africa’s desire to absorb labour-intensive manufacturing in an effort to induce wide-ranging industrialization. Finally, ceremonial projects are driven by China’s ambitious geopolitical agenda and the state’s desire to create long-lasting relationships on the continent.

The following chapter will focus on South Africa and detail how megaprojects have been increasingly conceptualized by elites within the country as both a quick fix for the

enduring problems of poverty and inequality and as a way to legitimize their governance strategies through state-building, nation-building, and the creation of international linkages (especially with China). Additionally, it will argue that several of the country's socio-technical systems (housing, manufacturing, energy) have become dependent on the successful implementation of state-led megaproject-based initiatives.

### **Chapter 3 – A Panacea for Development? Megaprojects and South Africa’s Post-Apartheid Economic Policy**

Given their use in advancing state (and private) agendas, megaprojects have proven to be indispensable instruments for South Africa in both its post-apartheid domestic economic restructuring and broader re-engagement with the global economy. Throughout the democratic era, the South African state has repeatedly mobilized megaprojects in the pursuit of socio-economic transformation. As such, projects have become key cogs in sectors ranging from energy and extractives to manufacturing and housing.

As Ballard and Rubin (2017, p.12) note, there is a ‘big project mentality’ across the South African government, which attempts to ‘solve a whole bunch of problems’ through the megaproject framework. This framework has been a recurring staple of South Africa’s developmental calculus since the early 20<sup>th</sup> century, and projects have frequently become the primary vehicles for macro-level politico-economic initiatives and developmental visions. Also called a ‘silver bullet’ approach (Peck, 2011, p.174), the megaproject framework is being turned to once again as the African National Congress (ANC), now in power for over two decades, comes under growing pressure to provide answers to the enduring problems of poverty and inequality.

This chapter will analyse the logics, roles, and rationales of South African megaprojects in the post-apartheid period. It will argue that these projects have been among the main politico-economic instruments used by the South African state to construct its authority. It will do this by detailing how megaprojects in the South African context are built for three overarching rationales which together form the crux of state legitimacy: state building as articulated through economic development initiatives or political successes, political symbolism and nation building, and as instruments of foreign policy – where they principally serve to strengthen existing engagements, ‘spatially fix’ (Harvey, 1981, p.2) foreign capital, and embed ‘friendly’ actors into the country’s socio-technical systems.<sup>41</sup> Finally, the chapter will argue that given the country’s faltering post-apartheid economic trajectory (particularly during the late Zuma era), and state-oriented development vision as

---

<sup>41</sup> Socio-technical systems are those that fulfil essential functions – for example food, energy, and manufacturing (Murphy and Carmody, 2015)

articulated by the New Growth Plan (NGP) and Industrial Policy Action Plan (IPAP)<sup>42</sup> among others; sectors including energy, housing, and manufacturing have become dependent on state-led megaproject-based initiatives.

The rest of the chapter will be divided into three parts. The first will briefly examine the evolution of the South African ‘developmental state’; tracing its origins and specific politico-economic reforms from the beginning of the democratic transition through to the Zuma administration. The second will detail how megaprojects are conceptualized and used by South African actors. Due to space restrictions, this chapter will reference key projects and initiatives in order to substantiate the theoretical constructs mentioned throughout. Finally, the theoretical implications of the discussion will be addressed in the conclusion.

### **3.1 A Brief History of South Africa’s Post-Apartheid Economic Trajectory**

#### *3.1.1 Neoliberalism from Within? The ANC’s Economic Policy 1994-2007*

Through its apartheid policies, South Africa’s Nationalist government created an internal colonial system in the country (Wolpe, 1975), essentially engineering two distinct (but linked) economies on the basis of race (Thabo Mbeki called these the ‘first’ and ‘second’ economies). On the one hand there was ‘white South Africa’, which by the early 1990s functioned as an advanced capitalist economy complete with transnational corporations, increasing financialization, and a stable welfare system. On the other was ‘non-white’ South Africa, which was largely excluded from the formal economy and exhibited the features of an internal colony<sup>43</sup> (Padayachee, 2013). An exhaustive examination of apartheid South Africa’s economic structure and system of capital accumulation as instituted by the Nationalist government is beyond the scope of this chapter but suffice it to say that the system of value capture was built upon geographically

---

<sup>42</sup> The NGP (2010) and IPAP (2009), released by the departments of Economic Development and Trade and Industry respectively, are policy documents which outline statist approaches to economic development. Other noteworthy initiatives include the National Infrastructure Plan and Strategic Integrated Projects (SIPs).

<sup>43</sup> As per Wolpe (1975, p.107) the internal colony is one where ‘the indigenous population is subjected to national oppression, poverty and exploitation, lack of all democratic rights and political domination by a group which does everything it can to emphasize and perpetuate its ‘European’ character’.

uneven development (articulated and enforced by apartheid laws) which kept African<sup>44</sup> labour cheap, and in turn allowed for the creation of the heavily subsidized manufacturing sector which underwrote white South Africa's advanced economy.

In the academic literature, the existence of deliberately crafted spatial inequalities had been recognized from the 1970s on, with Board, Davies, and Fair (1970) and Fair (1982) identifying the 'Homelands'<sup>45</sup> role as peripheral labour reserves created to serve the dominant urban economic cores (Rogerson and Nel, 2016). Yet as South Africa moved towards non-racialized democracy in the early 1990s, a combination of internal capitalist logics and path dependencies, as well as the nature of the transition agreement, would lead to a post-apartheid trajectory that has frequently reproduced the structural and geographical disparities of the previous era (Carmody, 2002; Hart and Padayachee, 2013).

As Haines (2015) notes, in the period between 1994 and approximately 2007, South Africa's economic policy shifted towards the 'global economic orthodoxy' as per the neoliberal Growth, Employment, and Redistribution (GEAR) macroeconomic strategy. Despite previous talk of nationalization and redistribution (Schneider, 2018), the negotiated nature of the settlement to bring about democracy meant that the core of the previous economic system was sustained (Carmody, 2002). Within this context, it is important to consider that the frameworks of apartheid's *national capitalism* remain highly relevant today. Indeed, many of the key institutions of the original white-dominated developmental state, including the Industrial Development Corporation (IDC), the Council for Scientific and Industrial Research (CSIR), and Eskom (the government's energy parastatal), continue to play significant roles in contemporary government. As per North (1990), the founding institutions of a country set its growth and development path, and institutional patterns are self-reinforcing through built-up routines and social connections. For North, the past is not prologue, rather it is linked to the present and future via institutional memory. While it is important to note that this sort of path dependence does not necessarily preclude change, it can significantly impair it. Lim (2017, p.9) expands on this concept within the context of

---

<sup>44</sup> The terms for racial groups in apartheid South Africa as per the Population Registration act of 1950 were African, Indian, White, and Coloured (Schensul, 2008).

<sup>45</sup> Homelands here refers to the Bantustans – the 13 territories set aside by the Nationalist government for black South Africans. The full list of Bantustans is as follows: Transkei, Bophuthatswana, Venda, Ciskei, Gazankulu, Lebowa, QwaQwa, KaNgwane, KwaNdebele, KwaZulu.

state institutions, asserting that organizational ‘lock in’ occurs when a large number of people adopt or use a practice or policy. Any drastic alteration to this policy, even in the face of superior alternatives, will encounter resistance in the form of ‘locked in’ actors whose interests would be threatened by change. As Padayachee and van Niekerk (2017) document, in several cases, apartheid-era officials from the Ministry of Finance, South African Reserve Bank (SARB), and provincial developmental finance institutions (DFIs) remained on during the transition period and oversaw the continuation of older policies in their respective sectors.

GEAR led to policies such as the acceptance of apartheid-era debt, deregulation of a wide-range of microeconomic markets, increasing privatization of state enterprises<sup>46</sup>, and the implementation of free trade policies (Schneider, 2018). Officially adopted in 1996, the strategy represented a broad reorganization of state priorities and can be conceptualized as a (temporary) move away from state-led economic and industrial development.

#### *3.1.1.1 The Neoliberal Turn and its Effects*

Hart and Padayachee (2013) contend that the ANC’s neoliberal turn had three primary consequences for capitalism in South Africa. First, it led to structural changes in the Minerals-Energy-Complex (MEC) and South African accumulation strategies as a whole. The MEC, first established in the early 20th century, was made up of a set of core industries, largely metal extractors, energy providers, and their associated downstream firms (Marais, 2011), and eventually came to function as an alliance between large-scale productive mining capital, the state, and the financial sector. While some of its key components, such as energy and extractives, made a largely seamless transition from apartheid to democracy; the manufacturing sector, now open to international pressures given the dismantling of import substitution, shrunk dramatically. In 1990 manufacturing constituted approximately 24% of the gross domestic product (GDP), but by 2016 this number had fallen to 13.4% (Schneider, 2018). Moreover, employment levels have also been on a steady downward slope (Makgetla, 2014).

---

<sup>46</sup> Though as per Haines (2015), this had been slowly unfolding since the mid-1980s.

Year	Employment - Manufacturing
1994	1,503,387
1995	1,512,462
1996	1,456,501
1997	1,396,002
1998	1,350,628
1999	1,315,841
2000	1,296,166
2001	1,262,906
2002	1,255,343
2003	1,250,806
2004	1,249,294
2005	1,185,770
2006	1,297,692
2007	1,320,379
2008	1,299,204
2009	1,212,995
2010	1,170,645
2011	1,154,009
2012	1,149,471

**Table 2:1 Private Sector Manufacturing Employment (Haines, 2015).**

Yet while manufacturing has contracted, finance has become one of the main drivers of the economy, with its share of GDP going from 11% in 1980 to 21% in 2010



(ibid.). In fact, by 2016 finance represented 14% of total formal employment (Statistics South Africa, 2018). Ashman and Fine (2013, p.146) conceptualize the interests of the sector as integrating into the classical MEC, resulting in what they term a ‘financialized MEC’.<sup>47</sup> It is also important to note that while mining today only accounts for approximately 8% of South African GDP, it remains enormously important as it supplies much of the country’s raw material needs (and foreign exchange reserves). As per Bisseker (2017), nearly 80% of South Africa’s steel is fabricated using locally mined minerals. Moreover, the sector’s demands help drive the local production of a variety of materials, including primary steel, but also manufactured goods such as locomotives, winches, explosives, and cables. Finally, there is a high degree of (inter)dependence between mining and services given the sector’s needs for financial, engineering, and consulting services, among others. Bisseker (2017) details that the extractive industry not only contributed approximately R291 billion towards GDP in 2015 but also spent R245 billion purchasing goods from other sectors. As such, it remains a foundational industry at the core of the South African economy and the country’s accumulative system.

A second major transformation was the introduction of the Black Economic Empowerment (now rebranded as Broad-Based Black Economic Empowerment) program. BBE is the ANC’s program of affirmative action, and at its core signifies an attempt to create an African entrepreneurial class. The program was originally articulated through the redistribution of assets via the sale of ‘non-core’ business interests to BEE partners. Corporations were then allowed to use the proceeds to invest overseas (Carmody, 2002). This early approach was quickly changed to a more assertive stance based on regulatory policy, which led to the creation of targets for ownership change throughout the country’s strategic industries (including auto, mining, and information and communications technology [ICT]) (Hart and Padayachee, 2013). While this has successfully embedded BEE into South Africa’s socio-technical systems, the regularly changing demands of the program have led to criticism from the business community.<sup>48</sup> The BEE model has been

---

<sup>47</sup> This characterization helps highlight the continuity of certain parts of South Africa’s post-apartheid economic trajectory even within the context of a changing economic landscape.

<sup>48</sup> One prominent example being the dispute over the country’s Mining Charter, which sought to push minimum BEE partner ownership up from 26% to 30% over the course of a year. However, this was motion was defeated by the industry.

widely criticized by social commentators as well, who say it has not led to the promised broad-based growth or the rise of African-owned commerce. Instead, they assert that it has created a small African elite which has since been incorporated into existing structures of power.

The final effect of the neoliberalization process was widespread capital flight. Internationalization strategies implemented by South African conglomerates after the end of apartheid led to significant capital outflow and the shifting of primary stock market listings and headquarters to London (Surborg, 2012). This was done largely to facilitate overseas expansion and access cheaper capital. Yet this delinking has had significant deleterious effects in South Africa since large financial outflows can cause macroeconomic instability and have negative impacts on national currencies. From 1994 to 2000, capital flight was over 5% of national GDP, and it continues to spike whenever crises arise (Saul and Bond, 2014). As per Ashman, Fine and Newman (2011), approximately 20% of GDP left the country between 2004 and 2011, using both legal and illegal avenues.

Much has been written about GEAR, and it is often presented either as a missed opportunity for broad-based change or an attempt by international financial institutions (IFIs) to bring the country into the neoliberal fold. Yet despite policy shifts in trade and investment, the state remained highly involved in a variety of socio-technical systems. In fact, South Africa maintained a high-level of public expenditure relative to its apartheid era (Trading Economics, 2018) and in certain cases the previous era's industrial policy was simply repackaged and continued. For example, as Hart and Padayachee (2013) note, shortly after the democratic transition, the government approved pre-existing proposals for megaprojects in stainless steel and aluminium smelting<sup>49</sup>, with both projects also receiving significant financial support from the IDC.

In addition, despite the new government's stated desire to move away from spatial planning, 1996 saw the unveiling of the Spatial Development Initiatives (SDIs), large-scale developments, frequently of megaproject size, which sought to generate economic growth in underdeveloped areas (Rogerson, 2004). These were later joined by the Industrial Development Zones (IDZs), essentially a sort of SEZ which attempted to bring in foreign

---

<sup>49</sup> Specifically, the Saldanha steel mill which was developed as a joint venture between ISCOR and the IDC in Saldanha, and the Hillside Aluminium smelter in Richards Bay.

investment via tax and labour incentives.

The South African experience can thus most accurately be characterized as a neoliberal restructuring of certain state policies, combined with the continuation of statist and developmental practices in other aspects of government and governance. The processes of policy transition or continuation were influenced both from above, through the state's interplay with contemporary globalization and its constituent forces, and from below, in terms of the response at the domestic level. In fact, there was constant resistance to neoliberalization from below, and collective pushback against GEAR by various state/society groups culminated in the ousting of President Thabo Mbeki as President of the ANC at the party's Polokwane conference in 2007 (Haines, 2015). Both the results of the Polokwane conference and the subsequent pressure to demonstrate commitment to economic reform informed the ANC's 2009 election manifesto. Jacob Zuma, the ANC candidate, declared that the key to substantive socio-economic transformation would be the creation of 'an effective developmental state' (ibid.).

### *3.1.2 Zuma's Developmental State: 2008 – Present*

Meyns and Musamba (2010) argue that a successful developmental state must have an autonomous, development-oriented leadership, an efficient professional bureaucracy, a production-oriented private sector, and performance-oriented governance. Essentially, the state must be able to attract capital and have the capability and intent to resolve market failures (Singh and Ovidia, 2018). While the idea of a contemporary South African developmental state had been introduced in 2005, it received little publicity and did not result in major policy proposals. Yet the Polokwane conference, combined with continued opposition to GEAR and neoliberal macro-economic policy, led to significant changes in the form of the 2010 New Growth Plan (NGP)<sup>50</sup> (Haines, 2015). The NGP repudiated the strategies used from 1994-2008 and acknowledged that the economic growth achieved in

---

<sup>50</sup> In line with the dysfunction of the Zuma era, the NGP was joined in 2012 by the National Planning Commission's National Development Plan (NDP). Unlike the NGP, which characterized the country's economic problems as being caused by a lack of financial support for manufacturing, the NDP was much more market-friendly and sought to reduce the cost of doing business while prescribing a much larger role for the private sector in the economy as a whole. The NDP was never implemented, though for a time the state 'tried to pretend the NGP and NDP were essentially the same thing' (Bisseker, 2017 p.3).

that period did not lead to broad-based employment or change the impediments to economic participation for many of the country's marginalized populations.

The NGP recommended the revival of government-led economic planning with a focus on state-led or state-supported labour-intensive industries. The hope was to create 11 million jobs and reduce the unemployment rate from 25% to 6% by 2030 (ibid.). However, the program did not fully back away from the previous path, stressing that private capital should remain the main driver of the economy. The crux of the NGP and its related initiatives was thus ostensibly to create mechanisms by which the state could direct investment towards industrial growth in the manner of Taiwan, Japan, and South Korea (Masondo, 2018). Yet mismanagement at nearly all levels of government has hindered the NGP and South Africa's economy slid into recession in 2009<sup>51</sup>, 2017, and 2018, with growth rates averaging less than 2% per year throughout the Zuma presidency. Meanwhile, the country's debt-to-GDP ratio rose from 31% in 2009 to 53.1% by 2016 (Giokos, 2018) as public debt levels and social welfare spending escalated, while growth remained stagnant. Accompanying these issues is the maladministration of the country's SOEs, which has become one of the most pressing matters facing South Africa. The Zuma administration's push for 'developmentalism' sought to align the SOEs with what it termed 'national commercial interests', yet this largely resulted in the politicization and mismanagement of the parastatals (including the aforementioned Eskom), which had previously operated as commercial entities (Interview, Analyst, October 2017, Johannesburg).

Eskom's debt in particular has become a concern for the national budget, with the World Bank recently proclaiming that the company is 'too big to fail' and that the government has few options besides a restructuring of its debt (Paton, 2019). Eskom's current loan agreements contain cross-default clauses which stipulate that if the SOE were to default on a single one of its debtors, all other loans would be recalled. Collocott (2019) estimates that Eskom's debts are approximately R1,081 billion – or 87% of government revenue and approximately 23% of total GDP. Similarly, he estimates that, assuming the number remains constant, a possible Eskom default would raise the debt-to-GDP ratio to 69.95%.

---

<sup>51</sup> Though it is important to note that this recession was concomitant with the global financial crisis.

The bungling of the construction of Eskom's two megaproject-sized plants, Kusile and Medupi, are a large part of the reason it has run into these problems. The power plants, built to deal with the energy shortages of the mid-2000s<sup>52</sup>, have both gone far over schedule and budget (with delays of 7 and 8 years respectively, and current cost approximations doubling initial estimates at R292 billion) amidst accusations of corruption, and have led to the entire sector facing, in the words of one analyst, 'huge uncertainty' (Burkhardt, 2019; Interview, Energy Analyst, February 2018, Johannesburg).<sup>53</sup> As per the 2019 State of the Nation Address, President Ramaphosa vowed to provide the struggling power utility with further financial support while also splitting it into three separate entities – covering generation, distribution, and transmission<sup>54</sup>, in order to better manage costs. Yet complicating the matter is the fact that the Department of Energy, who is supposed to govern the sector, has never published an integrated energy plan (IEP) (Interview, Analyst, February 2018, Johannesburg). Moreover, the government of South Africa as a whole refuses to disclose the specifics behind the latest loans (which were borrowed from Bank of China) meant to keep Eskom afloat.

Compounding these problems, investor confidence in the country has been shaken by corruption scandals, wide-spread labour disputes, and the Marikana massacre<sup>55</sup> in August 2012. Beyond the glaring human tragedy, Marikana was particularly harmful for South Africa's economy as it severely disrupted mining productivity and was followed by a five-month strike in the platinum belt in 2014. Between 2011 and 2014, the broader mining sector lost nearly 60,000 jobs (equivalent to 11.4% of the total workforce) (Bisseker, 2017).

These failures in governance, along with the ANC's disjointed embrace of both neoliberalism/developmentalism and sector-specific difficulties in adapting to global production networks and market conditions (see chapters 5 and 7), have led to a capitalism with limited opportunities for small to medium sized enterprises (SMEs), and which

---

<sup>52</sup> Which saw consistent power outages and load shedding, leading to significant problems for large-scale industry (Interview, Energy Analyst, February 2018, Johannesburg).

<sup>53</sup> As of early 2019, periodic generator failures in the Medupi station continue to cause blackouts.

<sup>54</sup> Transmission systems are those that move large amounts of power over large distances at high voltage levels (69KV – 765 KV). Distribution systems on the other hand are those that move power within smaller areas at lower voltage levels (4 KV – 46 KV).

<sup>55</sup> The Marikana massacre refers to the killing of 34 striking miners by the South African Police Service (SAPS).

features widespread cronyism between firms, banks, and government (Hart and Padayachee, 2013). Indeed, some have argued that the focus on industrial policy and the creation of manufacturing jobs masks the fact that South Africa does not have an effective employment strategy and has not confronted skills shortages and other problems within the labour market (Bisseker, 2017). Moreover, the South African state has generally not exhibited the capacity to link economic development with structural transformation (though there have been exceptions), nor has it been able to craft a mutually beneficial state-corporate alliance (ibid). Some scholars have noted that instead of a developmental state, in some sectors the South African government has created a ‘business nanny state’ where the state intervenes to create upward redistribution through subsidies to MNCs (Masondo, 2018). For instance, in the automotive sector, the government contributes R2.6 billion for every R1 billion of investment. Additionally, increases in investment have come at the expense of local SMEs, with most having to reposition themselves as second tier suppliers (see Chapter 5 for more) (Masondo, 2018). As such, South Africa should not be characterized as a functional developmental state. Rather, Haines (2015) argues that under Zuma, its main attributes are those of a neo-patrimonial state, with a certain neoliberal hybridity thrown into the mix.

It is within this context of economic restructuring and political upheaval that certain elements of the South African state (e.g. Department of Trade and Industry (DTI), Economic Development Department (EDD), provincial governments) have turned once again to megaprojects. This is evidenced by an increase in state reliance on megaproject-led initiatives across a variety of sectors (e.g. energy, transport infrastructure, manufacturing, housing). Yet as previously mentioned, large-scale projects are inherently risky (Flyvbjerg, 2006) and with their potential opacity can serve as vehicles for state capture, maladministration, and rent-seeking.

### **3.2 Megaprojects and the South African State**

Throughout its democratic period, South Africa has thoroughly embraced the megaproject framework, with billions of dollars’ worth of state funding going to large-scale projects such as the 2010 World Cup stadia, the world’s third and fourth largest coal power plants (the aforementioned Medupi and Kusile), the industrial zone at Coega, a

housing delivery strategy based entirely on large-scale ‘catalytic projects’<sup>56</sup>, and expansions to a variety of ports, roads, and airports (including both OR Tambo in Johannesburg and King Shaka Airport in Durban) among others (Desai, 2015; Pollet, Staffel, and Adamson, 2015, Harrison and Todes, 2017). Megaprojects have been hailed by politicians as drivers of socio-economic change despite scant evidence to support these claims. One example of this is a speech by then Public Enterprise Minister Malusi Gigaba, who in the run-up to the 2014 elections stated that an infrastructure investment plan totalling up to \$380 billion would result in ‘radical socio-economic transformation’, and create ‘inclusive and equitable growth’ in the form of ‘millions of sustainable and decent jobs’ (quoted in Desai, 2015, p.23). However, as with similar claims, the jobs never materialized to the promised extent.

The specific sectoral ramifications of South African megaprojects have been analysed by a small yet growing literature (Sutherland, Sim and Scott, 2014; Welman and Ferreira, 2014; Murray, 2015; Ballard and Rubin, 2017; Ballard et al., 2017). However, to-date, no studies have considered the general logics behind South Africa’s decade-long, economy-wide megaproject building boom. This chapter proposes that at the national level, South Africa’s megaprojects are driven by three overarching rationales: state building and the creation of legitimacy via hyper-visible economic development initiatives and political ‘successes’, legacy concerns and nation building, – also termed political symbolism (van der Westhuizen, 2007) in the literature – and as instruments of foreign policy, where they both serve as tangible examples of international cooperation and to embed desired transnational actors (and thus ‘spatially fix’ foreign capital) into South Africa’s socio-technical systems. Enmeshed in these initiatives are the capitalist logics of individual contractors, enterprises, and corporations. Yet as this chapter has stated, given the current politico-economic situation in South Africa, the impetus for megaproject construction (whether through direct planning or the channelling of international financial flows into specific projects) comes most often from within the state. Finally, before continuing, it is important to consider that given the number of actors and large-scale capital requirements

---

<sup>56</sup> These are large-scale housing projects which are meant to kick-start development in formerly unused or marginalized areas.

necessary to undertake a megaproject, multiple rationales can be used to justify a single project.

### 3.2.1 State Building and Legitimacy

Post-apartheid reforms have been designed to restore and consolidate the state's legitimacy through the creation of broad-based socio-economic transformation (a concept which implies racial change in ownership). While the state has supported certain ideological movements (for a time embracing Archbishop Desmond Tutu's concept of a *Rainbow Nation*), the core of the South African state's claim to legitimacy is its commitment to material economic development for historically oppressed populations. This framework deepened with the Zuma administration's ostensible creation of an east-Asian style developmental state, as these are almost solely underpinned by a commitment to economic growth as a principal source of political legitimacy (Singh and Ovaida, 2018). The methods of achieving this economic growth within a statist context are intrinsically tied to the state's *capacity* and *infrastructural power*.<sup>57</sup> Given that megaprojects are intimately tied to the state and specific government in power (van der Westhuizen, 2007) they can be mobilized by these actors (either as direct initiators or facilitators) to both express their intent and affirm their capacity. Moreover, megaprojects' complexities and long timetables allow for periodic renegotiations and what Gualini and Majoor (2007, p.316) term 'frame realignment', or the reframing of a project's objectives when problems arise. As such, they are especially useful tools for building legitimacy and reinforcing the power of the state, particularly in difficult circumstances.

Despite the aforementioned economic struggles of the post-apartheid period, the ANC remains the country's largest political party despite ebbs and flows in approval<sup>58</sup> (Mattes, 2018). However, after two decades in power and with pressure building from years of highly publicized corruption scandals and government dysfunction stemming from the Zuma administration (see Bisseker, 2017), elements within the ANC feel that in order

---

<sup>57</sup> Mann (2008) defines infrastructural power as the ability of the state to penetrate civil society and implement policy choices across the territory it claims to govern.

<sup>58</sup> While it remains the largest party by votes, the 2016 election saw the ANC's national majority fall to 54% while also losing control of three major metropolitan areas – Nelson Mandela Bay (Port Elizabeth), Johannesburg, and Tshwane (Pretoria) (Bisseker, 2017).



to stay in power, they must offer decisive solutions to overcome the persistent problems of poverty and inequality (Ballard and Rubin, 2017).

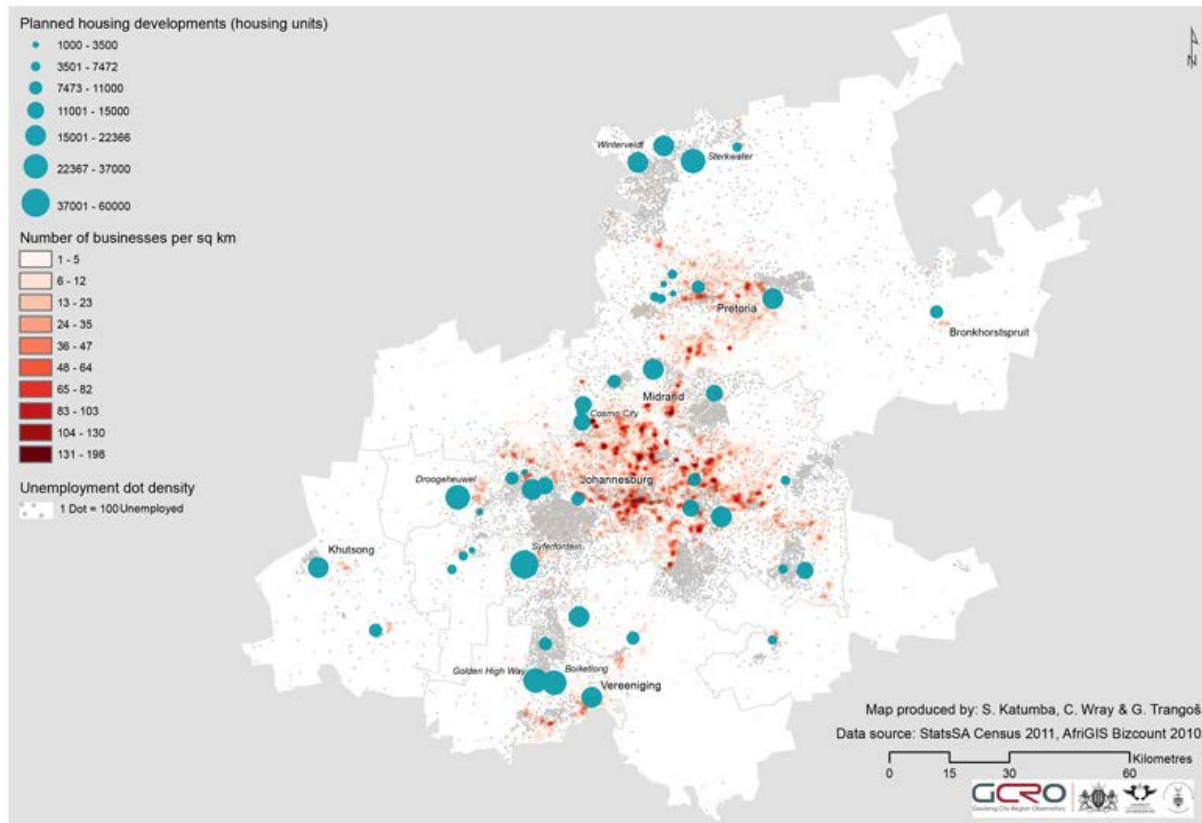
Few sectors illustrate South Africa's experience with megaprojects better than housing provision. Given South Africa's history of exclusion, segregation, and dispossession, state-led housing provision has been one of the main elements of post-apartheid governance (Ballard et al., 2017). In 2015, the Department of Human Settlements put forth a proposal that would see all new housing provision take the form of 'new cities' – large-scale projects with a minimum of 15,000 housing units and populations of at least 60,000 people (Harrison and Todes, 2017). Ballard and Rubin (2017) describe how concerns about meeting housing expectations played a major role in the decision to move forward with the 'new cities' plan and how an *urgency framework*<sup>59</sup> (van Wijk and Fischhendler, 2016, p.469) was then created at the provincial level in order to force a move away from 'microprojects'. David Makhura, then premier of Gauteng province, eventually cemented this policy direction with the launch of a document entitled: *Mega Projects: Clusters and New Cities, New Mega Projects proposal for human settlements in the Gauteng City Region* (Gauteng Department of Human Settlements 2015).

Highlighting how the South African state has consistently turned to megaprojects, similar methods of housing delivery were attempted in the early 2000s in KwaZulu-Natal, with large-scale developments being promoted as a 'pro-growth' approach that meshed with Durban's shift towards entrepreneurial urbanism, since the projects would channel investment into specific areas of the city (Sutherland, Sim and Scott, 2014). However, these types of approaches often concentrate vulnerable populations away from centres of formal economic activity, limiting their effectiveness in terms of inducing sustainable growth and instead reproducing patterns of exclusion and the need for informal livelihood strategies. Charlton's (2017) study of Lufhereng, a mixed-income 'new city' on the far western edges of Soweto, highlights how due to the need for large parcels of undeveloped land, the new settlement was placed far from existing economic bases and areas of business activity. Figure 3:1 illustrates the location of Gauteng's planned housing developments as

---

<sup>59</sup> Refers to the use of a deliberate discursive strategy which frames the project as being 'urgent' in order to facilitate implementation.

per the new housing strategy, within the context of the province's economic footprint as measured by number of businesses per sq. km.



**Figure 3:1 Location of Planned Housing Developments in the Context of Gauteng's Economic Footprint (Wray, Everatt, Gotz, Ballard, Trangos, Culwick, and Katumba, 2015, quoted in Ballard and Rubin, 2017).**

Despite the difficulties associated with mega-sized human settlements and their integration into existing economic structures, these ambitious projects are highly visible and present an image of a government at work. They reinforce the state's *infrastructural power* (Mann, 2008) and its ability to project 'authority over distance' (Herbst, 2000, p.231) and are thus the preferred delivery model for provincial level government actors, even when city-specific plans call for brownfield and infill development (Interview, City Planner, October 2017, Johannesburg). Moreover, large-scale projects serve as prominent reminders of generosity, power, and achievement, further entrenching state capacity and helping secure the territorialisation of outlying or border areas (see Chapter 7) (Yeh and Wharton, 2016). Nevertheless, it is important to note that infrastructural power is relational,

and as Schensul (2008) notes in his study of public investment and housing delivery in Durban, forces outside of the state's control can alter or even derail projects. In the Durban case, the state's push for new housing was derailed by corporate interests in the historically white core and made more difficult by overwhelming demands for adequate services and infrastructure in the historically marginalized townships, which led to rushed and substandard service delivery in these areas. The state was only able to break with the entrenched spatial hierarchy through new developments in the city's 'buffer areas', large tracts of land left empty by apartheid planners which served to separate the races (ibid) (for more on apartheid planning, see Chapter 6).

### 3.2.2 Political Symbolism: Legacy and Nation Building

Beyond state building and legitimacy, megaprojects in South Africa are often approved and built for reasons of *political symbolism*. Coined by Steinberg (1987) as a way to help explain increasing numbers of 'large-scale national technological development projects', the logic of political symbolism refers to the set of political and ideological benefits that state elites think can be gained from embarking on a megaproject. He notes that the growing frequency of large-scale projects can be partly explained through their 'appropriation by a political leadership for symbolic purposes in both domestic and international political systems' (Steinberg, 1987, p.33). While similar to Flyvbjerg's (2014, p.8) 'political sublime', political symbolism is closely associated with the creation of new 'national imaginaries'<sup>60</sup> since the building of large-scale projects is often embedded within discourses of national prestige, technological prowess, and the creation of a 'world class' city discourse. Accordingly, projects built within this logic serve the dual goals of advancing the state's ideology and capacity internationally through discursive means (for instance South Africa promoting itself as the 'premier African state'), while also reinforcing nation-building efforts at home.

In South Africa, one of the clearest examples of planning via political symbolism is the Gautrain, Gauteng's light-rail system. Originally envisaged as a rail system linking Pretoria, Johannesburg, and O.R Tambo international airport, the project was part of the

---

<sup>60</sup> This term is borrowed from Ong's (2011) 'urban imaginaries' which refers to a 'reimagining of the urban form and functions and a reordering of space.'

Gauteng SDI. Given the legacies of apartheid-era planning and internal colonialism, a new mass transit system for Gauteng province was/is sorely needed.

The original system of roads and rail was built in service of the apartheid regime and thus reinforced its exclusionary principles. Linkages to the townships were designed primarily for the daily transport of the black African majority to and from their workplaces in 'white South Africa' (Thomas, 2013, p.78) and consequently operated on a strict centre/periphery structure. One instance of this is the province's metro-rail system, which stops in central Pretoria and Johannesburg but does not serve the historically white northern suburbs. This functioned to funnel the African population into their workplaces while limiting their access to the residential 'white' areas (which was compounded by apartheid pass laws). Today, the metro transports nearly 2 million South Africans every weekday, yet it continues to be largely neglected, dangerous, and undercapitalized (ibid). The post-apartheid challenge was to create a more equitable, effective, and practical system which would allow for a greater degree of mobility to previously excluded populations. However, despite public transport being a clear area of need, little work has been done since the start of democracy to upgrade and modernize transport networks, and the Gautrain, designed as a standalone project and running on a different rail gauge than the metro, has done little to solve provincial mobility problems for historically marginalized groups (Fombad, 2015).

The Gautrain, which cost approximately R25bn (\$3.8 billion), was aimed at the affluent and the middle classes from the start. As CEO Jack van der Merwe famously said, 'Our focus is the car user... if you have enough money for a car, you have enough money for the Gautrain' (Thomas, 2013, p.84). Harris (2011) details that only 11% of black South Africans use cars as their primary mode of transportation, compared to 90% of white South Africans. While the Gautrain was successful in generating over 10,000 jobs, the vast majority of these were temporary construction jobs, and only 2,700 full-time positions (in either operations or maintenance) were created (Transport Portfolio Committee, 2005). Additionally, nearly all of the existing stations are in wealthy suburbs. The areas around the heavily securitized stations have experienced substantial clustering through the construction of middle and upper-class apartments and condominiums, leading to an explosion in local property values (Interview, City Planner, October 2017, Johannesburg).

This clustering was predicted by economic models prior to construction, yet while ‘significant economic activity’ has occurred around the stations, the rail network has not alleviated the city’s spatial patterns of inequality (Thomas, 2013, p.82).

As with other megaprojects, the Gautrain experienced significant cost overrun, with estimates first placing total costs at R7 billion, then R12 billion, before finally settling on the aforementioned R25 billion. These overruns are particularly noteworthy given that provincial officials have since confirmed that funds which were meant to go towards other provincial infrastructure projects were instead redirected to the Gautrain (Stone, 2012, quoted from Thomas, 2013).

As this chapter has mentioned, the original idea behind the Gautrain was conducive to societal change, so how did it become what Thomas (2013, p.88) terms a ‘parallel transit system for the professional class’? The answer lies in political symbolism. While the Gautrain was promoted via narratives of utility, sustainability, and job creation<sup>61</sup>, the overriding logics for the project were those of prestige, elite-led nation building, and the positioning of South Africa as the pre-eminent African state. This is evidenced not just by the aforementioned technical choices (e.g. a light rail system with no metro compatibility aimed at the largely white car-using population) but also by the project’s discursive position as an ‘ultra-modern’ development and its integration into Johannesburg’s ‘World Class African City’ branding exercise.

Gauteng’s provincial minister Ignatius Jacobs christened the Gautrain ‘Africa’s first high-speed train’ (Brunn, 2011, p.691) and upon completion of the first four-car train, Gauteng premier Mbhazima Shilowa proclaimed that the Gautrain was ‘ready to bear the pride of the South African nation’. The subsequent Premier, Paul Mashatile later noted: ‘Our golden train is now finally where it belongs, and although Gautrain’s physical home is here in Gauteng, her real home is in the heart and minds of all South Africans’ (van der Westhuizen, 2017, p.550). This strategic discourse was used to great effect in tandem with the run-up to the 2010 FIFA World Cup. As per Gautrain CEO Jack van der Merwe, the country had a ‘moral and legal duty’ to deliver the train by the time the World Cup began

---

<sup>61</sup> It is important to note that none of these narratives have survived the first few years of operation as the Gautrain actually deepens spatial inequalities, has a neutral effect on carbon emissions, and did not create nearly the number of jobs promised.

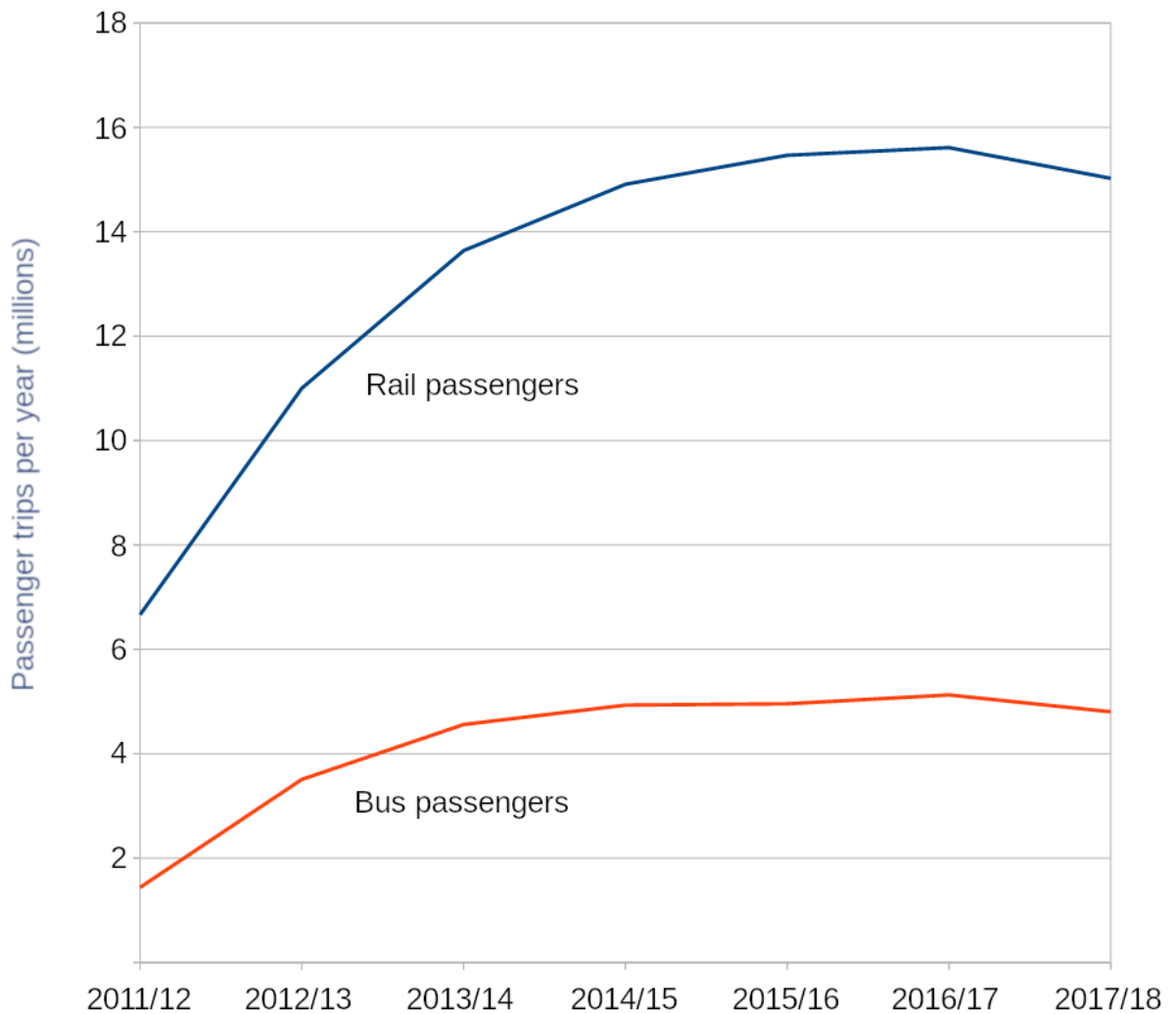
(van der Westhuizen, 2007, p.341). Even as costs rose far beyond the original estimates, and groups such as the Congress of South African Trade Unions (COSATU) called for its postponement, support within elite groups remained robust, with van der Merwe arguing that discontinuing the project would send inappropriate signals to foreign investors and risk the country's image in the run-up to the tournament (Thomas, 2013).

While the Gautrain's ridership grew steadily over its first 6 years<sup>62</sup>, it has declined over the last year. This forced the provincial government to pay the operator, Bombela Concessions Company, R1.54 billion as the operating contract guarantees a 'minimum required revenue' (Vegter, 2019). Moreover, the Gautrain Management Authority has run at a steady annual deficit of approximately R1-billion (ibid.).

---

<sup>62</sup> It has hitherto been considered a 'relative success' by Johannesburg City Planners (Interview, City Planner, October 2017, Johannesburg)

## Passenger trips on Gautrain trains and buses



Source: Gautrain Management Agency Annual Reports

**Figure 3:2 Passenger trips on Gautrain rail and bus (Vegter, 2019)**

While a possible expansion is in the works (Citizen Reporter, 2018), it is currently unknown whether this project, or any of the other projects driven by political symbolism (including the World Cup stadiums – which cost approximately \$5 billion to complete), will either be profitable in the long run or positively affect the lives of the vast majority of South Africans.

### 3.2.3 Megaprojects as Instruments of South African Foreign Policy

Despite its foreign policy dimensions never being fully elucidated by official documents, the Zuma administrations 'developmental state' framework has had significant effects on South Africa's international engagements. Operating under the banner of a 'new developmental agenda' (Landsberg, 2010, p.273), megaprojects such as the Atlantis SEZ<sup>63</sup> and the BAIC factory<sup>64</sup> in Coega are being increasingly used by both national and provincial actors<sup>65</sup> as instruments in South Africa's new foreign policy agenda. While projects are almost always enmeshed in other discourses domestically (generally developmental), the use of megaprojects as instruments of foreign policy allows for strategic coupling with selected firms and the strengthening of political ties with key allies (through incentivization and the cultivation of elite-level relationships). These strategies have become increasingly important given the changing ownership structures of South African industry - with foreign ownership rates in strategic sectors rising quickly over the last decade (Barnes, 2013; Welman and Ferreira, 2014; Masondo, 2018), and with the slump in overall FDI during the late Zuma years (2015-2018) (Bisseker, 2017; Trading Economics, 2018).

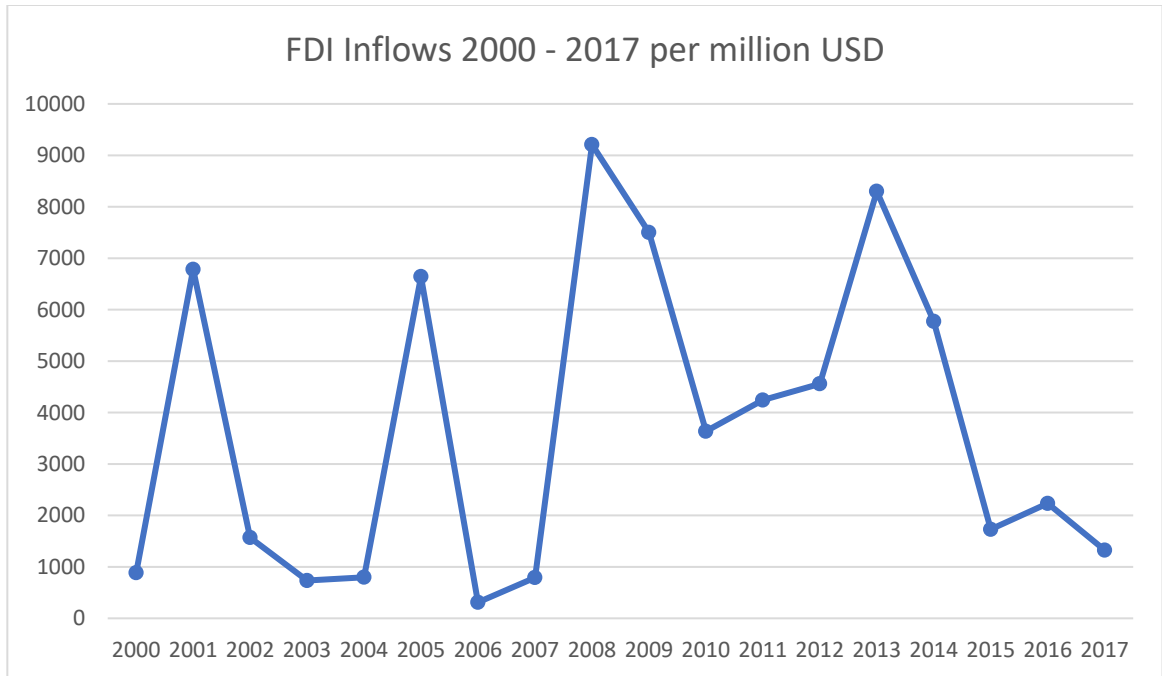
---

<sup>63</sup> The Atlantis zone is the state's attempt to revitalize Atlantis, an industrial town established by the Nationalist government as a 'decentralization' point, or peripheral industrial centre, which experienced severe economic decline after the end of industrial subsidies.

<sup>64</sup> The BAIC factory is South Africa's the largest automotive investment in 40 years and a key part of the DTI's attempts to spur manufacturing-led development in marginalized areas.

<sup>65</sup> Megaprojects have become some of the main tools for *paradiplomacy* in the sub-national political system.





**Figure 3:3 South Africa's FDI Inflow's 2000 - 2017 (compiled from UNCTAD, 2018).**

As Landsberg (2010, p.274) describes, Jacob Zuma’s foreign policy was based on a ‘developmental agenda’ whose goals included: consolidating and expanding the ‘African agenda’ (which has been further developed in the form of regional integration strategies), deepening South-South cooperation, cultivating South-North relations, participating in the global system of governance, and strengthening politico-economic relations with foreign countries as a whole. The shift in foreign policy was accompanied by an ideological pivot within elite circles, which saw the ANC move away from the west, and towards the BRICs and China in particular. Some scholars have conceptualized this pivot as a move away from ‘western-based humanistic values’ and towards ‘developmental pragmatism’ (Alden and Wu, 2016, p.2) while others see it as an embrace of a ‘Chinese model’ in which civil society is stifled for the sake of growth and regime maintenance (Carmody, 2017c, p.871).

Since the apartheid era, South Africa has functioned as a ‘sub-imperial state’ (Bond, 2013, p.2).<sup>66</sup> Given the size of its economy, depths of its transnational linkages, and the

<sup>66</sup> This is defined as a state which seeks to promote regional economic liberalization in order to facilitate market access by its transnational corporations, while concomitantly being influenced by larger actors (Carmody, 2013).

capabilities of its state apparatus, the country remains a highly important regional power despite its economic downturn. This position was leveraged by the Zuma government early on in order to increase engagement with the BRICs grouping.<sup>67</sup> As one analyst interviewed during the course of the research stated, ‘Mbeki was very comfortable in New York and London, Zuma is the opposite, he’s more comfortable in Moscow and Beijing’ (Interview, Analyst, October 2017, Johannesburg). Megaprojects initiated by central government actors, as well as by regional and local groups, have proven to be a key part of the new engagement strategy. Indeed, the DTI and the EDD<sup>68</sup> (which have now been consolidated) have both attempted to bring in international partners to strengthen the country’s productive and extractive systems, though these efforts have often been imperilled by regulatory dysfunction and mismanagement. Megaprojects attempted under this umbrella include the Atlantis Special Economic Zone, the Moloto Development Corridor, the Musina Makhado Special Economic Zone, and the BAIC automobile factory, among others.<sup>69</sup>

Of particular importance to these efforts is the Special Economic Zone (SEZ) program, which was launched in 2014 and sought to improve on the previous Industrial Development Zone (IDZ) program. The SEZs represent the latest attempt at spatially-based economic interventions and have become the focal points for South-South international investment and megaproject development. The South African state and its parastatals have attempted to heavily incentivize zone development (through tax breaks and infrastructure provision) in order to ‘spatially fix’ foreign capital and thus facilitate technology imports/product exports and decentralize industrial development with the hope of supporting rural and township economies which were left behind when the Nationalist government ended its manufacturing subsidies (DTI, 2017).

The DTI conceptualizes SEZs as being ‘fundamental routes to economic development’ with one high ranking official declaring that ‘[we are] learning from other countries – UK, Germany, China’ (Interview, DTI, February 2018, Johannesburg). In

---

<sup>67</sup> The BRICs grouping invited South Africa to join in 2010.

<sup>68</sup> The EDD was carved out of the DTI early in the Zuma administration and is responsible for economic policy and economic planning. The DTI retained commercial planning and industrial policy.

<sup>69</sup> These megaprojects are either infrastructure projects (Moloto Development Corridor) or attempts to revitalize the manufacturing sector (Atlantis, Musina-Makhado, BAIC).

addition, he went on to describe how SEZs are key elements ‘towards the implementation of the Industrial Policy Action Plan (IPAP)’ (ibid.). Meanwhile, others within the program argued that the 2014 act improves on the previous IDZs in 5 major ways:

- The 2014 act creates an attractive incentive inventory which includes reduced corporate tax (12R incentive) for qualifying investments (15%), streamlined customs procedures, and the cash flow advantages inherent in Customs Controlled Areas.
- [The act] establishes government support mechanisms that are designed for investor retention and facilitation of new investments.
- The new zones are designed to enable linkages with both the host economy and regional economies (making them attractive to market and efficiency-seeking investments alike)
- They create a DTI-led 1 stop shop (multi-departmental coordination to streamline licensing and permitting processes)
- A carefully managed incentive inventory implies there will be no “incentive confusion” and the country will have a unified or coherent location proposition (Interview, Coega SEZ, November 2018, Johannesburg).

Despite these broad improvements, Nel and Rogerson (2014) note that the baseline incentives approved for the SEZ program will not give the zones a decisive advantage compared to those in other parts of the world (largely due to a number of zones being located in areas with structural disadvantages such as a low skills base and poor infrastructure), and South Africa’s relatively remote location in terms of market access and logistics may hinder investments in certain sectors. Part of this policy failure comes down to a lack of foresight; as one prominent policy analyst stated: I ‘don’t think it’s been well thought through, or if it’s some big strategy’. Instead to him, the SEZ program has essentially ‘doubled down’ on the failed IDZ program (Interview, Analyst, February 2018, Johannesburg). Another analyst argued that ‘In South African government circles there is limited awareness of how China grew’ and thus the problems with the SEZs begin ‘at the highe[st] levels’ (Interview, SAIIA Researcher, March 2018, Johannesburg).

The 2014 SEZs have attracted several megaproject sized investments (see Chapters 5 and 7), and some can be considered megaprojects themselves given their cost, objectives, and visibility. Yet the future of the zones remains uncertain. Two high-level officials working on separate SEZs both commented that access to capital was the biggest concern for the program. One stated: ‘currently, funding is one of the biggest challenges facing the Special Economic Zone programme nationally because of the competing priorities on the national fiscus’ (Interview, Coega SEZ, November 2017, Johannesburg), while another noted that:

*‘the main challenge right now is that there are a lot of competing budgetary interests at the national scale... [my] fear is that they reach a point where there is no money from the government because this is a long term project, as opposed to short term concerns like student protests, [and] health care’* (Interview, LEDA, November 2017, Johannesburg).

### **3.3 Conclusion**

This chapter has interrogated how megaprojects are conceptualized, promoted, and implemented by South African actors. Throughout its democratic period, South Africa has thoroughly embraced the megaproject framework, with billions of Rand worth of state funding going to large-scale projects. Indeed, contemporary advocates for megaprojects within both the state and private sector view them as a panacea, or what Ballard and Rubin (2017, p.25) characterize as a ‘singular fix’ for a wide variety of social and economic problems. Given the ‘big project mentality’ present in certain departments of the South African state (ibid., p.12), megaprojects have become crucial for the successful articulation of high-level strategies and initiatives such as the NGP, IPAP, and the catalytic housing program. They have also served to further entrench the state’s infrastructural power/capacity, promote nation-building and international recognition initiatives, and achieve the state’s foreign policy objectives. As such megaprojects can be conceptualized as some of the primary legitimizing instruments of the post-apartheid African state. In fact, given the country’s faltering post-apartheid economic trajectory and the crises associated with the late Zuma years, sectors such as housing, energy, and manufacturing are becoming

dependent on the success of their state-led initiatives.<sup>70</sup> It can also be argued that given Eskom's 'too big to fail' status, the future of South Africa's entire economy depends on finding a viable solution to its two problematic energy megaprojects, Medupi and Kusile.

As contemporary projects are generally initiated or heavily supported by the state, either through direct planning or the leveraging of international development finance, they are generally undertaken within the bounds of the extant system of accumulation (the 'financialized MEC') and will likely not change the structural patterns of South Africa's economy. Rather, through successful project development, the South African state intends to deepen the effects of its existing growth strategies. However, as this chapter has detailed, projects are not always well received and intra-government and government-private sector disputes are a common occurrence (Ballard and Rubin, 2017; Ballard, Dittgen, Harrison, and Todes, 2017; Harrison and Todes, 2017; Interview, Analyst, October 2017, Johannesburg). Additionally, while projects are often promoted as responses to the structural and spatial distortions left by apartheid, many either fail to alter the root causes of uneven development or simply reinforce extant marginalizations.

Cyril Ramaphosa's ascendancy to the role of President may lead to substantial changes in the way South Africa conceptualizes and uses megaprojects, and the early signs are that he will seek to repair the state's ailing parastatals as well as bring foreign investment in whatever form it may take, in an effort to revitalize the economy. However, with Medupi and Kusile still hanging over Eskom, the \$10 billion EMSEZ complex likely beginning construction shortly, and a renewed focus on infrastructure projects as per the newly unveiled 'infrastructure fund', it appears that megaprojects will remain a major part of South Africa's accumulative, legitimizing, and developmental strategies.

---

<sup>70</sup> These are: Catalytic projects, Medupi and Kusile, and the Special Economic Zone program, respectively.

## Chapter 4 – Methodology

As Silverman (2013) notes, researchers are most effective when they tailor their research design<sup>71</sup> to their specific objectives, as well as to possible issues and difficulties encountered in their work. Given the nature of the questions driving this project, the inspiration for its methodology and research design came from studies in two distinct literatures: South-South relations, specifically studies in Sino-African relations by scholars such as Brautigam and Tang (2014), Corkin (2011), Anwar (2012), and Surborg (2012), and International Business Research (Yeung, 1995; Harvey, 2010; 2011; Goldman and Swayze, 2012) with its focus on elite interviews and the study of transnational corporations. This dualistic approach came from the fact that in order to fully answer the research questions, this study needed to successfully obtain a substantial amount of data from corporate and government elites within the context of Global South relations. Further complicating the planning process was(is) the notorious opacity of megaprojects in Africa. Studies into African megaprojects (Wissenbach and Wang, 2017) as well as into Sino-South African relations (Alden and Wu, 2016) have noted the secrecy with which government deals are made and implemented.

Due to their enormous capital requirements, projects are generally undertaken by high-level government agencies, banks, and large-scale companies; as such, access can be difficult and extended time is required to create the respondent networks necessary to obtain primary stakeholder interviews. The access question was arguably the largest consideration in the pre-fieldwork planning stage and the location of the fieldwork (Johannesburg) as well as its time-frame (approximately eight months, split into two roughly isochronous phases) reflected this. Johannesburg was chosen as it is South Africa's economic capital, nearly all large-scale Chinese firms, development finance institutions, and banks have offices or connections in the city. Additionally, Johannesburg is home to several universities and think tanks (e.g., University of the Witwatersrand, University of Johannesburg, the South African Institute of International Affairs [SAIIA]), and is relatively close to Pretoria, South Africa's administrative capital. It was therefore deemed

---

<sup>71</sup> *Research design* refers to the 'overall structure of an investigation' whereas *research methods* refer to specific techniques of data collection (Yeung, 1995, p.316).

to be the best staging point for the research as I could quickly access a large number of interviewees that could provide the specific information needed for this research. The length of the study was chosen as it was thought to be substantial enough to establish respondent networks from the ground up, while conforming to South African visa requirements.

To achieve its objectives, this thesis adopts a case study methodology with a specific focus on elite interviews, as this is where the most significant data and thus greatest contribution to the literature will likely come from. As mentioned in Chapter 1, the research involves two levels of analysis; a practical examination of the specific dynamics of given projects and a theoretical analysis, informed by the literature, which connects projects to broader trends in globalization/global capitalism and South-South relations. This analytical strategy was chosen as it complemented the research goals and allowed for a broad lens and flexibility throughout the fieldwork process.

The research relies on three main sources of material: a comprehensive literature review which was undertaken in the first year of the project, an analysis of pertinent state and corporate documents, and the in-depth interviews with key stakeholders. The comprehensive literature review served to ground the research in existing theory and to formulate the guiding questions. It also informed the predictions for the ‘pattern matching’ (which compares empirically based patterns with predictions done before the data collection) done in the analysis phase of the research. The combination of document analysis and stakeholder interviews allowed for research informed by multiple points of view. This was particularly useful for data triangulation and to create a broad, yet deep understanding of the chosen projects, firms, and industries.

The period from September 2016 to July 2017 was used to go over the relevant literature, design the fieldwork, and establish preliminary contacts in South Africa. Fieldwork was then undertaken between August 2017 and March 2018. Primary data was collected in-person in Johannesburg, Pretoria, Midrand, and Durban with additional phone and Skype interviews taking place with respondents in Cape Town, Port Elizabeth and Polokwane (as well as Johannesburg in several follow-ups done after returning to Ireland). A total of 66 interviews were conducted with respondents ranging from academics and industry consultants to corporate and government elites. Additionally, a number of public

and corporate documents were collected throughout the eight months of fieldwork. The specificities of this data collection will be described later in this chapter.

The case study method was chosen as it is a strategy for data collection that is well-suited to research questions that require in-depth, qualitative analysis of complex processes situated within multiple cultures and ideologies (Hartley, 1994). Moreover, case studies allow for the empirical study of a phenomena within its real-life context, including the consideration of organizational processes, international relations, and the state of certain industries (Yeung, 1995). However, they require multiple sources of evidence, as well as pre-existing theories to guide the research. These concerns were noted in the in the design of the project.

This chapter will be divided into five sections. The first will briefly examine the literature on case study research, analysing its characteristics and detailing why this strategy was deemed appropriate for this project. The second will review the selection criteria for the projects chosen in this research. The third section will describe the specific methodology chosen for the fieldwork. This will illustrate the specific challenges of working in the South African context, the importance of qualitative interviews with elites, and the strategies undertaken to secure these. Section four will briefly explain the analysis process and the choices made in this regard. Finally, section five will describe some of the limitations of both the data and the research as a whole.

#### **4.1 Case Study Research**

The *case study* approach has become popular in a variety of fields including political science, geography, and international business research, among others. Yet as with *megaproject* (another fashionable term with numerous definitions throughout the literature), the term *case study* has, in the words of Gerring (2004, p.342), become a 'definitional morass'. Case studies have been defined in the literature as a type of research characterized by process-tracing (George and Bennet, 2004), 'a detailed investigation of one or more organizations, or groups within an organization' (Hartley, 1994, p.208 - 209), or a study which focuses on the analysis of the interrelationships that constitute the context of a specific entity (Mills et al., 2010, quoted in Anwar, 2012 p.60). Gerring (2004, p.342) argues that these interpretations describe the characteristics of case studies, as opposed to



the approach itself, and proposes a more comprehensive definition. He characterizes a case study as: ‘an intensive study of a single unit for the purpose of understanding a larger class of similar units’ where a *unit* denotes a ‘spatially-bounded phenomenon observed at [either] a single point in time or over some delimited period of time’. The case study can thus be conceptualized as a particular way of defining and organizing cases rather than as a specific analytical method. Gerring goes on to state that as an approach, case studies are most useful when inferences are descriptive rather than causal and when depth is prioritized over breadth and boundedness (*ibid*). In this research, the *units* are specific Chinese-backed megaprojects, chosen in order to gain insight and understanding into the broad dynamics at play. Given the complexity of the material, as well as the time and resource limitations placed on this study, all the projects chosen are located in South Africa. However, the research methods outlined in this thesis could conceivably serve as a jumping off point for larger, cross-border studies which investigate Chinese-backed megaprojects throughout southern Africa or the continent as a whole.

It is important to note that there are different categories of case study. Stake (1995) defines three broad types. The first, *intrinsic* case studies, denotes a study where the researcher’s interest is in simply understanding the subject. The second, *instrumental* case studies, see the researcher explore an instance of a certain case as a way to examine the broader phenomena. The final category, the *collective* case study, sees researchers select multiple instances in multiple classes to achieve a representative sample. Yin (2014) similarly groups case studies into either *explanatory*, *descriptive*, or *multiple* categories. For him, an *explanatory* case study can serve as the basis of generalization, a *descriptive* case study generally traces a sequence across time, and *multiple* case study designs are used to study multiple phenomena, in a similar fashion to Stake’s *collective* case studies.

Among the biggest methodological strengths of the case study approach is that it allows the researcher to incorporate a variety of data collection methods (e.g. field observations, surveys, interviews, archival analysis) into the research. This attribute not only allow for greater diversity in the data but also for increased credibility via data triangulation. Indeed, Mills et. al (2010) contend that the case study approach should be classified as a comprehensive research strategy given its methodological flexibility, while Yin (2014) conceptualizes case studies as particular types of inclusive research inquiries.

Nonetheless, it should be noted that case studies and other ‘small-N comparisons’ have been criticized by some throughout academia as being ideographic as opposed to nomothetic and thus having less scientific capital and overall validity than large-n number studies (Steinmetz, 2004). However, after careful consideration of the overarching goals of this research (e.g., providing insight into the processes and practices of Chinese-inflected globalization and how it is leveraged by Global South actors), the case study methodology was determined to be the most appropriate way forward as per the advantages discussed above.

## 4.2 Case Study Selection

Given that this thesis focuses on the broad logics and drivers of Chinese-backed megaprojects in South Africa, as well as what these projects can tell us about the nature of power dynamics between the two countries in the context of a novel type of globalization, one of the first steps was to identify the specific case studies to be examined. The selection of suitable projects depended on a number of criteria which in turn reflected the research goals. Additionally, multiple case studies would be chosen from the start as this would permit cross-site comparison as well as in-depth within-site understanding, leading to more compelling data, a more robust study, and generalizable conclusions (Harriett and Firestone, 1983; Yin, 2014). As Yin (2014) notes, the number of cases chosen during a case study is discretionary and should be based on the specific conditions and research goals. I initially believed I could gather comprehensive data from five separate projects, though due to time considerations and an unexpected scarcity in Chinese-backed megaprojects, this was eventually trimmed down to three.

Using media reports as well as the memorandums of understanding (MOUs) signed in the 2015 Forum on China-Africa Cooperation (FOCAC)<sup>72</sup> meeting (which coincidentally was held in Johannesburg – a testament to the importance of the Sino-South African relationship) as a preliminary guide, I made a rubric of possible projects (Table

---

<sup>72</sup> FOCAC is a triennial multilateral forum between China and African states which seeks to enhance cooperation between the parties at multiple levels (Kim, 2015).

4:1) in the months leading up to the fieldwork. Yet as I found upon arrival, media reports can be wholly inaccurate and multiple, wildly contradictory, stories may be circulated.<sup>73</sup>

Extractive	Infrastructure	Consumption	Production	Ceremonial
Sinopec Assets in Cape Town	Gauteng-Mpumalanga railway	Heartland Development at Modderfontein	Limpopo SEZ (Refers to the Musina-Makhado SEZ)	Confucius centres
Wesizwe Bakubung Mine	Richards Bay Dry Dock Project	Sinopec Sandton Centre	P.E Auto Plant (this refers to the BAIC plant)	
ASA Metals Mines	Moloto Development Corridor		Jinko Solar Manufacturing Plant	
Tuang Gold Mines	Transnet Locomotive Deal		Hisense Atlantis Factory*	
	Mzimvubu Water Project			
	Longyuan-Mulilo Wind Project*			

**Table 4:1 Original list of projects compiled for study – July 2017.**

\* denotes projects whose size was exaggerated by media reports

<sup>73</sup> It is important to note that the mainstream South African media is very much split into either ‘pro-China’ or ‘anti-China’ camps depending on their ownership status (Interview, academic, Johannesburg, September 2017). Additionally, there are several Chinese-owned publications such as *Global Times* and *People’s Daily* in circulation throughout the Chinese diaspora community in Johannesburg.

While Table 4:1 is by no means exhaustive, it does highlight some of the main trends encountered throughout the fieldwork. The majority of large-scale Chinese-backed projects in South Africa were reported to be in the extractive, infrastructure, or production sectors. However, as I would later find, most of the infrastructure projects were either abandoned or postponed before the construction stage, and the Longyuan-Mulilo project, which was the sole project to be built out of the group, is not large enough to be considered a megaproject - its inclusion in the rubric was due to media reports which severely exaggerated its size. Additionally, besides the EMSEZ and BAIC factory, Chinese production projects in South Africa are generally small-scale endeavours, usually totalling 100-300 million USD. Yet it is interesting to note that small-scale projects such as the FAW or BAW factory, in Coega and Springs respectively, or the Hisense factory in Atlantis, are portrayed as massive successes in both the Chinese and South African media (Kim, 2015; Xinhua, 2017). Given the propensity for both countries' media to circulate wild claims about Chinese economic engagement (more on this later), it was not until I arrived in Johannesburg and began searching out stakeholders, academics, and industry experts, that I was able to fully understand the reality of the situation on the ground. Therefore while prior to my arrival in South Africa I had planned to study at least one project from each subdivision in my typology, as I believed this would give me the most complete picture of Chinese megaprojects in South Africa, I quickly realized that this would not be possible.

### *2.2.1 Selection Criteria*

Throughout the research process I sought to focus on megaprojects that were:

- Important to the Sino-South African relationship as evidenced by their inclusion in multilateral meetings including FOCAC or the BRICS meetings, support from corporate or government elites such as the Chinese ambassador, and presence in official Chinese or South African government reports.
- Highly significant to the South African government's extant economic plans and the country's economy as a whole. This was done through a review of South Africa's Industrial Policy Action Plan (IPAP), New Growth Plan (NGP) and National Development Plan (NDP), as well as documents from the Department of

Trade and Industry (DTI), Economic Development Department (EDD), and specific city plans such as the Johannesburg Spatial Development Framework (SDF).

- Important for the Chinese state's geopolitical motivations in South Africa. This was done through a comprehensive review of official Chinese government documents, speeches, and media releases. One example of a media release is Figure 4:1, which shows a special issue of 'Business Day' released by the Chinese embassy that highlights China's contributions to South African economic development and celebrates the Sino-South African relationship. The 12-page issue can be considered part of China's 'charm offensive' (see Chapter 2) in the country. The projects mentioned in these types of media are crucial in creating the official Chinese narrative of South Africa as the 'gateway to Africa'.



**Figure 4:1 Special Issue of ‘Business Day’ Released by the Chinese Embassy Celebrating the 68th Anniversary of the Founding of the PRC (September 26th, 2017).**

By the end of the third month of fieldwork I had conducted interviews with relevant and knowledgeable actors from a number of different projects (Table 4:2 and Figure 4:2 provide specific details on each). These were selected through careful analysis of media

sources, South African/Chinese policy papers and official government releases, and information given to me in the initial set of interviews with stakeholders, analysts, academics, and journalists. The projects are as follows:

1. Musina Makhado Special Economic Zone<sup>74</sup> (Production)
2. Moloto Development Corridor (Infrastructure)
3. Wesizwe’s Bakubung Mine (Extractive)
4. Heartland Development at Modderfontein (Consumption)
5. BAIC Automobile Factory (Production)
6. Transnet Locomotive Acquisition Deal (Production)
7. Mzimvubu Water Project (Infrastructure)
8. Richards Bay Dry Dock Project (Infrastructure)

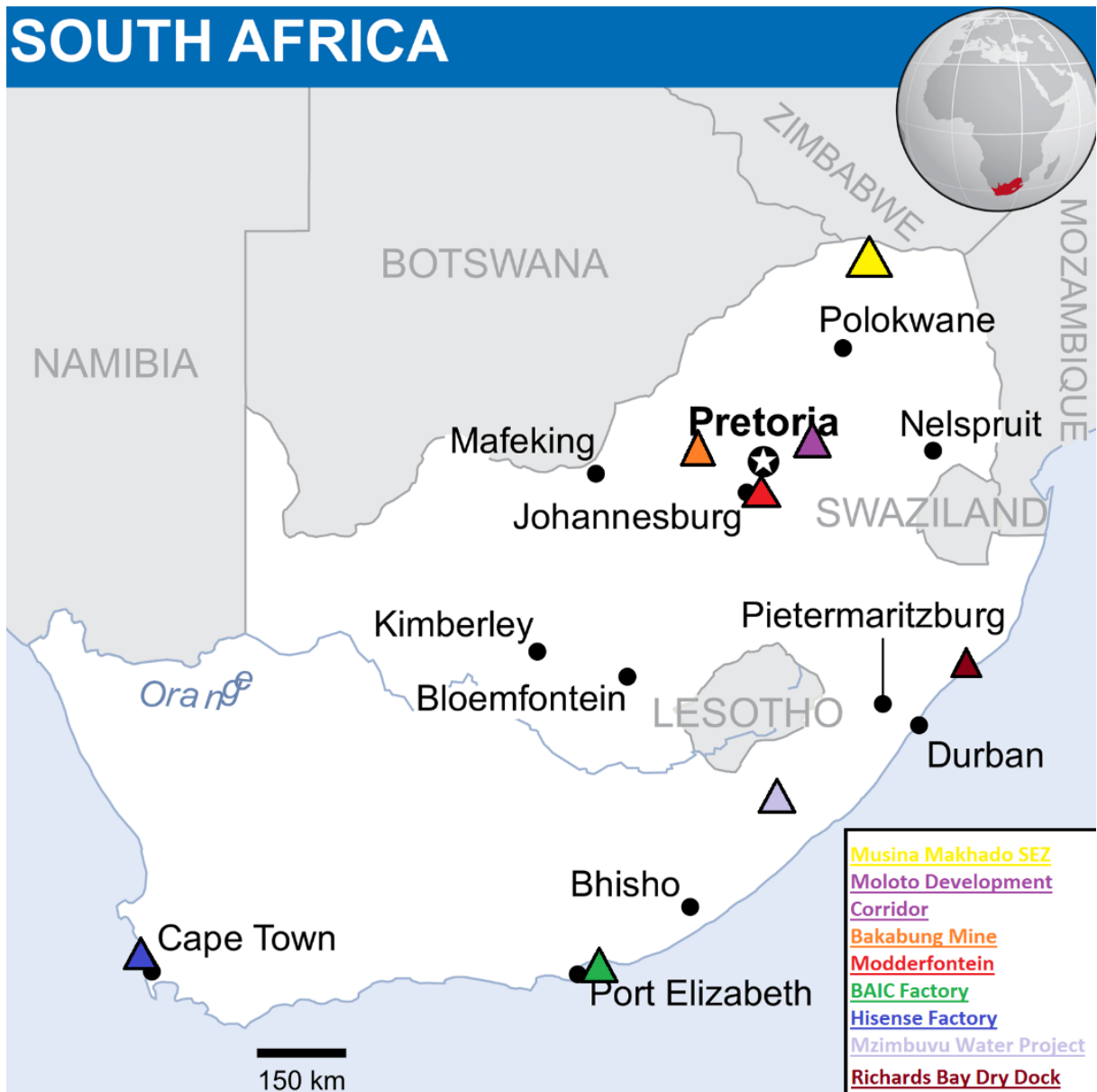
<b>Project Information</b>					
<b>Name</b>	<b>Classification</b>	<b>Status</b>	<b>Cost</b>	<b>Companies Involved</b>	<b>Location</b>
Musina Makhado SEZ	Production	Under Construction	R40 Billion	Shenzhen Hoi Mor / Limpopo Economic Development Agency	Musina, Limpopo
Moloto Development Corridor	Infrastructure	Unknown	R58 Billion	PRASA / China Exim Bank	Moloto, Mpumalanga

<sup>74</sup> The official name for this project is the Energy Metallurgical Special Economic Zone (EMSEZ); however, it is nearly always referred to as the Musina Makhado Special Economic Zone in the media and official documents.

Bakubung Mine	Extractive	Under Construction	R2.5 Billion	Wesizwe	North West Province
Modderfontein New City	Consumption	Defunct	R86 Billion	Shanghai Zendai	Modderfontein, Guateng
BAIC Auto Manufacturing Plant	Production	Under Construction	R11 Billion	BAIC / Industrial Development Corporation	Coega SEZ, Port Elizabeth
Hisense Factory / Atlantis SEZ	Production	Completed / Ongoing	R350 Million / R 1.8 Billion	Hisense / Green Cape	Atlantis, Western Cape
Mzimvubu Water Project	Infrastructure	Unknown	R12 Billion	Department of Water and Sanitation / China Exim Bank	Mzimvubu River, Eastern Cape
Richards Bay Dry Dock	Infrastructure	Cancelled	R4 Billion	Transnet	Richards Bay, KwaZulu-Natal

**Table 4:2 Project Information**





**Figure 4:2 Project Location**

Additionally, I had spoken with representatives from the China Africa Development Fund, Bank of China, SAIL mining group, Hisense, the City of Johannesburg, the South African Institute of International Affairs (SAIIA), the Confucius Institute at UJ, Wits University, the Institute for Global Dialogue, Mulilo, the Department of Trade and Industry, the Department of International Relations and Cooperation, and the Gauteng City Region Observatory, among others.

Phase 2 of the research began in January 2018. From then on, I decided to focus on three specific projects: the EMSEZ (Musina Makhado SEZ), The BAIC factory, and the Modderfontein New City. These projects were chosen given access considerations and because they best fit the aforementioned selection criteria. The BAIC factory and EMSEZ are flagship projects for South Africa's automotive and steel sectors. Both projects are part of the Department of Trade and Industry's efforts to decentralize industrial development in order to support inclusive growth in rural and township economies as detailed in the Industrial Policy Action Plan (IPAP). Moreover, the EMSEZ is part of the Limpopo Economic Development Agency's (LEDA) strategy to 'accelerate industrial diversification through strategic economic development interventions' (LEDA, 2018). Additionally, both projects prominently featured in FOCAC and have been hailed by state elites as tangible examples of economic cooperation and as key projects for the future of Sino-South African relations.

The final project, Modderfontein, while abandoned shortly after my arrival in South Africa, was a highly publicized project and was set to be the largest, most expensive megaproject in South Africa in decades (with estimates putting it at ~8 Billion USD). In contrast with the other two projects, the Modderfontein development was led by Zendai, a private, Hong Kong-listed company<sup>75</sup>, as such, its study allows for an understanding of the nuances faced by Chinese developers attempting to build megaprojects in South Africa's ever-changing regulatory environment. At their core, these developments, while located in diverse fields and engaging a wide variety of actors, represent an effort by elements of the South African government to leverage their Global South relationships (specifically those with the Chinese government) in order to meet their developmental objectives in the context of a deteriorating economic situation.

### **4.3 Data Collection**

---

<sup>75</sup> However, the funds for Zendai's acquisition of the Modderfontein site came from Bank of China, and the site was eventually passed on to China Orient Asset Management Co. This highlights the corporate/state linkages present in Chinese megaprojects.

#### 4.3.1 *The Challenge of Elite Interviews*

As previously mentioned, this research relies heavily on interviews with corporate and state elites for its primary data collection. As Yeung (1995) notes, qualitative research and specifically informant interviews allow the researcher to adopt an insider's stance to the organization, obtain and retain a strong proximity to the processes under study, and present a strong sense of contextualization. In addition, personal interviews can offer greater accuracy and broader validity than surveys as they allow for elucidation of complex processes, linkages, and circumstances. Yet interviewing elites can be one of the more challenging aspects of qualitative research, and a small but important literature has emerged on the topic.

The literature has several definitions of 'elites' as the term and its use in academia originated in the early 1900s (Goldman and Swayze, 2012, p.231); however, most scholars use it relationally, defining the term as those who hold positions of power compared to the average person in society (Stephens, 2007 quoted in Harvey, 2010). Yet it must be noted that there is a significant amount of variability within that grouping, with scholars such as Undheim (2003) separating 'experts' from elites through a gauging of their specialization, and others like Zuckerman (1972, quoted in Harvey, 2011, p.432) specifying that an 'ultra-elite' group exists among the elites, at the very top of organizations. This research used a modified version (which includes state actors) of Harvey's (2011, p.433) definition, defining elites as 'personnel who occupy senior management positions within corporations or government ministries'.

Once the target population is identified, the next step in the research is gaining access. Nearly every paper on elite interviews examined in the pre-fieldwork phase of this project noted that access depends a great deal on a combination of good fortune and strong preparation. As per Yeung (1995; quoted from Harvey, 2010 p.8), in order to maximize their chances of success, researchers must 'pursue as many avenues as possible in a polite, yet persistent and opportunistic manner'. Throughout this fieldwork, I sought to access informants through a variety of routes using a *systematic but flexible* approach. Gatekeepers of various types were particularly useful in setting up interviews. Indeed, Harvey (2010) describes how rather than conceptualizing gatekeepers as barriers, researchers should see them as potential opportunities as they have the means to ease the

difficulty of connecting with possible interviewees.

Beyond access, the literature focuses heavily on the power asymmetries between elite and researcher. Some scholars conceptualize interviews through the lens of ‘micro-geographies of spatial relations and meaning’ (Elwood and Martin, 2000, p.649), noting that the positionality of the elite and researcher are fluid as opposed to static, and interviewees may shift their stance throughout the process (sometimes becoming defensive, or attempting to steer the interview in a direction that does not suit the research).

Preparation is thus key to dealing with the challenges of an interview. Yin (2014) lays out five general skills that researchers should prepare when carrying out interviews:

- Ask good questions that are directly related to the topic and follow the research design
- Be a good listener
- Stay adaptive so as to deal with changing situations
- Have a firm grasp on the issues being discussed in the interview
- Avoid biases and conduct research ethically

Throughout the fieldwork process I followed the rubric laid out by Harvey (2010) and attempted to be as transparent as possible with respondents, explaining to them who I was, where I studied, what my research was about, what my interest in their work was, and how I wanted the interview to proceed (in terms of length, meeting place, and anonymity). Some respondents wanted a significant amount of information, including a letter from my advisor, proof of registration at TCD, and the TCD ethics forms.

#### *4.3.2 Interview Structure*

Arriving in South Africa with approximately a half-dozen academic contacts, I began the data collection process by attempting to build the respondent networks which would eventually lead me to direct stakeholders. Interviews were arranged via purposive snowball sampling with direct contact being made through email and phone calls. All interviews for this research were conducted by me, without the use of a translator, and I retain notes for verification.

The first wave of interviewees was targeted according to their expertise and/or

participation in given projects (specifically the projects I had been able to research prior to arriving), though throughout the first month I also sought to contact a number of academics, journalists, and think tanks so as to build relationships within the South African research community. As Rice (2010) notes, it is important to select respondents based on their knowledge and ability to answer questions. However, the ideal situation is to interview elites who understand the broader picture but are also involved with day-to-day work and thus have comprehensive knowledge of the project. Throughout the first phase of the research I attempted to interview multiple high-level contacts for each of the initial projects chosen (Table 4:2), as well as industry insiders and competitors who could provide knowledgeable alternative viewpoints, leading to a fuller, more nuanced understanding of each project. Beginning in early November 2017, multiple respondents commented that Johannesburg would essentially shut down for the festive period between mid-December and mid-January. I took this time to consolidate the work that I had done until then through an analysis of the existing material. I then used this analysis to formulate the plan for the second phase of the research. It was during this time that I chose to focus on the three projects that would eventually become my case studies.

For these projects I began by targeting the highest-ranking official that could conceivably be reached (for instance CEO, CFO, Ministers, etc.) and that would have direct knowledge of project objectives and developmental mechanisms. This was done through connections created during phase 1 of the research. However, in addition to these main targets I also attempted to interview knowledgeable officials (both state and corporate) that had direct knowledge and expertise regarding the projects no matter their rank (though taking it into consideration). Eventually I was able to interview several high-level officials from each project, as well as a number of industry experts and other knowledgeable parties. Table 4:3 details the spread of respondents:

Type	Representing: South African entity	Representing: Chinese entity	Other	Total
Government Officials / Diplomats	13	2		15
Privately- Owned Enterprises	13	3	2	18
State-Owned Enterprises	5	6		11
Media	7			7
Academics	15		2	15
<b>Total</b>	<b>53</b>	<b>11</b>	<b>4</b>	<b>66</b>

**Table 4:3 Interview Spread**

Questions were designed to uncover the main rationales behind the projects as well as the mechanisms behind their development.<sup>76</sup> Additionally, I sought to understand the sort of government linkages and backing necessary for successful project implementation. The interviews were semi-structured, with a short list of initial questions, and ranged between 30 and 90 minutes. I attempted to create what Welch, Marschan-Piekkari, Penttinen, and Tahvanainen (2002, p.12) describe as a ‘space for intellectual discussion and reflection which is clearly separate from the manager’s day to day routine of meetings, deadlines and administration’. This allows for lines of questioning which are centred around motivations, expectations, transnational or domestic linkages, funding, and other factors which help to identify the logics behind project construction. In order to spur conversation, an emphasis was placed on open-ended questions which would allow the interviewee to speak freely.

Most interviews were conducted as one-on-one conversations, though I also spoke with participants at various events and workshops (which also served to establish contact

---

<sup>76</sup> I sought to tailor my questions to each specific respondent but generally focused on the 5W’s and How (*who, what, when, where, why* and *how*) of each project.

with other stakeholders). Whenever possible, interviews were conducted in person, as opposed to over the phone, since this created an open, interactive environment conducive to discussion and debate, thus yielding much higher quality information and long-lasting, fruitful research relationships. Yeung (1995) contends that open dialogue is often the most efficient form of acquiring information from elites. However, it is important to note that some scholars argue that telephone interviews can be more time-efficient for both parties and therefore should not be seen as a second-best option (Stephens, 2007; Holt 2010). Phone interviews did eventually become a crucial part of this research, a necessity given the distance between Johannesburg and other major South African cities.

All data collection was done according to the guidelines set out by the Trinity College School of Natural Science's Research Ethics Policy. In keeping with the sensitive nature of this research, interviews with key stakeholders were conducted under condition of anonymity. Additionally, I did not record these interviews, instead choosing to write notes where permitted by the participant, as studies have shown that the former method can compromise the quality of information due to the sensitive nature of matters discussed (Corkin, 2011). During the first month or so I asked several interviewees if they preferred note taking or recording and was told that notes would make them more comfortable as their companies had strict rules regarding the disclosure of confidential information. In cementing this choice, I sought advice from journalists who work within elite circles. They generally concurred with the note-taking strategy and described it as a more 'natural' way of gathering data. In the academic literature, Byron and Peabody (cited in Harvey, 2011) argue that while note taking may provide a weaker description of the interview, it allows for more detailed, off-the-record information (which was crucial to this research). Therefore, while recording may provide an exact representation of the event, it can limit the information your interviewee is willing to share. Upon completion of an interview, all notes were immediately integrated into a password-protected document.

Beyond interviews I collected a number of documents from government departments, industry insiders, journalists, banks, trade organizations, and state-owned enterprises. These provide important framing for the research as they typically outline the official positions and discursive approach of each entity. Additionally, they served as entry points into several organizations via the phone numbers and emails listed inside. The policy

documents collected consist of both publicly available papers/brochures/PowerPoints/pamphlets and private material given to me by stakeholders during or after interviews. These documents are all highly relevant to the research as they either detail internal plans for projects or provide context for high-level decision making (for example, a Chinese DFI's internal presentations). Specific care has been taken to collect data from the Department of Trade and Industry (including SEZ specifications, SEZ plans, prefeasibility/feasibility studies, executive summaries, and technical reports) as the department is the primary South African driver for two of the three main cases. Chinese corporate business documents have also been targeted and play a key role in understanding the general plans for each of the projects. Further examples include the reports made after Zendai's workshops with the city of Johannesburg and both versions of the project's 'master plan', which provide invaluable insight into its nature and logics.

#### **4.4 Data Analysis**

As per Silverman (2013), data analysis is ongoing from the initial formulation of the research on through the collection and writing phase. This is especially true with dynamic research environments such as the ones in this thesis, as the direction of the research can change throughout the process. Yet in terms of the final, protracted data analysis phase, there are very few fixed formulas or rubrics for qualitative, case study research (Yin, 2014). Yin contends that this final analysis phase of case study research is one of its 'least developed' aspects, despite data analysis and interpretation being a critical part of the research process. He defines data analysis as consisting of examining, tabulating, categorizing, testing, and recombining evidence in order to 'produce empirically based findings' (ibid, p.132). Holstein and Gubrium (2011, cited in Siakwah, 2016) delineate the process of analysis into several interconnected tasks:

- Immersion - Which entails a critical reading of the data, with an eye for patterns, insights, and concepts that may emerge as data is manipulated.
- Reduction - The process of focusing the data and discarding superfluous insights
- Interpretation - In which data is synthesized, consolidated, and brought into the overall argument.



- Reporting - Which entails the presentation of data and research findings.

There are several broad strategies which can be undertaken to guide this process: reliance on theoretical propositions, working the data from the ‘ground up’, examining rival explanations, or developing a case description. These techniques allow a researcher to undertake a comprehensive review of the data, which is crucial to the overall research as studies can easily stall at this stage (Yin, 2015).

The data collected for this project was analysed broadly using a cross-case analysis (Salkind, 2010), which grouped different data sets and attempting to find common patterns and insights. From a macro perspective, I used what Yin (2014, p.127) calls a ‘ground up’ working of the data, which entails a detailed examination of the data. In a way, this method seeks to ‘let the data speak for itself’ as opposed to guiding it via attempting to fit it into existing theoretical frameworks. Throughout the research, interview data and notes were transcribed into a ‘master’ word document on the same day that the interview took place.<sup>77</sup> Once the interviews were complete, the data was analysed manually through careful reading and understanding. Upon finishing this task, I combined the ‘master’ document with the main findings from my comprehensive state/corporate document analysis. I then split the data in terms of the type of actor it came from (e.g. South African government actor, journalists, industry experts). In this way, I was able to create a well-defined picture of the themes within each subset of the data. I sought to use what Yin (2014, p.140) terms ‘pattern matching’ for the data analysis. This fundamentally compares empirically based patterns with predicted ones made before the fieldwork. Throughout the analysis phase, as well as throughout the fieldwork process as a whole, I found that my expected results were significantly different from what I was discovering in the field in terms of both the broad logics behind the projects, as well as the general power dynamics present in elite-level Sino-South African relations.

#### **4.5 Limitations**

When undertaking research, it is necessary for the researcher to understand the strengths and weaknesses of the methodology used as well as that of the data itself. Indeed,

---

<sup>77</sup> This was specifically done in order to aid recollection, as the interviews were not recorded.

all studies have certain limitations and vulnerabilities and it is imperative to be transparent about them. This study has sought to focus on the logics and mechanisms behind large-scale Chinese-led projects in South Africa, though as I have acknowledged earlier, this sort of work lends itself well to cross-border comparative research. For instance, a comparison of the state and corporate dynamics between the BAIC automotive plant and the Maputo-Katembe bridge could further illuminate both Sino-African power relations and the strategies/discourses used by Chinese state and corporate actors on the continent. Additionally, while I have sought to study the largest, most important contemporary projects, a large part of the 'Chinese' footprint in South Africa is made up of small-scale traders, businesspeople, and the hundred-year-old Chinese diasporic community in Johannesburg. While these actors do not take part in the megaproject framework, they play a significant role in Sino-South African relations as a whole. As one academic noted, the roots of the relationship span far longer than the 20 years of diplomatic relations and 'there is no singular Chinese engagement in South Africa and no singular relationship with China' (Interview, Academic, February 2018, Johannesburg).

In terms of the interviews and fieldwork process itself, access to Chinese corporate or state representatives was incredibly difficult to obtain, and I was only able to interview primary project stakeholders from Chinese firms in the last few weeks of the research. Attempts to interview Chinese diplomats were largely unsuccessful, though I was able to collect a substantial amount of relevant data from their publications, events, and Ambassador Lin Songtian's speeches. Finally, several interviews with Chinese nationals (either primary stakeholders or knowledgeable parties) were scheduled but then had to be cancelled at the last minute.

## Chapter 5 – ‘Catching the Value in the Value Chain’: The BAIC Automotive Factory

With nearly 80 million vehicles sold worldwide every year, the automotive industry has emerged as a key sector for both developed and developing countries, and presents significant opportunities in terms of production, investment, and employment (Barnes, 2017). In the Global South, a strong domestic auto industry allows for economic development via technology transfer and the creation of locally based supply chains, which if properly structured, can have strong multiplier effects on associated manufacturing and service sectors. As such, the industry can create a wide variety of employment opportunities, ranging from highly- to semi-skilled and unskilled labour (ibid.).

As global production and assembly has largely moved from Global North to Global South over the last thirty years<sup>78</sup> (Masondo, 2018), the sector has emerged as a key driver of developing-world industrialization efforts. Countries such as Turkey, Thailand, and South Africa have sought to support and incubate their domestic auto industries through strategic coupling with lead firms (see Yeung, 2009) with the end goal of establishing competitive manufacturing capabilities through product specialization and the incorporation of their domestic auto sectors into the industry’s global value chains (GVCs). Using Horner’s (2017) typology of state roles within GVCs<sup>79</sup>, governments throughout the Global South have thus largely positioned themselves as ‘facilitators’ (through investment incentivization), but also in some cases as ‘producers’ (through the involvement of state-owned enterprises) or ‘regulators’ (by restricting certain activities) within automotive value chains.

South Africa’s auto industry has been active since the 1920s and has long been a mainstay in the country’s manufacturing sector. However, given its successful transition from the heavy protections and domestic orientation of the apartheid era to its current form as a globally integrated, export-oriented sector, the industry has become a centrepiece for the country’s industrial policy in recent years. In fact, it is considered one of the few

---

<sup>78</sup> In 1989, Europe, North America, and Japan accounted for nearly all global automotive production; however, by 2010 production had largely shifted to east Asia and emerging markets (Masondo, 2018).

<sup>79</sup> As per Horner (2017, p.6), states can take on the role of ‘facilitator’ (assisting firms), ‘regulator’ (restricting activities), ‘producer’ (through state-owned firms) or buyer (through the purchase of output, for instance via public procurement).

success stories for South African manufacturing in its democratic era (Interview, Analyst, October 2017, Johannesburg).

As per a 2017 report, the industry currently consists of 7 Original Equipment Manufacturers (OEMs), a number of heavy commercial vehicle assemblers, and approximately 200 component manufacturers. It produces nearly 600,000 vehicles per year, constituting roughly 30% of South Africa's overall manufacturing output and 13.9% of total exports (de Lange, 2017). Likewise, it directly employs 120,000 people; of these, 18% are 'highly-educated' workers, 52% are 'educated' and 30% are 'semi-educated or uneducated' (ibid.). While the automotive industry's contribution to GDP has fallen to 7.2% (R265.7 billion) from a 2005 high of 7.5%, its standing within the broader manufacturing sector means that it has remained integral to South Africa's overall domestic economy, as well as to the state's efforts to create large-scale employment and revitalize peri-urban regions whose economies collapsed with the end of apartheid-era subsidies (Barnes, 2013). Yet significant issues endure, while the post-apartheid period has seen the industry consolidate its manufacturing capacity, increase productivity, and integrate into GVCs, its successes have largely been achieved at the expense of local producers and component manufacturers (Barnes, Black, and Monaco, 2018).

As Barnes and Kaplinsky (2000) note, the post-apartheid policy regime has led to the reorganization of production and growing foreign ownership across OEMs and Tier 1 suppliers.<sup>80</sup> South African component manufacturers have thus been exposed to the performance and cost requirements of MNCs and have largely been forced to move down the value chain (see Barnes, 2013, p.19). Moreover, at the macro level, the increase in foreign ownership across OEMs and Tier 1 suppliers has led to the state being increasingly constrained by the decisions of a handful of large-scale MNCs (Barnes, Black, and Monaco, 2018; Masondo, 2018).

The Beijing Automotive Industry Holding Co.'s (BAIC) vehicle assembly plant in the Coega Special Economic Zone (SEZ) represents the South African state's latest, and largest, effort to support the auto industry and accelerate its development. Structured as a joint venture (JV) between BAIC and the South African state-owned Industrial Development Corporation (IDC), it can also be conceptualized as an attempt to reassert

---

<sup>80</sup> A tier 1 supplier is a manufacturer that directly provides products to an OEM.

state power and leadership within the industry.

At its core, the megaproject is a crystallization of a combination of economic and (geo)political logics. The project was secured at the political-elite level and has been largely driven by the politico-ideological imperatives of the South African state. Initiated by the IDC and backed by the central state through the DTI, the BAIC plant is an example of how actors within the South African state are attempting to leverage political linkages with China in order to attain their goals within the context of the ‘developmental state’ approach. As was made explicitly clear throughout the interviews conducted for this study, these state actors characterize the political networks created through South Africa’s ‘Southward’ reorientation as an opportunity to further both the automotive industry and the government’s developmental approach (in terms of state-to-state negotiations and direct involvement in the manufacturing sector).

From the South African stakeholder’s perspective, the primary logics are thus a combination of state-building, via the decentralization of industrial development (which expands the states *infrastructural power*), and the embedding of ‘friendly’ actors into the country’s automotive industry through strategic coupling. Borrowing from Horner’s (2017, p.6) typology, the South African state in this instance can be characterized as both GVC ‘facilitator’ (via its tax incentives, subsidies, and lobbying) and as ‘producer’ (through the IDC’s direct stake in the project).

For BAIC and the Chinese state, the primary imperatives are those of SOE internationalization, the expanded reproduction of Chinese-based capital and the creation of new markets for Chinese goods. However, given the project’s visibility and politically sensitive nature (due to the profile of the Chinese actors involved), political considerations will likely be embedded in BAIC’s accumulative logics, for instance in the creation of employment targets for South Africans (see below). How much these factors will influence top-level decision making remains unknown, though given the amount of elite-level political support for the project (for example the launch ceremony featured call-ins by both Cyril Ramaphosa and Xi Jinping), it’s ultimate success or failure could have considerable ramifications for the Sino-South African relationship.

In terms of its presentation to the public, the BAIC project has been thoroughly enmeshed into the Sino-South African developmental discourse. Indeed, it is important to

note that project implementation, embedding, and construction have been facilitated and accelerated through ‘South-South’ political linkages and the language of developmental partnership cultivated by the Chinese state throughout its expansionist moment (see Chapter 2).

This chapter will explore the logics, rationales, and developmental mechanisms<sup>81</sup> behind BAIC’s automotive megaproject. It will argue that the specific politico-economic networks used to develop and legitimize the project are illustrative of both South Africa’s growing dependence on China and how Chinese actors can use ‘South-South’ discourses to create the space for international expansion, thus advance their commercial objectives. Likewise, the project showcases how despite significant elite-level support, the ultimate geography of Chinese-backed megaprojects can be subject to a multitude of local- and regional-level conditionalities. The chapter will be divided into three further parts, the first will briefly reflect on the South African automotive industry’s historical trajectory, detailing the broad policy frameworks behind its growth and discussing the evolution of its position within automotive GVCs. This will contextualize the state of the industry as well as the reasons why the IDC decided to partner with a Chinese OEM. The second section will describe the project’s specifications, detail the motivations of the primary stakeholders and examine the principal logics behind its construction. Finally, the last section will review the challenges faced throughout project construction, as well as interrogate its relatively tenuous economic viability and what this can reveal about the plant as a whole.

## **5.1 South Africa’s Automotive Industry**

### *5.1.1 The Early Industry: LCPs to the Democratic Transition*

The history of South Africa’s automotive industry is one of varying degrees of state intervention, support, and protection. Born into seven decades of import-substitution industrialization (ISI) schemes and local content programs (LCPs), South Africa’s auto manufacturing sector has since 1995 relied on the Motor Industry Development

---

<sup>81</sup> This refers to the specific policy frameworks and negotiated agreements which ultimately led to project implementation.

Programme (MIDP) and 2013's Automotive Production Development Programme (APDP) for stability in the face of domestic liberalization and large-scale shifts in automotive GVCs.

Between its inception in 1920 and the start of democracy in 1994, the South African automotive industry was entrenched within the Nationalist government's white-oriented developmental state framework, specifically its import-substitution industrialization (ISI) program. The structure of South African automotive ISI was similar to that adopted in other developing countries at the time. High tariffs were placed on completely built units (CBUs)<sup>82</sup>, which led to the establishment of a number of assembly plants throughout the country<sup>83</sup>, though production was aimed exclusively at the rapidly growing domestic market (Barnes, Black, and Monaco, 2018). To support the inward-oriented industry, government programs encouraged diversified development. However, this led to a high-cost production structure as large numbers of makes and models were assembled in low volumes (Barnes, Black, and Techakanot, 2016). Additionally, it must be noted that the plants themselves were generally low value-adding operations built to meet the minimum local-content standards set by the state as a prerequisite for market access (Barnes, 2013). As such, despite its success in generating employment, the early automotive industry faced significant impediments in terms of productive orientation, connectivity, and responsiveness to international standards that would hinder it when the sector was opened up to international pressures following the end of apartheid.

Barnes (2013, p.247-249) details several major factors which shaped the South African auto industry as it neared the democratic transition. Firstly, South Africa's relative insignificance within the global automotive industry meant that while MNCs benefited from operations in the country, the domestic auto sector functioned as a peripheral 'technology colony', with little native innovation or development. As production was aimed at domestic markets, plants were generally isolated from parent company production networks (Black, 2001, quoted in Barnes and Black, 2013). Secondly, from its inception, the industry was characterized by the state as being a crucial element for the elimination of

---

<sup>82</sup> Imported vehicles had a nominal duty of 115% (Barnes, Black and Monaco, 2018).

<sup>83</sup> South Africa's auto manufacturing hubs are in Tshwane (Pretoria), eThekweni (Durban), Buffalo City (East London), and the Nelson Mandela Bay area. However, the distance between these hubs has historically impeded the creation of economies of scale (Barnes, Black, and Techakanot, 2016).

*white* poverty (and thus part of the broader system of accumulation that Gelb [1991, quoted in Desai and Habib, 1997] terms, ‘racial Fordism’). The early LCPs<sup>84</sup> that regulated the sector between the mid-1950s and 1995 ensured employment reservations for whites and prevented black South Africans from undertaking skilled roles or pursuing opportunities for promotion. These policies led to poor human resource development throughout the industry, which culminated in a ‘poorly-skilled middle management structure’ (Barnes, 2013, p.248) as well as highly adversarial labour relations.

Compounding these issues, the sanctions of the 1980s and disinvestment due to the apartheid state’s status as an international pariah led to stagnation and decline in the industry. This profoundly shaped the sector’s trajectory as the decade saw the proliferation of transnational corporate geographies (Breslin, 2005) and the subsequent formation of contemporary GVCs. The huge surplus of low-cost labour throughout the Global South (though specifically in east Asia) led to significant FDI flows to supply local markets and create export hubs (Sturgeon, Memedovic, van Biesebroeck, and Gereffi, 2009). However, due to the South African industry’s inward orientation, as well as a combination of sanctions and external pressures on large-scale OEMs not to do business with the nationalist government, the country was essentially left out of this shift and its auto sector failed to either attract FDI or adapt to emerging industry-wide logistical practices. By 1986, South Africa’s auto industry was made up of 7 separate assemblers producing 20 variants for a market of 172,000 units per year. Given the sizeable duties on CBUs, vehicle imports remained modest; however, low production volumes meant that the industry was inefficient, uncompetitive, and would fail without the substantial support frameworks instituted by the state (Barnes, Black and Monaco, 2018).

The democratic transition brought about large-scale trade liberalization and the end of a number of industrial subsidies. This had disastrous effects on certain manufacturing subsectors, specifically light manufacturing and textiles (see Chapter 3). In the auto sector, South Africa emerged into a highly competitive global industry where a handful of lead firms had concentrated their dominance via mergers and acquisitions and developed tiered

---

<sup>84</sup> The first LCP was introduced in 1961, and had 5 subsequent phases (1964, 1971, 1977, 1980, and 1989) (Barnes, 2013).



production structures with multiple levels of suppliers to produce vehicles in a system defined by regional hubs with dense global linkages (Sturgeon et al, 2009; Barnes, 2014).

### *5.1.2 Global Integration: From MIDP to APDP and Beyond*

Barnes, Black and Techakanot (2016, p.38) argue that a successful automotive industry development policy must have two broad attributes. First, it is necessary for the state to establish a regional or national ‘automotive space’ - essentially a market that must be protected in the short-to medium term. This space must be sizeable enough to support scale economies for vehicle producers and component manufacturers, as high-volume assembly reduces overall cost and induces supply chain integration and backwards linkages to local suppliers. Secondly, policy must ensure that the domestic industry remains competitive at the firm level. Costs associated with production (e.g., inputs, labour, overhead) must be kept low, while firm capabilities should be enhanced.

The South African state has largely focused on the first attribute throughout the last three decades. Indeed, the state understood that the automotive industry needed to integrate into GVCs and take on an export-heavy orientation (to promote efficiency/economies of scale) in order to survive the changing macro-economic conditions (e.g., adoption of the GEAR suite of policies and its subsequent effects - see chapter 3 for more) of the transition period. To achieve these goals, the Motor Industry Development Programme (MIDP) was launched in 1995. The MIDP represented a substantial departure from the LCPs, and as per Barnes and Black (2013), it has been one of the most significant industrial policy interventions of the post-apartheid period due to both the size of the industry it affected as well as the powerful incentive structure it eventually established.

The MIDP led to a gradual reduction in tariffs, abolished local content requirements, and provided strong incentives for exports through export-import complementation, a system whereby exports earn import credits which then allow manufacturers to offset import duties (Black, 2011). As per Masondo (2018), this arrangement enabled firms to specialize in certain makes/models and import those which they did not produce at close to international prices. The MIDP also provided a duty-free allowance, which allowed for tax-free import of components up to the value of 27% of the ex-factory price, working essentially as a subsidy which reduced the cost of component

importation (ibid.). Table 5:1 shows the reductions on built up vehicles/component tariffs under the MIDP.

<i>Year</i>	<i>Built Up %</i>	<i>Original Equipment components %</i>
1995	65	49
1996	61	46
1997	57.5	43
1998	54	40
1999	50.5	37.5
2000	47	35
2001	43.5	32.5
2002	40	30
2003	38	20
2004	36	28
2005	34	27
2006	32	26

**Table 3:1 Tariff Reductions 1995 – 2006 Under MIDP (Masondo, 2018)**

The MIDP functioned to increase the volume and scale of production through specialization in terms of models and components.<sup>85</sup> Through import-export complementation and the duty-free allowance, firms were encouraged to develop exports, which led to a substantial reorganization and reorientation of production lines. In addition, South African companies were encouraged by the state to sell shares to leading firms with the goal of increasing the amount of automotive investment coming into the country. As per Masondo (2018), the state argued that domestically owned manufacturers would not be able to invest enough on their own to match global standards. Likewise, foreign ownership would allow South African firms to leverage well-developed MNC linkages and production chains. As of 2019, all of South Africa’s assemblers, as well as most of its component

---

<sup>85</sup> In 1994, South African-based OEMs produced 39 different models for a market of approximately 300,000 units (Masondo, 2018)

manufacturers are foreign-owned, which has forced smaller domestic firms to reposition themselves as second-tier suppliers (Barnes, Black, and Monaco, 2018). The growth of South African exports for passenger cars can be seen in Table 5:2.

Passenger Car Output / Exports				
	Market			Exports as a percentage of total
	Domestic	Exports	Total	
1995	233,512	8,976	242,488	3.7
1996	231,616	3,743	235,359	1.6
1997	215,784	10,458	226,242	4.6
1998	174,870	18,342	193,212	9.5
1999	159,944	52,347	212,291	24.7
2000	172,373	58,204	230,577	25.2
2001	172,052	975,99	269,651	36.2
2002	163,474	113,025	276,499	40.9
2003	176,340	114,909	291,249	39.5
2004	200,264	100,699	300,963	33.5
2005	210,976	113,899	324,875	35.1

2006	215,311	119,171	334,482	35.6
2007	169,558	106,460	276,018	38.6
2008	125,454	195,670	321,124	60.9
2009	94,379	128,602	222,981	57.7
2010	113,740	181,654	295,394	61.5
2011	124,736	187,529	312,265	60.1
2012	121,677	153,196	274,873	55.7

**Table 5:2 South African Passenger Car Production and Exports 1995 - 2012 (Barnes and Black 2013)**

Within the academic literature, opinions differ regarding the effects of the MIDP. Black (2009) argues that while the programme achieved some of its objectives in terms of global integration, it failed to turn the country into an export hub. Barnes, Kaplinsky, and Morris (2004) on the other hand maintain that for all its weaknesses (in terms of growing market share for imports and the rise of foreign ownership), the program significantly helped the industry through a much-needed transition. Hirsch (2005) also takes an optimistic view, describing the MIDP as a broad success that greatly assisted auto manufacturing throughout the country. Finally, Flatters and Netshitomboni (2007) and Masondo (2018) represent the opposite end of the spectrum and cite the heavy burden the program has placed on the public sector. Flatters and Stern (2007) estimate that under the MIDP, the state has contributed R2.6 billion for every R1 billion of automotive investment. Meanwhile, Masondo (2018, p.2) argues that in its attempt to channel private investment into the sector via a developmental state framework (see Chapter 3), the South African

government has in fact built a ‘business nanny-state’ which induces investment via handouts (e.g., excessive subsidies) to transnational companies. Yet when assessing the effects of the MIDP it is also necessary to consider that the conditions for integration into GVCs have been largely unfavourable to South Africa. Some scholars, such as Sturgeon and Florida (1999) have argued that the country lacks either the sales volumes (both domestically and in terms of the region as a whole) or firm capabilities needed to constitute a viable ‘automotive space’. Expanding on this claim, Barnes (2013, p.236) contends that the industry is fundamentally a ‘construct of national government intervention’ due to the high levels of protection throughout the apartheid period as well as the heavily facilitative nature of the programs undertaken during democracy. Thus, despite appropriate criticisms of the program, including its cost to the public sector, it is only due to state involvement that the automotive sector remains viable and competitive.

The MIDP was phased out in 2013 in favour of the Automotive Production and Development Program (APDP). The APDP originally had 7-year window of operation (though it has now been extended as it will be integrated into the ‘Automotive Masterplan 2035’) and has attempted to shift the industry from the export-heavy focus of the MIDP towards one based on large-scale production. As per the Automotive Industry Development Centre (2014), the program will seek to double total vehicle production (up to 1.2 million units per year) by 2020. Moreover, the APDP will attempt to raise local content levels from approximately 40% to 65% in the time allotted. However, it must be noted that the 2018 estimates for total vehicle production are at 609,000 units, and local content remains below 40% (Cokayne, 2018). As such, the APDP will likely not meet its goals.

Moving forward, the APDP’s post-2020 architecture<sup>86</sup> will be aligned with that of the newly released South African Automotive Masterplan 2035 (SAAM). SAAM has four major objectives: making the industry globally competitive, using it as a springboard for domestic transformation via the inclusion of black-owned firms into supply chains, developing domestic employment, skills, and firm capacity, and sharing the prosperity created by the industry through fair employee remuneration (DTI, 2018c).

In order to meet these goals, the DTI has instituted six objectives: increasing total

---

<sup>86</sup> Which, as per Black, Barnes, and Monaco (2018), will seek to correct the programme’s excessive import bias and ensure that benefits correlate with localization levels.

domestic production to 1.4 million units by 2035, doubling employment in the value chain from 112,000 to 224,000, improving industry competitiveness, deepening value addition across strategic commodities and technologies, increasing local content, and achieving ownership transformation across the value chain (ibid). To realize these objectives, the state has sought to proactively engage the industry, and the BAIC project stands as one of its main initiatives.

## **5.2 – Project Background and Specifications**

BAIC's R11 billion automobile plant is the first new assembly operation in South Africa, as well as the single largest investment in automobile manufacturing in the whole of Africa, in over four decades (Interview, CDC Representative 1, November 2017, Johannesburg). While project planning began in 2011 (see below), the plant was officially announced at the 2015 FOCAC meeting, where it was positioned among the 26 major agreements signed between President Jacob Zuma and General Secretary Xi Jinping. Negotiated at the political elite level, the project will be structured as a JV. BAIC will serve as the majority shareholder, holding 65% of the venture, while the IDC will hold the remainder.

As a JV, the BAIC vehicle plant is meant to play a significant role in achieving the objectives of both the APDP and SAAM since it allows the South African state, via the IDC, input into supply chain creation and management. Likewise, government officials believe that the project will provide a substantial economic boost to the Nelson Mandela Bay area as a whole. As per one Coega Special Economic Zone representative:

*As [a] result of the BAIC construction project, the economy-wide GDP impact in the Eastern Cape Province is estimated at R945.1 million. This represents about 0.41% of Eastern Cape's 2014 GDP\_R, at constant 2010 prices. The spending related to the construction of [a] new facility to accommodate BAIC's vehicle manufacturing plant within the Coega IDZ would result in growing the local economy and in creating job opportunities in the Nelson Mandela Bay Metro (Interview, CDC Representative 1, November 2017, Johannesburg).*

JVs of this sort are exceedingly rare within the auto sector (Interview, Analyst, October 2017, Johannesburg), and as per Black, Barnes, and Monaco (2018), BAIC will be the only light vehicle producer with local ownership.<sup>87</sup> One automotive sector analyst interviewed for this research noted that the IDC's stake in the project is 'not normal at all' (Interview, Analyst, October 2017, Johannesburg). However, when pressed on whether or not this signalled a change in strategy or specific government support for Chinese manufacturers, an IDC executive stated that 'the door is open' with regards to IDC JVs and financing for all OEMs regardless of country of origin. He stated that the reason the IDC became a shareholder in this project, as opposed to others, is that 'major OEMs can access cheaper credit internationally', so the IDC 'doesn't have to provide financing' for those projects (Interview, IDC, February 2018, Johannesburg). Yet it is necessary to consider that the South African state's facilitative role in the project (through joint ownership, SEZ benefits, and subsidies) has been central to successful project implementation, and it almost certainly would not have been built without heavy state involvement.

### *5.2.1 Primary Stakeholders*

The BAIC Group is a Chinese OEM that was founded in 1958 and is owned by the Beijing Municipal Government. The SOE initially specialized in manufacturing units through JVs with MNCs such as Daimler AG and Hyundai (Interview, BAIC SA, February 2018, Johannesburg); however, in 2010 BAIC began selling their own vehicles under the moniker 'BAIC Motor Corporation'. The group has since become one of China's largest OEMs (Coega, 2016; Zhu, 2018).

Given its domestic success, the company has recently begun internationalization efforts. BAIC-brand vehicles are now being sold in Mexico and Iran, with future ventures likely in South America and other parts of the Middle East. As with other 'champion' firms, the imperatives of the Chinese state can sometimes manifest in company strategies and accumulative logics (see Lee, 2017). This type of engagement, essentially a blurring of boundaries between state and corporate, has been well-documented throughout the literature. However, as Milhaupt and Zheng (2015) argue, despite the presence of the state,

---

<sup>87</sup> Though it is important to note that significantly smaller-scale operations such as Beijing Auto Works' (BAW) assembly plant in Springs, Gauteng are partially funded by the IDC.

a substantial amount of authority and discretion is delegated to local agents and as such *ownership* is not analogous to *control* (emphasis mine). Per a BAIC executive, the company can count on ‘significant’ ministerial and state support when necessary; however, in return the CEO is also ‘required to give updates to the ambassador occasionally’ (Interview, BAIC SA, February 2018, Johannesburg). This functions to keep SOEs within the broad frameworks set out by the state<sup>88</sup>, but generally does not interfere with day-to-day management.

The hybrid nature of Chinese firms can similarly inform their engagement patterns and corporate outreach strategies. Indeed, one industry analyst who has worked on the plant noted that given their institutional dynamics, ‘[the] Chinese see government as a partner, and [Chinese] companies tend to be very reliant on [host] states (Interview, Analyst, February 2018, Johannesburg). In similar fashion, a different analyst noted that state-owned Chinese firms operating in Africa generally ‘go straight’ to their government counterparts, in the search for ‘political blessings’ which may fast-track project development (Interview, Analyst, October 2017, Johannesburg). However, in countries (including South Africa) with a record of dysfunctional governance, relying on the state can be a perilous strategy as politically motivated decisions can be made and quickly derail projects.<sup>89</sup>

BAIC’s South African assembly plant will be their first manufacturing plant outside of China (Interview, BAIC SA, February 2018, Johannesburg) and is ‘central’ to its global expansion plans (Venter, 2016). As per a BAIC executive, the focus will be on exports, with a specific emphasis on both the right-hand drive market (South Africa is a left-hand country) and countries in Africa where the Chinese state has ‘good bilateral relations’ (Interview, BAIC SA, February 2018, Johannesburg). This speaks to the leveraging of elite-level political linkages by Chinese corporate actors and the importance of ‘South-South’ cooperation in terms of creating space for the expansion of Chinese-based capital.

---

<sup>88</sup> Though, as Milhaupt and Zeng (2015) document, SOEs often fail to implement significant operational decisions set forth by the state.

<sup>89</sup> A prominent example of this is the now defunct Richards Bay Dry Dock project. TRANSNET contracted a Chinese firm (China Harbour Engineering Construction) to build the R4 billion project, which was also to be partially funded by China EXIM bank. However, the project was suddenly cancelled with ‘no specific reason given’. (Planting, 2012).



As of early 2018, the company had yet to finalize the logistical structure<sup>90</sup> for the South African plant, though the executive noted that they ‘don’t want to compete with sister plants in China’ (ibid.).

On the South African side of the project is the IDC, a national development finance institution (DFI) established in 1940 and owned by the South African government under the supervision of the Economic Development Department (EDD).<sup>91</sup> The IDC has a mandate to promote industrialization, capacity building, and innovation in key economic sectors including manufacturing, mining, and telecommunications. As per their official materials, the IDC’s activities ‘currently centre on the National Development Plan (NDP), the New Growth Plan (NGP), and Industrial Policy Action Plan (IPAP) (IDC, 2018a)’.<sup>92</sup>

The corporation’s financial support for firms can be structured in a variety of ways, including through debt, equity, and guarantees. Additionally, they provide non-financial ‘business support’ which includes the development of business plans for prospective clients, turnaround plans for ‘distressed’ clients, and analysis/assistance for firms in the post-investment stage (IDC, 2018b). In 2018 IDC-linked investments created approximately 23,000 jobs, and the corporation disbursed R15.4 billion in funding (IDC, 2018a). The corporation’s funding is largely generated through income from both mature investments and loan and equity investments (ibid). As per one IDC executive: ‘[we] always have to balance developmental objectives with financial objectives’ (Interview, IDC, February 2018, Johannesburg). As previously noted, the IDC has had a role in a multitude of developmental projects over the years; however, the fact that it would directly take a stake in the automotive sector, which had never happened before since its involvement can change the dynamic between OEMs and the state (see below), speaks to the government’s changing industrial policy approach and more hands-on role beginning with the Zuma administration.

---

<sup>90</sup> This refers to the specifics of imports and exports associated with the plant.

<sup>91</sup> As of 2019 the EDD has been re-integrated into the Department of Trade and Industry

<sup>92</sup> Though it is important to note that the economic trajectories specified by the NDP and NGP are in fact incompatible (see Chapter 3).

### 5.2.2 Plant Specifications

BAIC's vehicle assembly plant follows in the footsteps of First Auto Works (FAW), another large Chinese automobile manufacturer, which set up a widely-publicized R600 million heavy truck plant in Coega in 2014. However, unlike the FAW plant, which assembles vehicles using 'semi-knockdown' (SKD) kits, the BAIC factory will eventually be a 'complete knock down' (CKD) kit plant.<sup>93</sup> Within the automotive industry, semi-knockdown kits refer to partially prefabricated vehicles<sup>94</sup> which are shipped to an assembly plant and finalized. In the case of FAW, the kits are imported from China and assembled in South Africa, resulting in very little local content and relatively low levels of employment. FAW uses SKD kits as it is more cost effective to import their large truck frames than source parts locally (Venter, 2015). One automotive analyst interviewed for this research argued that while FAW's Coega plant has been portrayed as a positive development for the SEZ and as a significant milestone for the Sino-South African relationship, the reality is that it is a 'mickey mouse operation' which takes up a large amount of space but employs a relatively small number of workers<sup>95</sup> and likely produces vehicles with between 5 and 10% local content (Interview, Analyst, October 2017, Johannesburg).

FAW's SKD approach contrasts with BAIC's ultimate goal of a CKD plant. CKD refers to the assemblage of individually supplied (either through import or by local suppliers) parts. CKD allows for higher rates of local content and the incubation of domestic industries since it is generally more cost-efficient to secure local suppliers to meet 'just in time'<sup>96</sup> procurement requirements than it is to ship in all materials from abroad. In BAIC's case, a BAIC SA executive noted that their local content strategy stipulated that the 'big value parts' including engines were to be made in South Africa (Interview, BAIC SA, February 2018, Johannesburg). Whether this procurement decision is politically-influenced or merely the most profitable avenue forward was not disclosed during the

---

<sup>93</sup> Though initial production will be done via SKD kits while the main elements of Phase 1 are under construction (Droppa, 2018a).

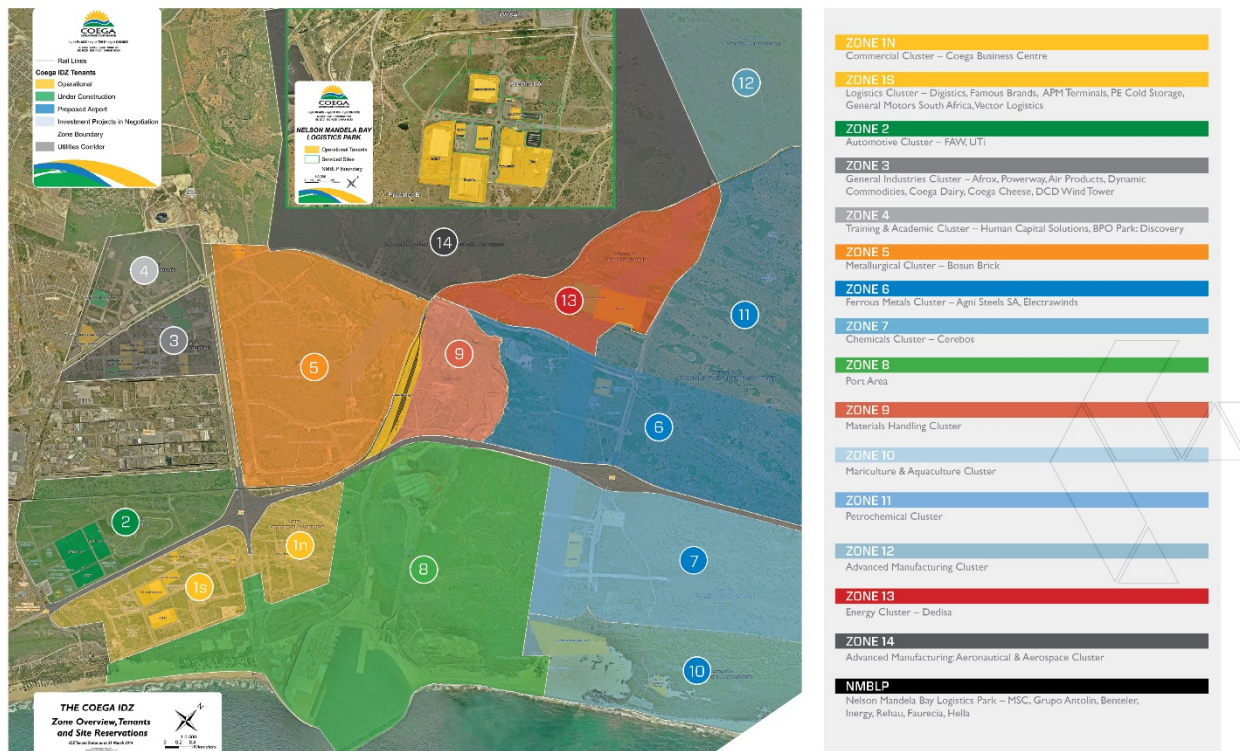
<sup>94</sup> In South Africa SKD components have a 25% duty imposed on them (Interview, Analyst, October 2017, Johannesburg).

<sup>95</sup> 230 as of 2018 (Songtian, 2018).

<sup>96</sup> This refers to an inventory strategy in which materials are procured according to the production schedule, decreasing waste and increasing efficiency.

interview.

The assembly plant is set to be built in stages. Phase 1, valued at R4.5 billion and covering some 88,969.79 m<sup>2</sup> in Zone 1 of the Coega SEZ, is expected to be finished by 2022 (Slater 2017). Upon completion of this phase, which includes a paint shop, assembly line, press shop, office, and body shop, the plant will have a production capacity of 50,000 units per year. In addition to the main facilities, a R2 billion supplier park for local component manufacturers will be built adjacent to the complex. Gary Yang, BAIC SA's acting director, has confirmed that memorandums of understanding (MOUs) have been signed with 6 South African component suppliers (Matavire, 2017a).



**Figure 5:1 Map of the Coega SEZ (Coega, 2018b).**

Despite complaints from South African steel producers, who had placed a bid to supply the materials for construction, the steel for Phase 1 was imported from China in order to ‘keep costs down’ (Interview, BAIC SA, February 2018, Johannesburg). A South African steel executive interviewed for this research noted that a Chinese study found that using the imported steel would reduce construction prices by up to 40% (Interview, Steel

Executive, October 2017, Johannesburg). As such, only 15 to 30% of the plant’s construction inputs originated in South Africa (Setokoe, 2017). The South African government does not have standardized regulations for the percentage of locally-sourced building materials to be used in a project. Instead these considerations, along with total local content and local labour percentages for construction and operations, are negotiated on a project by project basis (Interview, DTI, October 2017, Pretoria; Interview, LEDA, November 2017, Johannesburg). In the BAIC case, interviews conducted for this research indicated that the negotiations focused on targets for local employment and locally-sourced parts for vehicles assembled at the plant (Interview, Coega, November 2017, Johannesburg).

Approximately 1,500 jobs were created during the initial construction process, with a further 1,000 to be employed by BAIC after the final launch of Phase 1 (Coega, 2018b). Phase 2 will consist of a R6.5 billion expansion to the assembly shop to be implemented ‘given the right market conditions’ (Interview, IDC, February 2018, Johannesburg). This conditioning suggests that IDC officials are conscious of the challenges facing the plant. Estimates put the number of domestic jobs created through the full automotive value chain at approximately 10,000 (Venter, 2016; Coega, 2018b). However, the majority of these are expected to be semi-skilled, unskilled, and informal jobs.

	Direct and Indirect Impact	Induced Impact	Economy-wide Impact
	Number		
Formal Employment	6047	1055	7102
Informal Employment	2822	721	3543
Total	8869	1776	10645

**Table 5:3 BAIC Plant Employment Estimates (Coega, 2018b)**

### 5.3 Logics, Drivers, and Developmental Mechanisms

As previously noted, the BAIC megaproject should be conceptualized as a manifestation of a variety of economic and (geo)political logics. Broadly speaking, the South African state's interests in the project are driven by a set of largely politico-ideological imperatives. Foremost among these is the requirement (as stipulated by the IPAP and NGP) to decentralize industrial development with the end goal of supporting rural and township economies in what is essentially a response to apartheid-era spatial inequalities. This can be considered a re-extension of state power and capacity into marginalized areas and is thus an example of the logic of state-building discussed in Chapter 3. Additionally, the IDC undertook this project with a specific desire to embed a *Chinese* firm (Interview, IDC, February 2018, Johannesburg) within the South African automotive industry (an example of strategic coupling – see Yeung, 2009). While explained further below, certain departments within the South African state view their Chinese counterparts as 'developmental partners' and conceptualize interactions through the lens of 'South-South' or 'win-win' relations.

The structure of engagement can therefore be characterized as a maturation and evolution of the South-South developmental discourse, as its principles have now crystallized at the highest levels of the South African state (see Mohan and Tan-Mullins, 2018). As one analyst commented '[South-South] rhetoric has 'absolutely infiltrated (sic) policy [making] (Interview, Analyst, October 2017, Johannesburg). Combined with an industry-specific belief that Chinese firms will eventually 'dominate'<sup>97</sup> the global auto industry, government officials believed that 'it just made sense to bring in a Chinese OEM' (Interview, IDC, February 2018, Johannesburg).

On the Chinese side, the state-owned BAIC motors is seeking to expand its operations into new markets. The macro conditions for the facilitation of champion SOE internationalization have been created by the Chinese state via its 'go-out' and 'BRI' umbrella projects (see Chapter 2). Indeed, BRI was specifically cited in the official project materials as a main 'driver' for the project (Coega, 2018c). However, more pressing for

---

<sup>97</sup> That is, play a major role in the global auto market. Certain South African officials believe that in a few decades, Chinese firms will occupy the positions taken by Japanese and Korean manufacturers today.

BAIC's economic prospects is keeping up with the ultra-competitive Chinese auto market, which has grown to be the world's largest with more than 28 million cars sold in 2017 (though sales are down as of early 2019). In this sense, the Coega factory can be characterized as 'market seeking' FDI (Dunning and Lundan, 2008). Yet given the significant role of the Chinese state in helping publicize and market the project by embedding it within its official discourse, a geopolitical agenda is evidently a factor on the Chinese side of the project.

### *5.3.1 Primary Drivers*

Given the IDC's mandate to nurture industrial development in the automotive sector, the corporation began looking for a new OEM to enter the South African market sometime around 2011 (Interview, IDC, February 2018, Johannesburg). IDC Officials believe that South Africa has a need for 'quality, affordable cars' and saw an opportunity with the country's invitation to BRICs in 2010. As per an IDC executive, 'there's a need to take advantage of these (BRICs) relationships' in order to consolidate and grow the auto sector (ibid.).<sup>98</sup> It is important to note that the BAIC factory can be differentiated from the majority of other Chinese megaprojects in Africa as it is largely the imperatives and facilitation of the 'host' country that have driven project development. The 'guiding hand' (Brautigam, 2010, p.180) behind development in this case is South African, rather than Chinese.

In 2011, IDC officials went to China on a 'road show' to visit several potential partners and eventually agreed to terms on the JV with BAIC. As one South African government official explained, there were two core arguments in favour of the JV. Firstly, the cost of production for Chinese vehicles is relatively low; secondly, there is a widespread belief among state elites that Chinese firms will one day dominate the global auto market, a point which was independently brought up by an IDC executive (Interview, CSIR, February 2018, Johannesburg; Interview, IDC, February 2018, Johannesburg). In addition, bringing in a Chinese OEM helps the South African state diversify the sector, and lessens its vulnerability to decisions made by the traditional MNCs which currently operate

---

<sup>98</sup> As explained by an economic analyst, 'the [Zuma] government prefers state-to-state deals, even when these are done by SOEs' (Interview, Analyst, October 2017, Johannesburg).

in the country.<sup>99</sup>

The IDC characterize BAIC as a ‘growing brand’, whose entry into the South African market could create opportunities for local manufacturers, as well as allow South Africa to ‘catch the value’ in the automotive value chain (Interview, IDC, February 2018, Johannesburg; Interview, Analyst, February 2018, Pretoria). The corporation takes a ‘long term approach’ with regards to its investments, as such, they believe that significant economic complementarities exist between their plan and BAIC’s. The end goal for the IDC, as well as the Department of Trade and Industry (DTI), is to increase local content for vehicles produced in South Africa from the current 40% to approximately 60% (as per the APDP); however, they believe this must be done incrementally (Furlonger, 2018) and view the BAIC project as a step towards meeting that goal. Indeed, BAIC’s stated aims promise 60% local content (Zhong, 2018). Historically, the IDC works on varied timelines, and typically exits projects when the investment is deemed to be ‘mature’, selling to Black Economic Empowerment (BEE) beneficiaries or partners. As the automotive industry lags in terms of meeting BEE goals, the JV will allow for the implementation of an incubation program for ‘black industrialists’ (Interview, IDC, February 2018, Johannesburg). In this fashion, the embedding of Chinese capital allows for the pursuit of politico-ideological goals and the creation of policy space.

BAIC on the other hand views South Africa as the ‘gateway to Africa’. According to chairperson Xu Heyi, the Coega plant will ‘cover the entire African continent’, in its function as one of the corporation’s continental headquarters (Cokayne, 2018).<sup>100</sup> The characterization of South Africa as a ‘gateway’ mirrors the language used by official representatives from both states, including current Chinese ambassador Lin Songtian and high-ranking members of DIRCO (Interview, DIRCO, October 2017, Pretoria). Additionally, Mr. Xu has explicitly tied the project to BRI and broader Sino-South African ties in his official statements, describing the relationship between the two countries as one of ‘golden cooperation’ while adding: ‘we should make full use of our opportunities ahead and comparative advantages to reach a win-win situation’ (Xinhua, 2018). The use of such discourse on the one hand highlights the way in which Chinese actors can leverage the

---

<sup>99</sup> One example being GM’s sudden announcement to exit the South African market in 2017.

<sup>100</sup> Future headquarters are planned for Mexico and India.

actions of the state in order to meet their own commercial goals and on the other how the state can create safe operating spaces for Chinese-based capital to expand.

The Coega SEZ was chosen from a number of candidates (including East London and Durban) as it was the ‘best fit’ given its logistical facilities (Interview, BAIC SA, February 2018, Johannesburg), though a Coega manager noted that the SEZ’s only role is as ‘real estate’, that is, they have no input over the IDC’s or BAIC’s plans for the site (Interview, CDC Manager, January 2018, Johannesburg). The Coega SEZ provides access to two ports - Port of Ngqura and Port of Port Elizabeth and is the only SEZ designated as a customs control area (CCA), which enables ‘qualifying investors to benefit from customs duty and VAT incentives’ (Interview, CDC Representative 1, November 2017, Johannesburg). However, the zone, which was originally an IDZ (see Chapter 2), had been widely regarded as a failure by industry insiders given its inability to attract large investments (Interview, Analyst, February 2018, Johannesburg). The BAIC project is by far the largest in the zone, nearly doubling the value of its other investments (R11 billion v. R6 billion) (Coega, 2018b). One market analyst interviewed for this research detailed that sources within the state informed him that the decision to base the plant in Coega came ‘from the top’, and that the Coega Development Corporation (CDC), who are in charge of operations, had no voice or choice in the matter (Interview, Analyst, October 2017, Pretoria). However, this was not confirmed by the CDC or IDC employees interviewed. When pressed, a BAIC executive simply stated that there was a significant amount of ‘involvement’ by the South African government regarding the plant’s final location (Interview, BAIC SA, February 2018, Johannesburg). Meanwhile, a CDC representative stated that Coega’s objectives have been integrated with those of the state and that the ‘Automotive Masterplan’ (SAAM) informs the corporations decisions (Interview, CDC Representative 2, January 2018, Johannesburg); though when asked how specifically, the representative declined to answer. This speaks to the *top-down* nature of this project, as well as the statist objectives which drive the (South African) government’s involvement in it.

Beyond the main plant, the component supplier park will play a major role in achieving the IDC’s objectives (if the project is successful) as it will provide opportunities for small, medium, and micro enterprises (SMMEs) to participate in the value chain. With



the auto sector shifting to a ‘just in time’ procurement approach, supplier parks have become more numerous throughout the industry (Sturgeon, Memedovic, Biesebroek, Gereffi, 2009)<sup>101</sup> and the IDC has sought to leverage this by playing a major role in identifying and developing the site (though BAIC will have final say in its operations), which they consider a crucial part of the investment. Indeed, while some of the park’s suppliers will be Chinese firms, the current IDC plan is that the bulk will be local SMMEs (Interview, IDC, February 2018, Johannesburg; Interview, BAIC SA, February 2018, Johannesburg). The park itself is to be finalized once the assembly plant is up and running (after the transition from SKD to CKD), though as per a CDC representative, the auto unit at Coega has already engaged with black-owned logistics service providers and component manufacturers with regards to locational and procurement opportunities (Interview, CDC Representative 2, January 2018, Johannesburg).

### *5.3.2 BAIC and Sino-South African Relations*

As noted, the project was officially announced during the 2015 Forum on China Africa Cooperation (FOCAC), though finalized later on.<sup>102</sup> When asked why they chose to unveil at FOCAC, an IDC executive responded by saying that as the partnership is between government-owned entities, it was ‘simply the right place to do it’, adding: ‘the whole intention of FOCAC is to promote investment’, and announcing it then was well within the ‘spirit of FOCAC’ (Interview, IDC, February 2018, Johannesburg). The use of FOCAC in this instance is indicative of the mindset that officials have brought to this project and highlights the importance of South-South political linkages and rhetoric in its legitimization.

The project’s importance to the Sino-South African relationship has also been highlighted by the visit of then Chinese vice-president, Dr. Li Yuanchao, to the Coega Special Economic Zone. During his visit, Dr. Li stated: ‘I’ve been to many developing countries and industrial development zones in the world, the Coega IDZ is by far the best of them all’ (Staff, 2017). Beyond Dr. Li, Coega has also welcomed Kang Yong, the

---

<sup>101</sup> Though it must be noted that the other 2 OEMs operating in the Nelson Mandela Bay area have not established parks of their own.

<sup>102</sup> BAIC has since signed a 99-year lease on the property (Interview, CDC Manager, January 2018, Johannesburg).

Consul General of the PRC, and Jacob Zuma, then President of the Republic of South Africa. Moreover, it has been mentioned prominently by the Chinese ambassador to South Africa, Lin Songtian (who has also visited the site), as a symbol of the Sino-South African developmental partnership. A Coega manager noted that these high-level political linkages mean that the project is distinct from others in the SEZ, saying:

*“It’s different, they’re not just looking at market opportunities, it’s a little bit more of a kick from the government... it’s not just market forces, it’s also based on the willingness of the Chinese government to show that they’re not just here to get raw materials, they also want to invest in manufacturing. There are certain targets to employ South Africans”* (Interview, CDC Manager, January 2018, Johannesburg).<sup>103</sup>

As such, the project displays significant political dimensions. The presence of the IDC as a stakeholder deviates from set norms and threatens to affect the country’s automobile industry, as the government has historically worked to protect and support existing manufacturers. Despite the IDC insisting that ‘the door is open’ to other OEMs (Interview, IDC, February 2017, Johannesburg), one industry insider noted that the BAIC investment will likely alter the relationship between the state and competing auto manufacturers and lead to a more ‘adversarial approach’ (Interview, Analyst, October 2017, Johannesburg).

Beyond its 35% stake through the IDC, the South African government has incentivized the project via its Automotive Investment Scheme (AIS). The AIS is designed to support the auto sector by facilitating greenfield investment, increasing production volumes, and strengthening the value chain (DTI, 2015). It does so by providing a non-taxable cash grant of 25% (payable over three years) of the value of an investment for light vehicle manufacturers producing more than 50,000 units a year. Furthermore, an additional cash grant of 5% of total value may be given for meeting supplementary requirements. In the BAIC case, the grant will come into effect at the 10,000-unit mark, as the minister can personally change the terms of the AIS (Interview, BAIC SA, February 2018,

---

<sup>103</sup> As per the CDC, local content targets are for 35% of construction work to go to SMMEs and 75% local employment during phase 1 construction (Interview, CDC Representative 1, November 2017, Johannesburg).

Johannesburg). However, it is important to note that the AIS will only apply once the plant reaches full CKD status. While the AIS is available to all auto manufacturers, its use in combination with the IDC's stake in the project serves to illustrate how Chinese commercial actors can exploit the linkages created by high-level diplomacy to aid in their accumulative and internationalization strategies.

#### **5.4 Challenges and Economic Viability**

Despite strong ties between Chinese and South African elites, local-level project implementation has been delayed several times throughout the last several years. Similarly, it faces significant challenges in terms of market for its output due to conditions in both South Africa and the broader continent. The challenges facing this project underscore how the geographies of Chinese-inflected globalization are subject to a multitude of local-national- and regional-level conditionalities. Moreover, they highlight how the outcomes that emerge from state-state strategic couplings are tied to the interests of a variety of actors who operate through differentiated imperatives and political opportunity structures.

Much of the labour unrest which has troubled the project is due to confusion regarding the role/funding of local SMMEs. Prior to the beginning of the construction process, approximately R300 million of the phase 1 investment was to be set aside for SMMEs in order to ensure local participation. However, the registration and tendering process for contracts was 'unclear' (even though help desks were set up in the surrounding townships), eventually leading to work stoppages (Matavire, 2017b).

When interviewed, a BAIC official was confident that operations would go smoothly once initial labour issues were resolved (Interview, BAIC SA, February 2018, Johannesburg); however, disputes continued throughout 2018. One work stoppage late in the year (the third in total, and taking place after the plant's official unveiling) went on for approximately two weeks, with SMMEs working on the project complaining that they had not been paid in three months (Matavire, 2018a). Luvuyo Popo, the President of the African Chamber of Business, which represents a number of the SMMEs involved in the project, lashed out at BAIC SA, stating: 'we have been dealing with these people [BAIC SA] since the inception of this project and our experiences in doing business with them are not good... BAIC SA has not lived up to our expectations and so there is a trust deficit'

(Matavire 2018b). Yet most problems stemmed not from BAIC SA itself, but rather from the Beijing Industrial Designing and Research Institute (BIDR), which was appointed head contractor to oversee Phase 1 implementation. As per one electrical contractor: ‘We are told that BIDR overshot its budget and now BAIC SA is refusing to give them more money’ (Matavire 2018a). While disputes of this type are relatively common in large-scale projects, given the high-level political linkages involved in Sino-South African (and Sino-African projects more broadly), problems emerging from the local level can quickly move up the transmission chain and elicit response from the ministerial level and above (see Chapter 8). BIDR resolved its contractual disagreements in September 2018 and work has since resumed without further incident. Yet while construction is ongoing, the combination of a relatively small domestic market, minimal brand recognition, and low demand for new vehicles throughout Africa means that the project’s long-term viability faces similar questions and challenges.

The South African auto market sells approximately 550,000 units per year, with the highest selling model (VW Polo) topping out at approximately 50,000 units (Interview, Analyst, October 2017, Johannesburg). The country has one of the widest choice-to-market ratios in the world with 53 separate passenger models and 3,236 model derivatives sold. A pre-owned vehicle import ban has kept demand for new cars on the rise; however, new vehicle sales have grown at a modest 1.8% over the last four years (BusinessWire, 2018).

Best Selling Passenger Vehicles 2017		
1	VW Polo Vivo Hatchback and Sedan	28402
2	VW Polo Hatchback and Sedan	22575
3	Toyota Etios	14686
4	Toyota Fortuner	13696
5	Toyota Corolla Quest	12333
6	Ford Fiesta	11446
7	Ford EcoSport	9920
8	Kia Picanto	8136
9	Renault Kwid	8027
10	Toyota RAV4	7622

**Table 5:4 Best Selling Passenger Vehicles 2017 South Africa (Oosthuizen, 2018)**

Best Selling Light Commercial Vehicles 2017		
1	Toyota Hilux	36422
2	Ford Ranger	32786
3	Toyota Quantum	15694
4	Nissan NP200	15074
5	Isuzu KB	14255
6	Nissan NP300/Hardbody	13604
7	Chevrolet Utility	7544
8	Hyundai H100	3398
9	Volkswagen Amarok	2946
10	Toyota Landcruiser P/U	2682

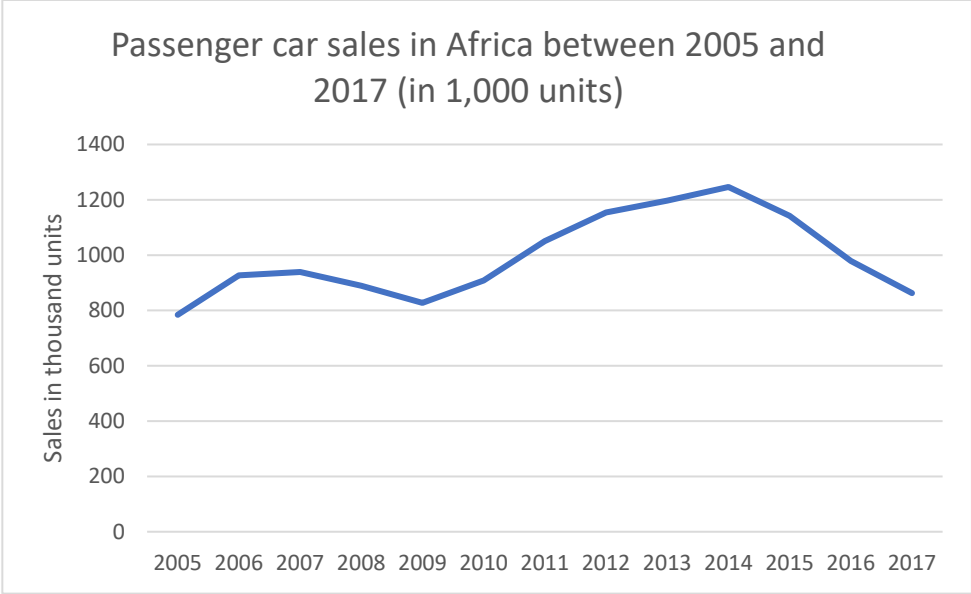
**Table 5:5 Best Selling Light Commercial Vehicles 2017 (Oosthuizen, 2018).**

Given their goals of producing 50,000 units per year by 2022 (Interview, CDC Representative 1, Johannesburg, November 2017), and 100,000 p/y in the mid-2020s (Smith, 2019), BAIC will have to export a substantial number of units to achieve profitability. This is backed up by official releases, which state that once full production is reached, 60% of vehicles will be for export (Allix, 2017).

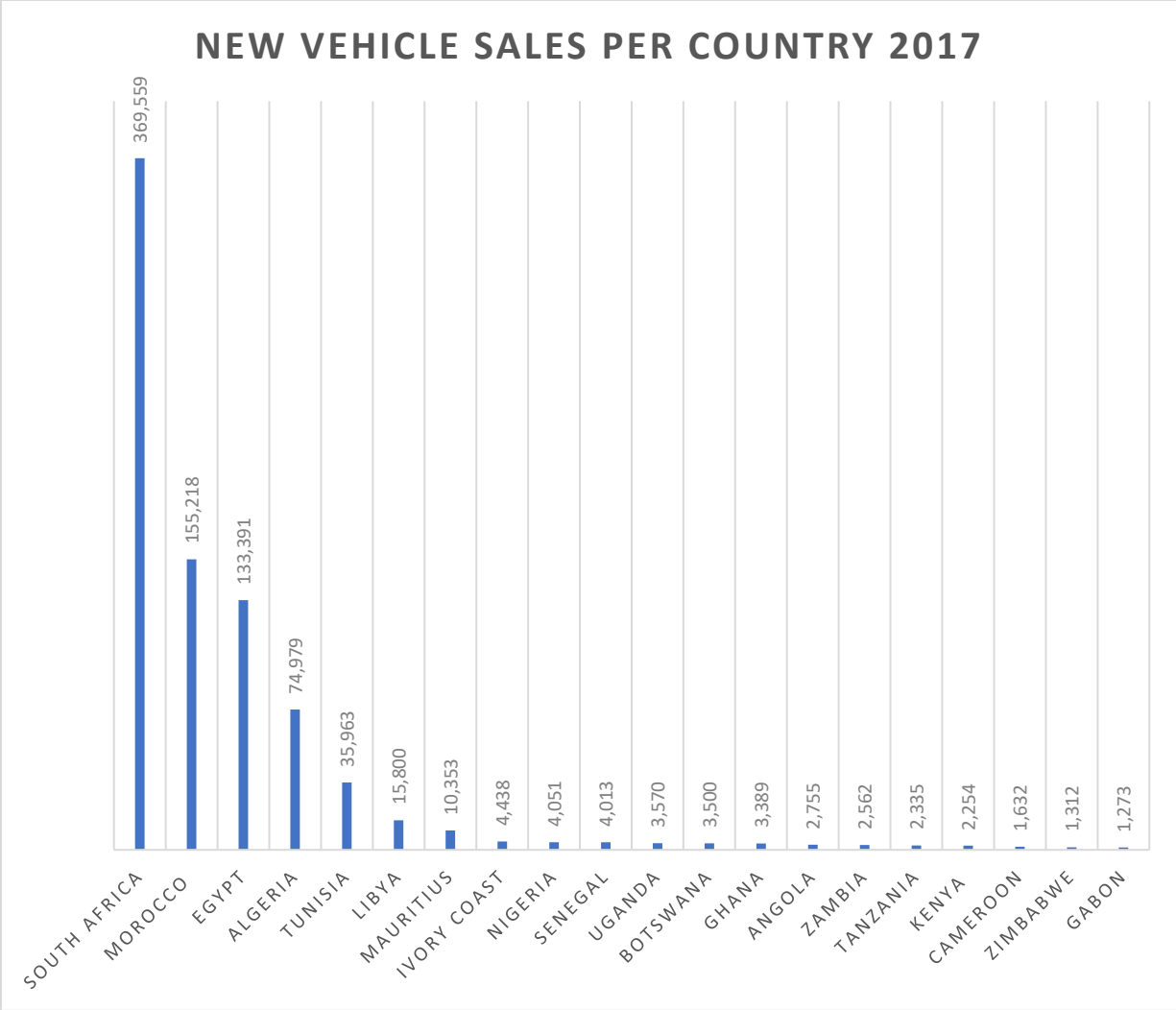
Two major factors complicate BAIC's 40/60 proposal. First, it is a relative novice in a South African market which has largely rejected Chinese-made vehicles. While the group has 20 dealerships throughout the country, a number which is expected to rise to 27 by the end of the decade, it only started selling vehicles in South Africa in 2017 and brand recognition remains low amongst consumers (Interview, CDC Manager, January 2018, Johannesburg; Furlonger, 2018). Compounding this is the reputation of Chinese-built cars in South Africa. Most are seen as low quality, unsafe, and unreliable - a narrative that applies to many Chinese-made goods, and that can turn away quality-conscious consumers. While BAIC is attempting to enter the market via price competitive vehicles, a Coega manager complained that some of the vehicles sold locally were of 'bad quality', adding: 'clients weren't happy' (Interview, Coega Manager, Johannesburg, January 2018). Initial reviews of BAIC vehicles, including the X25 scheduled to be built at Coega, have largely

been mixed (Droppa, 2018b; CarMag, 2018). One auto industry analyst described the general feeling around the industry by saying: ‘at the end of the day, the Chinese make crappy cars, that’s why they’re so cheap’ (Interview, Analyst, February 2018, Johannesburg). Yet these concerns don’t trouble some officials within the South African state. When asked about BAIC’s chances of breaking into the market, one state official who worked on the project flatly stated: ‘You make cheap shit when you’re breaking in... you’re breaking into an industry based on price and quality’ (Interview, CSIR, February 2018, Johannesburg). This mindset speaks to the belief within parts of the state that the east-Asian model of development can be replicated at least partially. Indeed, a separate official noted that when Japanese cars were introduced in the country, they were similarly thought of as ‘scrap’ (their reputation has since improved significantly) (Interview, Official, October 2017, Johannesburg). For their part, BAIC understands the apprehensions, with BAIC SA marketing manager Kane Du recently pointing out that they’ve heard the negative feedback about Chinese brands but adding that ‘we have had good public reaction to our vehicles at motor shows, and our investment in the assembly plant also builds trust’ (Droppa, 2018a). Moreover, the company has expressed that they are ‘here for the long run’ (Furlonger, 2018) and have hinted at producing both electric and autonomous vehicles in South Africa (McDonald, 2018).

The market outlook for the broader African continent is similarly problematic. Primarily attributed to the commodity price crash and policy changes regarding the importation of pre-owned vehicles, demand for new cars has plummeted throughout the continent. Figure 5:2 shows passenger car sales in Africa between 2005 and 2017. Figure 5:3 disaggregates this data to show the top 20 markets for new cars in Africa, along with the total sold in 2017. It is important to note that pre-owned vehicle imports are banned in South Africa, Morocco, and Egypt.



**Figure 5:2 Passenger car sales in Africa between 2005 and 2017 (Statista.com, 2018).**



**Figure 5:3 New Vehicle Sales Per Country, 2017 (GlobalEconomy.com, 2018).**

The collapse of Nigeria’s motor industry is emblematic of the problems facing the continent. In the 1980s, the country produced nearly 200,000 vehicles annually, yet a lack of government support and growing market dominance by used foreign cars led to the end of large-scale domestic production (though heavy tariffs in recent years have revived some production). A recent Deloitte report estimated that only 10% of vehicles imported to Nigeria are new. Indeed, used vehicles account for approximately 80% of all vehicle sales in Nigeria, Ethiopia, and Kenya (Davies and Schiller, 2019). In total, approximately 400,000 pre-owned vehicles are imported into the continent every year (Interview, Analyst, February 2018, Johannesburg). While policies, including age limits and environmental



restrictions, may come in to effect in the next 5-10 years, BAIC's market in Africa will likely remain limited in the near future.

Exports to the EU will also be problematic as the EU-South Africa economic partnership agreement (EPA) stipulates 60% local content for duty-free access. The official releases for the plant target this number specifically; however, the highest local content of any vehicle assembler is just under 50% (Interview, Analyst, October 2017, Johannesburg). Indeed, a CDC manager asserted that local content requirements '[are] the main reason why GM is no longer in South Africa' (Interview, CDC Manager, January 2018, Johannesburg). Regarding BAIC, one auto industry analyst noted:

*This [Chinese] firm is establishing a mega-plant to either supply to a domestic market that doesn't exist, a regional market that is decimated by pre-owned vehicle imports, or its going to export into the EU at 60% local content when no other South African vehicle manufacturer has managed to get there* (Interview, Analyst, October 2017, Johannesburg).

Some from within the South African government have expressed doubts regarding BAIC's strategy, as per a government official who worked on the project: '[its] surprising, the way the Chinese have entered this auto market'. He instead believes that they should have sold their vehicles in South Africa to create brand recognition before 'going all in' with the manufacturing plant. However, he noted that since this is BAIC's first project outside of China, 'they're [in the process of] learning' (Interview, Official, February 2018, Johannesburg). A Coega official had analogous concerns, stating: 'they have to work on getting market acceptance' (Interview, CDC Manager, January 2018, Johannesburg). Meanwhile, an industry analyst was more direct, flatly stating: 'this [project] doesn't make sense at all' (Interview, Analyst, October 2017, Johannesburg). Even those who believe in the project's eventual viability have concerns and one government official revealed that contingency plans have been made for a scenario where the project fails: 'perhaps a warehouse or bring in another motor [company]' (Interview, CSIR, February 2018, Johannesburg).

The idea of Chinese actors being somewhat unprepared and naïve regarding the

South African market was something that appeared repeatedly over the course of the research. One journalist observed that BAIC appeared to have a somewhat nonchalant attitude towards the project. As of early 2018 his sources indicated that they had yet to conduct full market studies, work out the final cost of production, or disclose their sales estimates (Interview, Journalist, February 2018, Johannesburg). Additionally, BAIC SA CEO Nemo Tian was recently quoted in the media as saying: ‘this is BAIC International’s first overseas project of this magnitude. We’ve experienced some challenges and have learned from them, with the support and guidance of our local shareholders’ (Smith, 2019). This hints at an accumulative strategy which leverages the visibility brought on by the plants opening as a way to expand market access and thus reach a larger customer base. However, whether this can be a success is yet to be determined.

## **5.5 Conclusion**

This chapter has examined the specific logics, rationales and developmental mechanisms behind the BAIC vehicle factory in the Coega SEZ. It has detailed the historical trajectory of South Africa’s automotive industry, which from its inception has been dependent on state backing and support. Yet while the state remains heavily involved, the shift from LCPs to the MIDP within the context of the transition to democracy and widespread liberalization in the economy has had profound effects on the industry’s organizational and ownership structures.

The MIDP and its successor, the APDP, have largely succeeded in enhancing manufacturing capacity, increasing overall productivity and integrating the country into automotive GVCs. However, this success has been tempered by a failure to develop well-integrated value chains, incubate domestic suppliers, or define a national automotive space in the face of rising imports. Given that all OEMs and the majority of component suppliers are now foreign-owned, domestic suppliers have been forced to move down the value chain. As one auto industry analyst put it: ‘the whole country is losing manufacturing’ and instead ‘becoming assemblers – which is not good if you know about GVCs’ (Interview, Analyst, October 2017, Johannesburg). To remain competitive, the industry will have to continue to increase production while simultaneously focusing on product development and raising local content.

Understanding this, the state has since at least 2011 planned to use its BRICS connections and bring in a Chinese OEM. The BAIC plant is thus an example of how South African state actors, ranging from the central state to parastatals, are attempting to utilize political linkages with China in order to attain their own goals within the context of the 'developmental state' approach. Operating under the assumption that attracting a Chinese production line will be relatively inexpensive, and that Chinese vehicles will one day have a large presence in the global automotive market, the state has assumed both a facilitative and productive role (Horner, 2017) in order to induce project development. Indeed, it is unlikely that the vehicle plant would have played out as it did without the high levels of state intervention and assistance. This in turn reinforces the government's 'Southward' orientation as it embeds Chinese state-capital into key systems. By organizing the project as a joint venture, locating it in a special economic zone, and lowering requirements for the AIS rebate, the state has done essentially all it can to leverage its partnership with its Chinese counterparts to ensure project development. Yet the project has faced significant challenges throughout the construction phase, and with BAIC's lack of brand recognition and low demand for new vehicles throughout Africa, it likely faces a difficult first few years. However, both BAIC and South African government officials appear to be working with far longer timelines than most. Additionally, given the deep political linkages throughout the project, success or failure will not be based on sales alone. Rather, BAIC will likely work through Lee's (2017, p.10) 'encompassing accumulation', which sacrifices the absolute maximization of profit in order to achieve other types of returns, in this case the strengthening of political ties.

## Chapter 6 – ‘The Quote that Killed the Project’: The Modderfontein New City

A quarter century after the tumultuous end of apartheid, Johannesburg has – in the words of Surborg (2012, p.118) ‘(re)affirmed its position as the leading city in southern Africa and perhaps all of Africa south of the Sahara’. Concurrent with Johannesburg’s evolution within the global economic architecture, where it is now a command and control centre for capital operating throughout southern Africa (Rogerson and Rogerson, 2015), have been substantial modifications to settlement patterns and the city’s built environment. Micro-spatial restructuring together with city building strategies that, as Herbert and Murray (2015, p.476-477) note, ‘ha[ve] been increasingly left to the competitive anarchy of unrestrained market forces’, have led the city to become spatially fragmented and increasingly polynucleated. Johannesburg’s patchwork of low-density sprawl and high-density edge nodes is a direct result of the post-apartheid dominance of real estate capital over municipal planning authorities in shaping the built environment within the context of a landscape predominantly informed by apartheid planning principles (Herbert and Murray 2015; Rogerson and Rogerson 2015). Murray (2008, p.xv) notes that post-apartheid city building has effectively ‘partitioned’ the city and in ways reinforced and perpetuated the old patterns of spatial exclusion, though this has been done not through specific policy but rather as a function of the housing market and the nature of state-led housing provision, which often builds settlements far from areas of economic activity (see Chapter 3 for more detail).

It is into this context that the Modderfontein New City project was launched in 2013. Modelled on ‘New Town’ developments found throughout China<sup>104</sup>, the Modderfontein project sought to build on the success of Gauteng’s privately-developed urban integrated megaprojects (UIM) (Shatkin, 2011) like Waterfall City and Steyn City, to build the ‘New York of Africa’ – a high end, globally connected urban district that would ‘become a hub for Chinese firms investing in sub-Saharan Africa’ (SCMP, 2013). Developed by Zendai, a Shanghai-based, Hong Kong-listed firm, the New City was

---

<sup>104</sup> These are master-planned, mixed-use mega-development projects which cater to upscale commercial and residential usage and exhibit deep linkages with the global economy (Wu and Zhang, 2007).

designed to exploit growing politico-economic linkages between China and South Africa. As per Zendai CEO Dai Zhikang, Modderfontein would be the ‘future capital for the whole of Africa’ (Times Live, 2015 quoted in Carmody and Owusu, 2016, p.67).

The Modderfontein New City project was driven by Zendai’s economic imperatives, namely brand expansion and capital accumulation. Zendai is a relatively small private company<sup>105</sup>, with few visible connections to the Chinese government (Interview, Heartland, February 2018, Durban). As such, initial project formation was predominantly driven by commercial considerations, as opposed to the confluence of commercial and geopolitical/geoeconomic factors seen in the other Sino-African megaprojects studied throughout this thesis. In terms of investment type, the Modderfontein project can be characterized as a purely market-seeking initiative (Dunning and Lundan, 2008). However, it is important to consider that Zendai’s imperatives were heavily influenced by a variety of state-led push and pull factors including the facilitative internationalization measures of the ‘Go Out’ initiative (in terms of access to state-backed credit) and restrictions placed on domestic developers by the Chinese state.

Despite being a private company, Zendai sought to leverage ‘South-South’ political linkages and state support in its attempts to secure backing for the project. Specifically, the company wanted to utilize the mechanisms for facilitation of international expansion established by the Chinese state (e.g., preferential financing, high-level discursive support). However, as one high-ranking executive involved in the project acknowledged: ‘we always thought there was [political support] but it never materialized’ (Interview, Heartland, January 2018, Durban). While Zendai was able to purchase the site with funds issued by Bank of China (BoC), and eventually sold the property to a state-owned asset management corporation, the Modderfontein project never received the discursive support or political backing from the Chinese state bestowed on similar SOE-operated megaprojects like the Kilamba Kiayi New City in Angola. Of the three projects studied for this research, Modderfontein was the only one that did not receive this type of backing. Indeed, it was never mentioned in an official capacity by state elites at either the 2015 FOCAC, or any of the BRICS conferences.

---

<sup>105</sup> At the time of the sale, Zendai ranked 630<sup>th</sup> on the Hong Kong exchange’s listings by market capitalization (HK\$3.2) (Hogg, 2013).

Zendai likewise planned to use the aspirations of Gauteng province to bring in large-scale investment in order to facilitate project development. Gauteng has a history of effective sub-national economic planning schemes, and a variety of large-scale projects have been built under the province's authority through meso-institutions<sup>106</sup> (see Rogerson, 2004). Therefore, the company and its international team of consultants made the decision to seek support and funding from Gauteng province as opposed to the city government of Johannesburg (Interview, Heartland, January 2018, Durban; Brill, 2018). One city planner surmised that Zendai's top officials based the way the South African state would behave on their experiences with the Chinese government, and thus misunderstood the linkages needed to gain project approval (Interview, City Planner, October 2017, Johannesburg). Similarly, a Zendai employee stated that 'there was an assumption that if you go to Province and get buy-in politically at provincial level it will trickle down - that's how it would work in China' (Brill and Reboredo, *forthcoming*, p.14). This is understandable given that from the outside the provincial government appears to be at a higher 'level' than the city. However, recent regulatory changes, including a 2010 ruling that ended provincial channels of planning approval (Ballard and Harrison, 2019) meant that it was in fact the city government that ultimately had the authority to issue planning permits (Brill, 2018). Zendai's entry into the South African market was thus conditioned by two broad factors: the requirement to secure state support, and its lack of experience/knowledge of local market conditions.

Similar to Waterfall City (for more on Waterfall see Murray, 2015), Modderfontein was to be a master-planned greenfield investment designed to allow the developer to bypass public oversight and regulation. It therefore represented a form of 'ex-urbanization' – or the construction of an entirely new city which is unburdened by crime, congestion, or poverty (Carmody and Owusu, 2016, p.67). However, the project was hindered from the start by competing visions between the developers and the city of Johannesburg which resulted in difficulties securing both the further investment needed to develop the site and the necessary support for large-scale urban construction. Compounding these issues, a host of backroom problems and a change of ownership midway through the project (to a

---

<sup>106</sup> These are institutional arrangements operating at the regional or provincial level, between (and connecting) the macro- and micro-levels.

Chinese SOE) led to the eventual sale of the site to another (South African) developer, who abandoned the original vision and is instead building a gated-development style housing project (Ballard, Dittgen, Harrison, Todes, 2016; Brill, 2018; Brill and Reboredo, 2018; Interview, Heartland, February 2018, Durban; Interview, MT, September 2017, Johannesburg).

The Modderfontein project and its ultimate demise highlight both the uncoordinated nature of Chinese commercial expansion, as well as the difficulties that firms, especially those without political support from the Chinese state, face when entering the South African market via a megaproject framework. It also underscores how dysfunction, institutional misalignment, and contradictory visions of development between levels of government (essentially context-specific conditions) can significantly hinder megaproject implementation and construction. As Ballard et al. (2017, p.115) contend, the state can play a variety of roles in megaproject development, and the relationship between private and public interests is 'often blurred or highly complex'. In this case, contradictory stances on the project between the provincial and city governments, reflecting their diverging developmental visions in terms of greenfield v. brownfield development, led to significant confusion amongst the project staff (Interview, City Planner, October 2017, Johannesburg; Brill, 2018). Borrowing from Horner's (2017) terminology, the province sought to play a facilitative role in the project, while the city government instead positioned itself as a regulator in order to ensure that its own plans were integrated into the development.

This chapter will explore the logics, drivers, and developmental mechanisms behind the Modderfontein New City. It will argue that despite the project receiving little support from the Chinese state, it was ultimately the divided response of the South African state, combined with Zendai's internal dysfunction and insistence on following its original vision for the site even when it became evident that this was commercially unviable, that ultimately doomed the project to failure. The remainder of the chapter will be divided into 3 sections. The first will briefly analyse the trajectory of Johannesburg's built environment and its spatial restructuring from the apartheid period to the present. This will contextualize the development of UIMs, including Modderfontein, and elucidate why Zendai believed there was a market for the proposed development. The second section will detail the project's specifications throughout the different iterations of its masterplan. The final

section will analyse the project's specific logics with a focus on how the inter-governmental disagreements affected overall support for the development on the part of the South African state. It will similarly examine the general disinterest shown by Chinese state-owned enterprises and high-level Chinese officials. Finally, this section will detail the project's ultimate collapse and what it reflects about the politico-economic dynamics of the Sino-South African relationship.

### **6.1 Johannesburg – From Apartheid to ‘World Class’ City**

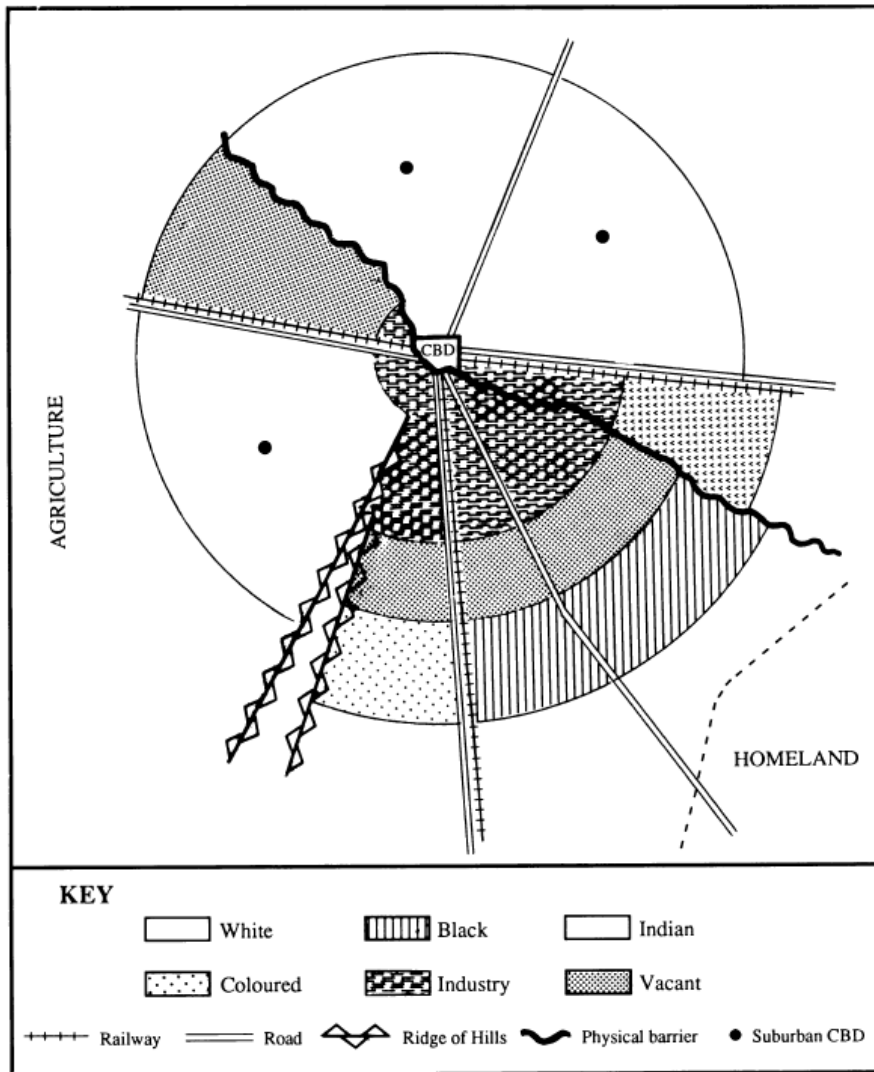
Under the Nationalist government, the central state exerted extensive control over patterns of urban growth and city planning was among the primary instruments through which *apartheid* was instituted (Turok, 1994). Beginning with the Group Areas act of 1950<sup>107</sup>, South African planners were required to enforce racially-exclusive zoning patterns as part of broader apartheid legislation. As Turok (1994) explains, the singular goal of apartheid spatial planning was the separation of the races, and development was heavily regulated by the central state in order to ensure consistent implementation of racial policy. As such, the style of city governance during the formative apartheid years was largely centralized, with strong administrative controls. The form of the city was essentially dictated from above, with planning success gauged by how closely reality could be made to conform to crude, racially-based urban zoning schemes (see Figure 6:1 for an example). In this way, the form and function of the built environment was incorporated into the logic of

---

<sup>107</sup> Which forced individuals of different races to reside in separate areas.



racial separation (Murray, 2008).



**Figure 6:1 General Apartheid-era Racial Zoning Model (Turok, 1994).**

Black South Africans were barred from owning property and forced into state-owned townships on urban peripheries. Forced removals like those undertaken in Sophiatown (Johannesburg) or District Six (Cape Town) were quickly followed by restrictions to prevent or reduce black urbanization. Moreover, buffer zones were created between communities to reinforce exclusionary principles (Turok, 2011). Housing allocation was tied to employment and the state refused to recognize black South Africans as permanent urban inhabitants, allowing for the forcible expulsion of thousands of

residents to the ‘homelands’ when deemed necessary (Turok, 2014, p.246). In the state-administered townships, investment was kept low, and only rudimentary (at best) services provided. Township residents had no control over planning or management and basic functions were delegated to the (white-majority) city councils (ibid.).

The economic geography of the apartheid city was similarly designed to maximize exploitation and economic activity was generally concentrated in the white areas of South African cities. To protect white-owned firms, black South African’s were prohibited from engaging in formal entrepreneurial activities in the townships. A 1987 study estimated that the approximately 300,000 Soweto residents who worked in central Johannesburg spent 70% of their income in the central business district (CBD) and accounted for 70-80% of total purchases in the area (Swilling, Cobbett, and Hunter, 1991, quoted in Turok, 2014, p.253).

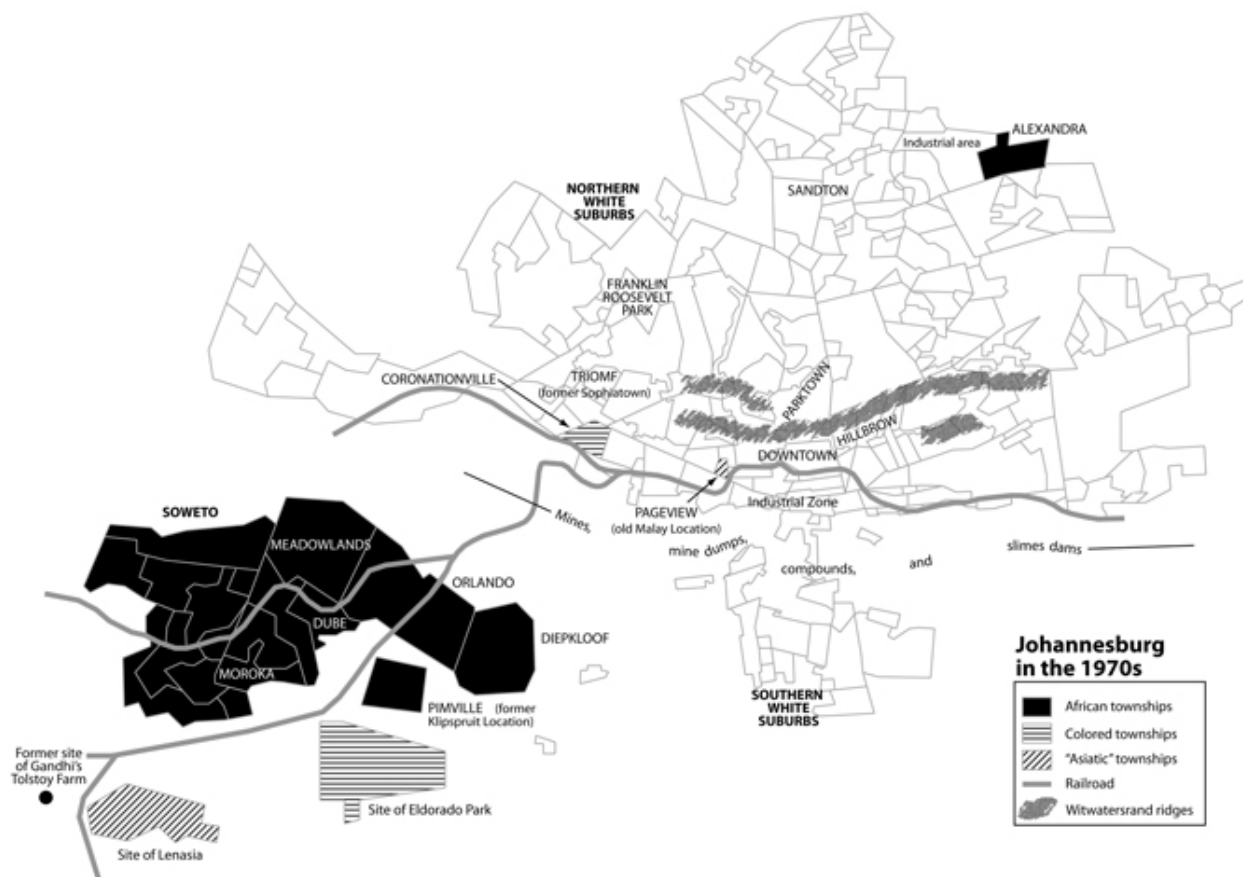


Figure 6:2 Johannesburg's Racial Zoning Patterns circa 1970 (Nightingale, nd).

As Figure 6:2 shows, White suburbs were zoned almost exclusively north of the central business district (CBD), beyond the Witwatersrand ridges, while the majority of black South Africans were forced to settle in Soweto, approximately 12 miles south-west of the centre but separated by a slew of mines and their toxic tailing disposal dumps. While post-apartheid planning has sought to suture together the different parts of the city, apartheid-era residential patterns continue to inform real estate markets as they were firmly entrenched by the time of the democratic transition (Cirolia and Smit, 2017).

Beyond settlement patterns, apartheid policy likewise shaped the regulatory and administrative mechanisms of South African cities. The 1970s saw the creation of local councils for each racial group, producing a proliferation of public authorities and the fragmentation of administrative powers. However, the new authorities remained tied to central legislation and local planning was confined to narrow concerns including land use and physical control (Turok, 2014; Ballard et al., 2017). The ostensible devolution of administrative powers led to poor management, largely due to the inexperience of new councils, and undermined planning efforts for areas of need (Turok, 2014). Johannesburg was no exception and prior to the Local Government Transition Act (LGTA) of 1993, the city was governed by 15 racially defined local councils, 13 of which had their own operating budgets (Murray, 2008, p.85). Since the end of apartheid, Johannesburg's regulatory regime has changed several times, something which caused significant confusion for Modderfontein's international consulting teams who came in with expectations based on their previous projects in the Global North (Brill, 2018).

The gradual loosening of apartheid spatial regulations in the mid-1980s led to what Rogerson and Rogerson (1996, p.86) term the 'deracialisation of space' - essentially large-scale spatial changes including an influx of migrants into the inner city, as well as the beginning of white capital flight towards the northern suburbs. This restructuring occurred in the context of broad economic decline and coincided with the loss of manufacturing employment detailed in Chapter 3. Johannesburg, along with South Africa as a whole, entered the 1990s in crisis; informal urbanization was accelerating, the economy was stagnant, and unrest was mounting.

Turok (2014) describes how the urban legacies of apartheid spatial planning can

largely be broken down into four categories: economic costs due to the creation of barriers to trade and employment, the exacerbation of social inequalities, inefficiencies in the public sector caused by the proliferation of local authorities, and racially-motivated land-use patterns which promote urban sprawl and create massive discrepancies in living standards. Each of these would put severe pressure on Johannesburg as the city entered the post-apartheid era.

### *6.1.1 The Post-Apartheid City*

As Murray (2008, p.6) notes, Johannesburg's spatial transformation after apartheid has not been linear; rather, it has unfolded 'in fits and starts, where regeneration and ruin have proceeded in tandem as distorted mirror images of each other'. Following the democratic transition, city planners largely sought to transform Johannesburg by connecting the patchwork of segregated suburbs through the 'one city' idea, which had become integral to urban anti-apartheid struggles throughout the 1980s (Ballard et al., 2017, p.18).<sup>108</sup> Following the LGTA, the 15 separate administrative bodies were consolidated into seven administrations. In 1996 these were subsequently reduced to a single entity, the Greater Johannesburg Metropolitan Council (GJMC), which itself had four metropolitan local councils (MLCs). Yet despite the gradual consolidation of administrative power, the remaining bodies were hampered by a lack of coordination, duplication of powers, and overly bureaucratic decision making (Murray, 2008, p.85-86). Understanding that spatial transformation was necessary to ensure the new government's objectives, the state introduced and implemented several key policies. As Siyongwana (2005, p.6) explains, under the South African constitution, municipalities must take responsibility for socio-economic development and contribute to the creation of employment and infrastructure provision. Additionally, in 1995 the Development Facilitation Act (DFA) was passed (Act No. 67 of 1995). The DFA was meant to provide the framework through which South Africa's cities would be transformed (Cirolia and Smits, 2017). While the act was principally concerned with the promotion of efficient and integrated land development, it also sought to:

---

<sup>108</sup> Political opposition to apartheid manifested largely as an urban phenomenon (Robinson, 2008).

*‘...Introduce extraordinary measures to facilitate and speed up the implementation of reconstruction and development programmes and projects in relation to land; and in so doing to lay down general principles governing land development throughout the Republic; to provide for the establishment of a Development and Planning commission for the purpose of advising the government on policy and laws concerning land development at national and provincial levels’ (DFA, 1995).*

In the words of one city planner, ‘after 1994, Joburg (sic) was a bit of a mess and the DFA allowed for the province to approve projects’ in the hopes of accelerating spatial transformation (Interview, City Planner, October 2017, Johannesburg). The DFA would have far-reaching consequences as it was the mechanism that led to the approval of Waterfall and Steyn City (both of which sit on provincial land), though it had expired by the time Zendai attempted to negotiate land rights with the province. The DFA was followed by the Municipal Systems Act (No. 32 of 2000), which outlined an integrated approach for addressing administrative system weaknesses (Binns and Nel, 2002). However, as Cirolia and Smit (2017) argue, despite the variety of planning tools created by the state, the lack of coordination between local and provincial departments has remained a major issue.

Throughout the democratic era, local government has sought to integrate Johannesburg’s built environment via the development of affordable public transport, mixed use development, and urban infill (Ballard et al., 2017). However, the spatial legacies of apartheid (largely in the form of the aforementioned settlement patterns and administrative mechanisms), together with economic development and discursive frameworks focusing on entrepreneurially-led economic growth, ‘world-class’ city branding, and the development of finance, insurance, and real estate (FIRE) sectors, have largely impeded these efforts and resulted in a spatially fragmented and multi-nodal city. As per Murray (2008, p.85), post-apartheid municipal authorities have faced an ‘uphill battle’ against property owners whose decisions are governed by profitability above all else.

Rogerson and Rogerson (2015) argue that Johannesburg’s economic and spatial

restructuring since 2000 must be viewed within the context of urban entrepreneurialism. Mirroring South Africa as a whole, the city's tertiary sector has been strengthened while labour-intensive manufacturing and primary sector activities have declined and shifted towards decentralized nodes. The city's spatial restructuring has been rapid and largely occurred in the form of horizontal expansion, edge city developments (Sandton, Midrand, Fourways), and rapidly urbanizing cluster points (Ilovo, Sunninghill, Melrose Arch) (Todes, 2012; Parnreiter, Haferburg, and Oßenbrügge, 2013; Murray 2013). Transnational economic activity has shifted towards the northern suburbs (including large-scale Chinese state-owned enterprises (SOEs) using South Africa as their continental hub) and strategic clustering has intensified with the construction of the Gautrain in the early 2010s (Parnreiter, Haferburg, and Oßenbrügge, 2013), a fact that Modderfontein's developers sought to exploit through its strategic location between these nodes and OR Tambo International Airport. Murray (2008, p.11) argues that the profit-driven approaches of property developers have not only 'contributed to the spatial divisions inherited from the apartheid past but also introduced new kinds of cleavages that have reinforced the yawning gap between affluence and impoverishment'.

It is into this context that Johannesburg's contemporary housing megaprojects, both public and private, have emerged. While both the state and private developers characterize megaprojects as their preferred housing delivery system; public megaprojects, including the 'new cities' discussed in Chapter 3, are inherently different from their privately-built counterparts. While a variety of private developments have been planned (e.g., Steyn City, and Lanseria Airport City) throughout the Johannesburg metropolitan area, the most well-known is Waterfall City. Located north of Sandton in the Midrand area, Waterfall is controlled by a single real estate developer as a 'distinctive kind of extraterritorial enclave' that exists outside 'normal' planning regulations (Murray 2015, p.506). Built on privately owned land and financed by a consortium of developers, Waterfall City is an example of masterplanned, highly regulated, urbanization - though it is exceptional in its size and scope. As Murray (2015, p.510) notes, 'the underlying logic behind the holistic master plan is to build enough complexity and variety into its overall design to provide a distilled version of what can stand for genuine urbanity within its spatial boundaries'. Since its completion, Waterfall has become something of an aspiration for Johannesburg's real

estate industry (Brill and Reboredo, 2018). Modderfontein was designed to follow in its footsteps and create the same sort of ‘pre-packaged urbanity’ while simultaneously attempting to leverage the instruments, actors, and discourses of Sino-South African cooperation.

## **6.2 Project Background and Specifications**

The Modderfontein area has a modern history of habitation dating back to 1894. Founded as the home of the African Explosives and Chemical Industries (AECI) dynamite factory, the site has historically been governed as an ‘almost private settlement’ (Brill and Reboredo, 2018, p.13) - essentially existing outside of the standard planning regulations of the broader city. With the factory actively producing nitro-glycerine until the 1990s, most of the area was left relatively undeveloped so as to form a buffer zone which would shield the rest of the city from potentially dangerous explosions. Today, Modderfontein is surrounded by a hodgepodge of urban spaces including townships like Klipfontein and Alexandra, and suburbs like Kempton Park and Edenvale and occupies the strategic space between Sandton and O.R. Tambo International airport (Ballard et al, 2017).

Between the factory’s closing and the site’s sale to Zendai; Heartland, AECI’s real estate subsidiary, had been developing small parcels in piecemeal fashion. However, given its historical usage<sup>109</sup> and relatively peripheral location, it wasn’t until the construction of the Gautrain that land values in the area began to rise. As Ballard et al (2017) note, Modderfontein’s undeveloped land allowed the rail systems’ developers to lay track above ground. In return, AECI negotiated the right to establish a station at a future point, connecting the site to the city as a whole. With Gautrain services between the airport and Sandton beginning in 2010, the Modderfontein site assumed a more central role and real estate firms began considering it for large-scale development. The possibility of turning the site into an economic hub enticed developers, and as per a Heartland executive it shifted the time frame of development from ‘5-10 years down the line’ to ‘at or near realizable’ (Interview, Heartland, January 2018, Durban).

In 2011, Zendai had begun looking for overseas investment opportunities. This was

---

<sup>109</sup> Which according to one academic has contaminated some of the surrounding lands, though its ‘never been revealed to what extent’ (Interview, Academic, October 2017, Johannesburg).

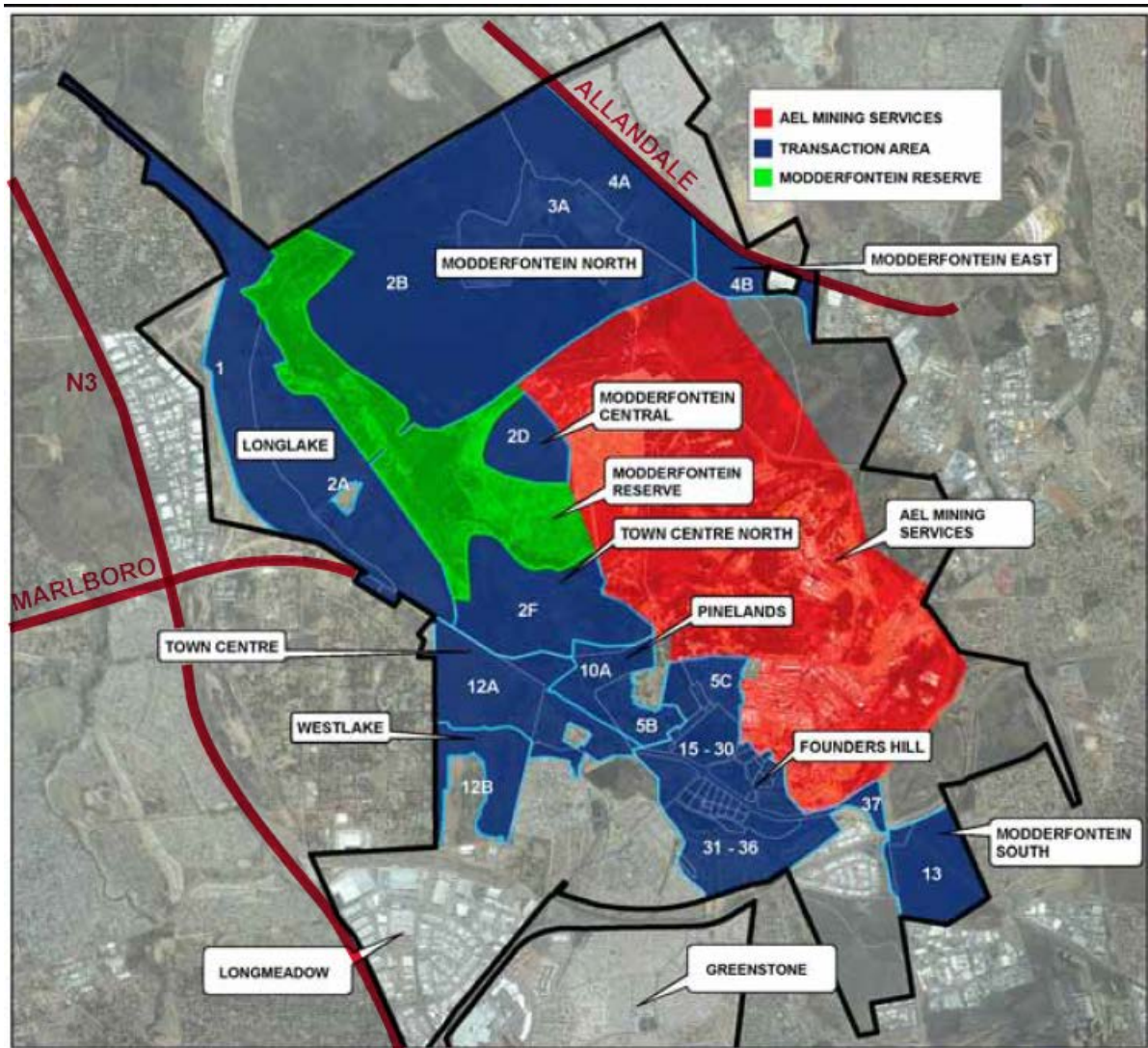
largely driven by their internal commercial and accumulative needs as CEO Dai Zhikang believed that property purchase restrictions put on developers by the Chinese state meant that internationalization was necessary for continued expansion (Steyn, 2013). While instituted to cool down the overheated domestic real estate market, the restrictions can be characterized as a ‘push’ factor for private real estate capital as they hindered the accumulation strategies of medium-sized domestic firms, precipitating internationalization that would not have otherwise occurred. The necessary conditions for Zendai’s expansion were thus created by this ‘push’ alongside the ‘pull’ (in the form of access to state-backed financing) of the mechanisms of commercial internationalization instituted by ‘Go Out’.

While Zendai is a private company, it was able to tap into at least part of the Sino-South African developmental apparatus by securing purchase capital from Bank of China with performance guarantees from Standard Bank of South Africa, which itself is partly owned by the Industrial and Commercial Bank of China (ICBC)<sup>110</sup> (Interview, Heartland, January 2018, Durban; AECI, 2013). Though the terms of the loans were never released, the sale was negotiated over the course of several years and finalized in 2013 for approximately R1.6 billion. In the end, approximately 1,600 hectares of AECI’s surplus land in Modderfontein, as well as Heartland itself, was sold to Shanghai Zendai Property Limited (AECI, 2019).

---

<sup>110</sup> In 2007, ICBC acquired 20% of Standard Bank for \$5.5 billion, at the time the largest out-bound investment by any Chinese enterprise (Wright, 2017). The main purpose given for the acquisition was to facilitate Chinese investment into the country.





**Figure 6:3. Area Sold to Zendai by AECI (AECI, 2013).**

In terms of UIMs, Zendai was inexperienced and had never attempted a project of this size. Founded in 1992 by Dai Zhikang, the company split its focus between financial services (e.g., advisory and consulting, enterprise assets management, and merger and acquisitions) and real estate. It emerged as a player in the Chinese real estate market with the development of Pudong in the early 2000s and was involved in a variety of projects including large-scale development's like Thumb Plaza and the Himalayas Centre in Shanghai (Zendai, 2017). Modderfontein was to be the company's centrepiece project for its internationalization efforts and its second venture outside of China, along with a smaller

project in New Zealand.<sup>111</sup>

Taking inspiration from Chinese ‘New Town’ designs and embedded into transnational narratives of smart/sustainable urbanization (see Brill, 2018), the original vision for Modderfontein called for the construction of a ‘new urban district’ which included 55,000 housing units, 1,468,000 square meters of office space in a new CBD, hospital and medical facilities, schools, and all the other amenities of urban life in a ‘cradle-to-grave’ package. Like Chinese ‘New Towns’, Zendai conceptualized Modderfontein as a growth pole with deep linkages to the global economy. However, unlike in China where this form of suburbanization has become a tool for the mobilization of state capital through the entrepreneurial activities of municipal and provincial governments (Shen and Wu, 2007), Zendai would take the lead on the project.

To design the masterplan, Zendai’s subsidiary, ‘Zendai South Africa’ hired a team of international consultants. As Brill (2018, p.4) notes, Zendai chose to hire consulting teams that were ‘deliberately global’, that is they were ‘not London teams but rather people who had extensive experience working on large-scale projects in various cities throughout the world’. This was to prove vital as the teams’ unfamiliarity with South African real estate practices and Johannesburg’s regulatory regime led to decisions taken throughout the masterplanning process which would ultimately cause significant delays. Additionally, the teams failed to adequately position the project in a way that would leverage the ‘South-South’ (e.g., state-state) linkages seen in similar megaprojects. For instance, advertising materials depicted the project as ‘Chinese’ yet failed to tie in to any of the country’s broader initiatives. While Modderfontein was not a BRI project, positioning it as such would likely have helped stir interest within the South African government as has happened with the Energy Metallurgical Special Economic Zone (see Chapter 7).

Zendai’s vision for Modderfontein was to create the ‘New York of Africa’<sup>112</sup> or ‘African Manhattan’ - an integrated multi-use megadevelopment which would serve as not only the base for its own expansion into the continent, but also ‘become a hub for Chinese firms investing in sub-Saharan Africa’ (Mahlaka, 2014; Wang, 2016). As Dittgen (2017)

---

<sup>111</sup> Zendai has since sold its stake in this project.

<sup>112</sup> A moniker which has been used to describe Johannesburg as a whole.

describes, the contemporary Chinese<sup>113</sup> spatial foothold in Johannesburg is characterized by disconnected clusters that are shaped by the nature of their economic activities. Small scale trading dominates the two Chinatowns (one of which is located near the centre and the other to the east), wholesalers operate just south of the CBD, and the large-scale corporate presence is located near Sandton. Zendai originally sought to suture the disconnect and envisioned itself as bringing in a sort of ‘transnationalism from above’ which would bring together these ‘Chinese’ elements (Dittgen, 2017, p.5). The plans for the site thus attempted to produce a hybrid space that was at once an enclave of Chinese corporate interests yet simultaneously ‘South African’ through its connections to the wider city (e.g., residential site for Johannesburg elites/role as command and control centre for South African firms who moved operations to the development).

In keeping with the grandiose theme of the original vision, the 1,600-hectare site was also to be turned into an ‘international cosmopolitan asset with cultural and art elements’ within a 10 to 15-year period and would create 200,000 jobs while catering for up to 100,000 residents. Zendai’s bold initial plans also called for: ‘integrated planning, rational layout, systematic construction, optimised allocation of various commercial and living functions and an integrated development environment [that is] aimed at making Modderfontein a multifunctional city’ (Zendai, 2015).

Seven sections would be developed in all: a finance and trade centre, industrial node, conference centre, education and training centre, sport and recreation facilities, and an African cultural theme park. Additionally, the site would host 10 hotels and 10 shopping centres (Lu, 2014). The original plans called for the construction of 3,000 residential units within 3 years in order to finance the remainder of the project, which would be finished in a 10-15-year time frame.

---

<sup>113</sup> In this case meaning both Chinese nationals working/residing in Johannesburg and ethnically Chinese South Africans.

## MODDERFONTEIN NEW CITY MASTER PLAN



**Figure 6:4 Modderfontein Master Plan (Zendai, 2015)**

It must be noted that not all of those involved found Modderfontein’s grandiose framing to be appropriate. As per one Heartland executive, Mr. Dai’s ‘New York of Africa’ quote ‘[effectively] killed the project’ as it not only put it on bad footing with the city government, who had not been informed about the plans for the site before its official public announcement (Ballard et al., 2017), but also solidified expectations that ‘were in no way possible to achieve’ (Interview, Heartland, February 2018, Durban).

## 6.3 Logics, Rationales, and Developmental Mechanisms

### 6.3.1 Primary Logics

The Modderfontein New City was driven by Zendai's commercial imperatives, namely brand expansion and the creation of new avenues of capital accumulation. As per Zendai CEO Dai Zhikang, the Modderfontein project was a 'move consistent with the company's long-term plan and... an important step in its overseas development plan', he added that given its strategic location, '[they] (Zendai) perceive after careful studies that Modderfontein is to Johannesburg and South Africa what Lujiazui [was] to Shanghai and China two decades ago'.<sup>114</sup> Building on this, he expressed that Modderfontein would serve to launch Zendai's investment into African mining, agriculture, and tourism (Lu, 2014). Thus, the project was purely a market-seeking initiative (Dunning and Lundan, 2008). However, it is important to note that Zendai's commercial imperatives were affected by a complex variety of push and pull factors emanating from the Chinese state. Indeed, on several occasions Mr. Dai admitted that the Chinese government's property purchase restrictions formed the main impetus for the company's international expansion (Steyn, 2013). These restrictions had been instituted in the early 2010s in order to dampen then-record housing prices believed to be caused by speculative sales and development. One Chinese consultant working in South Africa explained the thought process behind Zendai's strategy further, stating: 'in China the market is done' since the government 'doesn't allow the price to get too high'. The consultant similarly noted that there is a belief among Chinese real estate developers that the market in South Africa is 'very stable... like China 10 years ago', though this characterization was rejected by others interviewed throughout the research (Interview, Consultant, September 2017, Johannesburg; Interview, Academic, October 2017, Johannesburg; Interview, Analyst, October 2017, Johannesburg).

In Zendai's case, the 'push' was also accompanied by a 'pull' in terms of some state facilitation from the Chinese side. While there is no singular 'state-corporate' relationship and a variety of different types of support (e.g., moral, financial, discursive) exist for Chinese firms, Zendai was able to tap into the mechanisms of internationalization (though

---

<sup>114</sup> Lujiazui is Shanghai's financial district, home to the city's ultramodern skyscrapers.

whether or not these were connected to any specific initiative was not revealed during the research) at least partly as they bought the Modderfontein site using funds and guarantees from Bank of China and Standard Bank. Furthermore, when Mr. Dai left the project in 2015, he sold the entirety of his shares (which amounted to half of Zendai's total stock) to the China Orient Asset Management Corporation, an SOE.<sup>115</sup> However, high-level discursive support for the project was non-existent, and while media reports consistently presented Modderfontein as a distinctly 'Chinese project' (see Reboredo and Brill, *forthcoming*) it was never integrated into the Sino-South African developmental discourse as other large-scale projects tend to be. Unlike the other projects studied in this research, Modderfontein was not negotiated at the political elite level, rather it was proposed within the developmental frameworks set by the City of Johannesburg. In fact, broader Sino-South African linkages were a rarity in promotional materials. In one of the few examples, AECI termed the project a 'manifestation of BRICS strategy and China-SA trade partnership', though this was never followed up in the BRICS meetings themselves (AECI, 2013). None of the stakeholders or city officials interviewed throughout this research indicated that the project had received support from high-level officials, rather it appeared to be entirely disconnected from China's broader internationalization strategies, a rarity for a project of this magnitude. The specific reason for the lack of support shown by high-level Chinese officials is difficult to deduce, though as per a high-ranking Heartland official, the Zendai SA operation was led to believe that there would eventually be 'substantial' assistance from the Chinese government (Interview, Heartland, January 2018, Durban).

The possibility exists that there was little interest from the Chinese state in backing the project, or that they considered it unlikely to be completed from the start. Unlike the EMSEZ, the Modderfontein project does not fit into a pre-existing state initiative<sup>116</sup>, rather Modderfontein would likely be considered a commercial opportunity for Chinese construction firms at best and therefore lack the political significance required for state support. Additionally, despite the endorsement of Gauteng province, the New City was never presented as a Sino-South African developmental cooperation project. This contrasts

---

<sup>115</sup> Reportedly at a 30% premium (Interview, Heartland, January 2018, Durban)

<sup>116</sup> In the Musina case, the offshoring of productive assets it's a core part of International Capacity Cooperation (ICC). ICC is an initiative aimed at offshoring productive capacity in certain sectors in order to perpetuate China's investment/project-driven system of development – for more see Chapter 7.

with a similar Chinese-led project, the Kilamba Kiaxi New City near Luanda, which was marketed as a ‘social project’ and a ‘progress project’, and thus embedded directly into Sino-Angolan developmental cooperation efforts (Brautigam, 2014). However, in the case of Kilamba, the Angolan state played a significant role in facilitating the construction process by fast-tracking development, providing the site, and evicting the previous inhabitants (Cain, 2014). As noted below, rather than accommodating or fast tracking the project, the city of Johannesburg instead sought to force Zendai to integrate their plans into existing urban visions.

Zendai’s internal financial situation may have also played a role in the lack of support. As the Heartland executive noted, Zendai’s Altman Z-score, a credit-strength test that predicts a company’s probability of insolvency, showed that Zendai did not have enough capital to develop the land as it intended (Interview, Heartland, January 2018, Durban). Similarly, a 2012 Standard and Poor’s (S&P) analysis rated the company as being ‘vulnerable to adverse business, financial, and economic conditions’ while noting that their developments remained largely debt-funded and sales outlooks were weak (Steyn, 2013). Indeed, some have speculated that given Zendai’s lack of experience, their interest in Modderfontein may have been strategic (in terms of enlarging the company’s global profile) (Dittgen, 2017), or merely a public relations exercise to raise stock values (Interview, Heartland, January 2018, Durban). However, if this was the case, the plan was not divulged with the staff and many of them left the project disillusioned (ibid.).

As noted, the South African government’s reaction to the Modderfontein New City was dichotomous. The province, who in the words of one Johannesburg city planner ‘wants big projects’ (Interview, Planner, October 2017, Johannesburg), threw their full support behind it, pointing to a Stellenbosch University study which estimated benefits to the national economy being at approximately \$1.4 billion, with \$100 million generated for local government. In addition, the study hypothesized the creation of 22,000 jobs, with 65% going to semi- and unskilled labourers (Lu, 2014). As a Heartland executive quipped, ‘the South African [provincial] government saw jobs and investment’<sup>117</sup> (Interview,

---

<sup>117</sup> The executive added that one of Jacob Zuma’s nephews was attached to the project to ‘open doors at the provincial and national levels’ though this was not confirmed in subsequent interviews with the city or province (Interview, Heartland, January 2018, Durban).

Heartland, January 2018, Durban). However, the city government of Johannesburg, who only found out about the plans through the media, was much more sceptical and did not believe Modderfontein would fit in to their city-building vision of infill and brownfield development (Interview, City Planner, October 2017, Johannesburg).

In a misreading of the political and regulatory situation, the development team led by Atkins considered provincial support to be ‘vitaly important’ (Brill, 2018, p.5). However, as Ballard and Harrison (2019) note, in contemporary South Africa planning approvals are ultimately in the hands of municipal authorities, who are autonomous from the provincial government.

During the launch ceremony for the project, Mr. Dai appeared with Nomvula Mokonyane, then premier of Gauteng. Mokonyane asserted that the province would rally around the project for the benefit of those living in the local townships, and framed it through a developmental (and transformative) narrative, stating: ‘we are excited about the project. It is not all about job creation but extending ownership of property and business to black people who were previously marginalised’ (van Noorloos and Leung, 2017, p.9). Additionally, she played up Modderfontein’s Chinese connections, warning that ‘whatever has been said about the people of the Republic of China (sic) and their role in foreign countries has been done by those who always see the Chinese as competitors’ (Mahlaka, 2014). David Makhura, Mokonyane’s successor, likewise spoke highly of the project and incorporated it into the province’s ‘new towns and cities’ policy (Ballard, et al., 2017, p.131). In his 2015 State of the Province Address, Makhura singled out Modderfontein and stated that it ‘will inject R84 billion into the economy of the Gauteng City Region and is expected to create 150,000 jobs over the next twenty years’ (Gauteng Province, 2015). This support and promotion for the project can be considered an extension of the ‘entrepreneurial state’ approach and is in-line with the way other state entities (e.g., the IDC, LEDA) have sought to engage with Chinese looking to build large-scale projects. Moreover, this type of framing has been repeatedly used in order to attempt to create the policy space for ‘win-win’ embedding.

Despite the hype behind the ‘New York of Africa’, the city government of Johannesburg had little interest in the development. After the project’s launch event, city officials travelled to China to meet with Zendai’s board with the intention of informing



them of their concerns regarding the project. The city government believed that Modderfontein would ‘create an imbalance in the city’ (Ballard et al, 2017, p.131) as construction of new office space was largely unnecessary given that the inner city had a vacancy rate of 16.6% while the decentralized nodes were at nearly 10% (Carmody and Owusu, 2016). Paraphrasing a Heartland executive, city officials understood that Sandton ‘was born from the ashes of the old CBD’ and they didn’t want Modderfontein to bring about the end of Sandton (Interview, Heartland, January 2018, Durban). Rather than a new megadevelopment, the city was focused on creating more low-income housing and infill development as stipulated by the spatial development framework (SDF) The latest SDF, adopted in 2016, is a component of the Integrated Development Plan, which municipalities are required to follow. Unlike provincial documents, the city’s SDF does not mention Zendai’s project and instead conceptualizes Modderfontein as a viable ‘sub-centre’ as part of the Randburg – OR Tambo corridor. In this fashion it states that:

*Any future development in Modderfontein and surrounding land parcels will be considered in terms of: the development principles contained in the SDF and related policies; the need for expansion and the logical sequence of infrastructure programmes and availability of funding; connection to surrounding marginalised areas; and the development of inclusionary housing in the area (SDF 2040, p.119).*

One academic indicated that the position of city officials was that the ‘land [would] be developed when the market is there’ and as such they refused to grant Modderfontein special status (Interview, Academic, November 2017, Johannesburg). The municipal government’s decision to require Zendai follow its rigorous planning proposal procedures surprised and incensed top level executives at the firm (Interview, Heartland, January 2018, Durban). Given the level of promised investment, Zendai had expected that the city would do them certain ‘favours’ in terms of planning regulations and infrastructure provision (ibid) – meaning the creation of a ‘rhetoric of urgency’ with which to accelerate project development.

In South African UIMs, infrastructure is generally funded by the developers, who then receive a rebate from the city (Interview, Planner, October 2017, Johannesburg). In fact, as Murray (2015) describes, local developers have realized that by providing the

funding and expertise for infrastructure installation, they can greatly enhance their chances of winning approval for megadevelopments. In the Modderfontein case, Zendai did not have the capital to install the necessary infrastructure without the city's help (Interview, Heartland, January 2018, Durban). In an effort to overcome this issue, they first turned to South African construction companies, but these didn't have the assets. They then petitioned Chinese firms, with Dai personally overseeing negotiations; however, these were convinced that the market for the original vision simply didn't exist as the rate of sale was too low and the city already had excess office space (ibid.). As Lee (2017) describes, Chinese construction firms operating in Africa are generally motivated by commercial imperatives (as opposed to being influenced by political considerations), as such, if the Chinese firms saw that the project was commercially unviable, they would have no reason to participate. As a result of this failure to secure funding, Zendai's negotiations with the city bogged down. A series of planning workshops were scheduled throughout 2015 to deal with the city's specific apprehensions. Designed by Atkins to 'bring together different voices on the development' (Brill, 2018, p.4), the workshops were attended by major stakeholders, city officials, and local groups.

As has been documented elsewhere (Ballard et al, 2017; Dittgen, 2017; Brill and Reboredo, 2018), the city had a variety of concerns with the original vision for the Modderfontein project. Beyond the undermining of existing economic areas through the creation of superfluous office space, the project was not integrated into Johannesburg's Bus Rapid Transit (BRT) systems and was not connected to the surrounding city. While the Gautrain station would alleviate some concerns, daily transportation via Gautrain is not a viable strategy for most of Johannesburg's residents. Similarly, there was no policy support for a development of that magnitude in the area. As one city planner noted, the latest SDF dictates that housing delivery in the city must be within the urban development boundary (Interview, Planner, October 2017, Johannesburg). Secondly, Modderfontein was originally billed as a middle-class (and above) development and would not offer housing for the range of markets required by the city. City officials insisted that Modderfontein 'respond to the demographic reality of the city' (Ballard, et al., 2017) and demanded the developer include 5,000 affordable homes on the site. To ensure that these demands were feasible, the city government offered to contribute financial assistance for this part of the project (Brill and

Reboredo, 2018).

Despite the continuing workshops, it soon became clear within Heartland and Zendai that the city would not support the project as originally proposed by the developers. Despite the developers' wishes to circumvent the demands of the city, the national government could not get involved and the provincial government did not have the authority to work on or support the project (Interview, City Planner, October 2017, Johannesburg). Additionally, Zendai was losing money on projects in China where they had also misread the market (Ballard and Harrison, 2019). In January 2015, Dai announced he was selling his shares in Shanghai Zendai Property to China Orient Asset Management Co. (COAMC), arguing that:

*By nature, Zendai is a comprehensive investment firm, despite having impressed people as a property developer... but real estate was just a makeshift part of my business plan, and now it's time to go back to our core business, and that's finance" (Ren, 2016).*

One analyst interviewed for this research put it more bluntly, stating: 'Dai ran out of money' and they 'couldn't find investors' (Interview, Analyst, September 2018, Johannesburg). It is important to note that COAMC was originally a bad bank<sup>118</sup> for the Bank of China and continues to manage non-performing loans. In the words of a Heartland executive, 'that shows you what they thought of the project' (Interview, Heartland, January 2018, Durban).

The new ownership group, including new CEO Du Wenhui, were immediately concerned about the project and understood that it would not receive the necessary help from the municipal government, and that the market for such a project may have been overstated. Moreover, they realized that Modderfontein would have to continue operating solely as a commercial venture as it did not have strong backing from the Chinese state. To temper expectations, Mr. Du put out a statement saying that 'the project will be market driven, and depending on what our clients or developers want, the sky is the limit' (Cox, 2015), while adding that 'though the company has tried its best to push the process forward, the government is still acting very slowly with most applications, some of which

---

<sup>118</sup> An institution which isolates high risk and distressed assets.

may even take years' (Wang, 2016). Compounding these issues, Rand depreciation had led to a projected 600-million-dollar loss by December 2014. This led to Du stating that 'compared with three years ago, the rand has fallen 30%. When profits cannot make up for the currency loss, we can only slow down our investments' (ibid.).

In early 2015, not long after gaining control of the project, COAMC decided it either had to 'find a partner or sell the land off immediately' (Interview, Heartland, January 2018, Durban). By 2016, they had sold at least 17% of their shares to Chinese real estate giant Fuxing (Dittgen, 2017). Eventually, COAMC closed on a deal for the remainder of the project with M&T Development (a South African developer) for R1.6 billion. M&T will likely attempt to maximize the land's value and is currently building a residential community and a set of office parks which will open in stages throughout 2018/2019 (Interview, M&T, September 2017, Johannesburg).



**Figure 6:5 The M&T Development Site with Waterfall City in the Background (September 2017)**

### *6.3.2 Modderfontein and Sino-South African Relations*

The collapse of the Modderfontein New City exposes the intricacies of large-scale Sino-South African investment and highlights many of the patterns of engagement which can be observed throughout these projects. Broadly, these include substantial media attention and publicity, difficulty by Chinese actors in navigating South Africa's markets and regulatory environment, and a lack of policy coordination between South African government actors. As Dittgen (2017) rightly notes, Chinese economic operations must take into account host country politico-geographic realities, which makes it necessary to understand spatial configurations. Until now, the majority of megaprojects that are

successfully implemented have been SOE-driven, with significant backing from both states (see Chapter 5). As previously noted, the South African government prefers to engage with SOEs or government ministries (Interview, Analyst, October 2017, Johannesburg), while large-scale Chinese firms are heavily dependent on government backing and facilitation (Interview, Analyst, February 2018, Johannesburg). Without this support, projects (both state-led and private) face substantial difficulties given South Africa's dysfunctional patterns of governance, which have continued into the Ramaphosa era (Gopaldas and Ndhlovu, 2019).

The demise of the Modderfontein project should also be considered in the broader context of Chinese state support for outbound capital. As Gu et al., (2016) detail, for the majority of firms (even SASAC SOEs) the state merely creates the context and (sometimes) provide the means for expansion, as opposed to controlling interests and operations. Jones and Zeng (2019) similarly note that much of Chinese firm internationalization is in fact driven by commercial interests attempting to leverage the frameworks provided by the state to advance their own economic imperatives. Yet as detailed by one Chinese firm executive, there is significant competition among POEs to receive state support and funding, even when a project may have substantial elite-level political repercussions for the Sino-South African relationship (Interview, EMSEZ, March 2018, Johannesburg). The executive similarly noted that while Chinese FDI operations prefer to utilize Chinese-state funds, state banks and DFIs 'like to work through big partners in China' as opposed to smaller firms on the continent (ibid.). Indeed, not all firms are encouraged to 'go out', and the central government has stated that only those that meet certain internally determined criteria would receive support (Gu et al., 2016, p.26).

In the case of Modderfontein, it appears that the company did not have the right linkages or connections within the government to ensure support, and the vision simply wasn't compatible with the circumstances of Johannesburg's real estate market. A Heartland executive noted that while Dai Zhikang was the driving force behind Modderfontein, he did not seem to understand the context in which it was meant to be built. He stated:

*"A smaller scale project would've worked. A 600-million-dollar investment focused*

*around the Gautrain Station would've brought in 1.4 billion US, allowing for progressive development, but that's not what Dai wanted, he was obsessed with the vision"* (Interview, Heartland, January 2018, Durban).

## **6.4 Conclusion**

The Modderfontein project was envisioned as the launch point for Zendai's internationalization and highlights the opportunities that many Chinese real estate firms view Africa. However, the grand vision of bringing together private and state actors and establishing a Chinese 'New Town'-inspired, globally-linked financial capital was simply not appropriate for Johannesburg's urban realities. Zendai and its CEO, Dai Zhikang, sought to embed the project into transnational narratives of smart/sustainable urbanization for its international audience while simultaneously pushing a developmental narrative in order to gain the support of Gauteng province. Yet in using this framing and taking inspiration from UIMs, Zendai and their consulting teams misjudged the intentions of the City of Johannesburg and ultimately reduced their chances of receiving the necessary support. Likewise, Zendai misjudged the type of support it would receive from the Chinese government. While the company sought to leverage mechanisms established by the Chinese state for firm internationalization, it never received the sort of discursive and high-level support that has been bestowed to other Sino-South African or Sino-African megaprojects. It is difficult to know why the Chinese state decided not to support the project. Several factors, including Zendai's internal financial situation as evidenced by the company's Altman Z-scores and relatively low market cap, a lack of recognition for the project from the central South African state, or South Africa's peripheral location in terms of China's umbrella policy initiatives, may have played a role. This serves to highlight how the Chinese state's treatment of firms engaging in megaproject construction is determined on a project-by-project basis.

Modderfontein's ultimate failure also highlights the tenuous realities of megaproject construction in South Africa. While Zendai made a variety of strategic errors, including hiring consultants without adequate knowledge of the historical-geographic and regulatory realities of Johannesburg, ultimately it was the lack of support from the South African state, along with Rand depreciation (largely due to the Zuma administration's

economic mismanagement) that doomed the project. Even when the shares were sold to COAMC, a state-owned entity, it remained a purely commercial endeavour, with the asset management company eventually making the decision that recouping their investment was the best way to proceed. One city planner interviewed for this research noted that if the project had been proposed five years earlier, it might have succeeded given the ambiguity of administrative functions prior to the 2010 constitutional court ruling (Interview, City Planner, Johannesburg, October 2017). However, he also argued that ultimately, by going to the provincial government in search of backing, the developers failed to read the political climate correctly, though he conceded that it may not have mattered even if they had approached the city first given their strong developmental visions.



## Chapter 7 – ‘The Market is There’: The Energy Metallurgical Special Economic Zone

South Africa’s steel industry has long been a core component of the country’s system of accumulation. Historically conceptualized by the state as being of strategic significance for effective industrialization and (white) employment generation, steel was highly politicized and like auto manufacturing, received significant backing. Similarly, it was embedded into the minerals-energy complex (MEC) via input/output optimization (e.g., state-negotiated deals for iron ore and coking coal as well as state procurement for finished products). While the state-owned South African Iron and Steel Industrial Corporation (ISCOR) was privatized near the end of apartheid, support for the industry has remained robust throughout the democratic era through a variety of different means (e.g., access to subsidized financing and production incentives – see Roberts and Rustomjee, 2010). Yet with the emergence of China’s own heavily subsidized steel industry and its capacity for large-scale exports<sup>119</sup>, South Africa’s steel sector has fallen into crisis.

Between 2008 and 2015 steel production declined 33%, with exports falling by 32% (between 2010-2015). These conditions led to the closure of a number of foundries and key ferro-alloy producers Highveld and Samancor were forced into major restructuring. In total, the iron and steel industries lost approximately 30,000 jobs between 2011 and 2015 (TIPS, 2016). To stymie the crisis, the state was forced to impose a 10% tariff (the maximum allowed under WTO rules) on primary steel products. Today, South Africa continues to produce 4 to 5 million tons of steel a year (Interview, SAISC, October 2017, Johannesburg), yet the effects of the crisis linger, manifesting in the form of low demand, inefficiency due to aging plants, escalating costs, and an underdeveloped downstream industry beset by imports (DTI, 2018a). In the words of one analyst, the industry is ‘a mess’ (Interview, Analyst, November 2017, Midrand).

It is into this context that the nearly \$10 billion South African Energy Metallurgical Special Economic Zone (EMSEZ) – part of the broader *Musina-Makhado SEZ* has emerged (Winning 2018). The EMSEZ, which is currently the costliest and arguably most significant Sino-South African development project (given its role in furthering Sino-South

---

<sup>119</sup> As of 2017 China accounted for 49.2% of global steel production (831.7 million tonnes) (WSA, 2018).

African developmental cooperation), is conceptualized as an industrial/manufacturing hub with a focus on both steel and stainless-steel production. Like the Modderfontein project, its developmental path can be characterized as being ‘bottom-up’ as it was first proposed to the Limpopo Development Agency (LEDA) by a set of privately-owned Chinese firms, Hong Kong Mining Exchange Co. and Shenzhen Hoi Mor Resources. Both are chaired by Mr. Yat Hoi Ning (also known as Ning Yihai), who has served as the primary contact for LEDA throughout the negotiation and planning process. The firms largely employ Chinese nationals with several decades of experience in African extractives including projects in the Democratic Republic of the Congo (DRC) and Zimbabwe (Interview, EMSEZ, March 2018, Johannesburg). The original plan for the project could be thus characterized as a strictly commercial endeavour. However, as the project has evolved, interest from central government entities has grown and the EMSEZ has been absorbed into the Chinese state’s International Capacity Cooperation (ICC) (Sheng, 2019), a top-level geospatial policy designed to offshore production of certain goods to geoeconomically/geostrategically significant ‘partner’ states. As per Kenderdine and Ling (2018, p.43), ICC seeks to prolong China’s investment-driven model of development by moving output production overseas while ‘maintaining Chinese state control of the capital and supply chain’. As a result of this absorption, a number of large-scale Chinese SOEs, policy banks, and central ministries have become involved, adding an important diplomatic and geoeconomic element to the project.

At its core, the EMSEZ attempts to make use of purported economic complementarities, namely the South African state’s (specifically the provincial government of Limpopo) objectives and policy targets (e.g., mineral beneficiation, ‘reindustrialization’, and employment creation) and China’s need to shed productive steel capacity, through multi-axis strategic coupling (Carmody, 2017a). Concomitantly, the project reinforces high-level cooperation and expands/disseminates the discourse of developmental cooperation (South-South and ‘win-win’ cooperation) put forth by the Chinese state. In this fashion, it highlights several important facets of how development is accomplished within the context of Chinese-inflected globalization. Firstly, it is illustrative of how commercial activities can come to play a central role in China’s internationalisation strategies (Mohan and Tan-Mullin, 2018). Secondly, it exemplifies the pragmatism of

Chinese actors and how they can adapt their messaging to encourage host country cooperation. Finally, it shows how Chinese umbrella projects (BRI and in this instance ICC) can be consciously leveraged by host country governments in the pursuit of their own objectives and how this in turn territorializes the Chinese initiatives in host state systems (this will be explained in detail in Chapter 8).

As per Richard Zitha, a project executive, ‘this cluster provides a golden opportunity for our skills upgrading and technology transfer’ (Liu, 2016). Yet the project faces significant challenges if it is to be successful. As noted, South Africa’s steel industry has largely been in disarray since the 2015 crisis, and global steel overcapacity remains a substantial hurdle. Project executives interviewed for this research have stated that output will go largely towards the rest of Africa and China, yet demand has fallen throughout the continent alongside weakening commodity prices, and China remains a steel exporter. Beyond demand, certain project elements (e.g., the on-site power facility and potential rail linkages to the port of Matola) will need to be negotiated with South Africa’s parastatals, namely Eskom and Transnet. Given their historical preference for both valorising their own assets (for instance opposing rail lines linking extractive projects to ports owned by third parties) the parastatals will likely be opposed to the project’s current visions in terms of power generation and links to the global economy (Interview, CSIR, February 2018, Johannesburg).

The remainder of the chapter will be divided into four sections. The first will analyse the project’s specifications as well as describe how plans for the site have unfolded and evolved over the course of nearly a decade. This will contextualize the subsequent analysis. The second section will investigate the primary logics and imperatives from both sides with a focus on how the project has simultaneously been embedded into South Africa’s domestic development discourse and the mechanisms of International Capacity Cooperation. The third section will explore potential challenges to successful project implementation. Finally, part four will analyse how project development could affect the Sino-South African relationship.

## **7.1 Project Background and Specifications**

Located in northern Limpopo between the towns of Musina and Makhado (also

known as Louis Trichardt), the South African Energy and Metallurgical Special Economic Zone (EMSEZ) is designed to be a \$10 billion, 60 km<sup>2</sup> metallurgical cluster and industrial zone (DTI, 2018b). In the words of one high-level project executive, the ultimate goal for the EMSEZ is to create a ‘world class hub for manufacturing’ with a focus on stainless and shipbuilding steel (Interview, EMSEZ, March 2018, Johannesburg). The project is intended to function as one of three separate clusters which together will make up the Musina-Makhado Special Economic Zone; however, as of 2019 EMSEZ is the only cluster that’s moved beyond the planning and design stages.

As per a number of different stakeholders and officials interviewed for this research, the specific site for the EMSEZ was chosen due to its proximity to Limpopo’s coking coal reserves<sup>120</sup> as well as a general immediacy to the province’s other resources and the Zimbabwean and Mozambican borders, which officials noted would facilitate imports/exports (Interview, DTI, October 2017, Pretoria; Interview, LEDA, November 2017, Johannesburg; Interview, DTI, February 2018, Johannesburg; Interview, EMSEZ, March 2018, Johannesburg).

When asked why the firms were originally attracted to the site, an EMSEZ executive stated that they had been looking specifically for ‘hard coke’ and perceived that Limpopo had significant resource endowments that had not yet been exploited (Interview, EMSEZ, March 2018, Johannesburg). Moreover, he asserted that all the necessary materials and resources for steel production were within a 200 km radius and that water for the project would be easy to procure given the nearby location of the Limpopo river (ibid.). As per the EMSEZ website:

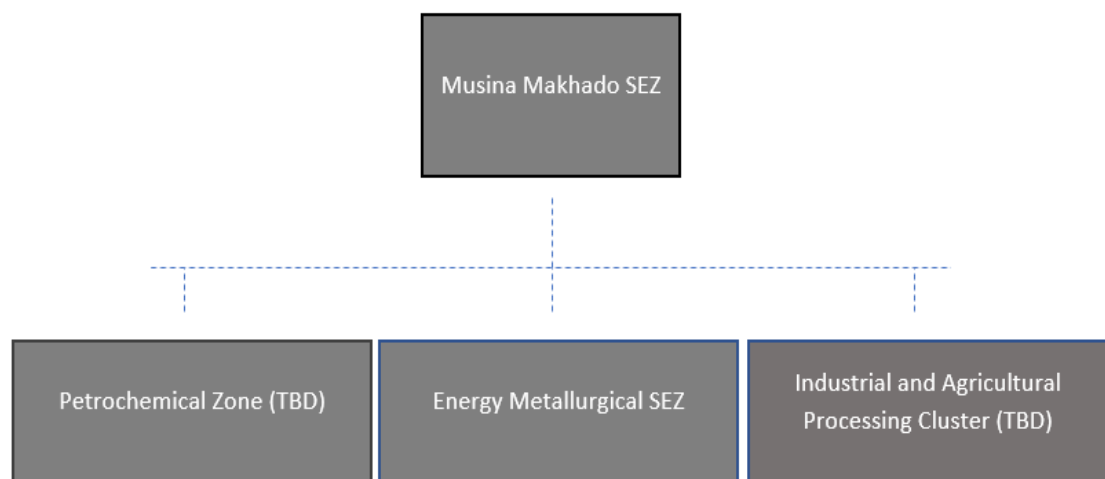
*Around the SEZ there are open pit coking-coal mines, with a deposit of more than 10 billion tons. South Africa has more than 83% of the world’s chrome resource and more than 81% of the world’s manganese resource. There are also other abundant mine resources used as raw materials for making stainless steel, such as iron ore, silicon ore, nickel ore and limestone, etc (EMSEZ, 2018a).*

Like other high-level state-to-state megaprojects, project specifics have largely been

---

<sup>120</sup> Coking coal is a necessary ingredient in steel production.

kept from the public. This has led to significant confusion as LEDA’s initial concept for the zone was that of an industrial and petrochemical centre which would also function as a ‘logistics hub’, essentially an export centre for neighbouring countries (Interview, CSIR, February 2018, Johannesburg). Some part of these early plans remain; indeed, while EMSEZ is to be the first cluster built on the site, the DTI has specified that the full SEZ will similarly seek to attract investment in ‘sectors such as Mineral Beneficiation, Agro-processing, Petro-chemical and Logistics’ which are to be part of the ‘zone complex’ (i.e., the full Musina-Makhado Zone – see Figure 7:1) (Interview, DTI, January 2018, Johannesburg).



**Figure 7:1 DTI Plans for Musina Makhado Special Economic Zone**

The other proposed clusters (if built) are to be separated spatially from the EMSEZ, with a site closer to Musina itself (and thus closer to the Zimbabwean border) hosting the future industrial and agro-processing clusters, and a third site near Makhado reportedly identified for petrochemicals (DTI, 2018d). In terms of administration, LEDA would function as an overseer, with each cluster’s day-to-day operations undertaken by distinct operators. In the EMSEZ case, the zone is to be run by the South African Energy Metallurgical Base (SAEMB), a subsidiary of Shenzhen Hoi Mor.

While the EMSEZ project has generally been referred to as the ‘Musina-Makhado SEZ’ by both the media and government officials, conceptualizing the full zone as a sprawling, multi-cluster industrial hub helps to explain some of the seemingly contradictory plans which have appeared in official documents. For instance, the pre-feasibility report prepared by the Mott MacDonald group for the DTI largely ignores the steel manufacturing centre, while the technical feasibility study highlights a proposed Carbon to Hydrocarbon (CTHC) facility (likely for the petrochemical site) (Mott Macdonald, 2015). Yet contemporaneous documents released by Hong Kong Mining Exchange instead focus on steel production and beneficiation. This has led to significant

confusion even within the government (Interview, CSIR, February 2018, Johannesburg).

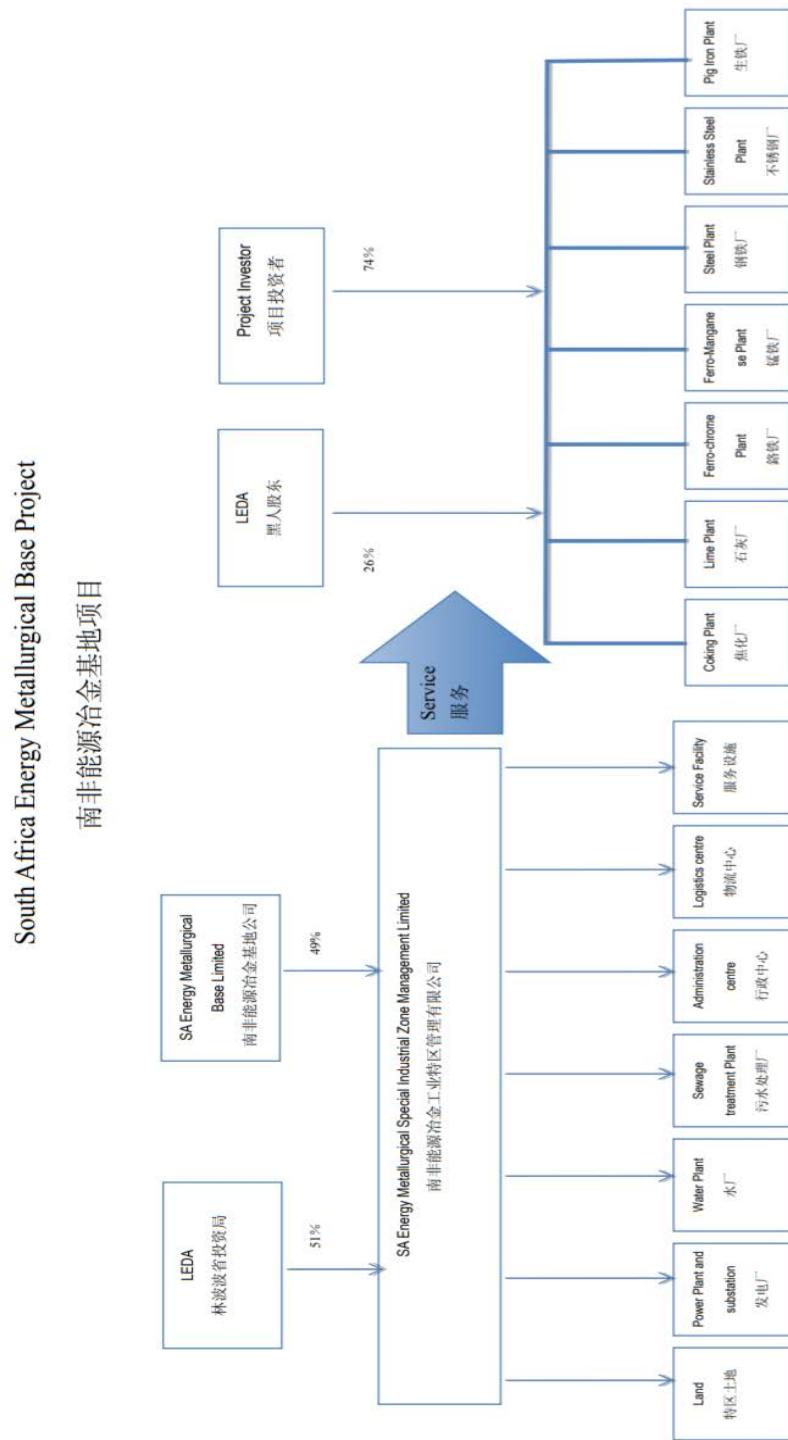


Figure 1:2 EMSEZ Initial Plan (HK Mining Exchange, 2014)

Contemporary plans for the EMSEZ site largely follow the model laid out in Figure 7:2, with LEDA CEO Ben Mphahlele noting that ‘there are [to be] four projects in the [EM]SEZ, namely the power plant, coking plant, alloy factory and steel manufacturing’ (SANews, 2018). Additionally, as per the subsequent December 2018 ‘SEZ coordination meeting’ held in Guangzhou, initial zone development will consist of a coking plant, a waste heat power plant, a high carbon ferrochromium plant, vanadium-titanium smelter and high-performance wear-resistant steel plant (EMSEZ, 2018b). The EMSEZ website explains:

*The advantage of energy and metallurgy integration of the involved items covered by SEZ Project is as follows: coking coal mine → coal washery → coking plant → power plant → ferroalloy plant → iron making plant → steel making plant, which form a connected sequence of energy and metallurgy production process (EMSEZ, 2018a).*

Supplementary plans for the site include an administrative centre with customs and taxation services, associated infrastructure including railways, road upgrades, and an integrated logistics centre (HK Mining Exchange, 2014). Pending full implementation, a ‘mixed-use’ living centre for workers which is to include apartments, hospitals, schools, shopping malls - what one EMSEZ executive described as a ‘steel city’, is also expected to be built (Interview, EMSEZ, March 2018, Johannesburg).

The executive noted that when undertaking a large-scale, politically sensitive project, the Chinese state ‘pushes you to do community stuff’ and that zone operators ‘must budget [their own funds] for social support’ (ibid.). This is consistent with the behaviour documented in other high-profile projects throughout Africa (Wissenbach and Wang, 2017). Likewise, a LEDA official maintains that they have ‘long term plans’ for the local community and will attempt to encourage substantial backwards linkages in order to ‘do more than just skills transfer and employment’ (Interview, LEDA, November 2017, Johannesburg). However, the official noted that it is ultimately the operator’s responsibility (in this case SAEMB) to develop zone policy and ensure compliance with local regulations (ibid.).



While general plans have slowly filtered out, the specifications for most on-site projects remain largely unknown to the public, which has led to significant conjecture and speculation. For example, while the latest development meeting (December 2018) contends that a waste-heat power plant<sup>121</sup> will provide energy for the site, plans announced during the 2018 BRICS meeting stated that a new coal power station would be built, with reports speculating that it would be a 4,600 MW station, nearly as large as Medupi and Kusile (which predictably led to a media frenzy around the project). Yet this is contradicted by the EMSEZ website, which states that a 3,000 MW coal power station will be built, and that COAL of Africa (now known as MC Mining) will provide the necessary materials. Ultimately, what is clear is that if current plans are successfully implemented, the site will have to produce power independently as LEDA officials believe that Eskom is unreliable and will not be able to ‘ensure a consistent supply of electricity’ for metallurgical operations (Interview, LEDA, November 2017, Johannesburg). As per a project executive, excess power is to go to the local community; however, regulations around independent power generation are stringent and will have to be negotiated with the parastatal (Interview, EMSEZ, March 2018, Johannesburg).

Local content in terms of construction inputs is currently arranged to be at 50% (Interview, EMSEZ, March 2018, Johannesburg), though this could change once project construction begins. As noted in Chapter 5, local content is a negotiated process agreed to on a project-by-project basis (Interview, DTI, October 2017, Pretoria).<sup>122</sup> This arrangement has been widely criticized by those in the steel industry. One steel executive asserted that ‘local content on Chinese projects is close to 0’, adding ‘they don’t buy anything they can make themselves’ and create very few backwards linkages (Interview, SAISC, October 2017, Johannesburg). While academic studies on Chinese projects in Africa remain scarce, the contemporary literature suggests that local content in large-scale Sino-African building projects is indeed limited, though likely not at 0. For instance, a recent study on the Standard Gauge Railway (SGR) in Kenya noted that cement producers were among the few local manufacturers supplying construction inputs despite an agreement which stipulated

---

<sup>121</sup> WHP captures heat discarded by existing industrial processes and uses it to generate power.

<sup>122</sup> It is important to note the local content requirements or policies are prohibited by the WTO. Despite this, they are widely used throughout the Global South.

that at least 40% of material should be procured from local sources. Inputs which could not be easily acquired in Kenya (rails, railway engines, construction machines) were shipped in from China (Wissenbach and Wang, 2017). In similar fashion, a study on a Chinese-financed gas processing plant in Ghana found that 60% of inputs are to be imported from China, which violates Ghanaian Local Content laws (Mohan and Tan-Mullins, 2018).

As with other South African SEZs, operations at the EMSEZ are to be incentivized according to the 2014 SEZ Act. Specifically, firms located within the zone will qualify for preferential 15% corporate tax rate, employment incentives, tax relief on imports, and a tax allowance for greenfield investments (DTI, nd). Per a LEDA spokesperson, each specific project on the site will be funded by different investors with ‘funds mainly com[ing] from China’ (Interview, LEDA, January 2018, Johannesburg). The spokesperson noted that LEDA will not fund any of the projects themselves, though they will cover infrastructure costs. While details on funding specificities remain opaque, project stakeholders have had meetings with both China Development Bank and the CAD Fund.<sup>123</sup>

## **7.2 Logics, Rationales, and Developmental Mechanisms**

The EMSEZ is arguably the most significant and high-profile project for Sino-South African developmental cooperation. Estimates for total project value range from \$3.8 billion to \$10 billion (Winning, 2018) and the venture has been embraced and promoted by high-level actors from both governments. In the words of one LEDA executive, even ‘the president of China knows about this project’ (Interview, LEDA, November 2017, Johannesburg).

Like the BAIC automobile plant (see Chapter 5), EMSEZ is a crystallization of a variety of commercial and (geo)political interests and imperatives emanating from both sides. Broadly, the project as currently envisioned is driven by the Chinese state’s need to offshore excess industrial capacity as fixed-capital investment under the rubric of its International Capacity Cooperation, as well as the South African state’s politico-ideological imperatives. Also like BAIC, development to date is illustrative of how South African actors attempt to leverage perceived opportunities in terms of Chinese investment

---

<sup>123</sup> It is important to note that both of these institutions are directly involved in the distribution of ICC-linked national funds (see Kenderdine and Ling, 2018).

and Chinese state support. Embedding has hitherto been accomplished via a developmental cooperation discourse, with the project being framed as a South-South, ‘win-win’ initiative.<sup>124</sup> As such, despite being of questionable economic viability (see below), project design and construction have been heavily facilitated by state-to-state linkages and networks.

The EMSEZ is unlike other megaprojects in the Sino-South African sphere in that the conditions for initial development were not facilitated by Chinese state actors<sup>125</sup>, who did not get involved until far later in the project.<sup>126</sup> Instead, it was small-scale private firms, owned by Chinese nationals with extensive independent experience operating in Africa’s extractive sector who initially identified the purported economic complementarities. In this manner, the zone exemplifies the uncoordinated and opportunistic nature of Chinese commercial expansion (see Chapter 8 for further discussion) (Jones and Zeng, 2019). In the EMSEZ case, the commercial logics of small-scale Chinese private capital have been absorbed into a larger, state-run project in the form of International Capacity Cooperation (Sheng, 2019).

### *7.2.1 Project Development Timeline*

Project development began with Hong Kong (HK) Mining Exchange Company, a privately-owned firm connected with Shenzhen Hoi Mor, who has operated in South Africa for a number of years and uses the country as its ‘hub’ in terms of logistics, procurement, and corporate administration (Interview, EMSEZ, March 2018, Johannesburg). They identified Limpopo for commercial expansion nearly a decade ago and had been attempting to build a project there since at least 2014, though their original idea was a power station (leveraging the areas coal reserves) rather than a metallurgical cluster (Moloto, 2014). Several years after initial contact with the Limpopo provincial government, HK Mining executives pitched an idea for a logistics and metals beneficiation zone to Limpopo

---

<sup>124</sup> Once again highlighting how the state can create spaces for Chinese-based capital to expand.

<sup>125</sup> In the Modderfontein case for instance, the initial sale was done through loans from Bank of China, with guarantees from Standard Bank.

<sup>126</sup> Though it is important to note that even the initial MOU signing ceremony between LEDA and private firms put forth an image of Sino-South African cooperation and took on the aesthetic of official state-to-state ceremonies. This speaks to an understanding by the private firms of what South African state actors are looking for in Sino-South African projects.

Development Agency (LEDA) officials at the African Mining Indaba<sup>127</sup> (Interview, EMSEZ, March 2018, Johannesburg). The primary stakeholders behind the firms then established SAEMB, which has since taken on an organizing role and holds the operator's permit for the metallurgical cluster (ibid.). When asked if this style of bottom-up planning was typical of South African SEZs, one DTI official noted that unlike how they're typically portrayed, SEZ projects are not 'top-down;' instead provinces can 'suggest ideas'. A different DTI official responded to the same query by stating that the SEZs take on a 'multifaceted approach' – some can be proposed by the investors themselves (Interview, DTI, October 2017, Pretoria; Interview, DTI, February 2018, Pretoria). These answers exemplify a growing pragmatism in the department.

LEDA, who had been eager to establish a SEZ in Limpopo (Interview, CSIR, February 2018, Johannesburg)<sup>128</sup> due to their preference for 'industrializing in a big way' (Interview, LEDA, November 2017, Johannesburg), jumped on the project, which then gained central state backing through the DTI. The DTI provides 'policy support' for the project (Interview, EMSEZ, March 2018, Johannesburg), which includes domestic regulatory backing as well as the inclusion of LEDA officials into 'roadshows' abroad.<sup>129</sup> The roadshows allow for project promotion, the signing of MOUs, and for the creation of 'high-level' relationships, which officials believe are important to strengthening Sino-South African developmental ties (Interview, DIRCO, October 2017, Pretoria).

When asked why this type of integrated development had never been attempted before despite the areas rich deposits, one LEDA executive replied: 'South Africa is not good with long term planning – not like China – planning in China is coordinated through the party structure – here there are many competing interests which make it difficult' (Interview, LEDA, November 2017, Johannesburg).<sup>130</sup> As per a different government official, plans for a similar zone had been floated throughout the previous decade, though it was ultimately decided that the project was not economically viable given import/export logistics (Interview, CSIR, February 2018, Johannesburg). Specifically, it was determined

---

<sup>127</sup> An annual mining conference.

<sup>128</sup> The original 2013 plan for Musina was to create a 'logistics' SEZ which would export to neighbouring Zimbabwe (Interview, CSIR, February 2018, Johannesburg)

<sup>129</sup> These are aimed at attracting investors to South Africa's SEZs.

<sup>130</sup> This quote similarly highlights how certain state officials conceptualize the Chinese development model (including its single party structure) as being conducive to development.

that it would be too expensive to build a rail line through the Great Escarpment and out to the port of Maputo. Additionally, the project faced pushback from Transnet, who would prefer not to transport commodities to a port they do not control.<sup>131</sup> When asked about this, a high-level DTI official noted that the EMSEZ ‘builds on [an] old plan’ but with ‘new thinking’ (Interview, DTI, February 2018, Pretoria). This type of mindset exemplifies how the introduction of large-scale Chinese capital has allowed South African actors to pursue economic plans that would otherwise not have been possible. However, whether or not the influx of capital leads to different results remains to be seen. While the rhetoric and ‘thinking’ behind the EMSEZ is distinct from that of the old project, it will likely run into the similar geographically- and market-specific challenges (see below).

### *7.2.2 South African Imperatives*

LEDA’s primary objectives for the EMSEZ are largely the same as those outlined by the Industrial Policy Action Plan (IPAP). These include the decentralization of industrial capacity and employment generation. Domestically, LEDA has embedded the project into the state’s developmental discourse, declaring:

*The metallurgical cluster zone of the SEZ’s primary focus will be the beneficiation of minerals endowed in the Vhembe district and its neighbouring areas. Coking coal and other minerals, which are key inputs into the steel and iron production process will be part of the upstream and downstream value adding process, in line with the country’s national industrialisation objectives and mineral beneficiation strategy (LEDA, 2017).*

A DTI official similarly explained that the complex will be more ‘involved’ in terms of beneficiation and value-addition than existing steel plants (Interview, DTI, October 2017, Pretoria). Beneficiation is a significant part of the department’s goal of ‘re-industrialization’ and its inclusion in this project is a further example of how the pivot to China and the attempted embedding of Chinese capital has allowed South African actors the space to pursue their specific developmental objectives.

Beyond these domestic goals, the project will attempt to cultivate cross-border

---

<sup>131</sup> Transnet owns and operates 16 port terminals in 7 major ports across South Africa.

trade. As per a LEDA executive: ‘the long-term plan is regional economic integration and development’ (Interview, LEDA, November 2017, Johannesburg). The steel to be produced on site will be of ‘high-grade’ and not made elsewhere in South Africa (ibid.). The executive noted that the thinking behind this is that for South Africa’s steel industry to expand, it needs to provide the primary inputs for SADC (and broader African) construction. This was echoed by a DTI official who stated: ‘the market is there, still a lot of steel consumption to be done’ (Interview, DTI, October 2017, Pretoria), and in DTI documents which conceptualize an opportunity for industrial expansion due to sub-Saharan African growth forecasts but warn of ‘strong supply competition’ as the region imports 2/3rds of its steel consumption needs (DTI, 2018a).

Throughout interviews for this research, both the DTI and LEDA maintained that for South Africa to develop as per the state’s plans it requires a primary steel sector as this not only provides large-scale employment opportunities but is considered a foundational piece for economic growth (Interview, DTI, October 2017, Pretoria; Interview LEDA, November 2017, Johannesburg; Interview DTI, February 2018, Pretoria). Indeed, the South African state has consistently maintained that a working steel industry is fundamental to manufacturing productivity and employment.

Presently, the steel value chain accounts for approximately 190,000 jobs (largely concentrated in iron-ore, steel making, and fabrication), while the top steel consuming sectors, which include mining, auto, and construction, account for 15% of South Africa’s GDP (DTI, 2018a). The DTI believe that the loss of primary steel production would preclude the country from using their advantages in terms of resources and material (ibid.). However, when asked if they were willing to nurture the primary sector at the expense of downstream producers - a common critique to government responses to the steel crisis, an official responded that they did not intend to, instead the DTI views the primary steel sector as the ‘anchor’ for secondary and downstream producers (Interview, DTI, October 2017, Pretoria).<sup>132</sup> Both the DTI and LEDA are thus keen to participate in China’s industrial cooperation, which exports capacity abroad with the goal of then reimporting finished

---

<sup>132</sup> The official did not explain this metaphor further. However, it is likely that he conceptualizes increased primary sector production as providing cheap inputs for downstream producers, thus strengthening the value chain.

goods back into China (Kenderdine, 2018). They deem that Chinese investment ‘gives [us] an opportunity to benefit and diversify our economy’ (Interview, DTI, October 2017, Pretoria). A different official argued that South Africa will never achieve transformation if the economy is ‘anchored around commodities’ and that inclusive growth will only occur through projects like EMSEZ that can create backwards linkages and accelerate technology transfer (Interview, DTI, February 2018, Johannesburg).

Former DTI head Rob Davies likewise stated that the project is ‘in alignment with the National Development Plan (NDP)’, adding: ‘this development is intended to accelerate economic growth, attract foreign and domestic direct investment, expand the manufacturing sector and mineral beneficiation, as well as create employment in the region’ (gov.za, 2016). As with all South African megaprojects, job creation for historically disadvantaged communities is among the foremost imperatives. Table 7:1 shows the estimates for on-site employment opportunities as per the SEZ application, though these likely represent a best-case scenario (LEDA, 2015).

Project	Job Creation Estimates
Coking Plant	1200
Thermal Power Plant	800
Ferrochrome Plant	2600
Ferromanganese Plant	2300
Ferrosilicon Plant	1800
Pig Iron Metallurgy Plant	3000
Steel Plant	2600
Stainless Steel Plant	2000
Lime Plant	1500

**Table 7:1 Job creation estimates EMSEZ**

Domestically, South African government officials ranging from the DTI to LEDA and the provincial government of Limpopo have sought to highlight the involvement of large-scale Chinese firms and the Chinese state, with one project executive stating that EMSEZ is ‘being led by Chinese state-owned companies’ despite them not actually engaging in a leadership capacity (Winning, 2018). Engagement with these firms is used to

legitimize the project and further entrenches it within the Sino-South African developmental calculus, which officials hope will help keep the project funded (Interview, LEDA, November 2017, Johannesburg). As a LEDA official noted: ‘the umbrella project is supported by Chinese and South African governments and identified as one of the fruits of high-level cooperation’ (Interview, LEDA, January 2018, Johannesburg).

Legitimization is also significant as despite the presence of the DTI - who was described by one official as being the ‘custodian of the legislation’ (essentially a broad regulatory role with little command or control of day-to-day activity) (Interview, DTI, February 2018, Pretoria), at its core EMSEZ is a provincial development project. In this fashion, it can be conceptualized as an expression of paradiplomacy.<sup>133</sup> Nganje (2014, p.144) argues that while paradiplomacy has been a feature of post-apartheid South African governance, efforts at coordinating and rationalizing paradiplomatic initiatives have largely failed given the central state’s general ‘ambivalence toward the international agency of provincial and local governments’. This is largely due to the fact that while the constitution makes provisions for relative sub-national government (SNG) autonomy, the dominant interpretation within the state is that foreign policy is the exclusive domain of the central government. In the EMSEZ case, the DTI has embraced Limpopo’s efforts despite the project’s uncertain viability largely because the zone and the Musina complex as a whole are compatible with the framework of socio-economic transformation and reintegration of the state into the steel industry pursued by the ministry under the leadership of both former Minister Davies and current Minister Patel. Additionally, the element of strategic coupling with Chinese SOEs furthers the South African state’s core foreign policy objectives. As one analyst noted, the DTI ‘has a strong ideological commitment to China’ (in terms of shared developmental vision and interests) (Interview, Analyst, October 2017, Pretoria). Moreover, several DTI officials interviewed throughout this research characterized the Chinese as ‘developmental partners’, while one said he believes the Chinese ‘will be benevolent’ in their negotiations – indicating the extent to which the cooperation discourse has taken hold at the top levels of the South African government (Interview, DTI, October 2017, Pretoria; Interview DTI, February 2018, Pretoria).

---

<sup>133</sup> Nganje (2016) defines paradiplomacy as the transnational linkages of sub-national governments.



### 7.2.3 *The Role of Chinese Firms and ICC*

As previously noted, the EMSEZ project was initiated by small privately-owned Chinese firms. However, with the increasing involvement of ministry-level officials, it has been absorbed into the wider Sino-South African developmental discourse as well as the Chinese state's International Capacity Cooperation. Conceptualizing EMSEZ's current form as a product of ICC elucidates the Chinese government's role in the project and explains why it has unfolded in the manner that it has despite questions regarding its profitability.

International Capacity Cooperation was initially added to the 'Go Global' policy suite in 2014. Officially distributed to SNGs through the State Council's *Guiding Opinions on the Promotion of International Capacity Cooperation and Equipment Manufacturing*, it outlined 12 target sectors (i.e., steel, railways, construction materials, non-ferrous metals, chemicals, electricity, automotive, information and communications technology (ICT), textiles, engineering machinery and aerospace and marine engineering) where productive capacity was to be offshored to receptive middle-income countries (Kenderdine and Ling, 2018).

The initiative is essentially a domestic industrial policy which, given China's size and production volumes, affects the global economy (Kenderdine, 2018). At its core ICC attempts to resolve China's industrial overcapacity by offshoring plants (in the absence of capital account liberalization) in order to both perpetuate the investment-driven project model of development and serve the country's growing consumer demands. The initiative therefore furthers China's extant economic model while concomitantly creating 'opportunities' for industrialization, capital investment, and technology transfer in 'partner' states. Just as BRI can be conceptualized as cooperation via infrastructural development, ICC is cooperation via industrialization.

Due to China's historical patterns of state-led uneven development (see Yeh and Wharton, 2016), industrial capital chasing cheaper inputs could move to inland and western provinces as has been attempted with past umbrella projects (e.g., 'Go West'). However, through ICC, Go Out, and BRI, the state has incentivized the movement of (select) industrial capacity and production towards economies of geoeconomic/geostrategic

importance to the Chinese government (Kenderdine and Ling, 2018). ICC is thus an inherently geoeconomic strategy and has become one of the primary initiatives through which China's economic system is exported (this occurs in the form of both mega- and micro-development projects - see Mohan and Tan Mullins, 2018). The specific territoriality of these projects, however, is dependent on the politico-economic dynamics of host countries, who ultimately create the conditions for development.

ICC funds are distributed through China's policy banks on a project-based system (Kenderdine and Ling, 2018). Provincial governments have emerged as the initiative's primary actors, with the National Development and Reform Commission (NDRC) taking on the role of coordinating the different SNGs, provincial/central SOEs, and industry associations to successfully implement the program<sup>134</sup> (ibid, p.5). As per Zhang (2016), the NDRC has signed cooperation agreements with 19 provinces.<sup>135</sup> While the NDRC has a variety of plans to develop ICC's financial architecture, in general the provinces are allowed to pursue their interests within the program's broad framework (Kenderdine and Ling, 2018). As Jones and Zeng, (2019, p.3) document, the provinces have similarly played major roles in BRI and other Chinese umbrella projects. They describe how provincial governors, managing their provinces external economic relations, have undertaken large-scale paradiplomatic efforts, and turned provinces into 'quasi-autonomous international actors'.

In the EMSEZ case, the initial memorandum of understanding (MOU) between Hong Kong Mining Exchange co. and Limpopo's provincial government was signed in 2014. However, the project was not integrated into the ICC until approximately 2016 when it was discussed at the China-South Africa Capacity and Investment Cooperation Seminar (Song, 2016). Preparations and discussions between SAEMB and Chinese SOEs then began in earnest, with MOUs being signed between SAEMB/LEDA and nine large-scale Chinese companies in May 2018.

---

<sup>134</sup> The NDRC is also responsible for curbing capacity in large-scale industries such as steel, coal, and aluminium (Kenderdine, 2018).

<sup>135</sup> Guangdong, Fujian, Hebei, Hubei, Jiangxi, Anhui, Gansu, Shandong, Yunnan, Jiangsu, Henan, Sichuan, Guangxi, Liaoning, Jilin, Zhejiang, Shaanxi, Ningxia, and Hunan (Zhang, 2016).

List of Large-Scale Chinese Firms/Banks with Direct Contacts to EMSEZ as of April 2019
1. Taiyuan Iron and Steel (TISCO)
2. Power China International Group Limited
3. China Metallurgical Group Corporation
4. China Export Credit Insurance Company
5. China Communications Construction Company Limited
6. Nanguo Hodo Holdings Co., Ltd.
7. Shaanxi CEI Investment Holdings Co., Ltd.
8. Guangdong wealth Investment Corporation
9. Shanxi Sente Clean Coal and Coking Design Institute
10. Guangzhou Rising Steel Group
11. China development bank
12. Cad Fund

**Table 7:2 List of Large-Scale Chinese Firms/Banks with Direct Contacts to EMSEZ as of April 2019 (compiled from EMSEZ, 2018b; Interview, EMSEZ, March 2018, Johannesburg)**

As with other Sino-African projects, the BRICS summits and FOCAC have been the arenas used to both showcase project advancement and undertake high-level meetings. In this case, Limpopo premier Mathabatha has used the occasions to visit TISCO and other investors, as well as sign MOUs with Shanxi province. Other MOUs have also been signed between the primaries and Chinese SOEs on multiple occasions. The NDRC has taken on a coordinating role, convening a conference between the different actors during the 2018 FOCAC summit and signing MOUs with the DTI regarding the identification of future ICC projects (EMSEZ, 2018c).

The EMSEZ project highlights how the nebulous character of China’s internationalization policies, described by Narins and Agnew (2019, p.2) as a ‘useful fuzziness’, can be used to embed projects within the overarching ‘South-South’ developmental discourse. During the 2018 FOCAC, Premier Mathabatha described the zone in the context of BRI (despite the EMSEZ not being a BRI project), stating that:

*‘...the “Belt and Road Initiative” provides a rare opportunity and broad space for the two sides to deepen pragmatic cooperation. The two sides should play a high-level leading role, to innovate and to improve the cooperation mechanism, and China-South Africa cooperation will bear fruit and benefit the people of the two countries’* (Shanxi, R&T, 2018).

Yet Mathabatha is far from alone in conflating the different initiatives. During his meeting with the Premier, Shanxi Governor Luo Yangsheng noted how Belt and Road has allowed for unprecedented cooperation and the leveraging of the economic complementarities between the two provinces (in terms of resources and industry). He similarly argued that it will increase exchanges and promote cooperation/win-win development. Notwithstanding the project’s integration into the machinery of South-South cooperation, an EMSEZ executive stated that the site operators (SAEMB) had not received any financial or logistical support from the Chinese state, though he speculated that the investor firms may have (Interview, EMSEZ, March 2018, Johannesburg).

### **7.3 Challenges and Economic Viability**

Despite the presence of large-scale Chinese SOEs and support from state elites, the project faces significant challenges. Foremost among these is demand. The South African steel industry has been in decline since 2010 and nearly collapsed in 2015 amidst a flood of cheap Chinese imports<sup>136</sup> (combined with falling regional demand). Table 7:3 details the short-to-medium term measures put in place by the state following the onset of the 2015 steel crisis.

---

<sup>136</sup> As per the DTI (2018a), manufactured steel imports rose 250% between 2000 and 2016. Imports from China accounted for 54% of 2016’s total steel imports. However, South Africa has never instituted anti-dumping measures against China.

Planned Steel Interventions Post-2015
1. 10% duty on primary steel products/ 3-year safeguard measures for hot rolled coil and plate
2. Tariff increases on various types of downstream products
3. Agreement on principles for flat steel pricing which ensures that steel-dependent industries remain competitive while simultaneously ensuring that the upstream steel mills remain sustainable.
4. Agreement on local procurement by government
5. Settlement with Arcelor Mittal South Africa regarding competition issues
6. Establishment of R1.5 bn Steel Development Fund for downstream sector support
7. Development of a short-term negotiated energy pricing agreement framework between Eskom and energy intensive users which allows for excess electrical capacity to be used by industry at lower cost.
8. Investment support/incubation for SME development
9. Scrap metal export tax proposal – submitted to treasury
10. SARS reference price system in development for downstream products

**Table 7:3 Planned Steel Interventions Post-2015 (DTI, 2018a).**

As one analyst noted, as soon as Jacob Zuma became president, the DTI became ‘significantly more protectionist, but also unpredictably protectionist’ (Interview, Analyst, November 2017, Midrand). Yet despite the subsequent drop in volume of imported primary steel products, the industry continues to struggle as the structure of duties have created a strong incentive to import further downstream, which hurts smaller manufacturers (ibid). Beyond demand, the steel industry is hindered by aging, inefficient plants, the costs of electricity (hence the on-site power plant for EMSEZ), and a shortage in skilled labour, something which was noted as a substantial challenge for EMSEZ by a LEDA official (Interview, LEDA, November 2017, Johannesburg). DTI documents argue that ‘sustained recovery [remains] uncertain due to megatrends associated with lower steel intensity (i.e. move towards recycling) circular economy, climate change, ageing population, and increased digitalisation’ (DTI, 2018a). As one sector analyst flatly stated: ‘this is not an environment conducive to a new steel plant’ (Interview, Analyst, November 2017,

Midrand).

As per several high-level officials and direct stakeholders interviewed for this research, the cluster’s steel output will be directed mainly towards the rest of Africa and China. However, it remains unclear exactly what sort of steel will be manufactured.<sup>137</sup> One LEDA official noted that ‘there isn’t enough demand in South Africa alone to maintain this kind of complex’ (Interview, LEDA, November 2017, Johannesburg). An EMSEZ executive similarly specified that if China is ‘willing to buy’ then ‘they are the buyer for us’, though a DTI official challenged this, indicating that output would mostly go to regional economies (Interview, EMSEZ, March 2018, Johannesburg; Interview, DTI, October 2017, Pretoria). Regardless, whether China or Africa is the main buyer for EMSEZ’s steel, these plans face significant challenges. Sub-Saharan Africa’s steel consumption has stagnated throughout the last few years with the end of the commodity supercycle. Additionally, of the remaining demand, two-thirds is met by imports (DTI, 2018a).

Steel use (Million tons)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Egypt	5.5	7.5	11.1	9.3	7.8	9.5	9.2	10.2	10.9
South Africa	5.8	6.1	4.5	5.0	5.3	5.3	5.7	5.1	5.4
Other African Countries	11.4	14.6	16.4	14.1	16.3	18.2	21.5	22.1	22.8
Africa Total	22.7	28.2	31.9	28.4	29.4	32.9	36.4	37.4	39.0

**Table 7:4 African Steel Usage (DTI, 2018a).**

<sup>137</sup> The latest news from EMSEZ states that it will be ‘high-performance wear-resistant steel’ but doesn’t specify which sort of stainless steel or shipbuilding (ABS) steel they will produce, nor do they specify long products (beams and rebar) vs. flats (hot and cold rolled steel). A high-ranking DTI official simply stated that it would be a ‘unique product’ while a separate South African government official hypothesized that the plant may focus on 200 series stainless steel, given that South Africa’s nickel (40,000 tons p/y) mostly goes to the Columbus stainless steel plant, while Zimbabwe only produces 10,000 tons of nickel per year (Interview, DTI, February 2018, Pretoria; Interview, CSIR, February 2018, Johannesburg).

In China, steel consumption has likely peaked (Kinch, 2019) and the country remains a steel exporter, with outflows reaching 60 to 80 million tons of steel products per year. While ICC aims to offshore production, it remains to be seen how sizeable the Chinese market for EMSEZ's output will be.

A related challenge is the cluster's location. While the site was reportedly chosen due to its immediacy to necessary resources, with an EMSEZ executive stating that 'its 30% cheaper to make the steel there since you have everything in close proximity' (Interview, EMSEZ, March 2018, Johannesburg), its distance from the coast will mean significant transport costs and possible conflicts with South African parastatals. The EMSEZ executive interviewed noted that they would export finished goods via Mozambique's port of Matola;<sup>138</sup> however, a South African government official noted that this would require Transnet approval. As the port operator (and freight carrier) for South Africa, Transnet has historically sought to valorise its own assets and 'will fight tooth and nail' against transporting to a port that isn't theirs (Interview, CSIR, February 2018, Johannesburg). Similarly, if the on-site power plant attempts to sell its extra electricity into the national grid, it will need to get approval from Eskom as an independent power producer (IPP). However, the struggling power company has found itself dependent on Chinese loans (Winning, 2019) and it is possible that the state could step in to facilitate an agreement between the two parties.

#### **7.4 EMSEZ and Sino-South African Relations**

The EMSEZ project exemplifies the opportunistic and pragmatic nature of Chinese commercial internationalization. As Jones and Zeng (2019) and Ye (2019) argue, China's internationalization policies<sup>139</sup> are not clearly-defined 'grand strategies', rather they take the form of loose policy envelopes where projects are driven largely by state capitalist

---

<sup>138</sup> Matola is an export point for commodities near Maputo. It contains an aluminium and coal terminal and can receive vessels of up to 85,000 tons.

<sup>139</sup> While their specific focus is on BRI, their arguments can be expanded to initiatives such as ICC, or 'Go Global'.

interests such as provincial SOEs and policy banks. These SNGs and corporate actors generally serve their own economic interests within the broad frameworks set out by the central state, though in some cases projects can be completely unrelated to central plans. Projects undertaken within the context of these broad policies have the capability of severely affecting China's diplomatic relations with ostensibly friendly governments, yet they can emerge outside the purview of the state organs that manage foreign affairs – the Ministry of Foreign Affairs (MFA) and the Ministry of Commerce (MOFCOM) (see Corkin, 2011). Indeed, neither of these ministries have any power over SASAC, which controls the central SOEs, the NRDC, which is responsible for BRI and ICC coordination/implementation, or the policy banks. In combination with a relatively loose regulatory structure for approving overseas financing, this system of ostensibly externalized diplomacy can lead to white elephant projects, unsustainable debts, and substantial social/environmental costs.

In the case of EMSEZ, the Chinese firms behind the initial development were 'looking for opportunities' – they understood the resource endowments in northern Limpopo and pursued the project with the understanding that LEDA was looking to build an internationally connected SEZ in the area (Interview, DTI, October 2017, Pretoria). However, the introduction of Chinese SOE capital has ushered in a geoeconomic and diplomatic element into the project. While these firms likely view the project in commercial terms, their connections with the central Chinese state and the coordinating presence of the NDRC legitimizes the project as a state-to-state development initiative within the broader South-South discourse, which substantially increases the diplomatic risk for the Chinese government. Additionally, as Kenderdine and Ling (2018, p.49) note, exporting China's industrial capacity to external geographies introduces novel financial risks to recipient countries. They argue that capacity cooperation should not be characterized as traditional FDI, rather it is a 'debt-export ploy' which leverages the conditions of China's financial architecture and overcapacity to create a parallel system of interdependency which operates without the reciprocal opening of Chinese capital or consumer markets.<sup>140</sup> With the questions surrounding EMSEZ's overall viability, it is

---

<sup>140</sup> In a separate paper, Kenderdine and Lan (2018, p.570) expand on this concept, arguing that 'the institutionally connected nature of the capital allocation mechanism[s] (of ICC) mean that the host economy



necessary to consider the possible implications of failure.

As with BAIC, most industry analysts interviewed for this research are confounded by the project given the current condition of the sector. One analyst called it ‘BS’ while a steel executive said he was ‘horrified by it’ (Interview, Analyst, October 2017, Johannesburg; Interview, SAISC, October 2017, Johannesburg). As a government official stated: ‘to me it [is] just flying kites’. For him, the project is representative of an ‘idiotic provincial government’ that is being supported by the DTI for political reasons and Chinese firms that are ‘looking for contracts’ (Interview, Official, February 2018, Johannesburg). Yet despite these criticisms, the diplomatic and political dimensions created by the project’s inclusion into ICC mean that it is unlikely to be abandoned as Modderfontein was. Instead, it is possible that ‘encompassing’ goals (Lee, 2017, p.10) will be tied to the Chinese state funds used by investors. In this scenario, long term timelines and changing project objectives will be used to keep the zone functioning, even if it is not the transformative development that it is currently portrayed as. Thus, while it remains in question whether or not the zone will ultimately be built according to the current plans, it will likely go ahead in some form over the next few years.

## **7.5 Conclusion**

This chapter has analysed the underlying processes, imperatives, and mechanisms behind the Energy Metallurgical Special Economic Zone (EMSEZ) at Musina Makhado. Tracing the \$10 billion megaproject’s development from paradiplomatic initiative between Limpopo’s provincial development agency (LEDA) and a set of small Chinese firms, to its current iteration as an official Sino-South African capacity cooperation project within the broader ICC framework showcases several important facets of development within the context of Chinese-inflected globalization. Firstly, the project demonstrates how Chinese geopolitics is at once geoeconomic, and how the commercial imperatives of POEs can be incorporated into broader umbrella projects. This highlights the pragmatism of Chinese actors as well as the commercial nature of much of Chinese firm internationalization. Yet this arrangement can also create complications, as projects that emerge from such linkages

---

is exposed to a chain of [unaudited] financial risk that remains unbroken all the way back down to China’s provincial and prefectural local government revenues’.

have the capacity to affect China's diplomatic relations with ostensibly friendly governments, yet are outside the regulatory authority of the state organs that manage foreign affairs – the Ministry of Foreign Affairs (MFA) and the Ministry of Commerce (MOFCOM).

Like the BAIC factory, the EMSEZ showcases how the introduction and leveraging of large-scale Chinese capital can create policy space and opportunity for South African state actors attempting to implement development initiatives. Throughout these cases, South African actors have also behaved pragmatically and sought to position themselves and their organizations in ways which advance project development. For instance, the DTI and LEDA officials interviewed during this research have consciously leveraged China's industrial restructuring and are happy to accept 'dirty' industrial capacity if it means job creation, beneficiation, and re-industrialization back home (Interview, LEDA, November 2017, Johannesburg). However, given the difficulties faced by the South African steel sector, which include plummeting African demand, global overcapacity, and rising primary imports (largely Chinese in origin), the viability of the EMSEZ's steel and stainless-steel plants remains questionable. The question of output market remained somewhat unclear throughout this research, with stakeholders seemingly having different ideas regarding where the steel would ultimately go. While high-level DTI officials note that the project will produce 'unique products' which will 'impact positively towards [the] economy of [the] country – no negative impact', as it stands, the EMSEZ is a project that, if fully implemented, will cost between \$3.8 and \$10 billion. Ultimately, given the political importance of the project, it is likely that Chinese state capital will be tied to 'encompassing' goals and thus project success or failure will not be entirely based on profit maximization.

## **Chapter 8 – Geopolitics and Geoeconomics in the Global South: BRI, Megaprojects, and (Inter)dependence**

Research on the proliferation of Chinese-backed projects throughout the developing world has largely focused on two specific topics: infrastructure construction (at the project-level) and the Belt and Road Initiative (BRI) (at the macro-level) (Summers, 2016; Murton, Lord, and Beazely, 2016; Wissenbach and Wang, 2017; Kanai and Schindler, 2018; Siciliano, Urban, Tan-Mullins, and Mohan, 2018; Zeng, 2019). Yet while infrastructure projects are among the most prominent examples of Chinese developmental cooperation and BRI has effectively become shorthand for China's overall foreign policy, few articles (exceptions include Kenderdine and Lan, 2018; Mohan and Tan-Mullins, 2018) have sought to unpack how the totality<sup>141</sup> of Chinese-backed megaprojects at once articulate China's broad geopolitical/geoeconomic initiatives and reconstitute power relations and dynamics with host/participant governments.

This chapter, which functions as the discussion and theoretical analysis section of the thesis, will utilize a multi-scalar perspective to illustrate how megaprojects, despite often being driven by commercial imperatives, form a constitutive part of Chinese geopolitics and the creation/expansion of Chinese influence throughout the Global South in the latest phase of BRI/Chinese-inflected globalization. From there, it will focus on the South African context. In particular, the chapter will detail how the leveraging of Chinese firm internationalization by certain South African state actors in order to advance and legitimize their 'developmental state' approach creates novel configurations of dependence, territorializes Chinese geopolitical power and furthers its hegemonic project.

Specifically, the chapter will argue how despite being more 'spatial fix' than 'grand strategy' (Summers, 2016; Jones and Zeng, 2019), the particular articulations of the Belt and Road initiative and Chinese commercial internationalization at large (i.e., uncoordinated actors working toward a diverse set of objectives in the context of broad policy and financial architectures) as well as the sheer volume of outward investment and trade, gives the central Chinese state significant leverage to pursue its geopolitical

---

<sup>141</sup> For information on the types of megaprojects built by Chinese actors see the typology in Chapter 2.

ambitions and spread its influence throughout the Global South. As an example of this process, the chapter will examine how in order to facilitate their accumulative strategies and depoliticize/attain their broadly commercial objectives, Chinese actors (both state-owned [SOE] and private enterprises [POE]) operating throughout Africa seek to co-opt host country developmental discourses and if possible, integrate their plans with those of the host government. The Chinese state then subsequently supports *some* of these project-level initiatives (to varying degrees as selected through internal criteria – see Gu et al., 2016) at the elite level through access to state-backed financing and discursive construction/consolidation, which can create the conditions for amplified political influence and ultimately recruitment into China’s incipient hegemonic project. This has been previously characterized by Carmody and Taylor (2010) as ‘flexigemony’ yet this chapter proposes that the specific articulations have evolved and broadened with China’s increasingly assertive foreign policy. While Chinese actors continue working through existing institutions, the Chinese state increasingly seeks to transform host country institutions through its trade, investment, and industrial cooperation architectures.

This approach has been especially fruitful in South Africa, where contemporary Chinese-backed megaprojects are resultative of (but simultaneously reinforce) the adoption by certain high-level ministries of the principles, mechanisms, and vernacular of China’s state-led globalization (Chinese-inflected globalization) as well as a growing dependence on Chinese state capital. In what can be considered a maturation of ‘South-South’ developmentalism, South Africa’s elite-level political reorientation has encompassed the wider adoption of some of the economic modalities of ‘Chinese’<sup>142</sup> state capitalism, including an emerging ‘decentralized improvisation’ approach as a way to mobilize subnational actors into policy regimes, as well as a preference for state capital and state-to-state megaprojects among others. These policy preferences are borne of a belief among government officials that the Chinese export-oriented model of development is conducive to the South African state’s politico-ideological goals and that economically beneficial linkages can be easily reinforced via participation in initiatives such as BRI or ICC. In the words of one South African official, Chinese investment ‘give us an opportunity to

---

<sup>142</sup> Placed in quotations as most officials have limited awareness of the historical and material context of Chinese development.

beneficiate and diversify [the economy]' (Interview, DTI, October 2017, Pretoria). The South African case thus offers insight into how host state elites can attempt to utilize Chinese engagement for their own purposes and how this in turn reconstitutes relations between the two countries. However, the exact ways in which this plays out (including project success/failure and who ultimately benefits) are dependent on the actors, arrangements, and situational characteristics of each coupling and are therefore best understood at the project level.

This chapter will be divided into three further sections. The first will describe the manner in which Chinese geopolitical/geoeconomic power is created and disseminated through the current phase of BRI and Chinese commercial internationalization as a whole. Additionally, it will interrogate the broad embedding strategies of Chinese actors operating in Africa and explain how these have produced an elite-level political environment conducive to the creation of hegemonic consent and active participation in China's geoeconomic initiatives. Sections two and three of this chapter will then focus on South Africa and describe how the use of Chinese firm internationalization as an economic lever serves to further Chinese state influence and functions as a channel through which dependence is created. In essence, the sections will attempt to answer Glassman's (2011, quoted in Flint and Zhu, p.95) call and link the 'messiness' of local politics and territorialities to the 'simplicity' of broader geopolitical initiatives. To do this, section two will situate the Sino-South African relationship within the broader context of Chinese internationalization. Section three will then interrogate the particularities of Sino-South African megaprojects to reveal the specific networks and mechanisms of engagement that lead to the territorialisation of China's geopolitical influence.

### **8.1 – Chinese Commercial Expansion and State Influence in the Global South**

As Mohan and Tan-Mullins (2018) argue, given the nature of the country's state capitalism – specifically its hybrid state-corporate relations (see Lin and Milhaupt, 2013; Milhaupt and Zheng, 2015; Gu et al., 2016), China's geopolitical ambitions are simultaneously geoeconomic. Indeed, studies (Zeng, 2019; Jones and Zeng, 2019; Ye, 2019) focusing on the domestic drivers of BRI and its associated trade/industrial policies have noted that analyses which paint these as geopolitically-motivated 'masterplans'

significantly overstate the ability of the central state to effectively control and coordinate the large number of firms, institutions, and policy banks involved. As noted in chapter 2, the sprawling nature of Chinese state capital means that the central state delegates substantial authority to what are ostensibly corporate actors in order to ensure cooperation.

This chapter builds on this critical understanding and asserts that while China's diplomatic relations are generally characterized by elite-level, top-down approaches, the Chinese state's ability to project power outside of its territorial bounds is largely dependent on *cooperation* with (as opposed to domination of) firms, both SOE and POE, which operate primarily through the logic of capital and whose foremost imperatives are those of accumulation<sup>143</sup> within the context of China's domestic regulatory state (Jones, 2018). In the words of Kenderdine and Lan (2018, p.576), 'Beijing is much better at making plans than implementing them', and as a totality, BRI retains the fragmented and chaotic state-corporate relations that have characterized earlier development initiatives including 'Go Out' and 'Go West'.

Broadly, Chinese firm internationalization under the BRI umbrella (though also including ICC and related provincial-level cross-border initiatives) works on two levels, at the macro level, the state attempts to create capital allocation mechanisms which serve its overarching geopolitical/geoeconomic objectives (see Kenderdine and Lan, 2018). Meanwhile, the main drivers at the project level are the disaggregated interests of SOEs, sub-national, and private actors who use access (or perceived access – see Chapter 6) to state-backed funding to pursue their own broad interests. As such, the foremost reason for the 'fuzziness'<sup>144</sup> (Narins and Agnew, 2019, p.21) of the current phase of BRI is the need on the part of the Chinese state to navigate and contextualize the fragmented and uncoordinated project-level ventures which characterize the global expansion of Chinese capital in order to push its own geopolitical/geoeconomic agenda (Jones and Zeng, 2019) – a process which van Staden (China-Africa project, 2019) describes as the state creating broad narratives on top of the chaotic set of projects that emerge from China's internationalization mechanisms. This intertwining of firm and state activity couples the

---

<sup>143</sup> However, it is important to note that within the constellation global Chinese-backed projects, some strategic initiatives (largely energy-related) are driven by the state.

<sup>144</sup> The authors use this term to refer to the Chinese state's attempt to make the initiative as open and flexible as possible.

geopolitical and geoeconomic even as actors are driven by differentiated imperatives (Flint and Zhu, 2019).

As Ye (2019, p.2, emphasis mine) argues, ‘entering implementation, [BRI] results in top-down political *mobilization*, but not *policy directives*. Moreover, subnational and corporate actors improvise projects and programs that serve their own economic interests, not the external ambition of the autocratic leader’.<sup>145</sup> The evolution of BRI<sup>146</sup> is thus emblematic of how the state has been *responsive* to the bottom-up imperatives that ultimately drive the major share of outbound commercial engagement. In essence, BRI has been transformed from the initial set of geostrategic land/sea corridors into both a branding exercise for China’s foreign policy and a mechanism for corporate internationalization analogous to the ‘Go Out’ initiative of the 2000s.

This conceptualization is useful in examining how the state seeks to leverage the reach of Chinese-based capital to create influence in the Global South and beyond. As previously noted, while the state retains power over cadre appointment, discipline, regulation and funding, it generally cannot dominate the functions of SOEs, even those owned by the State-owned Assets Supervision and Administration Commission (SASAC) (Yi-Chong, 2014; Jones and Zeng, 2019). Indeed, Milhaupt and Zheng (2015) document how not only do SOEs often ignore the central state’s operational and policy decisions, but when the state does discipline SOEs, it behaves principally as a regulator, not a controlling shareholder.

In lieu of an ability to control firm operations, the state instead incentivizes (‘facilitates’ as per Horner [2017, p.6]) and creates the discursive context for firm internationalization (Gu, et al., 2016). As Kenderdine (2018) explains, large-scale Chinese capital chasing cheaper inputs could simply go inland towards the less-developed western provinces;<sup>147</sup> as such, the outward flow of large-scale capital is generally determined more by geoeconomic strategy than factor endowments. Even in places like Ethiopia where low

---

<sup>145</sup> Though a more accurate characterization would replace the ‘autocratic leader’ with the foreign policy-making apparatus of the central state.

<sup>146</sup> BRI (2013) was initially put forth as a regional development project with a focus on central Asia. However, the second phase included Eastern Europe and Africa, while the latest phase (2015) opens the project up to global participation (For more on BRI’s evolution see Zeng, 2019)

<sup>147</sup> In fact, this is what was supposed to take place as per Deng Xiaoping’s ‘ladder step’ approach (Lim, 2014).

labour costs serve to attract investment, the guiding hand of the Chinese state is visible through its role in the creation of that country's SEZs and OECCZ (where most Chinese investment flows – see Giannecchini and Taylor, 2018).

Through BRI, ICC, and related provincial level initiatives, the Chinese state has thus created the financial architecture (e.g., access to state-backed credit, tax breaks), operational space, discursive framing, and support mechanisms for firm internationalization and the expanded reproduction of Chinese-based capital.<sup>148</sup> Chinese actors of varying types operating around the world can then attempt (with varying degrees of success) to tie their specific projects to these broad umbrella initiatives in order to access their support mechanisms.

As has been noted throughout the case studies, Chinese firms are profit-seeking, however the specific modalities of accumulation can vary through (and within) the specific ownership categories. While POEs operating outside of China are nearly always looking to maximize profits, state capital in the form of funds dispersed by policy banks can at times be tasked with seeking other types of returns (i.e., access to raw materials or enhanced diplomatic relations). As Lee (2014; 2017) describes, Chinese SOEs in certain sectors (e.g., extractives, finance) sometimes integrate the diplomatic/geopolitical strategies of the state into their own accumulative logics in order to gain access to state funding, in essence giving up profit maximization for the sake of political goals – though they are still expected to turn some profit. However, this is not the case with all SOEs; for instance, in the construction sector, Lee (2017) describes purely commercial imperatives largely due to intra-sector competition. As such, the particular configurations of firm accumulation, production, and embeddedness are sector- and context-specific and should be distinguished through project-level analysis.

'Global China' thus merges state and capitalist logics where useful for the specific actors involved and despite not being driven by a top-down 'grand-strategy', the interplay and particular articulation of imperatives, regulation, and framings between the state and Chinese-based capital allows for the state to effectively pursue its geopolitical objectives and extend the geographical bounds of its influence.

---

<sup>148</sup> Though not all firms receive support.



### 8.1.1 'Global China' in the African Context

In a recent article, Narins and Agnew (2019, p.6 – 9) detail a variety of 'challenges' that could ultimately impede the Chinese state from instituting a *globalist* sovereignty regime – essentially the successful establishment of a hegemonic project. Foremost among these is the creation of consent among participant states. While the discourse and messaging behind Chinese firm internationalization throughout the developing world is built around 'win-win' cooperation; as the authors note, to become a hegemon, China will need to navigate the challenges posed by its own territorially based identity<sup>149</sup> and help mollify historically- or ideologically-rooted anxieties in some participating countries. As an example, they document several cases near China's borders, including Mongolia, Nepal, Kyrgyzstan, and Myanmar, where long-standing Sinophobia or the extant configurations of government (in terms of state-building programmes or dependence on adversarial powers) may hinder the implementation of Chinese-backed projects and the acceptance of associated institutions. Yet the specific nature of issues facing Chinese actors are largely context- and country-specific and patterns of engagement in other regions may actually aid their entry into new markets and territories. Indeed, it is likely that the shape and confines of future Chinese influence will be dependent on spatially-variegated, institutionally-specific factors.

In Africa the broadly developmentalist nature of engagement dating back to the Cold War and general lack of historical antagonism means that the difficulties detailed by the authors do not affect either elite or public characterizations of Chinese actors to the same extent as they would in central or south Asia. For Chinese actors engaging with African states, the continent's history of extraversion and unattained/impeded development, stretching from colonialism through to structural adjustment, provides opportunities to implement their project-level commercial designs through the co-optation of African developmental discourses and logics. In similar fashion to Carmody and Taylor's (2010) state-focused 'flexigemony', actors operating at the firm/project level can thus tailor their messaging to the specific geographical historical context of the countries

---

<sup>149</sup> As exemplified by the recent crackdowns and blatant human rights abuses in Xinjiang and the Tibetan Autonomous Region (TAR).

they engage with, while simultaneously at the elite-level, the Chinese state can connect uncoordinated projects (i.e., city building in Egypt and road development in Zambia) under the umbrella of BRI-led development (even if the projects themselves are not officially connected to BRI) or more broadly, ‘South-South’ cooperation – furthering their diplomatic reach and developmental message.

An analysis of project framing demonstrates how it is used strategically. Within China, large-scale development projects in peripheral provinces have historically been framed as ‘gifts’ from the state to inhabitants. Yeh (2013; quoted in Yeh and Wharton, 2016, p.296) explains:

*‘...the state and the majority Han citizens of China are discursively positioned as providers of aid, with an expectation of demonstrated gratitude in return. Refusals to act properly grateful are treated as signs of separatism, punishable as a political crime. This presentation of development as gift helps secure the territorialisation of Tibet within the PRC’.*

While certain Chinese-backed projects in Africa, typically ceremonial megaprojects (see Chapter 2 for more information), have been presented in similar fashion;<sup>150</sup> the overarching narrative for engagement throughout the continent is that of ‘partnership’, ‘developmental cooperation’, and ‘win-win’ outcomes. As described in Chapter 2, this has been disseminated both bilaterally and through fora like FOCAC. Chinese actors have sought to build on decades of ‘South-South’ cooperation and attempted to cultivate and leverage a ‘South Space’ metaregional imaginary – essentially a space of engagement in which economic relations and interactions are less exploitative than North-South relations and where accumulative imperatives are pursued in the context of mutual growth and constructive linkages (Carmody, 2017b).

This strategy has allowed for the reproduction of Chinese capital as well as the expansion of China’s international influence with the active consent and participation of African elites. As Carmody and Kragelund (2016, p.22) argue, by incorporating African elites into the process of internationalization, China has ‘reinforced politically and economically dependent relationships with those states’. In Africa, Chinese-inflected

---

<sup>150</sup> One example is the African Union headquarters in Addis Ababa.

globalization has therefore become something that is locally assembled or constructed and sometimes prompted by non-Chinese elites. While these processes can be broadly characterized as enrolment into China's hegemonic project, the assortment of ways in which assemblages are created and play out escape broad classification and are best understood at the project- or local-level. Indeed, the geographies of Chinese engagement vis-à-vis the outcomes of any given project or coupling emerge from its particularities and situational characteristics (see below). Echoing Carmody and Kragelund (2016, p.2), if the question is whether China will become 'a hegemon on the continent, or whether we are seeing a rise in African agency pointing towards multipolar power structures and orientations on the continent', then insight from the local-level will be necessary.

## **8.2 'A Gateway to the Continent' – Situating South Africa in the Context of Chinese Politico-Economic Expansionism**

Any understanding of the current phase of the Sino-South African relationship and the megaprojects that have emerged from it must be situated within the context of South Africa's developmental initiatives as well as its decade long economic malaise, as these condition the entry of large-scale Chinese capital. The late-Zuma years saw a period of economic and political uncertainty brought on by both 'state capture' (essentially institutionalized rent-seeking) and what one government official termed the 'confident ignorance' of certain ministries operating within the administration's developmental state framework – which can be understood as the undertaking of specific policy initiatives without sufficient understanding of their ultimate effects (Interview, Official, October 2017, Johannesburg).

Beyond general governmental instability in the form of frequent cabinet reshufflings;<sup>151</sup> top-down decisions like the adoption of the new Mining Charter, rapidly changing BEE requirements, inconsistent energy regulations relating to independent power producers (as well as an energy crisis in 2014-15), and the release of separate and often contradictory macro-economic policies (NGP and NDP), have led to economy-wide

---

<sup>151</sup> President Zuma reshuffled his cabinet 11 times over the course of 8 years (Kekana and Ritchie, 2017). These overhauls included the infamous 'Nene-gate' in which South Africa went through three finance ministers over the course of five days (see Bisseker, 2017).

regulatory uncertainty and resulted in a business environment which is neither conducive to megaproject development or large-scale investment. To illustrate, South Africa's ranking on the World Bank's 'Doing Business' reports fell from 34 in 2010 to 82 (out of 190) in 2019 (World Bank, 2019).

Given that Chinese actors are expected to turn a profit even when receiving funds tied to specific political goals (Lee, 2017), such conditions have severely limited opportunities for project construction. As described in Chapter 4, besides EMSEZ and the BAIC factory, which only emerged over the last few years and whose development is dependent on broad state backing, Chinese-backed investments in South Africa are generally small-scale endeavours. Yet it must be noted that the opportunities available for Chinese firms attempting to spark megaproject construction in South Africa are markedly different than those in other African countries as South Africa already has well-developed physical linkages to the global economy (rail, ports, airports). The country's strong unions and skilled labour shortage (combined with the aforementioned regulatory uncertainty) also create difficult implementation conditions for those firms attempting to undertake projects, further deterring risk-averse Chinese capital. Additionally, in contrast to the Ethiopian context documented by Ziso (2018), where Chinese actors can leverage informal arrangements at the party level to advance their projects (thus bypassing the country's difficult regulatory and business environment); South Africa has a vibrant press which has on several occasions broken stories regarding possible impropriety in terms of project tendering practices (Ensor, 2017). As noted throughout this study, even when projects are announced, few make it beyond the planning phases<sup>152</sup> and those that do are heavily facilitated (i.e., through access to state-backed credit or discursive embedding into extant industrial policy) by both states.

While there is no singular response to Chinese engagement within the South African government (Interview, Analyst, October 2017, Pretoria), several ministries have adopted the developmental mindset promoted by their Chinese counterparts (Interview, DTI, October 2017, Pretoria; Interview, DIRCO, October 2017, Pretoria; Interview, DTI,

---

<sup>152</sup> Development megaprojects such as the Moloto Development Corridor, Mzimvubu Water Project, and Richards Bay Dry Dock all failed to launch despite vociferous government support from the South African side. Additionally, as detailed in Chapter 6, the Modderfontein project was largely derailed by contradictory developmental targets within the South African state.

Interview, IDC, February 2018, Johannesburg; February 2018, Johannesburg; Interview, Water and Sanitation, February 2018, Johannesburg). Throughout the course of this study, the views espoused by Department of Trade and Industry (DTI), Water and Sanitation, Department of International Relations and Cooperation (DIRCO), and Industrial Development Corporation (IDC) officials consistently portrayed Sino-South African engagement as one based on ‘South-South’ cooperation, and more broadly displayed viewpoints consistent with the ‘South Space’ metaregional imaginary (Carmody, 2017b). While cognizant that Chinese actors are seeking profits, officials were confident that project-level negotiations would be undertaken in terms of ‘win-win’ arrangements and that they could leverage extant ‘South-South’ discourse to obtain better terms.

This characterization of relations has both emerged from and strengthened the Zuma-led strategic reorientation away from traditional western partners and towards China and the BRICS grouping more broadly. One analyst interviewed observed that the ideological ‘cross-pollination’ between the governing parties has only grown since the rollout of Zuma’s ‘developmental state’ (Interview, Analyst, September 2017, Pretoria). Indeed, party-to-party relations have been augmented in recent years by training exercises and exchanges, as well as participation in FOCAC and the annual BRICS meetings.

Government officials conceptualize the ‘Chinese’ export-oriented, investment-based model of development as being conducive to the South African state’s politico-ideological goals and have sought to cultivate state-to-state relations to boost productive capacity and deliver on the goals of extant industrial policy. At the same time, the inflow of Chinese capital is used domestically to legitimize the state-led development models put forth by former DTI head Rob Davies and (former EDD) and current DTI head Ebrahim Patel, as well as shut down ideologically discordant solutions to South Africa’s economic problems - for instance market friendly reforms and confronting shortcomings in skilled labour (see Bisseker, 2017).

In this manner, the internationalization of Chinese capital becomes an economic lever for South Africa’s governing party, which at once furthers the influence of the Chinese state and embeds novel configurations of dependence into South Africa’s political apparatus and socio-technical systems. Moreover, as shown in Chapter 7 with the EMSEZ, though also in other mega- and micro-projects throughout the country (e.g., Atlantis SEZ),

paradiplomatic initiatives which had been previously spurned by central ministries (Nganje, 2014), have recently been incorporated into official development plans and supported by the DTI – a shift which can be characterized as a turn toward ‘decentralized improvisation’ within the context of growing provincial power and the return of industrial policy (Interview, Analyst, September 2017, Pretoria).

On the Chinese side, South Africa is currently designated as a ‘comprehensive strategic partner’ (Songtian, 2018). This categorization roughly occupies the fourth tier of relations in the Chinese diplomatic system (Kenderdine and Lan, 2018), putting South Africa on the same level as countries such as Iran, Saudi Arabia, and Egypt. Chinese state actors have sought to strengthen relations (while simultaneously inviting firm internationalization) through a discursive positioning of South Africa as a ‘gateway to the continent’. In a recent article written to commemorate 20 years of official diplomatic relations, Ambassador Lin Songtian wrote:

*China and South Africa face a historic opportunity to synergise development strategies. As a major economic power in Africa, South Africa boasts rich natural and human resources, social inclusiveness, well-regulated markets, and a sound legal system. China has a huge domestic market - a 1.4 billion population - and advantages in terms of capital, technologies, enterprises and expertise (Songtian, 2018).*

This type of discourse – which plays to stated government goals as well as the basis of its claim to legitimacy (in terms of its commitment to material economic development for historically oppressed populations - see Chapter 3) - is illustrative of how Chinese state actors attempt to cultivate support in South Africa. Likewise, it plays into the type of state-to-state (or state-to-SOE) strategic couplings favoured by certain South African ministries (Interview, Analyst, October 2017, Johannesburg) in the hopes that these will allow the country to ‘reindustrialize’ despite high labour costs compared to neighbouring countries (World Bank, 2018). This development model can then be made concrete through participation in ICC or BRI, further entrenching China’s growing influence in the country. While South Africa does not currently have any BRI projects, it did sign on to ‘participate’ in the initiative – which essentially amounts to political and moral support for China’s plans and an openness to hosting BRI projects in the future (Interview, Analyst, September

2017, Pretoria).

Chinese-backed capital (e.g., loans to keep Eskom solvent) and geographically embedded engagement have thus come to undergird the developmental, state-building, and territorializing initiatives and practices of certain South African state actors.<sup>153</sup> Indeed, when taken together with South Africa's growing involvement with the BRICS, as well as with trade, where China has been South Africa's largest partner for nearly a decade, a new pattern of state-sanctioned dependence has begun to unfold. This has similarly manifested in pro-China statements by South African politicians. For instance, President Ramaphosa recently spoke out in support of China in its trade war with the United States, characterizing the U.S' actions with regards to Huawei as being precipitated by 'jealousy' of that firm's 5G networks (Reuters, 2019).

Given South Africa's support for China both at the elite and institutional (e.g., FOCAC, BRICS) levels, it, it can be argued that the country is now a willing participant in China's hegemonic project. However, it must be noted that the acceptance of China as both principal 'developmental partner' and key strategic ally is subject to the particular configurations of the current phase of government and governance, which originated with the Zuma administration's 'Bandung view of the world', (Interview, Analyst, October 2017, Johannesburg) and thus remains subject to change amidst new developments or structural changes. Sino-South African megaprojects, given their size, risk, and visibility, will play an important role in determining the future form and character of relations. It is to these projects that this chapter now turns.

### **8.3 Sino-South African Megaprojects – Legitimization and Dependency**

As assemblages of a variety of networks and elements (including transnational capital, ideology, and expertise), Sino-South African megaprojects are illustrative of the restructuring of power relations between the two countries as well as the creation of novel geographies of dependence which, while manifesting through evolving networks of (largely) state-to-state engagement, have significant implications for state-society relations. Although an analysis of Sino-South African megaprojects cannot be extrapolated to all

---

<sup>153</sup> In 2018 alone, Chinese firms committed to R193 billion in new investments (de Villiers, 2019)

Chinese-backed developments in Africa or the Global South, understanding the specificities behind these projects offers insight into the ways in which Chinese internationalization plays out contextually.

Through its interface with Chinese capital in the form of megaprojects, the South African state has attempted to legitimize and advance its shift towards state-led development. This has been accomplished through an emphasis on increasing infrastructural and despotic power (Mann, 2008). Understanding *despotic power* as the extent to which a state maintains ‘an effective and legitimate apparatus of rule’ and *infrastructural power* as the degree to which the ‘provision of public goods is bounded territorially’ (Agnew, 2018, p.161), this study has shown how megaproject development is tied to both the creation of state legitimacy in the form of state-/nation-building initiatives and foreign policy creation (see Chapter 3), as well as the capture of new value through the leveraging of resource deposits, domestic beneficiation (for instance through the production of steel), reindustrialization (through automobile assembly and component manufacturing) and access to new markets. However, by tying its material and ideological interests with Chinese capital (specifically state capital) in this fashion, the South African state has ultimately ceded some power and authority over critical aspects of its political economy (e.g., productive capacity, power generation). Likewise, once operational, these projects territorialize Chinese interests in the region and can help spread those via interface with South African actors operating in external localities (for instance exporting BAIC vehicles to SADC countries). In this sense, the willing enrolment in new dependencies highlighted in these projects are further evidence of how China’s commercial endeavours are constitutive to its foreign policy and broad geopolitical goals. Yet as previously noted, the geographies of Chinese engagement as well as its eventual outcomes depend on the nature and characteristics of the specific couplings. The remainder of this section will analyse project formation and territorialisation in order to illuminate how these factors play out in South Africa.

### *8.3.1 Project Formation and the Creation of Transnational Assemblages*



As this research has revealed, the sectoriality of Chinese-backed megaprojects largely mirrors the areas of need of the South African state. This is reflective of how given the country's aforementioned politico-economic situation, significant state support is needed to gain traction in terms of project development. Indeed, throughout this study it has become apparent that state support is the largest determinant of whether or not megaprojects will move beyond the formative stages.<sup>154</sup> However, the initial impetus for project formation is heterogenous as it can be both bottom-up and top-down, and development plans can be proposed by a variety of actors with varying degrees of connection to the state. The heterogenous nature of project formation has been evident throughout this research as all three of the case studies came together through distinct constellations of actors. For instance, in the BAIC case it was the IDC, a South African parastatal, who independently initiated the linkages that ultimately led to project construction. As described in Chapter 5, the IDC characterized Sino-South African relations and South Africa's participation in BRICS as an opportunity to further its developmental goals. The corporation was then able to leverage established linkages created by the central state (e.g., high-level linkages, inclusion in official 'road shows') in its pursuit of a Chinese OEM to partner with.

The exercise of agency in Sino-South African megaprojects is thus largely shaped by the nature of Chinese internationalization, with multi-level actors from both sides attempting to use its financial/discursive/diplomatic mechanisms to achieve their own objectives. As such, power is vested not in particular actors<sup>155</sup> but negotiated and constructed through corporate- and state-state networks and is therefore dependent on the specific mix of opportunities and imperatives around these projects. For example, in the EMSEZ case, project evolution has been contingent on the creation of vertical networks leading up through successive levels of government. As described in Chapter 7, the original plan for the zone was proposed by private Chinese firms under the leadership of a handful of individuals with experience in African extractives, they then joined into a partnership with Limpopo's provincial development agency, LEDA. LEDA subsequently sought to

---

<sup>154</sup> Though is important to note that particular, context-specific configurations of project approval and support are needed, and the state cannot be conceptualized as a singular entity (see Chapter 6).

<sup>155</sup> Though power differentials remain between those involved.

integrate the plan into the central government's developmental policy via the designation of the site as a SEZ and by linking the EMSEZ to previous ideas for projects in the area. Finally, the central government, in the form of the DTI, helped connect the project to the high-level Chinese state actors who are scheduled to bring in the bulk of the investment. However, given that the original firms are now zone operators and LEDA holds the SEZ permits, decision-making power remains fluid as opposed to coalescing around the state actors. Contrasting the power flows and dynamics in the EMSEZ to those of BAIC's more straightforward top-down arrangement, or Modderfontein's POE-state linkages, showcases how megaprojects function as assemblages and are ultimately reflective of the coming together of diverse actors and the differentiated ways in which they're embedded.

While it remains too early to assert full project impacts, the outcomes of EMSEZ and the BAIC factory will be the product of both project implantation/operation and broader market conditions. Yet it is important to consider that project objectives and definitions of 'success' may be different for each of the parties involved. Given the questions surrounding the economic viability of both BAIC and EMSEZ, it is possible that they may not be the economically transformative endeavours that they have been framed as. Indeed, a scenario exists where one or both projects potentially collapse due to lack of markets for their expected output. However, the politically sensitive nature of both projects can inform expectations for future developments. Given EMSEZ's embedding within the ICC initiative as well as the centrality of firms associated with the BAIC project, it is likely that what Lee (2014, p.9; 2017, p.10) terms 'encompassing accumulation' strategies will influence how the Chinese firms involved react as the projects evolve. As a mining executive quoted from Lee (2014, p.36) explained:

*'We don't need to maximize profit, but we need to make some profit. The state won't support us if we make losses year after year. The Chinese government gave CNMC the initial capital but the company has to survive and expand by reinvesting its profit into production'.*

Chinese state actors will therefore likely operate through the assumption that failure (in terms of promised benefits) could profoundly change the nature of engagement between

the two governments as despite the projects ultimately being products of elite-level relationships, they play key roles in the South African government's developmental strategies and are thus subject to intense public scrutiny. In the words of a Coega SEZ manager, BAIC is 'not only looking at market opportunities... its also based on the willingness of the Chinese government to show that they're not just here to get raw materials, they also want to invest in manufacturing' (Interview, Coega, January 2018, Johannesburg).

Public perception of China in South Africa has not followed the same trends as elite perception and remains decidedly mixed (Lekorwe, Chingwete, Okuru, and Samson, 2016). As such, project failure could reinforce extant narratives of extraversion and thus affect future decisions on the part of the South African state.<sup>156</sup> Consequently, while there is little official accountability or transparency in terms of project financing or implementation, any problem in terms of local labour, employment creation, or the meeting of promised benefits can result in a credibility crisis for the actors involved. The disruptions around the BAIC plant are emblematic of how complications relating from something as simple as payment to local contractors and small, medium and micro sized enterprises (SMMEs) can create complications that lead up through to the ministerial level and have the capability to affect elite-level relations. In a sense, this is the weakness of China's hybrid state-corporate relationship and its mechanisms of engagement in Africa. If Chinese commercial actors do not (or cannot) fulfil their promises to host countries, the ramifications can quickly extend up the transmission belt (for instance incidents relating to mining accidents in Zambia or how the low initial usage rates of Chinese-built railways is portrayed as a failure of the entirety of China's state-led developmental model [Patey, 2018]). As Taylor (2012) rightly noted, the Chinese state and its representatives are often held directly accountable for the actions of (largely unconnected) Chinese-based capital. This is largely due to the fact that Chinese investments/service provision are often presented as being part of the 'grand strategy' even when they aren't – giving the illusion that the central state is in charge (ibid.). Thus, while crafting broad narratives can help the Chinese state 'connect' projects throughout the continent and further its 'win-win' message, these same pathways can

---

<sup>156</sup> As one researcher noted, the public typically associates China with substandard goods and the outsourcing of South Africa's manufacturing employment (Interview, Academic, March 2018, Johannesburg)

instead exacerbate the fallout from singular project failure.

This element of risk has in some cases affected the way that the Chinese state interacts with different types of capital. While the state has historically supported champion SOEs, the configurations of contemporary Chinese firm internationalization have created instances where it behaves in similar fashion towards POEs. For instance, as detailed in Chapter 6, despite Zendai not having any formal connections with the state, it was able to access state-backed capital to purchase the land needed for the project. Similarly, it sold off the project to an SOE (China Orient Asset Management Corporation – COAMC). In the Modderfontein case, the Chinese state essentially acted to minimize the effects of project failure, in what was contemporaneously described by media reports as a ‘bail out’ of Zendai and other real estate firms (Fung, 2015). Whether this was done in order to avoid a politically divisive situation (given Modderfontein’s high profile and celebrated launch) and/or because COAMC saw an opportunity is unknown. However, COAMC’s history of managing non-performing assets and the lack of support shown by ministerial level officials, as well as the statements put forth by the new project CEO Du Wenhui (see Chapter 6) suggests that they lacked confidence in the project.

### *8.3.2 Territorialisation Strategies: State and Non-State Spaces*

Given the aforementioned conditions of entry, large-scale Chinese capital in South Africa is typically funnelled through pre-existing investment modalities such as SEZs or government priority projects. Unlike the Overseas Economic and Commercial Cooperation Zones (OECCZ) mentioned in Chapter 2, South Africa’s SEZs are not designed as Chinese enclaves and land-use decisions/permits are ultimately made by the South African state (in the form of the DTI and the specific SEZ license holders – for instance LEDA). Beyond creating support within central ministries, the focus on SEZs allows the South African actors to engineer frameworks for investment via incentives, rebates, and tax credits, and easily embeds projects within wider systems (for instance BAIC’s location provides access to infrastructure as per the port of Ngqura). As such, the use of SEZs to territorialize capital allows for the creation of forward and backwards linkages which (may) lead to local-level economic development. In the case of BAIC, the IDC has specified that a supplier park is to be built near the site as part of their attempt to incubate a new generation of ‘black

industrialists' (Interview, IDC, February 2018, Johannesburg). Meanwhile, LEDA has been adamant that EMSEZ's location near the Zimbabwean border will lead to 'regional economic integration and development' (Interview, LEDA, November 2017, Johannesburg). However, whether or not these plans will work remains unknown, and is tied to the success or failure of the larger projects.

On the other side, the focus on state-run spaces permits Chinese firms to easily find economic complementarities and ultimately mitigates risk on their behalf (by shifting it to South African actors), creating further incentives for investment. Yet despite the South African government's preference for state-to-state deals (Interview, Analyst, October 2017, Johannesburg) as well as the aforementioned difficulties of stepping outside of the SEZ/state-led framework, Chinese actors are not necessarily bound to this type of engagement and may attempt to create linkages with the private sector when opportunities arise. The Longyuan-Mulillo wind power micro-projects in Northern Cape are emblematic of Chinese actors' willingness to move beyond the preferences of the host state if necessary. The 244.5 mw wind farms are a 40/60 joint venture between Mulillo, a South African renewable energy developer, and China Longyuan Power Corporation, the world's largest wind power developer and a subsidiary of China Guodian, a SASAC-owned power producer. The R5 billion project was financed with funds from China Development Bank and built as an engineering, procurement, and construction (EPC) project (Interview, Mulilo, February 2018, Johannesburg). While the South African government was not directly involved in the project, Eskom, the energy parastatal, had to approve the final plans and government regulation conditioned the investment. Other examples of such projects include the Hisense factory near Atlantis (Western Cape), and the Beijing Auto Works (BAW) plant near Springs (Gauteng). It is important to note however, that these projects are small scale endeavours (\$100 – 300 million) and all Sino-South African megaprojects studied throughout this thesis require significant state-linkages.

An analysis of South Africa's Chinese-backed megaprojects thus reveals the commercial drivers of much of Chinese engagement (whether POE or SOE). However, it similarly highlights how for megaprojects to gain traction/support (both discursive and financial), they generally need to be tied into broader (higher-level) state-led initiatives, a fact which is reflective of the particularities of the South African context, and cannot be

extrapolated to all continent-wide project development. In scrutinising the specificities behind South Africa's megaprojects, this chapter sought to answer how high-level geopolitical initiatives are ultimately grounded and what this can expose about the networks and mechanisms that can ultimately lead to the creation of influence and dependence.

#### **8.4 Conclusion**

This chapter has sought to explain how Chinese power is created and disseminated under the current phase of BRI and 'Global China' as a whole. Moreover, it situated this analysis with an examination of how these processes are reconstituting power relations between China and South Africa via the embedding of Chinese capital in the form of megaproject construction.

The chapter has argued that the Chinese state's ability to project power outside of its territorial bounds is dependent on *cooperation* with (as opposed to domination of) firms, both SOE and POE, which operate through the logic of capital. As such, rather than a geopolitical masterplan, BRI operates as a fragmented and uncoordinated umbrella in similar fashion to the earlier 'Go Out'. Where BRI differs from the earlier initiative is in its simultaneous use as a 'brand' for Chinese foreign policy (with various degrees of success). Indeed, BRI is often brought up by provincial and central state officials (as well as private firms) as the catalyst for Chinese-backed megaprojects - even when such projects are part of entirely different initiatives. For instance in a recent interview, Yat Hoi Ning of South Africa Energy Metallurgical Base (the zone operators for EMSEZ – which is not a BRI project) stated that 'the international cooperation space unfolded by "Belt and Road" has provided a valuable stage and opportunity for us entrepreneurs to deeply participate in the global industrial division and international competition' (Sheng, 2019). The current phase of BRI has thus allowed the state to leverage the activities of firms, whose imperatives are largely commercial, to meet its own broad geopolitical/geoeconomic goals. However, in the case of project-level failure, either in terms of promised benefits or exorbitant cost, this strategy can instead multiply the fallout and create a credibility crisis leading up to the ministerial-level (for instance the Hambantota port in Sri Lanka and the cancellation of

BRI projects in Malaysia).

In Africa, the co-optation of developmental discourses both provides Chinese firms opportunities to implement their project-level commercial designs and legitimizes/endears these to (many of) the continent's governments. Echoing Carmody and Taylor's (2010) flexigemony, Chinese actors operating at the firm/project level can tailor their messaging to the specific histories and geographies of the countries they engage with. Meanwhile at the elite-level, the state supports these discourses and uses them to connect uncoordinated projects under the umbrella of BRI-led development or 'South-South' cooperation, thus gaining favour with 'developmental partners' on the continent and pushing Chinese-inflected globalization forward. Chinese-inflected globalization has therefore become something that is locally assembled, produced, or constructed, as the specific geographies of place are constitutive to the creation of its global flows and processes (Hart, 2002)

The second half of this chapter sought to augment the theoretical framework with an analysis of the embedding of Chinese capital in the form of megaprojects into South Africa's economic systems and how these are representative of evolving relations between the two countries. It argued that the Chinese state's hegemonic strategy has thus far worked to great effect in South Africa, where China has positioned itself as the country's key developmental partner with the active consent of important ministerial-level departments, including the office of the Presidency. Chinese capital and Chinese-backed megaprojects now largely undergird the developmental, state-building, and territorializing initiatives of the South African state, which has compounded this new form of dependence with a geopolitical reorientation towards China and the BRICS. South African actors, operating through a 'South Space' lens, view Chinese support and Chinese-backed projects as crucial for the success of the country's developmental initiatives. An analysis of Chinese-backed megaprojects thus offers insight into how the merger of capitalist and statist logics necessary for large-scale firm internationalization (often in the form of megaprojects) creates the conditions for the extension of Chinese influence into South Africa's political and economic systems. However, the South African case also shows how the assemblage-nature of megaprojects means that their ultimate effects are dependent on a wide variety of multi-level actors and contextually-specific sets of circumstances that defy 'top-down' conceptualization.





## Chapter 9 – Conclusions

The emergence of a new phase of Chinese engagement in Africa (and more broadly, the Global South) has become a major topic within both academic and popular circles. While the Chinese state's ties with the African continent stretch back to the early phases of the Cold War, where it was involved in developmental assistance programs in ideologically compatible countries, the current era is driven by a distinct set of logics and exhibits far greater volumes of trade, aid, and investment.

Conceptualizing contemporary Sino-African engagement as part of China's broader expansionist moment, whose practices have given rise to a novel form of *state-led* globalization (Chinese-inflected globalization), this study has examined the logics, drivers, and developmental mechanisms behind South Africa's Chinese-backed megaprojects – effectively employing them as a lens to interrogate what such projects can reveal about both the nature of China's internationalization strategies and the reconfiguration of the South African government. In particular, this thesis has sought to understand how the underlying processes of Chinese-inflected globalization, specifically the internationalization of firms operating within China's state capitalist system and the central government's increasingly assertive foreign, have been utilized and leveraged by the South African state in order to legitimize and achieve their own goals and objectives. Likewise, the thesis has investigated how the resultant configurations and articulations lead to both a territorialisation of Chinese geopolitical influence and the reconstitution of power relations between the two countries - essentially creating new patterns of state-sanctioned dependence.

The study has focused on megaprojects for a variety of reasons. Foremost among these is the fact that such projects have become some of the primary mechanisms of engagement in this latest phase of Sino-African relations. Yet more significantly in terms of analysis, megaprojects form hubs where transnational flows of capital, ideology, and expertise interface with local circuits of economic and political power. As such, their study illuminates the specific linkages and power flows that ultimately help shape state to state relations. While the analysis of Sino-South African megaprojects in this thesis cannot be

generalized to all Chinese-backed developments on the continent, it offers contextually-specific insight into the differentiated ways which Chinese-inflected globalization plays out as well as the sorts of effects these processes can have on state-state relations and host country state-society relations.

Broadly, the study has revealed that South Africa's contemporary Chinese-backed megaprojects are constitutive of the South African state's strategic reorientation towards China within the context of a decade of weak economic growth and increasing regulatory and governmental dysfunction/maladministration. This reorientation includes both a political pivot away from traditional partners in the west, and instead towards China and the BRICS grouping, as well as a (hitherto sector-specific) domestic restructuring towards state-led growth in the form of a 'developmental state'. These policy preferences are resultant from a belief among government officials throughout the ministries charged with formulating foreign and economic policy that the Chinese state-led, investment-driven, export-oriented model of development is conducive to the South African state's politico-ideological goals (e.g., transformation through a state-led framework) and that economically beneficial linkages can be supported via participation in Chinese-led transnational assemblages and initiatives including BRI or ICC. Due to an increasing dependence on Chinese-backed capital embedded in the form of megaprojects across some of the most important sectors of the economy, this study argues that the Chinese state now at least partially underpins the South African state's legitimacy.

For their part, Chinese actors (both SOE and POE) participating in or responsible for megaproject construction are largely profit-seeking and engage with the South African government in order to further their commercial objectives. While SOEs may be tasked with political goals in order to access state-funding (for instance the creation of political influence or access to resources), at their core they remain profit-driven entities, and are expected to turn a profit or risk losing access to state-backed finance (Lee, 2017).

The research has been designed to address a significant gap in the literature, specifically the disconnect between the megaproject literature and that on Sino-South African relations. Indeed, while research on these subjects has become widespread over the last decade, few studies have combined the two literatures, and none have done so for South Africa specifically.

South Africa was chosen for the study as it has become both China's largest trading partner on the continent and an important geopolitical ally whose participation in Chinese multilateral fora serves to buttress the creation of Chinese influence in Africa. Since the beginning of the Zuma administration, South Africa has endorsed the Belt and Road Initiative (BRI), hosted the 2015 Forum on China Africa Cooperation (FOCAC), and become a member of the BRICS grouping (to which it was invited by China - see Alden and Wu, 2016). Moreover, it is now frequently portrayed by high-level Chinese state actors as a 'gateway to the continent' for Chinese firms. As per the Indian Consul General in South Africa, 'South Africa is the country which matters in Africa' (Carmody, 2017c, p.865).

This chapter, while not intending to restate all of the findings presented in this thesis, will summarize the main arguments in holistic fashion and elucidate what the specific findings can reveal about the broader processes described above. In addition, it will evaluate this thesis' contributions to the research and touch upon the emerging themes which will shape the course of future research.

## **9.1 Megaprojects as Politico-Economic Instruments**

Representing the literature review section of the study, Chapters 2 and 3 sought to detail and contextualize the use of megaprojects as politico-economic instruments deployed by both state and non-state actors to achieve their broader agendas. Moreover, the chapters detailed why these types of large-scale projects have become some of the main instruments with which the delivery of goods and services is accomplished throughout the world.

Chapter 2 argued that Chinese-backed projects in Africa are built and 'brought together' by a central phenomenon – China's global expansionist project, even if they are not necessarily driven by the political interests of the Chinese state. It explained how megaprojects are used by Chinese actors operating in Africa, with the broad goal of contextualizing Sino-African project development. The chapter also argued that 5 distinct categories of Chinese-backed megaproject can be observed in Africa. These are: infrastructure projects (energy installations, ports, roads, railways, sanitation systems), extractive projects (mines, oil/gas installations), production projects (special economic zones (SEZ), manufacturing zones, free ports), consumption projects (urban integrated

megaprojects (UIMs), mega-malls, skyscrapers), and ceremonial projects (palaces, stadiums) (Gellert and Lynch, 2013). Each of the types plays a different role within the Chinese state's geostrategic and geoeconomic designs and they are representative of the diverse types of economic complementarities that actors can leverage. For instance, Chinese involvement in large-scale infrastructural projects is the result of China's highly-experienced construction firms as well as the state connections and resources that the sector can bring to bear (e.g., tying loans to the employment of Chinese firms and material) combined with Africa's legacy of infrastructural underdevelopment and \$130 billion a year deficit (AfdB, 2018). Extractive projects on the other hand are largely driven by China's demand for resources for its domestic economy. However, as wide-spread investments in extractives didn't begin until after the 'Go Out' initiative of the early 2000s, fixed-capital investments are a fairly recent (albeit fast growing) phenomenon.

Chinese-backed consumption projects are generally driven by African demand for 'new cities' or urban integrated megaprojects (UIM) as panaceas for the continent's rapidly growing urban areas. Within this context, Chinese firms have been involved in the financing and construction of UIMs throughout the continent including the Kilamba Kiaxi New City in Angola, and New Cairo in Egypt. Meanwhile, the impetus for production projects generally comes from China's need to enlarge the geographical reach of its capital and export its low-value added and polluting industries in combination with African government's desire to absorb labour-intensive manufacturing as part of broader efforts to induce industrialization. Finally, ceremonial projects have been historically propelled by China's geopolitical agenda (e.g., establishing linkages with ideologically comparable states) and the state's desire to create long-lasting relationships on the continent.

Chapter 2 also elucidated how backing for megaprojects is created at the local level. Broadly, support is constructed by what Flyvbjerg (2014, p.8) terms the '4 sublimines'. These include the political sublime, or the positive attention received by politicians from the unveiling of large-scale projects; the economic, which is largely characterized in terms of the expectation of jobs that comes from large projects; the technological, which refers to the exhilaration that engineers and architects get from pushing the limits; and the aesthetic, or the adulation received when creating an iconic structure. In addition, research by van Wijk and Fischhendler (2017, p.469) has shown that megaprojects are often embedded into

what they term an ‘urgency discourse’ which seeks to create momentum for projects through the invocation of crisis conditions. This can facilitate implementation via the bypassing of institutional mechanisms and social or environmental regulations that would otherwise slow down or derail the process.

Yet despite their appeal to elites and discursive positioning as catalysts of growth and development, megaprojects are difficult undertakings that require long-term planning, immense amounts of capital, and can create tension among differently affected groups. Indeed, studies suggest that poor project outcomes can create the conditions for economic underperformance and macroeconomic risk via lost investment opportunities and the accumulation of debt (that may not be repayable if projects are unprofitable) (Ansar, Flyvbjerg, Budzier, and Lunn, 2016). For instance, Ethiopia and Kenya are struggling to manage the debt brought on by their Chinese-built railway projects, the Addis Ababa-Djibouti Railway and Standard Gauge Railway, respectively (Chen, 2019). Ethiopia has already had to restructure their debts, pushing repayment terms to thirty years as opposed to ten. Meanwhile Kenya’s plans for the second phase of the SGR have been derailed by a lack of interest from Chinese lenders.

Building on the understanding of megaprojects put forth in Chapter 2, Chapter 3 interrogated how such projects have been used by successive post-apartheid governments to construct authority and legitimacy. Specifically, the chapter argued that megaprojects in South Africa are built for three overarching rationales: state building (through economic development initiatives and the extension of infrastructural power), political symbolism, and as instruments of foreign policy, where they serve to ‘spatially fix’ (Harvey, 1981, p.2) foreign capital and strengthen key relationships. Together, these rationales form the crux of state legitimacy. This is evidenced by South Africa’s embrace of the megaproject framework throughout its democratic period as well as an elite-level discourse which presents them as drivers of socio-economic change despite limited supporting evidence. Indeed, since the end of apartheid, billions of dollars’ worth of state funding has gone to large-scale projects. These include the 2010 World Cup stadia, the Medupi and Kusile power stations (the world’s third and fourth largest coal plants, respectively), a housing delivery strategy based entirely on large-scale ‘catalytic projects’, and expansions to a variety of roads, ports, and airports (including both OR Tambo in Johannesburg and King

Shaka Airport in Durban) (Desai, 2015; Pollet, Staffel, and Adamson, 2015, Harrison and Todes, 2017).

The chapter also explained how, given the mismanagement and dysfunction across all level of governments under the Zuma administration, the country's economic situation has deteriorated and as such the impetus for megaproject construction (whether through direct planning or the channelling of international financial flows into specific projects) comes most often from within the state. This has led to sectors such as housing, energy, and manufacturing are becoming dependent on the success of their state-led initiatives.

## **9.2 Findings and Emerging Themes**

The central argument put forth throughout this thesis is that South Africa's elite-led pivot towards China, combined with the subsequent leveraging of that country's capital, has allowed state elites to pursue an economic, ideological, and political restructuring that otherwise would not have been possible. Essentially, through the cultivation of linkages with Chinese state actors and the embedding of Chinese capital, South Africa has been able to move beyond the previous phase of neoliberal development under GEAR and towards a *state-led* developmental path which takes inspiration from Chinese-inflected globalization. However, the embedding of Chinese capital into key nodes within South Africa's socio-technical systems in combination with an (as of yet) ever-tightening relationship among governing parties has led to the creation of novel configurations of dependence which tie the country's political economy to the Chinese state.

Beyond these main conclusions, several major themes and findings have also emerged from this research. First among these is the specific nature of Chinese-backed megaproject development in South Africa, which was largely detailed in the practical analysis (Chapter 5-7). As this research has explained, these projects are the result of particular and contextually-based confluences of politico-economic circumstances and are an example of state-driven globalization (in that the state must play a central role for projects to gain traction). The integration of state interests can also change the strategies of the firms involved. For instance, BAIC has certain targets to employ South Africans in its operations and will attempt to manufacture high-value components within the country (though as noted, these have been ignored in other contexts).

In order to bring in investment as required by the ‘developmental state’ agenda – whose vision is articulated into policy via specific cross-sectoral guidelines such as the New Growth Path (NGP) and Industrial Policy Action Plan (IPAP) - certain South African government ministries, as well as selected parastatals and state-owned enterprises (SOEs) are utilizing what Gonzalez-Vicente (2011, p.403) terms ‘entrepreneurial’ approaches, in which SOEs and state ministries actively engage markets and firms. South African actors operate through a ‘decentralized improvisation’ approach where actors across different levels (e.g. provincial governments, parastatals) may strike out on their own in order to precipitate, or ‘fish’ for projects which fit into the state’s developmental agenda and will thus be supported by central institutions. Consequently, while state support is needed to move plans along, project formation can be heterogeneous (see Chapter 8) and South African actors operate pragmatically and opportunistically in search of the economic complementarities that may lead to project construction.

Megaprojects are sought by these actors as part of a long-standing belief that they are among the most efficient way of meeting the country’s developmental goals (Hannan and Sutherland, 2014; Desai, 2015) and projecting state (and party) authority (Yeh and Wharton, 2016). Additionally, megaprojects provide opportunities for certain economic interests to make profits, both through contract procurement and rent-seeking (Ballard and Rubin; 2017; Interview, Analyst, October 2017, Johannesburg). As such, the South African state has heavily incentivized the international expansion of Chinese firms into its Special Economic Zones (SEZs) and sought to engage the Chinese with regards to certain government ‘priority’ areas (including the Moloto Road Corridor and Mzimvubu Water Project among others). The focus on SEZs allows the South African state to engineer the frameworks for investment and provides easy access to wider infrastructure – reducing risk for wary investors. Embedding via SEZs is also seen by the state as conducive for the creation of forward and backwards linkages which it can then leverage toward local-level economic development.

On the other side of this equation are a variety of Chinese actors including policy banks, developmental finance institutions, central (SASAC-owned) SOEs, and private or quasi-private firms. Operating under the ‘Global China’ framework (Lee, 2017) which sees firms expand internationally with varying degrees of state support, different sets of actors

have attempted to enter the South African market. As per Linhua (quoted in Carmody, 2017c, p.865), the country's combination of international reputation, regional linkages, and sizeable domestic markets make South Africa an important part of China's geopolitical calculus for the African continent. Using a 'flexigemony' approach, which calls for actors to work with, rather than against, the grain of state-society formations (Carmody and Taylor, 2010), large-scale projects have become a popular modality of engagement as per the previously discussed position of the South African state. These projects are also supported discursively by the 'win-win' rhetoric of South-South Cooperation and in terms of South Africa, an official government stance (from both governments) which places the country as the 'gateway to the continent' (Xinhua, 2018).

A secondary theme that emerged throughout this research was the paucity of large-scale projects in South Africa relative to what is reported in the media or agreed upon at multilateral conferences (for instance the MOUs signed at FOCAC or the annual BRICS meetings). Indeed, despite the factors listed above, which would seemingly indicate a large number of Chinese-backed megaprojects in South Africa, very few large-scale projects make it beyond the agreement or design phase. The reasons for this dearth in expected megaprojects are diverse and multi-scalar. In comparison to some of the megaprojects undertaken in other parts of Africa, Chinese-backed projects in South Africa are typically initiated by smaller, or less experienced firms. While the BAIC factory and EMSEZ can be considered exceptions, it is important to consider the Coega factory is BAIC's first international project. As Chapter 5 detailed, the company has been charged with exhibiting naivety in the planning of both the plant and its logistical operation. The EMSEZ project on the other hand only received large-scale government support once it was integrated into the International Capacity Cooperation initiative, several years after the preliminary idea was put forth to LEDA.

Contrary to the rhetoric put forth by Chinese state elites describing South Africa as a 'gateway to the continent', at the regional level, the infrastructure deficit (as well as trade barriers and requirements for export elsewhere) outside of South Africa means that it is often not profitable for firms to establish large-scale production facilities within the country (given logistical problems and high shipping costs). In terms of manufacturing and productive capacity, connectivity issues have thus been a severe impediment to establishing



South Africa as ‘the gateway’ to Africa.<sup>157</sup> Compounding this, within the country, Chinese goods are widely believed to be cheap and defective. One example of this is BAW’s launch of a line of minibuses, which were designed to compete with Toyota. The trucks were seen as unreliable in South Africa and low sales throughout the region led to the cancellation of a planned expansion to BAW’s facilities in Springs, Gauteng. Yet the largest impediments to the construction of Chinese-backed megaprojects are factors found within South Africa itself. These can be delineated into two separate categories: factors relating to government instability and dysfunction (which can be exacerbated by elite-level patronage networks), and factors relating to the historical trajectory of South African capitalism.

Near the end of Jacob Zuma’s term, the politico-economic environment within the South African government was one of increasing dysfunction and rent-seeking behaviour (Interview, Analyst, February 2018, Johannesburg). As per one analyst, every department seemingly has a different perspective on Chinese engagement (Interview, Analyst, October 2017, Pretoria). This has led to a lack of policy cohesion across the board, creating a cross-sectoral commercial environment that is not conducive to large-scale investments. Even the extractive sector, which has historically helped drive the South African economy, has been affected. One Chinese mining executive stressed that government instability is ‘the biggest problem in the industry’ while a South African analyst noted that despite high prices for some commodities, no new investment has come in during the last several years. Instead firms have only sought ‘the maintenance of existing projects’ (Interview, Analyst, October 2017, Midrand; Interview, Executive, November 2017, Johannesburg). This instability across government has a particularly disruptive effect on Chinese investment given that Chinese actors operating in South Africa are heavily reliant on the state for guidance (Interview, Analyst, October 2017, Johannesburg).

Beyond the situation within the state, factors relating to the trajectory of capitalism in South Africa also play a role in minimizing the opportunities for Chinese-backed megaprojects and constraining the ability of Chinese capital to embed itself in the country. South Africa has historically depended on its extractive sector and as such already has many of the necessary linkages to export raw and processes materials. This contrasts with

---

<sup>157</sup> Though it is important to note that this is not the case in all sectors. For instance, Chinese service providers and financial companies often use Johannesburg as their African hub.

other parts of Africa, where Chinese actors are currently building the infrastructure projects (which account for a large percentage of Chinese-backed megaprojects on the continent) necessary for profitable extraction. Additionally, the extractive sector itself is considered mature, meaning that new opportunities for mines are rare. Compounding this is the existence of local construction firms, which provide competition for the Chinese firms. Corporations like WBHO and Murray and Roberts Construction limit the opportunities for Chinese construction firms to embed themselves. Moreover, as Chinese policy bank loans sometimes have stringent procurement requirements (Yeh and Wharton, 2016) or necessitate that projects are undertaken specifically by Chinese construction firms (which violates South African procurement laws), South Africa has been unable to fund projects in this fashion. The case of the Mzimvubu water project is representative of this dilemma. In 2017 credible news reports surfaced which stated that the R12 billion project would be funded by China Exim bank as part of a R70 billion loan (which was confirmed by a government spokesperson [Interview, Water and Sanitation, February 2018, Johannesburg]). However, the documents stated that Exim bank would only provide the loan if construction was done by China Communications Construction Company as opposed to going through the standard tendering process. As such, the project was placed on hold. Finally, South Africa has strong labour unions, which can turn megaprojects into spaces of contestation and impede progress despite facilitative state policies. In the case of BAIC, construction of their 11-billion-rand automobile factory near Port Elizabeth was stopped for several months due to labour unrest. These difficulties are well known to Chinese actors and large Chinese SOEs are often hesitant to do business in South Africa without backing from experienced Chinese intermediaries or South African central state actors (Interview, Analyst, February 2018, Johannesburg).

Finally, the research has documented how megaprojects have become some of the main instruments through which Chinese influence is created and expressed in South Africa (which has been exacerbated by the country's growing sector-specific dependence on large-scale development schemes). Megaprojects serve to entrench Chinese interest into host country politico-economic systems and create conditions of (inter)dependence. Moreover, they can advance the Chinese state's strategic developmental discourses by providing tangible examples of the benefits that come from cooperation. As Chapter 8

detailed, in the current phase of BRI, the creation of Chinese state influence is done via cooperation (rather than domination) with leading Chinese firms - with the state essentially leveraging the reach of Chinese-based capital to further its own geopolitical designs. This intertwining of firm and state activity couples the geopolitical and geoeconomic despite differentiated imperatives. As Flint and Zhu (2019, p.95) explain, ‘when firms practice strategic coupling in a system of production networks (Yeung, 2016), they are enabled by states and economic connections are inseparable from territorial, or geopolitical, goals and practices’. The South African case highlights how this system can expand China’s international influence with the participation and active consent of African elites. However, it similarly shows that the same pathways used for project development can magnify the effects of on-site contestation or project failure as they interface the local level ‘messiness’ (Flint and Zhu, 2019 pg.95) of development with high-level geopolitical strategy.

### **9.3 Contribution to the Literature and Future Research Pathways**

This work has contributed to the literature on Sino-African relations and African agency through its investigation of the underlying processes, logics, and mechanisms behind Sino-South African megaproject construction. In doing so, it has highlighted how these projects both occur in cohesion with, and reinforce the construction of alternate developmental models. Moreover, it has shown how, despite power imbalances, the ‘guiding hand’ of project development can come from African actors. Through its analysis of project formation and development (or lack thereof), the research has also revealed how the geographies of Chinese engagement and the effectiveness of its strategic couplings are dependent on the situational characteristics of the host state and the specific local context in which projects are built.

The research has similarly shed light on the processes behind megaproject construction in South Africa. It has shown how megaprojects are seen as the preferred method of service and policy delivery by a variety (though not all) of government actors and how these projects have been used to underpin governmental legitimacy throughout the post-apartheid period. Yet in the case of Sino-South African megaprojects, the incoherence in project rollout can be attributed to a mix of dysfunctional (or rent-seeking) behaviour on behalf of the state actors involved, and difficulties navigating the country’s markets,

regulatory environment, and labour regime on the part of the Chinese actors.

Finally, the research contributes to the study of South African urbanism (through its in-depth examination of the Modderfontein project within the context of Johannesburg's evolving urban landscape) and industrial policy (through the BAIC and EMSEZ chapters). The sections on industrial policy similarly add to the growing literature on African industrialization (or in this case 're-industrialization') efforts.

Further in-depth research on the projects under construction (the BAIC plant and EMSEZ) could supplement academic understandings of the ways in which the South African state seeks to create the conditions for investment or the effects of local content policies on backwards linkages. In similar fashion, additional research on the EMSEZ could shed light on the machinations behind international capacity cooperation. As Kenderdine and Lan (2018) note, the initiative is currently concentrated in central Asia and the Middle East; as such, its spread to Africa signifies a geographic expansion which significantly furthers the reach of the specific provinces and SOEs involved. Finally, further examination of these projects could also reveal how they affect local-level conditions and contexts, as well as document how municipal governments or local SMMEs react to top-down central state plans. Studying how these pathways affect project development could provide a more profound understanding of the processes and practices of Chinese-inflected globalization in their interface with host country state-society formations.

## Bibliography

- 'Development Facilitation Act of 1995'. (1995) *Government of South Africa*. Retrieved July 17, 2019 from: <https://www.gov.za/documents/development-facilitation-act>.
- 'Premier David Makhura: Gauteng 2015 State of the Province Address'. (2015) *Government of South Africa*. Retrieved July 17, 2019 from: <https://www.gov.za/speeches/premier-david-makhura-gauteng-state-province-address-23-feb-2015-0000>.
- 'Where is the province of Limpopo, South Africa? Shanxi Provincial Government and they signed a memorandum on developing friendly inter-provincial relations'. (2018) *Shanxi Radio and Television Station*. Retrieved July 18, 2019 from: [https://page.om.qq.com/page/OL\\_JXcTg7IJAb0MVeMMRB8FQ0?refer=cp\\_1021&from=singlemessage&isappinstalled=0&ADTAG=tgi.wx.share.mess%E2%80%A6](https://page.om.qq.com/page/OL_JXcTg7IJAb0MVeMMRB8FQ0?refer=cp_1021&from=singlemessage&isappinstalled=0&ADTAG=tgi.wx.share.mess%E2%80%A6).
- Abubakar, I. R. and Doan, P. L. (2017) 'Building new capital cities in Africa: Lessons for new satellite towns in developing countries', *African Studies* 76, 4: 546–565.
- Adama, O. (2018) 'Urban imaginaries: funding mega infrastructure projects in Lagos, Nigeria', *GeoJournal* 83, 2: 257–274.
- AECI. (2013) 'Heartland and Zendai transaction', *AECI*. Retrieved July 17, 2019 from: <https://www.aeciworld.com/pdf/investors/presentations/2013/heartland-and-zendai-transaction.pdf>.
- AECI. (2019) 'History', *AECI*. Retrieved July 17, 2019 from: <https://www.aeciworld.com/about-history.php>.
- AFDB. (2018) 'Africa's Infrastructure: Great Potential but Little Impact on Inclusive Growth. *African Development Bank*, Retrieved July 15, 2019 from: [https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2018AEO/African\\_Economic\\_Outlook\\_2018\\_-\\_EN\\_Chapter3.pdf](https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/2018AEO/African_Economic_Outlook_2018_-_EN_Chapter3.pdf).
- AFP. (2017) 'Kenya unveils first new railway in a century' *The New Indian Express*, Retrieved July 15, 2019 from: <http://www.newindianexpress.com/world/2017/may/29/kenya-unveils-first-new-railway-in-a-century-1610375--1.html>.
- AIDC EC. (2014) 'State of the automotive industry 2014' *Automotive Industry Development Centre Eastern Cape (SOC) Ltd*. Retrieved July 17, 2019 from: [https://siteassets.pagecloud.com/inkanyezi/downloads/state\\_of\\_auto\\_industry.pdf](https://siteassets.pagecloud.com/inkanyezi/downloads/state_of_auto_industry.pdf).

- Alden, C. and Wu, Y.S. (2016) 'South African foreign policy and China: converging visions, competing interests, contested identities', *Commonwealth & Comparative Politics* 54, 2: 203–231.
- Allix, M. (2017) 'Strikes delay China's flagship BAIC SA plant construction', *BusinessDay*. Retrieved July 17, 2019 from: <https://www.businesslive.co.za/bd/companies/industrials/2017-09-27-strikes-delay-chinas-flagship-baic-sa-plant-construction/>.
- Altshuler, A. A. and Luberoff, D. E. (2004) *Mega-Projects: The Changing Politics of Urban Public Investment*. Washington D.C.: Brookings Institution Press.
- Alves, A. C. (2013) 'China's 'win-win' cooperation: Unpacking the impact of infrastructure-for-resources deals in Africa', *South African Journal of International Affairs* 20, 2: 207–226.
- Ansar, A., Flyvbjerg, B., Budzier, A. and Lunn, D. (2016) 'Does infrastructure investment lead to economic growth or economic fragility? Evidence from China', *Oxford Review of Economic Policy* 32, 3: 360–390.
- Anthony, R. (2013) 'Infrastructure and influence: China's presence on the coast of East Africa', *Journal of the Indian Ocean Region* 9, 2: 134–149.
- Antonio, N.S. and Ma, S. (2015) 'China's special economic zones in Africa: context, motivations and progress', *Euro Asia Journal of Management* 44, 25: 79- 03.
- Anwar, M.A. (2012) 'Bringing Globalisation to the Countryside: The Political Economy of Special Economic Zones in India', Doctoral dissertation, Trinity College Dublin, Dublin, Ireland.
- Arewa, O. B. (2016) 'Constructing Africa: Chinese Investment, Infrastructure Deficits, and Development', *Cornell International Law Journal* 49: 101–140.
- Ashman, S. and Fine, B. (2013) 'Neo-liberalism, varieties of capitalism, and the shifting contours of South Africa's financial system', *Transformation: Critical Perspectives on Southern Africa* 81: 144–178.
- Ashman, S. Fine, B. and Newman, S. (2011) 'Amnesty International? The Nature, Scale and Impact of Capital Flight from South Africa', *Journal of Southern African Studies* 37: 7–25.
- Ballard, R. and Harrison, P. (2019) 'Transnational urbanism interrupted: A Chinese developer's attempts to secure approval to build the 'New York of Africa' at Modderfontein, Johannesburg', *Environment and Planning A: Economy and Space*.

- Ballard, R. and Rubin, M. (2017) 'A 'Marshall Plan' for human settlements: how megaprojects became South Africa's housing policy', *Transformation: Critical Perspectives on Southern Africa* 95, 1: 1–31.
- Ballard, R., Dittgen, R., Harrison, P. and Todes, A. (2017) 'Megaprojects and urban visions: Johannesburg's Corridors of Freedom and Modderfontein', *Transformation: Critical Perspectives on Southern Africa* 95, 1: 111–139.
- Barnes, J. (2013) 'Capital structure of the South African automotive industry: historical perspectives and development implications', *Transformation: Critical Perspectives on Southern Africa* 81: 236–259.
- Barnes, J., Black, A., and Techakanont, K. (2017) 'Industrial Policy, Multinational Strategy and Domestic Capability: A Comparative Analysis of the Development of South Africa's and Thailand's Automotive Industries', *The European Journal of Development Research* 29, 1: 37–53.
- Barnes, J., Kaplinsky, R. and Morris, M. (2004) 'Industrial policy in developing economies: Developing dynamic comparative advantage in the South African automobile sector', *Competition and Change* 8, 2: 153-172.
- BBC. (2012) 'African Union opens Chinese-funded HQ in Ethiopia', *British Broadcasting Corporation*, Retrieved July 19, 2019 from: <https://www.bbc.com/news/world-africa-16770932>.
- Benazeraf, D. and Alves, A. (2014) 'Oil for housing: Chinese built new towns in Angola', Policy Briefing 88. Global Powers and Africa Programme, April 2014, SAIIA, p. 1–14.
- Binns, T. and Nel, E. (2002) 'Devolving Development: Integrated Development Planning and Developmental Local Government in Post-apartheid South Africa', *Regional Studies* 36, 8: 921–932.
- Bisseker, C. (2017) *On the Brink: SA's political and fiscal cliff-hanger*, Cape Town: Kwela.
- Black, A. (2009) 'Location, automotive policy and multinational strategy: The position of South Africa in the global automotive industry since 1995', *Growth and Change* 40, 3.
- Black, A. (2017) 'Trade Liberalization, Technical change and firm level restructuring in the South African automotive component sector', *Institutions and Economies* 3, 2: 173-202.

- Black, A., Barnes, J. and Monaco, L. (2018) 'Structural Transformation in the Auto Sector: Industrial Policy, State-Business Bargaining and Supply Chain Development', Industrial Development Think Tank (IDTT).
- Black, A., Craig, S. and Dunne, P. (2016) 'Capital intensity, industrial policy and employment in the South African manufacturing sector', *REDI3x3*, Working paper 23.
- Bloom, W. (1993) *Personal identity, national identity and international relations*, Cambridge: Cambridge University Press
- Board, C., Davies, R.J. and Fair, T.J.D. (1970), 'The structure of the South African space economy: an integrated approach', *Regional Studies* 4, 3: 367-392.
- Bond, P. (2013) 'Sub-imperialism as Lubricant of Neoliberalism: South African 'deputy sheriff' duty within BRICS', *Third World Quarterly* 34, 2: 251–270.
- Brautigam, D. (2009) *The dragon's gift: the real story of China in Africa*, Oxford: Oxford University Press.
- Brautigam, D. (2010) 'Looking East: Africa's newest investment partners', *Global Journal of Emerging Market Economies* 2, 2: 173–188.
- Brautigam, D. (2014) 'Chinese-Built Angolan "Ghost Town" Wakes Up?' *China in Africa: The Real Story*. Retrieved: July 15, 2019, from: <http://www.chinaafricarealstory.com/2014/04/chinese-built-angolan-ghost-town-wakes.html>.
- Brautigam, D. and Hwang, J. (2016) 'Eastern Promises: New Data on Chinese Loans in Africa, 2000 to 2014', *China Africa Research Initiative* Working paper 4.
- Brautigam, D. and Hwang, J. (2019) 'Great walls over African rivers: Chinese engagement in African hydropower projects', *Development Policy Review* 37, 3: 313–330.
- Brautigam, D. and Tang, X. (2012) 'Economic statecraft in China's new overseas special economic zones: soft power, business or resource security?' *International Affairs* 88, 4: 799–816.
- Brautigam, D. and Tang, X. (2014) 'Going Global in Groups: Structural Transformation and China's Special Economic Zones Overseas', *World Development* 63: 78–91.
- Brautigam, D., Hwang, J. and Wang, L. (2015) 'Chinese Financed Hydropower Projects in Sub-Saharan Africa', *China Africa Research Initiative* Working paper 8.
- Breslin, S. (1996) 'China: developmental state or dysfunctional development?' *Third World Quarterly*, 17, 4: 689-706.



- Breslin, S. (2005) 'Power and production: rethinking china's global economic role.' *Review of International Studies* 31, 4: 735–753.
- Breslin, S. (2009) *China and the global political economy*, New York: Palgrave Macmillan.
- Breslin, S. (2010) 'China's emerging global role: Dissatisfied responsible great power', *Politics* 30: 52-62.
- Breslin, S. (2018) 'Global Reordering and China's Rise: Adoption, Adaptation and Reform', *The International Spectator* 53, 1: 57–75.
- Brill, F. (2018) 'Playing the game: A comparison of international actors in real estate development in Modderfontein, Johannesburg and London's Royal Docks' *Geoforum*.
- Brill, F. and Reboredo, R. (2019) 'Failed Fantasies in a South African Context: the Case of Modderfontein, Johannesburg', *Urban Forum* 30, 2: 171–189.
- Brunn, S.D. (2011) *Engineering Earth: The Impacts of Megaengineering Projects*, New York: Springer Science & Business Media.
- Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H. and Zheng, P. (2007) 'The Determinants of Chinese Outward Foreign Direct Investment.' *Journal of International Business Studies* 38, 4: 499–518.
- Burkhardt, P. (2019) 'Eskom's Financial Woes Deepen as New Plant Repair Bill Mounts', *Bloomberg*, Retrieved July 16, 2019 from: <https://www.bloomberg.com/news/articles/2019-01-28/eskom-s-financial-woes-deepen-as-new-plant-repair-bill-mounts>
- BusinessWire. (2018) 'The Motor Vehicle Industry in South Africa, 2018 - Automotive Export Revenue Declined in 2017, Mainly Due to the Rand's Strength', *BusinessWire.com*. Retrieved July 17, 2019 from: <https://www.businesswire.com/news/home/20181206005304/en/Motor-Vehicle-Industry-South-Africa-2018-->.
- Cain, A. (2014) 'African urban fantasies: past lessons and emerging realities.' *Environment and Urbanization* 26, 2: 561–567.
- CARI. (2018) 'China-Africa Trade,' China Africa Research Initiative, Johns Hopkins University, Washington, DC, Retrieved July 15, 2019, from: <http://www.sais-cari.org/data-china-africa-trade>.
- CarMag. (2018) 'ROAD TEST: BAIC X25 1,5 MT Fashion' *CarMag.co.za*. Retrieved July 17, 2019 from: <https://www.carmag.co.za/car-reviews/baic-x25-15-mt-fashion/>.

- Carmody, P. (2002) 'Between Globalisation and (Post) Apartheid: The Political Economy of Restructuring in South Africa', *Journal of Southern African Studies* 28: 255–275.
- Carmody, P. (2013) *The rise of the BRICS in Africa: the geopolitics of south-south relations*, London; England: Zed Books.
- Carmody, P. (2017a) 'Assembling effective industrial policy in Africa: an agenda for action', *Review of African Political Economy* 44, 152: 336–345.
- Carmody, P. (2017b) 'India and the BRICS in Africa: Promoting development or dependency?', [lecture], *The University of Edinburgh*. Retrieved July 18, 2019 from:  
[https://media.ed.ac.uk/media/India+and+the+BRICS+in+AfricaA+Promoting+development+or+dependencyF+-+P%C3%A1draig+Carmody/1\\_bnqj2vmb](https://media.ed.ac.uk/media/India+and+the+BRICS+in+AfricaA+Promoting+development+or+dependencyF+-+P%C3%A1draig+Carmody/1_bnqj2vmb).
- Carmody, P. (2017c) 'The Geopolitics and Economics of BRICS' Resource and Market Access in Southern Africa: Aiding Development or Creating Dependency?' *Journal of Southern African Studies* 43, 5: 863–877.
- Carmody, P. (2019) *Development Theory and Practice in a Changing World*, Routledge: London.
- Carmody, P. and Kragelund, P. (2016) 'Who Is in Charge-State Power and Agency in Sino-African Relations', *Cornell International Law Journal* 49, 1: 1-24.
- Carmody, P. and Murphy, J. T. (2017) 'The Impact of China and South Africa in Urban Africa', In, E. Wamboye and E.A. Tiruneh (eds.), *Foreign Capital Flows and Economic Development in Africa*, New York: Palgrave Macmillan.
- Carmody, P. and Owusu, F. Y. (2007) 'Competing hegemons? Chinese versus American geo-economic strategies in Africa', *Political Geography* 26, 5: 504–524.
- Carmody, P. and Owusu, F. Y. (2016) 'Neoliberalism, Urbanization and Change in Africa: the Political Economy of Heterotopias', *Journal of African Development* 18, 18: 61-73.
- Carmody, P. and Taylor, I. (2010) 'Flexigemony and Force in China's Resource Diplomacy in Africa: Sudan and Zambia Compared.' *Geopolitics* 15, 3: 496–515.
- Carmody, P., Hampwaye, G. and Sakala, E. (2012) 'Globalisation and the Rise of the State? Chinese Geogovernance in Zambia.' *New Political Economy* 17, 2: 209–229.
- Carter, C., Harding, A. (eds.) (2010). *Special Economic Zones in Asian Market Economies*, Routledge: London.
- Cartier, C. (2002) 'Transnational Urbanism in the Reform-era Chinese City: Landscapes from Shenzhen', *Urban Studies* 39, 9: 1513–1532.

- CCCC Making Good Progress on the Lamu Port Project. (2018) *Dredging Today*. Retrieved July 15, 2019 from: <https://www.dredgingtoday.com/2018/02/20/cccc-making-good-progress-on-the-lamu-port-project/>.
- Charlton, S. (2017) 'Poverty, subsidised housing and Lufhereng as a prototype megaproject in Gauteng', *Transformation: Critical Perspectives on Southern Africa*, 95, 1: 85-110.
- Chin, G.T. (2015) 'China's Bold Economic Statecraft', *Current History* 114, 773: 217.
- China Daily. (2015) 'Chinese firms take lead in building African airports' *China.org.cn* Retrieved July 15, 2019 from: [http://www.china.org.cn/business/2015-02/09/content\\_34770114.htm](http://www.china.org.cn/business/2015-02/09/content_34770114.htm).
- China Statistical Yearbook 2017. (2018) National Bureau of Statistics of China, Retrieved July 15, 2019 from: <http://www.stats.gov.cn/tjsj/ndsj/2017/indexeh.htm>.
- China-Africa Project. (2019) 'Confused About China's Belt & Road Agenda? You're Not Alone', [podcast], *The China Africa Project Podcast*. Retrieved July 18, 2019 from: <https://soundcloud.com/chinatalkingpoints/confused-about-chinas-belt-road-agenda-youre-not-alone>.
- Cirolia, L. R. and Smit, W. (2017) 'Fractured approaches to urban transformation: Analysing parallel perspectives in South Africa', *Transformation: Critical Perspectives on Southern Africa* 95, 1: 63–84.
- Citizen Reporter. (2018) 'New proposed Gautrain expansion to reach Roodepoort, Little Falls, Lanseria and Soweto', *The Citizen Reporter*, Retrieved July 16, 2019 from: <https://citizen.co.za/news/south-africa/2027143/new-proposed-gautrain-expansion-to-reach-roodepoort-little-falls-lanseria-and-soweto/>.
- City of Johannesburg: Department of Development Planning. (2016) 'Spatial Development Framework (SDF) 2040', *City of Johannesburg Metropolitan Municipality*.
- Coega. (2016) 'Just another coega auto plant?' *Automotive Business Review*. Retrieved July 17, 2019 from: <https://www.coega.co.za/files/Coega%20Auto%20Plant.pdf>
- Coega. (2018a) 'SEZ Zone Map', Coega Development Corporation. Retrieved July 17, 2019 from: <https://www.coega.co.za/Content2.aspx?objID=88>.
- Coega. (2018b) 'BAIC FAQ', Coega Development Corporation. Retrieved July 17, 2019 from: [https://www.coega.co.za/files/BAIC\\_FAQ.pdf](https://www.coega.co.za/files/BAIC_FAQ.pdf).
- Coega. (2018c) 'Project Summary Report', Coega Development Corporation. Retrieved July 17, 2019 from: <https://www.coega.co.za/Assets/BAICProjectSummaryReport.pdf>.

- Cokayne, R. (2018) 'SA car exports brings in R164 billion', *IOL Business Report*. Retrieved July 17, 2019 from: <https://www.iol.co.za/business-report/economy/sa-car-exports-brings-in-r164-billion-14818920>.
- Collocott, C (2019) 'China's loans to South Africa – Brief I', *Helen Suzman Foundation*, Retrieved July 16 2019 from: <https://hsf.org.za/publications/hsf-briefs/china2019s-loans-to-south-africa-brief-i>.
- Cooke, F. L., Wang, J., Yao, X., Xiong, L., Zhang, J. and Li, A. S. (2015) 'Mining with a high-end strategy: a study of Chinese mining firms in Africa and human resources implications', *The International Journal of Human Resource Management* 26, 21: 2744–2762.
- Corcoran, B. (2017) 'China's commitment to mining in Africa deepens', *The Irish Times*, Retrieved July 15, 2019 from: <https://www.irishtimes.com/business/energy-and-resources/china-s-commitment-to-mining-in-africa-deepens-1.2977864>.
- Corkin, L. (2011) 'Uncovering Agency: Angola's Management of Relations with China', Doctoral dissertation, SOAS, University of London, London, UK.
- Corkin, L. (2016) *Uncovering African agency: Angola's management of China's credit lines*. Burlington: Ashgate.
- Cosin, C. (2016) 'From EPC to the BOT model. Changing trends', Retrieved July 17, 2019 from: <https://www.linkedin.com/pulse/from-epc-bot-model-changing-trends-carlos-cos%C3%ADn/>
- Cox, A. (2015) 'Construction begins on JHB mini city', *IOL Business Report*. Retrieved July 17, 2019 from: <https://www.iol.co.za/business-report/economy/construction-begins-on-jhb-mini-city-1802591>.
- Dahir, A. (2018) 'Twice as many African presidents made it to China's Africa summit than to the UN general assembly', *Quartz Africa*. Retrieved: July 15, 2019, from: <https://qz.com/africa/1414004/more-african-presidents-went-to-chinas-africa-forum-than-un-general-assembly/>.
- Das, D. (2015) 'Making of high-tech Hyderabad: Mapping neoliberal networks and splintering effects', *Singapore Journal of Tropical Geography* 36, 2: 231–248.
- Davies, M. and Schiller, T. (2019) 'Navigating the African Automotive Sector: Ethiopia, Kenya and Nigeria', *Deloitte*. Retrieved July 17, 2019 from: <https://www2.deloitte.com/za/en/pages/manufacturing/articles/navigating-the-african-automotive-sector--ethiopia--kenya-and-ni.html>.
- Desai, A, and A, Habib. (1997) 'Labour relations in transition: the rise of corporatism in South Africa's automobile industry', *The Journal of Modern African Studies* 35, 3.

- Desai, A. (2015) 'Of Faustian Pacts and Mega-projects: The Politics and Economics of the Port Expansion in the South Basin of Durban, South Africa', *Capitalism Nature Socialism* 26, 1: 18–34.
- Ding, G. and Xue, C. Q. L. (2015) 'China's architectural aid: Exporting a transformational modernism', *Habitat International* 47: 136–147.
- DIRCO. (2018) 'President concludes productive State Visit to China', Department of International Relations and Cooperation, Johannesburg, South Africa, Retrieved: July 15, 2019, from: <http://www.dirco.gov.za/docs/2018/chin0903.htm>.
- Dittgen, R. (2017) 'Features of Modernity, Development and 'Orientalism': Reading Johannesburg through its 'Chinese' Urban Spaces', *Journal of Southern African Studies* 43, 5: 979–996.
- Dobbs, R., Pohl, H., Lin, D.-Y., Mischke, J., Garemo, N., Hexter, J., Matzinger, S., Palter, R. and Nanavatty, R. (2013) 'Infrastructure productivity: How to save \$1 trillion a year' *McKinsey*. Retrieved July 15, 2019 from: <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/infrastructure-productivity>.
- Donnelly, L. (2018) 'Infrastructure at the heart of Ramaphosa's plan to boost the economy', *The M&G Online*. Retrieved July 16, 2019 from: <https://mg.co.za/article/2018-09-21-infrastructure-at-the-heart-of-ramaphosas-plan-to-boost-the-economy/>.
- Droppa, D. (2018a) 'China's BAIC ready to make SA inroads', *Business Day*. Retrieved July 17, 2019 from: <https://www.businesslive.co.za/bd/life/motoring/2018-10-25-chinas-baic-ready-to-make-sa-inroads/>.
- Droppa, D. (2018b) 'The 2018 BAIC D20 is surprisingly cheap but disappointingly nasty', *TimesLive*. Retrieved July 17, 2019 from: <https://www.timeslive.co.za/motoring/reviews/2018-11-16-review--the-2018-baic-d20-is-surprisingly-cheap-but-disappointingly-nasty/>.
- DTI. (2015) 'Trade, Export and Investment Financial Assistance: Automotive Investment Scheme (AIS)', Department of Trade and Industry, South Africa. Retrieved July 17, 2019 from: [https://www.thedti.gov.za/financial\\_assistance/financial\\_incentive.jsp?id=37&subthemeid=26](https://www.thedti.gov.za/financial_assistance/financial_incentive.jsp?id=37&subthemeid=26).
- DTI. (2017) 'Industrial Policy Action Plan, 2017/2018 – 2019/2020', *Department of Trade and Industry*, Pretoria, South Africa, Retrieved July 16 2019 from: [https://www.thedti.gov.za/parliament/2017/IPAP\\_13June2017.pdf](https://www.thedti.gov.za/parliament/2017/IPAP_13June2017.pdf).

- DTI. (2018a) 'Presentation to the Portfolio Committee on Trade and Industry', *Department of Trade and Industry*, Pretoria, South Africa. Retrieved July 18, 2019 from: [https://www.thedti.gov.za/parliament/2018/SA\\_Steel.pdf](https://www.thedti.gov.za/parliament/2018/SA_Steel.pdf)
- DTI. (2018b) 'Chinese Government Lends Heavy Support to Musina-Makhado SEZ', Department of Trade and Industry, Pretoria, South Africa. Retrieved July 18, 2019 from: <https://www.thedti.gov.za/editmedia.jsp?id=4460>.
- DTI. (2018c) 'Minister Rob Davies: South African Automotive Masterplan and Extension of Automotive Production and Development Programme' *Department of Trade and Industry, South Africa*. Retrieved July 17, 2019 from: <https://www.gov.za/speeches/minister-rob-davies-media-statement-south-african-automotive-masterplan-2035-and-extension>.
- DTI. (2018d) 'South African Special Economic and Industrial Development Zones', *Department of Trade and Industry*, Pretoria, South Africa. Retrieved July 18, 2019 from: [https://www.thedti.gov.za/industrial\\_development/docs/SEZ\\_brochure.pdf](https://www.thedti.gov.za/industrial_development/docs/SEZ_brochure.pdf).
- DTI. (nd) 'Special Economic Zone (SEZ)', *Department of Trade and Industry*, Pretoria, South Africa. Retrieved July 18, 2019 from: [http://www.thedti.gov.za/industrial\\_development/sez.jsp](http://www.thedti.gov.za/industrial_development/sez.jsp).
- Dunning, J.H. and Lundan, S.M. (2008) *Multinational Enterprises and the Global Economy*. Cheltenham: Edward Elgar.
- Elwood, S. A. and Martin, D. G. (2000) "'Placing" Interviews: Location and Scales of Power in Qualitative Research', *The Professional Geographer* 52, 4: 649–657.
- EMSEZ. (2018a) 'Brief Introduction of South Africa Energy Metallurgical Economic Zone', *Energy Metallurgical Special Economic Zone*. Retrieved July 18, 2019 from: <http://emsez.com/en/about.php?id=19>.
- EMSEZ. (2018b) 'SAEMSEZ Project Planning Technical Program Coordination Meeting', *Energy Metallurgical Special Economic Zone*. Retrieved July 18, 2019 from: [http://emsez.com/en/news\\_show.php?id=56](http://emsez.com/en/news_show.php?id=56).
- EMSEZ. (2018c) 'The NDRC and the DTI jointly held the China-South Africa Capacity Cooperation Key Projects Coordination Meeting for South African Energy Metallurgical', *Energy Metallurgical Special Economic Zone*. Retrieved July 18, 2019 from: [http://emsez.com/en/news\\_show.php?id=51](http://emsez.com/en/news_show.php?id=51).
- Ensor, L. (2017) 'Inquiry into localisation policy in SOEs to begin', *BusinessDay*. Retrieved July 18, 2019 from: <https://www.businesslive.co.za/bd/business-and-economy/2017-09-15-inquiry-into-localisation-policy-in-seos-to-begin/>.

- Fainstein, S. S. (2008) 'Mega-projects in New York, London and Amsterdam', *International Journal of Urban and Regional Research* 32, 4: 768–785.
- Fair, T.J. (1982) *South Africa: Spatial frameworks for development*, Kenwyn: Juta.
- Farrell, J. (2016) 'How Do Chinese Contractors Perform in Africa? Evidence from World Bank Projects', *China Africa Research Initiative*, Johns Hopkins University, Washington, DC, Working Paper No. 2016/3.
- Fessehaie, J. and Morris, M. (2013) 'Value Chain Dynamics of Chinese Copper Mining in Zambia: Enclave or Linkage Development?' *The European Journal of Development Research* 25, 4: 537–556.
- Fiori, C. and Kovaka, M. (2005) 'Defining Megaprojects: Learning from Construction at the Edge of Experience', In. *Construction Research Congress 2005*, Presented at the Construction Research Congress 2005 San Diego, California, United States: American Society of Civil Engineers.
- Fischhendler, I. and Nathan, D. (2014) 'In the name of energy security: the struggle over the exportation of Israeli natural gas', *Energy Policy* 70: 152–162.
- Flatters, F. and Netshitomboni, N. (2007) 'Trade and poverty in South Africa: The Motor Industry Development Programme', *Studies in Economics and Econometrics* 31, 2.
- Flatters, F., and Stern, M. (2007) 'Trade and Trade Policy in South Africa: Recent Trends and Future Prospects', Paper presented to the *Development Network Africa workshop*. Retrieved July 17, 2019 from: [http://www.dnaeconomics.com/assets/dlas/FILE\\_063020080109\\_FILE\\_101820070217\\_Trade\\_and\\_Trade\\_Policy\\_in\\_South\\_Africa.pdf](http://www.dnaeconomics.com/assets/dlas/FILE_063020080109_FILE_101820070217_Trade_and_Trade_Policy_in_South_Africa.pdf).
- Flint, C. and Zhu, C. (2019) 'The geopolitics of connectivity, cooperation, and hegemonic competition: The Belt and Road Initiative', *Geoforum* 99: 95–101.
- Flyvbjerg, B. (2006) 'From Nobel Prize to Project Management: Getting Risks Right', *Project Management Journal* 37: 5–15.
- Flyvbjerg, B. (2014) 'What you Should Know about Megaprojects and Why: An Overview', *Project Management Journal* 45, 2: 6–19.
- Follmann, A. (2015) 'Urban mega-projects for a 'world-class' riverfront – The interplay of informality, flexibility and exceptionality along the Yamuna in Delhi, India', *Habitat International* 45: 213–222.
- Fombad, M.C. (2015) 'Governance in public–private partnerships in South Africa: Some lessons from the Gautrain', *Journal of Southern African Studies* 41, 6: 1199–1217.

- Foster, V., Butterfield, W., Chen, C. and Pushak, N. (2009) 'Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa', *The World Bank*. Retrieved July 15, 2019 from: <http://documents.worldbank.org/curated/en/936991468023953753/pdf/480910PUB0Buil101OFFICIAL0USE0ONLY1.pdf>.
- French, H. W. (2014) *China's second continent: how a million migrants are building a new empire in Africa*, New York: Alfred A. Knopf.
- Freund, B. (2010) 'Is There Such a Thing as a Post-apartheid City?' *Urban Forum* 21, 3: 283–298.
- Fung, E. (2015) 'China lends a hand to debt-laden real-estate companies', *The Wall Street Journal*, Retrieved July 18, 2019 from: <https://www.wsj.com/articles/china-lends-a-hand-to-its-debt-laden-realestate-companies-1427448939>.
- Furlonger, D. (2018) 'Goals for car industry empowerment will be incremental, says Davies', *Business Day*. Retrieved July 17, 2019 from: <https://www.businesslive.co.za/bd/economy/2018-02-19-goals-for-car-industry-empowerment-will-be-incremental-says-davies/>.
- Garnaut, R. (2006) 'The China resources boom', *Australian Agriculture and Resource Economics Conference*, Sydney.
- Gauteng Department of Human Settlements. (2015) 'Mega Projects: Clusters and New Cities, New Mega Projects proposal for human settlements in the Gauteng City Region', Document distributed at the April 2015 launch of the Mega Projects policy proposal, Johannesburg.
- Gellert, P. K. and Lynch, B. D. (2003) 'Mega-projects as displacements\*', *International Social Science Journal* 55, 175: 15–25.
- Gerring, J. (2004) 'What is a case study and what is it good for?' *American political science review* 98, 2: 341-354.
- Giannecchini, P. and Taylor, I. (2018) 'The eastern industrial zone in Ethiopia: Catalyst for development?' *Geoforum* 88: 28–35.
- Gillespie, S. (2004) 'Diplomacy on a South-South Dimension: The Legacy of Mao's Three-Worlds Theory and the Evolution of Sino-African relations', in Slavik, H. (Ed), *Intercultural Communication and Diplomacy*, DiploFoundation: Malta.
- Giokos, E. (2018) 'Can a new president halt South Africa's decline?', *CNNMoney*, Retrieved July 16, 2019 from: <https://money.cnn.com/2018/02/13/news/economy/south-africa-zuma-economy-what-next/index.html>.



- Glennie, J. (2010) *The Trouble with Aid: Why Less Could Mean More for Africa*, London, England: Zed Books.
- Godement, F. (2017) 'Expanded ambitions, shrinking achievements: How China sees the global order', *European Council on Foreign Relations*. Retrieved July 15, 2019 from:  
[https://www.ecfr.eu/publications/summary/expanded\\_ambitions\\_shrinking\\_achievements\\_how\\_china\\_sees\\_the\\_global\\_order](https://www.ecfr.eu/publications/summary/expanded_ambitions_shrinking_achievements_how_china_sees_the_global_order).
- Goldman, E.F. and Swayze, S. (2012) 'In-depth interviewing with healthcare corporate elites: Strategies for entry and engagement', *International Journal of Qualitative Methods* 11, 3: 230-243.
- Goodfellow, T. (2018) 'African Capitalisms, Infrastructure and Urban Real Estate', *Review of African Political Economy*. Retrieved July 15, 2019 from:  
<http://roape.net/2018/08/17/african-capitalisms-infrastructure-and-urban-real-estate/>.
- Gonzalez-Vicente, R. (2011) 'The internationalization of the Chinese state', *Political Geography*, 30: 402-411.
- Gopaldas, R. and Ndhlovu, M. (2019) 'Ramaphosa's meando-nomics could be a risky strategy', *BizNews.com*. Retrieved July 17, 2019 from:  
<https://www.biznews.com/sa-investing/2019/03/28/ramaphosa-meando-nomics-risky>.
- Gov.za. (2016) 'Trade and Industry on approval of Musina-Makhado Special Economic Zone designation', *Government of South Africa*. Retrieved July 18, 2019 from:  
<https://www.gov.za/speeches/cabinet-approves-designation-musina-makhado-special-economic-zone-11-jul-2016-0000>.
- Graham, S. and Marvin, S. (2001) *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*, New York: Routledge.
- Grant, R. (2015) 'Sustainable African Urban Futures: Stocktaking and Critical Reflection on Proposed Urban Projects', *American Behavioral Scientist* 59, 3: 294-310.
- Gu, J., Zhang, C., Vaz, A. and Mukwereza, L. (2016) 'Chinese State Capitalism? Rethinking the Role of the State and Business in Chinese Development Cooperation in Africa', *World Development* 81: 24-34.
- Gualini, E. and Majoor, S. (2007) 'Innovative Practices in Large Urban Development Projects: Conflicting Frames in the Quest for "New Urbanity"' *Planning Theory & Practice* 8: 297-318.

- Haines, R. (2015) 'National Planning, Industrial Policy and the New Statism in Contemporary South Africa', in: M. Yülek, (Ed.), *Economic Planning and Industrial Policy in the Globalizing Economy: Concepts, Experience and Prospects, Public Administration, Governance and Globalization*, New York: Springer International Publishing.
- Hannan, S. and Sutherland, C. (2015) 'Mega-projects and sustainability in Durban, South Africa: Convergent or divergent agendas?' *Habitat International* 45: 205–212.
- Harris, L. (2011) 'Mega-events and the developing world: A look at the legacy of the 2010 Soccer World Cup', *South African Journal of International Affairs* 18: 407–427.
- Harrison, P. and Todes, A. (2017) 'Satellite settlement on the spatial periphery: Lessons from international and Gauteng experience', *Transformation: Critical Perspectives on Southern Africa* 95, 1: 32–62.
- Hart, K. and Padayachee, V. (2013), 'A history of South African capitalism in national and global perspective', *Transformation: Critical Perspectives on Southern Africa* 81: 55–85.
- Hartley, J. (2004a) Case Study Research. In *Essential Guide to Qualitative Methods in Organizational Research*. London: SAGE Publications Ltd.
- Hartley, J. (2004b) Case study research. In Cassell, C. and Symon, G. (Eds.), *Essential Guide to Qualitative Methods in Organizational Research*. London: Sage Publications Ltd.
- Hartley, J.F. (1994) 'Case Studies in Organizational Research', In C. Cassell, and G. Symon, (eds.), *Qualitative Methods in Organizational Research: A Practical guide* London: SAGE.
- Harvey, D. (1981) 'The Spatial Fix – Hegel, Von Thunen, and Marx', *Antipode* 13, 3: 1–12.
- Harvey, D. (2011) *A brief history of neoliberalism*. Oxford: Oxford University Press.
- Harvey, W. S. (2010) 'Methodological Approaches for Interviewing Elites', *Geography Compass* 4, 3: 193–205.
- Harvey, W. S. (2011) 'Strategies for conducting elite interviews' *Qualitative Research* 11, 4: 431–441.
- Herbert, C. W. and Murray, M. J. (2015) 'Building from Scratch: New Cities, Privatized Urbanism and the Spatial Restructuring of Johannesburg after Apartheid: Privatized urbanism in Johannesburg after apartheid', *International Journal of Urban and Regional Research* 39, 3: 471–494.

- Herbst, J. (2000) *States and Power in Africa: Comparative Lessons in Authority and Control*, Princeton: Princeton University Press.
- Herriott, R.E. Firestone, W.A. (1983) 'Multi-site qualitative policy research: optimising description and generalisability', *Educational Researcher* 12: 14-19.
- Hirsch, A. (2005) *Season of Hope: Economic Reform under Mandela and Mbeki*, Scottsville, South Africa: University of KwaZulu Natal Press.
- HK Mining Exchange. (2014) 'South Africa Energy Metallurgical Industrial Zone Brief Introduction', *HK Mining Exchange Company Limited Research Institute of technology*. Retrieved July 18, 2019 from: [https://www.thedti.gov.za/news2016/Pre-feasibility\\_Mettallurgical\\_cluster.pdf](https://www.thedti.gov.za/news2016/Pre-feasibility_Mettallurgical_cluster.pdf).
- Hogg, A. (2013) 'Turning AECI's Modderfontein into Manhattan? Joburg's Chinese Emerald City is more pie than sky', *BizNews.com*. Retrieved July 17, 2019 from: <https://www.biznews.com/undictated/2013/11/13/turning-aecis-modderfontein-into-manhattan>.
- Holt, A. (2010) 'Using the telephone for narrative interviewing: a research note', *Qualitative Research* 10, 1: 113–121.
- Horner, R. (2017) 'Beyond facilitator? State roles in global value chains and global production networks', *Geography Compass* 11, 2.
- IDC. (2018a) '2018 Integrated Report: Partnering for inclusive industrialisation', Industrial Development Corporation. Retrieved July 17, 2019 from: <https://www.idc.co.za/financial-results/2018-annual-report/>.
- IDC. (2018b) 'What we offer', Industrial Development Corporation. Retrieved July 17, 2019 from: <https://www.idc.co.za/what-we-offer-2/>.
- Isaacman, A. and Sneddon, C. (2000) 'Toward a social and environmental history of the building of Cahora Bassa Dam', *Journal of southern African studies* 26, 4: 597-632.
- Jedwab, R. and Storeygard, A. (2017) 'The average and heterogeneous effects of transportation investments: Evidence from Sub-Saharan Africa 1960-2010' (No. 0822). *Department of Economics, Tufts University*.
- Johnston, L. A. (2017) 'Steel pipe dreams: A China-Guinea and China-Africa lens on prospects for Simandou's iron ore' *The Extractive Industries and Society* 4, 2: 278–289.
- Jones, L. (2018) 'Theorizing Foreign and Security Policy in an Era of State Transformation: A New Framework and Case Study of China', *Journal of Global Security Studies*.

- Jones, L. and Zeng, J. (2019) 'Understanding China's 'Belt and Road Initiative': beyond 'grand strategy' to a state transformation analysis', *Third World Quarterly* 1–28.
- Kanai, M. and Schindler, S. (2019) 'Peri-urban promises of connectivity: Linking project-led polycentrism to the infrastructure scramble', *Environment and Planning A: Economy and Space* 51, 2: 302–322.
- Kanai, M. and Kutz, W. (2011) 'Entrepreneurialism in the Globalising City-Region of Tangier, Morocco', *Tijdschrift voor economische en sociale geografie* 102, 3: 346–360.
- Kaplinsky, R. (2008) 'Africa's Co-operation with New and Emerging Development Partners: Options for Africa's Development', Report prepared for The Office of Special Advisor on Africa United Nations, New York.
- Kaplinsky, R., McCormick, D. and Morris, M. (2007) 'The Impact of China on Sub-Saharan Africa', *Institute of Development Studies*, University of Sussex, Working Paper 291.
- Kekana, M. and Ritchie, G. (2017) 'Zuma's deck of cards: A timeline of Msholozis Cabinet reshuffles', *Mail&Guardian Online*. Retrieved July 18, 2019 from: <https://mg.co.za/article/2017-10-18-zumas-deck-of-cards-a-timeline-of-msholozis-cabinet-reshuffles>.
- Kenderdine, T. (2018) 'Death of the East Asian Goose and the Rise of China's Geointustrial Policy', *Journal of Chinese Political Science* 23, 3: 437–453.
- Kenderdine, T. and Lan, P. (2018) 'China's Middle East investment policy', *Eurasian Geography and Economics* 59, 5–6: 557–584.
- Kenderdine, T. and Ling, H. (2018) 'International Capacity Cooperation-Financing China's Export of Industrial Overcapacity', *Global Policy* 9, 1: 41–52.
- Kernen, A. and Lam, K. N. (2014) 'Workforce Localization among Chinese State-Owned Enterprises (SOEs) in Ghana', *Journal of Contemporary China* 23, 90: 1053–1072.
- Kiely, R. (2016) *The Rise and fall of emerging powers: globalisation, US power and the global North-South divide*. New York: Palgrave Macmillan.
- Kim, Y. (2015) 'China's soft power expansion in Africa through industrialisation-opportunities and challenges', *Africa Insight* 44, 4: 1-13.
- Kim, Y. (2016) 'A Chinese company's investment strategy in South Africa: the case of Hisense', *DIE ERDE–Journal of the Geographical Society of Berlin*, 147, 3: 219-223.

- Kinch, D. (2019) 'Long-term global steel demand growth to be 1%; China has peaked: worldsteel's Basson', *S&P Global*. Retrieved July 18, 2019 from: <https://www.spglobal.com/platts/en/market-insights/latest-news/metals/041819-long-term-global-steel-demand-growth-to-be-1-china-has-peaked-worldsteels-basson>.
- Kironde, J. M. L. (1993) 'Will Dodoma ever be the new capital of Tanzania?' *Geoforum* 24, 4: 435–453.
- Kodongo, O. (2018) 'Kenya's public debt is rising to dangerous levels', *The Conversation*. Retrieved July 15, 2019 from: <http://theconversation.com/kenyas-public-debt-is-rising-to-dangerous-levels-100790>.
- Kragelund, P. (2009) 'Part of the Disease Or Part of the Cure? Chinese Investments in the Zambian Mining and Construction Sectors', *The European Journal of Development Research* 21, 4: 644–661.
- Kuo, L. (2017) 'Chinese mines in Africa provide better roads but not more jobs for locals', *Quartz Africa*. Retrieved July 15, 2019 from: <https://qz.com/africa/1114954/chinese-mines-in-africa-provide-better-roads-but-not-more-jobs-for-locals/>.
- Landsberg, C. (2010) 'The foreign policy of the Zuma government: pursuing the 'national interest'? *South African Journal of International Affairs* 17, 3: 273–293.
- Larkin, B. (2013) 'The Politics and Poetics of Infrastructure' *Annual Review of Anthropology* 42, 1: 327–343.
- LEDA. (2015) 'Musina Special Economic Zone License Application For Designation – The Business Plan', *Limpopo Economic Development Agency*, Polkwane, South Africa.
- LEDA. (2017) 'NOTICE OF AN APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND A CHANGE OF LANDUSE FOR THE PROPOSED MUSINA-MAKHADO SPECIAL ECONOMIC ZONE (SEZ)', *Limpopo Economic Development Agency*, Polkwane, South Africa. Retrieved July 17, 2019 from: [https://sahris.sahra.org.za/sites/default/files/additionaldocs/P17102\\_REPORTS\\_5\\_PUBLIC\\_PARTICIPATION\\_2\\_BACKGROUND\\_INFORMATION\\_DOCUMENT\\_REV\\_00.pdf](https://sahris.sahra.org.za/sites/default/files/additionaldocs/P17102_REPORTS_5_PUBLIC_PARTICIPATION_2_BACKGROUND_INFORMATION_DOCUMENT_REV_00.pdf).
- Lee, C.K. (2014) 'The Spectre of Global China', *New Left Review* 89: 1-38.
- Lee, C. K. (2017) *The specter of global China: politics, labor, and foreign investment in Africa*. Chicago; London: The University of Chicago Press.

- Lekorwe, M., Chingwete, A., Okuru, M. and Samson, R. (2016) 'China's growing presence in Africa wins largely positive popular reviews', *Afrobarometer Dispatch No. 122*.
- Lim, K. F. (2010) 'On China's growing geo-economic influence and the evolution of variegated capitalism', *Geoforum* 41, 5: 677–688.
- Lim, K. F. (2014) 'Socialism with Chinese characteristics: Uneven development, variegated neoliberalization and the dialectical differentiation of state spatiality', *Progress in Human Geography* 38, 2: 221–247.
- Lim, K.F. (2017) 'State rescaling, policy experimentation and path dependency in post-mao china: a dynamic analytical framework', *Regional Studies* 51, 10, 1580–1593.
- Lin, L.W. and Milhaupt, C.J. (2013) 'We are the (national) champions: Understanding the mechanisms of state capitalism in China', *Stanford Law Review*, 65: 697.
- Liu, J. (2016) 'China's funding injection accelerates the upgrading of industrial cooperation with Africa', *ChinAfrica.cn*. Retrieved July 18, 2019 from: [http://www.chinafrica.cn/Business/201608/t20160830\\_800066071.html](http://www.chinafrica.cn/Business/201608/t20160830_800066071.html).
- Lopes, C. (2019) *Africa in transformation: economic development in the age of doubt*, Cham, Switzerland: Palgrave Macmillan.
- Lu, A. (2014) 'Investing in Africa's Future', *ChinAfrica.cn*. Retrieved July 17, 2019 from: [www.chinafrica.cn/company\\_profile/txt/2014-01/03/content\\_588900.htm](http://www.chinafrica.cn/company_profile/txt/2014-01/03/content_588900.htm).
- Ma, L. J. C. and Wu, F. (2004) *Restructuring the Chinese City: Changing Society, Economy and Space*. New York, NY: Routledge.
- Mahlaka, R. (2014) 'Chinese group's R84bn Modderfontein plan', *MoneyWeb.com.za*. Retrieved July 17, 2019, from: <https://www.moneyweb.co.za/archive/the-r84bn-chinese-property-development/>.
- Makgetla, N. (2014) 'Manufacturing Employment and Equality in South Africa?', *SSRN Electronic Journal*.
- Mann, M. (2008) 'Infrastructural Power Revisited', *Studies in Comparative International Development* 43: 355–365.
- Marais, H. (2013) *South Africa Pushed to the Limit: The Political Economy of Change*, London: Zed Books Ltd.
- Masondo, D. (2018) 'South African business nanny state: the case of the automotive industrial policy post-apartheid, 1995–2010', *Review of African Political Economy* 45: 203–222.

- Matavire, M. (2017a) 'Baic to set up R2bn Coega components supplier park', *Fin24*. Retrieved July 17, 2019 from: <https://www.fin24.com/Companies/Industrial/baic-to-set-up-r2bn-coega-components-supplier-park-20171210-2>.
- Matavire, M. (2017b) 'Baic's R11bn Coega project is bleeding millions', *Fin24*. Retrieved July 17, 2019 from: <https://www.fin24.com/Economy/baics-r11bn-coega-project-is-bleeding-millions-20170930>.
- Matavire, M. (2018a) 'Payment disputes keep Baic SA closed', *Fin24*. Retrieved July 17, 2019 from: <https://www.fin24.com/Companies/Industrial/payment-disputes-keep-baic-sa-closed-20180914>.
- Matavire, M. (2018b) 'Working round the clock to complete R11bn Coega plant', *Fin24*. Retrieved July 17, 2019 from: <https://www.fin24.com/Companies/Industrial/working-round-the-clock-to-complete-r11bn-coega-plant-20180323>.
- Mattes, R. (2018) 'Survey shows Zuma and ANC's mutual dance to the bottom' *News24*, Retrieved July 16 2019 from: <https://www.news24.com/Analysis/survey-shows-zuma-and-ancs-mutual-dance-to-the-bottom-20180312>.
- Mawdsley, E. (2008) 'Fu Manchu versus Dr Livingstone in the Dark Continent? Representing China, Africa and the West in British broadsheet newspapers' *Political Geography* 27, 5: 509–529.
- McCann, E. and Ward, K. (2011) 'Urban assemblages: territories, relations, practices and power', In, E. McCann & K. Ward (eds.), *Mobile Urbanism: Cities and policy making in the global age*, Minneapolis: University of Minnesota Press.
- McDonald, J. (2018) 'Chinese automaker plans electric car production in SAfrica' *Associated Press News*. Retrieved July 17, 2019 from: <https://apnews.com/aa3dbcd047e04895b1aa62434af99b62>.
- Meagher, K. (2016) 'Capitalist Redux: the Scramble for Africa's Workers', *Review of African Political Economy*, Retrieved July 15, 2019 from: <http://roape.net/2016/11/09/capitalism-redux-workers-transformation-africa/>.
- Meyns, P. and Musamba, C. (2010) 'The Developmental State in Africa: Problems and Prospects', *INEF Report*, Retrieved July 16, 2019 from: <https://duepublico.uni-duisburg-essen.de/servlets/DerivateServlet/Derivate-29167/report101.pdf>.
- Milhaupt, C.J. and Zheng, W. (2014) 'Beyond ownership: State capitalism and the Chinese firm', *Geo. LJ*, 103: 665.
- Mills, A. J., Durepos, G. and Wiebe, E. (2010) *Encyclopedia of case study research*, Thousand Oaks California: SAGE.

- MOFCOM. (2016) 年度中国 对外直接投资统计公报 (China Statistical Bulletin on Foreign Direct Investment), Ministry of Commerce, Beijing, China.
- Mohan, G. and Tan-Mullins, M. (2019) 'The geopolitics of South–South infrastructure development: Chinese-financed energy projects in the global South', *Urban Studies* 56, 7: 1368–1385.
- Mokone, T. (2018) 'Ramaphosa strikes deals in China to bring jobs, factories to Musina-Makhado corridor,' *Times Live*. Retrieved: July 15, 2019, from: <https://www.timeslive.co.za/politics/2018-09-03-ramaphosa-strikes-deals-in-china-to-bring-jobs-factories-to-musina-makhado-corridor/>.
- Molotch, H. (1976) 'The City as a Growth Machine: Toward a Political Economy of Place', *American Journal of Sociology* 82: 309–332.
- Moloto, M. (2014) 'Limpopo to get new R39bn power plant', *IOL Business Report*. Retrieved July 18, 2019: <https://www.iol.co.za/business-report/companies/limpopo-to-get-new-r39bn-power-plant-1778938>.
- Monson, J. (2009) *Africa's Freedom Railway: How a Chinese Development Project Changed Lives and Livelihoods in Tanzania*, Bloomington, IN: Indiana University Press.
- Mosha, A. C. (1996) 'The City of Gaborone, Botswana: Planning and Management', *Ambio* 25, 2: 118–125.
- Mott Macdonald. (2015) 'Pre-Feasibility Study for the Musina SEZ, Limpopo Province', Document produced as part of the Musina Makhado SEZ License Application.
- Murphy, J.T. and Carmody, P. (2015) *Africa's Information Revolution: Technical Regimes and Production Networks in South Africa and Tanzania*, West Sussex: Wiley-Blackwell.
- Murphy, J. T. and Carmody, P. (2019) 'Generative urbanization in Africa? A sociotechnical systems view of Tanzania's urban transition', *Urban Geography* 40,1: 128–157.
- Murray, M. J. (2008) *Taming the disorderly city: the spatial landscape of Johannesburg after apartheid*. Ithaca: Cornell University Press.
- Murray, M. J. (2015) 'Waterfall City (Johannesburg): Privatized Urbanism in Extremis', *Environment and Planning A: Economy and Space* 47, 3: 503–520.
- Murton, G., Lord, A. and Beazley, R. (2016) "'A handshake across the Himalayas: Chinese investment, hydropower development, and state formation in Nepal', *Eurasian Geography and Economics* 57, 3: 403–432.



- Narins, T. P. and Agnew, J. (2019) 'Missing from the Map: Chinese Exceptionalism, Sovereignty Regimes and the Belt Road Initiative', *Geopolitics*: 1–29.
- Ndalu, D. (2018) 'Shot in the arm for Bagamoyo port project', *The East African*, Retrieved July 15, 2019 from: <https://www.theeastafrican.co.ke/business/Bagamoyo-port-project/2560-4595712-14e7bm8/index.html>.
- Nel, E. L. and Rogerson, C. M. (2014) 'Re-Spatializing development: Reflections from South Africa's recent re-engagement with planning for Special Economic Zones', *Urbani izziv*, 25: 24–35.
- Nganje, F. (2014) 'The Developmental Paradiplomacy of South African Provinces: Context, Scope and the Challenge of Coordination', *The Hague Journal of Diplomacy* 9: 119–149.
- Nightingale, C. (nd) 'The Segregation Paradoxes', *MAS Context*. Retrieved June 17, 2019 from: <http://www.mascontext.com/issues/17-boundary-spring-13/the-segregation-paradoxes/>.
- Njobeni, S. (2018) 'Competition Tribunal approves the Chevron South Africa-Sinopec deal', *IOL Business Report*. Retrieved July 15, 2019 from: <https://www.iol.co.za/business-report/companies/competition-tribunal-approves-the-chevron-south-africa-sinopec-deal-13726079>.
- North, D. (1990) *Institutions, institutional change, and economic performance*, Cambridge: Cambridge University Press.
- OECD. (2018) 'Ethiopia (ETH) Exports, Imports, and Trade Partners', *Observatory of Economic Complexity, Massachusetts Institute of Technology (MIT)*, Retrieved July 15, 2019 from: <https://atlas.media.mit.edu/en/profile/country/eth/>.
- OECD. (2019a) 'Where does China import Platinum from? (2016)' *Observatory of Economic Complexity, Massachusetts Institute of Technology (MIT)*, Retrieved July 15, 2019 from: [https://oec.world/en/visualize/tree\\_map/hs92/import/chn/show/7110/2016/](https://oec.world/en/visualize/tree_map/hs92/import/chn/show/7110/2016/).
- OECD. (2019b) 'Where does China import Chromium Ore from? (2016)', *Observatory of Economic Complexity, Massachusetts Institute of Technology (MIT)*, Retrieved July 15, 2019 from: [https://oec.world/en/visualize/tree\\_map/hs92/import/chn/show/2610/2016/](https://oec.world/en/visualize/tree_map/hs92/import/chn/show/2610/2016/).
- Ong, A. (2011) 'Introduction worlding cities, or the art of being global', In. A. Roy & A. Ong (eds.), *Worlding cities: Asian experiments and the art of being global*, Hoboken: Wiley-Blackwell Publishing.

- Oosthuizen, H. (2018) 'South Africa's Top-Selling Cars in 2017', *Cars.co.za*. Retrieved July 17, 2019 from: [https://www.cars.co.za/motoring\\_news/south-africas-top-selling-cars-in-2017/44632/](https://www.cars.co.za/motoring_news/south-africas-top-selling-cars-in-2017/44632/).
- Padayachee, V. (2013) Introducing varieties of capitalism into the South African debate: uses and limits. *Transformation: Critical Perspectives on Southern Africa* 81: 5–32.
- Padayachee, V. and van Niekerk, R. (2017) 'Shadows of Liberation: ANC Economic and Social Policy from African Claims to GEAR' *New Agenda*, 67: 12–18.
- Pairault, T. (2018a) 'Guest Post - China in Africa: Much Ado about Investment - Part 1', *China in Africa the Real Story*. Retrieved July 15, 2019 from: <http://www.chinaafricarealstory.com/2018/02/guest-post-china-in-africa-much-ado-part-1.html>.
- Pairault, T. (2018b) 'Guest Post - China in Africa: Much Ado about Investment - Part 2', *China in Africa the Real Story*. Retrieved July 15, 2019 from: <http://www.chinaafricarealstory.com/2018/02/guest-post-china-in-africa-much-ado.html>.
- Pairault, T. (2018c) 'China in Africa: Goods Supplier, Service Provider rather than Investor', *International Centre for Trade and Sustainable Development*. Retrieved July 15, 2019 from: <http://www.ictsd.org/bridges-news/bridges-africa/news/china-in-africa-goods-supplier-service-provider-rather-than>.
- Pairault, T. (2019) 'China in Africa: Phoenix nests versus Special Economic Zones', *HAL*. Retrieved July 15, 2019 from: <https://hal.archives-ouvertes.fr/hal-01968812/document>.
- Parnreiter, C., Oßenbrügge, J. and Haferburg, C. (2013) 'Shifting corporate geographies in global cities of the South: Mexico City and Johannesburg as case studies', *DIE ERDE - Journal of the Geographical Society of Berlin* 1, 144: 1–16.
- Patey, L. (2018) 'The Chinese model is failing Africa', *Financial Times*. Retrieved July 15, 2019 from: <https://www.ft.com/content/ca4072f6-a79f-11e8-a1b6-f368d365bf0e>.
- Paton, C. (2019) 'Eskom too big to fail, says World Bank', *Business Day*, Retrieved July 16, 2019 from: <https://www.businesslive.co.za/bd/economy/2019-01-22-eskom-too-big-to-fail-says-world-bank/>.
- Peck, J. (2011) 'Geographies of policy: from transfer-diffusion to mobility-mutation', *Progress in Human Geography* 35, 6: 174.
- Peck, J. and Theodore, N. (2015) *Fast Policy: Experimental Statecraft at the Thresholds of Neoliberalism*, Minneapolis: University of Minnesota Press.

- Planting, S. (2012) 'R4 billion deal unravels', *News24*. Retrieved July 17, 2019 from: <https://www.news24.com/Archives/Witness/R4-billion-deal-unravels-20150430>.
- Pollet, B.G., Staffell, I. and Adamson, K.A. (2015) 'Current energy landscape in the Republic of South Africa' *International Journal of Hydrogen Energy* 40: 16685–16701.
- Potts, D. (1985) 'Capital Relocation in Africa: The Case of Lilongwe in Malawi', *The Geographical Journal* 151, 2: 182–196.
- Pritchard, S. B. (2012) 'From hydroimperialism to hydrocapitalism: 'French' hydraulics in France, North Africa, and beyond', *Social Studies of Science* 42, 4: 591–615.
- Ren, D. (2016) 'Zendai owner turns his back on property, and looks instead to art', *South China Morning Post (SCMP)*. Retrieved July 17, 2019 from: <https://www.scmp.com/property/article/1980778/zendai-owner-turns-his-back-property-and-looks-instead-art>.
- Ren, X. and Weinstein, L. (2013) 'Urban Governance, Mega-Projects, and Scalar Transformations in China and India', *Locating Right to the City in the Global South* 43: 107.
- Report of the Portfolio Committee on Transport on the Public Hearings on the Proposed Gautrain Project (2015) Retrieved July 16, 2019 from: <http://pmg-assets.s3-website-eu-west-1.amazonaws.com/docs/2005/comreports/051123pctransportreport2.htm>.
- Reuters. (2019) 'South Africa's Ramaphosa: U.S.-China trade war born from jealousy'. Retrieved July 18, 2019 from: [https://af.reuters.com/article/idAFKCN1U01GH OZATP?utm\\_source=34553&utm\\_medium=partner](https://af.reuters.com/article/idAFKCN1U01GH OZATP?utm_source=34553&utm_medium=partner).
- Rian, D. and Blomkvist, K. (2013) 'Drivers and Motives for Chinese Outward Foreign Direct Investments in Africa', *Journal of African Business* 14: 75–84.
- Rice, G. (2010) 'Reflections on interviewing elites' *Area* 42, 1: 70–75.
- Rizzo, M. (2015) 'The political economy of an urban megaproject: The Bus Rapid Transit project in Tanzania', *African Affairs* 114, 455: 249–270.
- Robbins, G. (2015) 'The Dube TradePort-King Shaka International Airport mega-project: Exploring impacts in the context of multi-scalar governance processes', *Habitat International* 45: 196–204.
- Roberts, S. and Rustomjee, Z. (2010) 'Industrial policy under democracy: apartheid's grown-up infant industries? Iscor and Sasol', *Transformation: Critical Perspectives on Southern Africa* 71, 1: 50–75.

- Robinson, J. (2008) 'Developing Ordinary Cities: City Visioning Processes in Durban and Johannesburg', *Environment and Planning A: Economy and Space* 40, 1: 74–87.
- Roccu, R. (2013) 'David Harvey in Tahrir Square: the dispossessed, the discontented and the Egyptian revolution', *Third World Quarterly* 34, 3: 423–440.
- Rogerson, C.M. (2004) 'From spatial development initiative to Blue IQ: Sub-national economic planning in Gauteng' *Urban Forum* 15, 1: 74-101.
- Rogerson, C.M. and Nel, E. (2016) 'Planning for local economic development in spaces of despair: Key trends in South Africa's 'distressed areas'', *Local Economy*, 31, 1-2: 124-141.
- Rogerson, C.M. and Rogerson, J.M. (1997) 'The changing post-apartheid city: Emergent black-owned small enterprises in Johannesburg', *Urban Studies* 34, 1: 85-103.
- Rogerson, C.M. and Rogerson, J.M. (2015) 'Johannesburg 2030: The Economic Contours of a "Linking Global City"', *American Behavioral Scientist* 59, 3: 347–368.
- Roskam, C. (2015) 'Non-Aligned Architecture: China's Designs on and in Ghana and Guinea, 1955-92', *Architectural History* 58: 261–291.
- Runde, D. and Barunda, R. (2018) 'The BUILD Act Has Passed: What's Next?' *Center for Strategic and International Studies*, Washington D.C. Retrieved July 15, 2019 from: <https://www.csis.org/analysis/build-act-has-passed-whats-next>.
- Salet, W., Bertolini, L. and Giezen, M. (2013) 'Complexity and Uncertainty: Problem or Asset in Decision Making of Mega Infrastructure Projects?' *International Journal of Urban and Regional Research* 37, 6: 1984–2000.
- Salkind, N. J. (ed.) (2010) *Encyclopaedia of research design*, Thousand Oaks, Calif: SAGE Publications.
- Samara, T. R., He, S. and Chen, G. (2013) *Locating Right to the City in the Global South*. New York: Routledge.
- Sánchez, F. and Broudehoux, A.M. (2013) 'Mega-events and urban regeneration in Rio de Janeiro: planning in a state of emergency', *International Journal of Urban Sustainable Development* 5, 2: 132–153.
- SANews. (2018) 'Chinese companies commit \$10bn to Limpopo SEZ', *South African Government News Agency*. Retrieved July 18, 2019 from: <https://www.sanews.gov.za/south-africa/chinese-companies-commit-10bn-limpopo-sez>.
- Saul, J.S. and Bond, P. (2014) *South Africa-- the Present as History: From Mrs Ples to Mandela & Marikana*, Woodbridge: Boydell & Brewer Ltd.

- Schensul, D. (2008) 'From resources to power: the state and spatial change in post-apartheid Durban, South Africa', *Studies in Comparative International Development* 43, 3-4: 290.
- Schneider, G.E. (2018) 'The Post-Apartheid Development Debacle in South Africa: How Mainstream Economics and the Vested Interests Preserved Apartheid Economic Structures', *Journal of Economic Issues* 52: 306–322.
- SCMP. (2013) 'Zendai to build 'New York of Africa'', *South China Morning Post (SCMP)*. Retrieved July 17, 2019 from: <https://www.scmp.com/property/international/article/1348653/zendai-build-new-york-africa>.
- Seth, S. (2009) 'Putting knowledge in its place: science, colonialism, and the postcolonial', *Postcolonial Studies* 12, 4: 373–388.
- Setokoe, T. (2017) 'BAIC expects first cars from SA plant in 2018', *news24.com*, Retrieved July 18, 2019 from: <https://www.news24.com/SouthAfrica/Local/PE-Express/baic-expects-first-cars-from-sa-plant-in-2018-20171002>
- Shatkin, G. (2011) 'Planning privatopolis: Representation and contestation in the development of urban integrated mega-projects' In, A. Roy, and A. Ong (eds.), *Worlding cities: Asian experiments and the art of being global*, Hoboken: Wiley-Blackwell Publishing.
- Shen, J. and Wu, F. (2017) 'The Suburb as a Space of Capital Accumulation: The Development of New Towns in Shanghai, China: The Suburb as a Space of Capital Accumulation', *Antipode* 49, 3: 761–780.
- Sheng, L.M. (2019) 'Build the World's Most Competitive Energy Metallurgical Base', *China Reform Daily*. Retrieved July 18, 2019 from: [http://emsez.com/en/news\\_show.php?id=62](http://emsez.com/en/news_show.php?id=62).
- Shepard, W. (2017) 'Why Hundreds Of Completely New Cities Are Being Built Around The World', *Forbes*. Retrieved July 15, 2019 from: <https://www.forbes.com/sites/wadeshepard/2017/12/12/why-hundreds-of-completely-new-cities-are-being-built-around-the-world/>.
- Siciliano, G., Urban, F., Tan-Mullins, M. and Mohan, G. (2018) 'Large dams, energy justice and the divergence between international, national and local developmental needs and priorities in the global South', *Energy Research & Social Science* 41: 199–209.
- Siemiatycki, M. (2017) 'Cycles in megaproject development', In B. Flyvbjerg, (Ed.), *The Oxford handbook of megaproject management*. Oxford: Oxford University Press.

- Silverman, D. (2013) *Doing qualitative research*, Thousand Oaks, California: SAGE Publications Ltd.
- Singh, J.N. and Ovadia, J.S. (2018) 'The theory and practice of building developmental states in the Global South', *Third World Quarterly* 39: 1033–1055.
- Siyongwana, P. Q. (2005) 'Transformation of residential planning in Umtata during the post-apartheid transition era', *GeoJournal* 64, 3: 199–213.
- Slater, D. (2017) 'BAIC implementing catch-up strategy to meet 2018 Coega deadline', Creamer Media's Engineering News. Retrieved July 17, 2019 from: <https://www.engineeringnews.co.za/print-version/baic-implements-catch-up-strategy-to-accelerate-factory-construction-to-meet-2018-deadline-2017-10-20>.
- Smith, C. 'Production to start at Chinese auto plant in Eastern Cape 'before end of 2019'', *Fin24*. Retrieved July 17, 2019 from: <https://www.fin24.com/Companies/Industrial/production-to-start-at-chinese-auto-plant-in-eastern-cape-before-end-of-2019-20190225>.
- Sneddon, C. (2015) *Concrete Revolution: Large Dams, Cold War Geopolitics, and the US Bureau of Reclamation*. Chicago: University of Chicago Press.
- Song, K. (2017) 'Modernism in late-Mao China: a critical analysis on state-sponsored buildings in Beijing, Guangzhou and overseas, 1969-1976', Doctoral Dissertation, The University of Melbourne, Melbourne, Australia.
- Song, X. (2016) 'China-South Africa Capacity and Investment Cooperation Seminar Held in Beijing', *Finance.China.cn*. Retrieved July 18, 2019 from: <http://finance.china.com.cn/roll/20160515/3723141.shtml>.
- Songtian, L. (2018) 'South Africa and China are beneficial partners', *Pretoria News*. Retrieved July 17, 2019 from: <https://www.iol.co.za/pretoria-news/south-africa-and-china-are-beneficial-partners-13508542>.
- Sovacool, B. K. and Hess, D. J. (2017) 'Ordering theories: Typologies and conceptual frameworks for sociotechnical change', *Social Studies of Science* 47, 5: 703–750.
- Staff, M. (2017) 'The Coega Development Corporation', *Africa Outlook*. Retrieved July 17, 2019 from: <https://www.africaoutlookmag.com/outlook-features/the-coega-development-corporation>.
- Stake, R. E. (1995) *The Art of Case Study Research*, Thousand Oaks: SAGE.
- Statista. (2018) 'Passenger car sales in Africa between 2005 and 2017 (in 1,000 units)', *Statista.com*, Retrieved July 17, 2019 from: <https://www.statista.com/statistics/473598/passenger-car-sales-in-africa/>.

- Statistics South Africa. (2018) 'Quarterly Labour Force Survey', Quarter 2: 2018.
- Strange, S. (1996) *The Retreat of the State: The Diffusion of Power in the World Economy*, Cambridge University Press: New York.
- Steinberg, G.M. (1987) 'Large-Scale National Projects as Political Symbols: The Case of Israel' *Comparative Politics* 19: 331–346.
- Steinmetz, G. (2004) 'Odious Comparisons: Incommensurability, the Case Study and 'Small N's' in Sociology', *Sociological Theory* 22, 3: 371-400.
- Stephens, N. (2007) 'Collecting data from elites and ultra elites: telephone and face-to-face interviews with macroeconomists', *Qualitative Research* 7, 2: 203–216.
- Steyn, L. (2013) 'Dai's vision for a Modderfontein metropolis', *Mail&Guardian*. Retrieved July 17, 2019 from: <https://mg.co.za/article/2013-11-08-00-dais-vision-for-a-new-metropolis>.
- Stone, S. (2018) 'Ramaphosa's China visit culminates in investment, coal deals worth billions,' *CityPress*. Retrieved July 15, 2019 from: <https://citypress.news24.com/News/ramaphosas-china-visit-culminates-in-investment-coal-deals-worth-billions-20180903>.
- Sturgeon, T. and Florida, R. (1999) 'The world that changed the machine: Globalization and jobs in the automotive industry', Final report to *the Alfred P. Sloan Foundation*, MIT: Cambridge, MA.
- Sturgeon, T., Memedovic, O., Van Biesebroeck, J. and Gereffi, G. (2009) 'Globalisation of the automotive industry: main features and trends', *International Journal of Technological learning, innovation and development*, 1, 1: 7-23.
- Summers, T. (2016) 'China's 'New Silk Roads': sub-national regions and networks of global political economy', *Third World Quarterly* 37, 9: 1628–1643.
- Sun, I. Y. (2017) *The next factory of the world: how Chinese investment is reshaping Africa*. Boston: Harvard Business Review Press.
- Surborg, B. (2012) 'The production of the world city: Extractive industries in a global urban economy', Doctoral dissertation, University of British Columbia, Vancouver, Canada.
- Sutherland, C., Sim, V. and Scott, D. (2015) 'Contested discourses of a mixed-use megaproject: Cornubia, Durban', *Habitat International, Megaprojects, Settlement Dynamics and the Sustainability Challenge in Metropolitan Cities* 45: 185–195.

- Swyngedouw, E., Moulaert, F. and Rodriguez, A. (2002) 'Neoliberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy', *Antipode* 34, 3: 542–577.
- Tang, X. (2015) 'How do Chinese 'Special Economic Zones' support economic transformation in Africa?', *Supporting Economic Transformation (SET)*, Brief, Retrieved July 15, 2019 from: <https://set.odi.org/wp-content/uploads/2015/07/How-Chinese-SEZs-support-economic-transformation-in-Africa.pdf>.
- Taylor, I. (2012) *The Forum on China-Africa Cooperation (FOCAC)*, New York: Routledge.
- Taylor, I. (2013) 'From Santa Claus to serious business: Where should FOCAC go next?' *African East-Asian Affairs* 74.
- Taylor, I. (2016) 'Dependency redux: why Africa is not rising', *Review of African Political Economy* 43, 147: 8–25.
- The Economist. (2015) 'Spanning Africa's Infrastructure Gap: How Development Capital is Transforming Africa's Project Build-out', Retrieved July 15, 2019 from: [http://ftp01.economist.com.hk/ECN\\_papers/Infrastructure-Africa](http://ftp01.economist.com.hk/ECN_papers/Infrastructure-Africa).
- Thomas, D.P. (2013) 'The Gautrain project in South Africa: a cautionary tale', *Journal of Contemporary African Studies* 31: 77–94.
- TIPS. (2016) 'The Real Economy Bulletin', *Trade and Industry Strategy (TIPS)*, Pretoria, South Africa. Retrieved July 18, 2019 from: [https://www.tips.org.za/images/The\\_Real\\_Economy\\_Bulletin\\_Q1\\_2016\\_Briefing\\_note\\_The\\_steel\\_crisis\\_June\\_2016.pdf](https://www.tips.org.za/images/The_Real_Economy_Bulletin_Q1_2016_Briefing_note_The_steel_crisis_June_2016.pdf).
- Todes, A. (2012) 'Urban growth and strategic spatial planning in Johannesburg, South Africa', *Cities* 29, 3: 158–165.
- Trading Economics. (2018) 'South African Government spending 1960-2018', *Trading Economics*, Retrieved July 17, 2019 from: <https://tradingeconomics.com/south-africa/government-spending>
- Turok, I. (1994) 'Urban planning in the transition from apartheid, Part 1: the legacy of social control' *Town Planning Review* 65, 3: 243.
- Turok, I. (2011) 'Deconstructing density: Strategic dilemmas confronting the post-apartheid city', *Cities* 28, 5: 470–477.
- UNCTAD. (2018) 'General Profile: South Africa', *United Nations*, Geneva, Switzerland. Retrieved July 18, 2019 from: <https://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/710/index.html>.



- UNCTAD. (2019) 'World Investment Report 2019: Special Economic Zones', *United Nations*, Geneva, Switzerland.
- Undheim, T. (2003). 'Getting connected: How sociologists can access the high tech elite', *The Qualitative Report* 8, 1.
- van Noorloos, F. and Kloosterboer, M. (2018) 'Africa's new cities: The contested future of urbanisation', *Urban Studies* 55, 6: 1223–1241.
- van Noorloos, F. and Leung, W.H.M. (2017) 'Circulating Asian urbanisms: an analysis of policy and media discourse in Africa and Latin America', In, E. Woertz, *Reconfiguration of the Global South - Africa and Latin America and the 'Asian Century'*, London: Routledge.
- van Wijk, J. and Fischhendler, I. (2017) 'The construction of urgency discourse around mega-projects: the Israeli case', *Policy Sciences* 50, 3: 469–494.
- Vegter, I. (2019) 'Gautrain: Political patronage profiteering is back with a vengeance', *Daily Maverick*, Retrieved July 16, 2019 from: <https://www.dailymaverick.co.za/opinionista/2019-01-22-gautrain-political-patronage-profiteering-is-back-with-a-vengeance/>.
- Venter, I. (2015) 'FAW starts truck body assembly at its Coega plant', *Creamer Media's Engineering News*. Retrieved July 17, 2019 from: <http://www.engineeringnews.co.za/article/faw-starts-truck-body-assembly-at-its-coega-plant-2015-02-16>.
- Venter, I. (2016) 'Construction of BAIC, IDC Coega auto plant to be completed in Q1 2018', *Creamer Media's Engineering News*. Retrieved July 17, 2019 from: [https://www.engineeringnews.co.za/article/construction-of-baic-idc-coega-auto-plant-to-be-completed-in-q1-2018-2016-08-30/rep\\_id:4136](https://www.engineeringnews.co.za/article/construction-of-baic-idc-coega-auto-plant-to-be-completed-in-q1-2018-2016-08-30/rep_id:4136).
- de Villiers, J. (2019) 'Foreign direct investment in SA rocketed by 446% in 2018 - these were the hottest sectors', *Business Insider South Africa*. Retrieved July 18, 2019 from: <https://www.businessinsider.co.za/foreign-direct-investment-to-sa-grew-by-a-massive-446-in-2018-2019-1>.
- Vondracek, H. D. (2015) 'China's stadium diplomacy and its determinants: a typological analysis of soft power.' Masters Thesis submitted to the University of Glasgow, Glasgow, Scotland.
- Wang, W. (2016) 'Slow and Steady in SA', *Global Times*. Retrieved July 17, 2019 from: <http://www.globaltimes.cn/content/1020943.shtml>.
- Watson, V. (2014) 'African urban fantasies: dreams or nightmares?' *Environment and Urbanization* 26, 1: 215–231.

- Watson, V. (2015) 'The allure of 'smart city' rhetoric: India and Africa', *Dialogues in Human Geography* 5, 1: 36–39.
- Webster, E. (2013) 'The promise and the possibility: South Africa's contested industrial relations path', *Transformation: Critical Perspectives on Southern Africa* 81: 208–235.
- Weiss, L. (2000). 'Globalization and State Power', *Development and Society* 29, 1:1-15.
- Welch, C., Marschan-Piekkari, R., Penttinen, H. and Tahvanainen, M. (2002) 'Corporate elites as informants in qualitative international business research', *International Business Review* 11, 5: 611–628.
- Welman, L. and Ferreira, S. L. (2014) 'Regional development of Saldanha Bay region, South Africa: The role of Saldanha Steel', *Bulletin of Geography. Socio-economic Series* 26, 26: 219–231.
- Welman, L. and Ferreira, S.L. (2016) 'The co-evolution of Saldanha Bay (town and hinterland) and its Port', *Local Economy* 31: 219–233.
- Westhuizen, J.V.D. (2007) 'Glitz, Glamour and the Gautrain: Mega-Projects as Political Symbols', *Politikon* 34, 3: 333–351.
- Westhuizen, J.V.D. (2017) 'Megaprojects as Political Symbols', In B. Flyvbjerg, (Ed.), *The Oxford handbook of megaproject management*. Oxford: Oxford University Press.
- Williamson, J. (1989) 'What Washington means by policy reform', in Williamson (ed), *Latin American Adjustment: How Much Has Happened?* Washington, DC: Institute for International Economics.
- Winning, A. (2018) 'Chinese investors plan \$10 billion metallurgical complex in South Africa', *Reuters*. Retrieved July 18, 2019 from: <https://www.reuters.com/article/us-safrica-brics-china/chinese-investors-plan-10-billion-metallurgical-complex-in-south-africa-idUSKBN1KH1E8>.
- Wissenbach, U. and Wang, Y. (2017) 'African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway Project in Kenya and East Africa', China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC. Working Paper 2017/13.
- Wolf, C. (2016) 'China and Latecomer Industrialization Processes in Sub-Saharan Africa: A Case of Combined and Uneven Development', *World Review of Political Economy* 7, 2: 249–284.
- Wolpe, H. (1975) 'The theory of internal colonization: The South African case', In collected seminar papers, *Institute of Commonwealth Studies* 18: 105–120.

- World Bank. (2018) 'An Incomplete Transition Overcoming the Legacy of Exclusion in South Africa', *World Bank Group*. Retrieved July 18, 2019 from: <http://documents.worldbank.org/curated/en/815401525706928690/pdf/WBG-South-Africa-Systematic-Country-Diagnostic-FINAL-for-board-SECPO-Edit-05032018.pdf>.
- World Bank. (2019) 'Doing Business 2019', *World Bank Group*. Retrieved July 18, 2019 from: [https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report\\_web-version.pdf](https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf)
- Wright, C. (2017) 'Banking: Ten years on, ICBC Standard deal starts to show its Worth', *Euromoney*. Retrieved July 17, 2019 from: <https://www.euromoney.com/article/b15j0kf1n926g4/banking-ten-years-on-icbc-standard-deal-starts-to-show-its-worth>.
- WSA. (2018) 'World Steel in Figures 2018 now available', *World Steel Association*, Brussels, Belgium. Retrieved July 18, 2018 from: <https://www.worldsteel.org/media-centre/press-releases/2018/world-steel-in-figures-2018.html>.
- Wu, F. and Zhang J. (2007) 'Planning the Competitive City-Region: The Emergence of Strategic Development Plan in China', *Urban Affairs Review* 42, 5: 714–740.
- Xinhua. (2017) 'Chinese car maker BAW launches joint venture in S. Africa to expand production' *Xinhua.net* Retrieved July 15, 2019 from: [http://www.xinhuanet.com/english/2017-05/09/c\\_136266561.htm](http://www.xinhuanet.com/english/2017-05/09/c_136266561.htm)
- Xinhua. (2018) 'China-S.Africa ties set example for China-Africa cooperation' *Xinhua.net*, Retrieved July 15, 2019 from: [http://www.xinhuanet.com/english/2018-07/23/c\\_137342694.htm](http://www.xinhuanet.com/english/2018-07/23/c_137342694.htm).
- Ye, M. (2019) 'Fragmentation and Mobilization: Domestic Politics of the Belt and Road in China', *Journal of Contemporary China*: 1–16.
- Yeh, E. T. and Wharton, E. (2016) 'Going West and Going Out: discourses, migrants, and models in Chinese development', *Eurasian Geography and Economics* 57, 3: 286–315.
- Yeung, H. W. (1995) 'Qualitative personal interviews in international business research: Some lessons from a study of Hong Kong Transnational Corporations', *International Business Review* 4, 3: 313–339.
- Yeung, H. W.C. (2009) 'Regional development and the competitive dynamics of global production networks: An East Asian perspective', *Regional Studies*, 43, 3: 325–351.

- Yi-Chong, X. (2014) 'Chinese State-owned Enterprises in Africa: ambassadors or freebooters?' *Journal of Contemporary China* 23, 89: 822–840.
- Yin, R. K. (1994) *Case study research: design and methods*. Los Angeles: Sage Publications.
- Yin, R. K. (2014) *Case study research: design and methods*, London: Sage Publications.
- Zendai. (2015) 'Project Overview – Development Plan', *Zendai Group*. Retrieved July 17, 2019 from: [http://www.heartland.co.za/3\\_project\\_overview.php](http://www.heartland.co.za/3_project_overview.php).
- Zendai. (2017) 'Introduction to Zendai Group', *Zendai Group*. Retrieved July 17, 2019 from: <http://www.zendai.com/english.html>.
- Zeng, J. (2019) 'Narrating China's belt and road initiative', *Global Policy* 10, 2: 207–216.
- Zhang, H. Y. (2016) 'NDRC Collaborates with 18 Provinces to Promote Production Capacity Exports, China Reform Net (NDRC)', Retrieved July 18, 2019 from: [http://www.crd.net.cn/2016-03/15/content\\_19305496.htm](http://www.crd.net.cn/2016-03/15/content_19305496.htm).
- Zhang, X. (2017) 'Chinese Capitalism and the Maritime Silk Road: A World-Systems Perspective', *Geopolitics* 22, 2: 310–331.
- Zhong, N. (2018) 'BAIC revs up presence in South Africa', *China Daily*. Retrieved July 17, 2019 from: <http://europe.chinadaily.com.cn/a/201808/02/WS5b625950a31031a351e9195e.html>.
- Zhu, L. (2019) 'Top 10 Chinese auto brands by H1 sales', *China Daily*. Retrieved July 17, 2019 from: [http://www.chinadaily.com.cn/a/201807/13/WS5b47d8c4a310796df4df62ab\\_6.html](http://www.chinadaily.com.cn/a/201807/13/WS5b47d8c4a310796df4df62ab_6.html).
- Ziso, E. (2018) *A post state-centric analysis of China-Africa relations: internationalisation of Chinese capital and state-society relations in Ethiopia*, Cham: Palgrave Macmillan.