

When China Builds Africa
Linking construction projects and economic development in
Mozambique

Ulrikke Wethal

Centre for Development and the Environment
&
Department of Sociology and Human Geography
University of Oslo

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Faculty of Social Sciences
Department of Sociology and Human Geography
University of Oslo

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Summary of thesis

This article-based doctoral thesis aims to contribute to the multifaceted debate on economic development, interests and power in China–Africa cooperation, through a qualitative study of Chinese activities in the Mozambican construction sector. Applying a theoretical lens that bridges development geography with economic geography, I examine Chinese-led construction projects: how they unfold, and their role in Mozambique’s economic development. The aim is to understand how Mozambican stakeholders assess and influence the growing relationship with China, and how this plays into continuing processes of inclusion and exclusion, both in the economic and political sphere. As such, this thesis is not about China in Mozambique: it sets out to explore economic development in Mozambique, and the role played by China within these ongoing development processes.

The research project examines how domestic backward linkages are created in Chinese-led construction projects in Mozambique, and how they are linked to broader development processes. Moreover, the project explores what characterises agency of the Mozambican government and other Mozambican stakeholders, and how this is expressed in the implementation of Chinese-led construction projects. The two main theoretical concepts, agency and backward linkages, are understood within a framework of global production networks. Domestic backward linkages are operationalised as domestic subcontractors, domestic suppliers and domestic workers

With qualitative data collected during fieldwork in Maputo, three Chinese-led construction projects in Maputo are examined: 1) a roadworks project funded by the China Export-Import Bank, 2) a project involving the expansion and rehabilitation of the urban water system, funded by the French Development Agency and built by three Chinese companies, and 3) the construction of 5000 homes, administered through a joint venture between a Chinese SOE and a Mozambican development fund. The qualitative methods employed consist mainly of interviews and observations.

This doctoral thesis shows that the domestic backward linkages from the Chinese-led projects are few and weak. The most extensive backward linkage is that of labour, where Mozambican workers filled positions that were often casual and required few skills. Chinese contractors

make use of domestic subcontractors and suppliers only to a minor extent. Such an outcome is explained through a combination of contextual determinants: factors connected to the ownership of Chinese lead firms, such as superior skills and technology, tied aid and closed tendering processes, but more importantly, the weak local capabilities in the Mozambican construction industry, and the social infrastructures and policies surrounding it.

The thesis sheds light on how Mozambican stakeholders connect construction projects to development, which can be summarized as follows: the labour-intensiveness of construction projects and thus their positive contribution to employment generation, the fundamental role of construction projects in facilitating other productive activities, and how construction projects satisfy the impatience for development understood from a modernisation perspective, illustrating the inherent promise of progress and modernisation that large-scale construction projects bring forth.

Agency of the state is explored through the negotiation processes involved in the implementation of the roadworks project. The analysis highlights crucial elements in the debate on state agency in African countries – the various interests that make up the Mozambican state and influence which aspects are subject to negotiation, and the historical and structural conditions that shape how state actors enter into negotiations with China. In terms of the local industry, the analysis illustrates how domestic SMEs fall outside the networks of industrial relations and struggle to make themselves relevant in the Mozambican context, lacking network and institutional support, skills, technology and training. Consequently, the local industry is suffering despite an upsurge of construction work in Mozambique over the last decades. Regarding the Mozambican workers, I examine how Mozambican workers respond to their workplaces, and which factors enable or constrain workers' agency. The analysis shows that Mozambican labour is positioned on the margins of the production network, with weak capacity for improvement. The degree of distance between Chinese and Mozambicans in the workplace leaves little room for participation and voice strategies, workers lack institutional support to react to company violations of their rights and labour regulations, and workers lack alternative employment opportunities.

Moreover, the findings of this PhD study contribute to a broad set of academic discussions – ranging from China–Africa relations, the changing architecture of international development assistance, general development discourses and industrial policies, to multi-cultural workplaces, and the role of construction and construction workers in global production

networks. A main theory contribution comes from connecting GPN theory and linkage theory, where my approach to theorising domestic backward linkages serves to operationalise value capture as articulated in GPN theory.

Part I

1. Introduction

When asked what my thesis is about, I generally answer with a simple ‘China in Africa’. People nod approvingly, as if this means something specific, or that it is possible to establish some sort of core in a China–Africa relationship. Actually, to be writing about ‘China in Africa’ could mean almost anything – as is clearly reflected in the literature base. The field ‘China in Africa’ has grown rapidly since the mid-2000s, and come to cover everything from general trade and aid flows between China and Africa (e.g. Shelton 2001, Christensen 2010, Lin and Wang 2015), to specific Chinese development projects in individual African countries (e.g. Monson 2009), and even the lives of migrant Chinese shop-owners in Cabo Verde (e.g. Haugen and Carling 2005), transcending any consensus on scope, theory, or level of analysis. China has tended to be presented as the lead actor, with the main research focus on disaggregating the motives, strategies, and interests behind various Chinese activities (Alden and Davies 2006, Lee 2006, Meidan 2006, Alden 2012). As a consequence, the explanatory power of ‘the China factor’ is often exaggerated, when in fact Chinese actors are as diverse as the contexts in which they operate, with both competing and contradictory interests. Instead of talking of Sino–African relations as a totality, we should:

...disaggregate the relationship and analyze its constituent parts in order to understand the underlying processes and mechanisms at play. Moreover, these processes and mechanisms do not act autonomously, but instead work in tandem with other processes and affect other structures and relationships. (Carmody and Kragelund 2016, 9)

For example, relations between Chinese and African actors unfold in a context shaped by the history of relationships between African countries and external parties, particularly former European colonial powers (Arewa 2016). Historical aid and trade relations create specific structures that influence how economic cooperation between China and African countries evolves – but are repeatedly ignored in China–Africa analyses.

Moreover, governments and other stakeholders in individual African countries are often presented as passive recipients at the mercy of Chinese actions. Such representations have recently come under criticism, and a growing body of literature has shifted the focus towards African agency, seeking to show how local actors express agency and influence the development of China–Africa relations (Corkin 2013, Harman and Brown 2013, Mohan and Power 2013). However, detailed work is still nascent, and several analyses have understood the concept of agency in a static and one-dimensional way that does not sufficiently comprehend societal change in today’s Africa (Carmody and Kragelund 2016, 5).

This thesis aims to contribute to the multifaceted debate on economic development, interests and power in China–Africa cooperation, through a qualitative study of Chinese activities in the Mozambican construction sector. I examine Chinese-led construction projects: how they unfold, and their role in Mozambique’s economic development. To counter the tendency to exoticise the ‘China factor’ in the China–Africa literature (see discussion in e.g. Gadzala 2015), I have deliberately placed Mozambican stakeholders at the centre of this study. The aim is to understand how Mozambican stakeholders assess and influence the growing relationship with the Asian giant and how this plays into ‘ongoing processes of inclusion and exclusion, both in the economic and political sphere’ (Dietz et al. 2011, 3). As such, this thesis is not about *China* in Mozambique: it sets out to explore economic development in Mozambique, and the role played by China within these ongoing development processes.

I have chosen the construction sector as the basis for exploring economic cooperation between Mozambique and China. Construction is one of the main sectors in which Chinese financing institutions and companies have become heavily involved across the African continent, with projects ranging from roads, railways and bridges, to ‘prestige buildings’ like stadiums, hotels and conference centres. In Mozambique, the government has welcomed Chinese activities in the construction sector, not least because much physical infrastructure was destroyed during the 1977–92 war. In light of recent gas findings and coal exports, Mozambique will need to keep investing in construction and expand its infrastructure networks in order to exploit these resources. Rapid provision of infrastructure from China to African countries is undoubtedly needed and valued. However, the ways in which Chinese-led construction projects are negotiated and implemented, and how they integrate with the

Mozambican economy, stand out as elements crucial for understanding how they contribute to long-term development in the sector.

The construction sector offers a relevant starting point for exploring economic development, as it is often a major contributor to Gross Domestic Product (GDP) in developing countries, with considerable potential for creating economic linkages that can spur national economic activity and provide employment opportunities (Ofori 2000). Given the lower skill threshold for entry, the construction sector should have the potential to foster strong economic links also in developing countries (Corkin 2012). As noted by Zhang and Gutman (2015, 5), ‘the development and expansion of a country’s construction industry is a key component of its early industrialization experience’. Construction projects often have complex linkages to many other sectors in the economy, and strategic sector development can become an important driver of growth in developing countries. Still, there are several examples that show this does not always happen (Ofori 2000), and that construction projects may end up being weakly integrated into the local socio-economic environments. This thesis will shed light on whether and how backward economic linkages are created in Chinese-led construction projects in Mozambique, what characterises them, and how these projects relate to broader development processes.

Mozambique has frequently been referred to as among the most promising African countries in terms of development progress, attracting high levels of foreign direct investment (FDI) and being one of the fastest growing economies on the continent (OECD et al. 2013, Macaueh 2015). Mozambique has been seen as ‘a donor darling’ in the West (Cunguara and Hanlon 2012, 624), and a ‘success-story of post-Washington consensus development’ (Anderson 2012, 2). Mozambique has also been cited as one of Africa’s ‘emerging economies’. This idea of ‘emerging Africa’ has become popular, especially in media reports (Amoako 2011, *The Economist* 2011, 2013, Bates 2012, French 2012) and in business literature (Ernst and Young 2011, Economic Commission for Africa 2012, 2013). It indicates regained optimism on behalf of the continent, based on impressive growth rates, significant increases in trade and investments, deepening democracies, and stronger governance (Radelet 2010, Hansen and Wethal 2015a). However, the concept is criticised for bringing shallow analyses about African growth trajectory, where ‘ongoing dynamics are actually deepening Africa’s dependent position in the global economy’ (Taylor 2016, 9). Others claim that this flicker of economic optimism has been closely linked to high commodity prices, which are now experiencing a sharp downturn (Behuria 2017). Closer examination of the Mozambican

economy supports such critical claims, with the idea of ‘emerging Mozambique’ appearing as an exaggeration at best¹. The country continues to heavily rely on aid from Western donors; GDP growth per capita is quite low; and poverty rates and unemployment rates remain high. Growth is mainly linked to large investments in capital-intensive megaprojects and resource extraction, while domestic firms remain small and uncompetitive, unable to reap the benefits of large inflows of foreign capital to the country (Wethal 2015).

China has come to play an important role in the story of ‘emerging Africa’, where its win–win partnerships with African countries – ‘South–South cooperation’ – are seen as an alternative to more asymmetric aid relations along North–South lines. Apparently viewing Africa as being on the brink of economic take-off, China has taken care to position itself strategically in order to develop mutually beneficial relationships. Mozambique and China established formal diplomatic ties already in 1975, but economic and commercial cooperation has increased particularly in the last decade or so (Alden et al. 2014). Recent successful coal and gas exploration seems to have made the Mozambican government more confident about approaching new types of investors, and it has come to rely on Chinese capital and skills for the execution of several priority projects (ibid).

Several African countries have experienced decades of low infrastructure investment from traditional donors (Grimm 2014), making Chinese investments in African infrastructure projects much appreciated. Indeed, one of the main responses from Chinese and foreign analysts to criticism of Chinese activities has been precisely that China delivers development to Africa through infrastructure projects (Sun 2014). However, during the infrastructure boom of the 1960s and 70s, driven by Western donors and the World Bank in particular, a major criticism was the bias towards physical capital as opposed to human capital. Schultz (1981, in Mold 2012, 246) predicted that new machinery and infrastructure would prove useless without parallel investments in local capacity building. He was largely correct: by the mid-1990s about one-third of the roads built in sub-Saharan Africa during the 1970s were out of use (Zawdie and Murray 2013, 74). Despite the evident short-term benefits deriving from infrastructure construction, especially given the widespread infrastructure shortcomings in many African countries, there is a risk of history repeating itself. Thus, the extent to which

¹ It should be noted that Mozambique is currently experiencing somewhat of a debt crisis. What started with the disclosure of a hidden debt of 2.2 billion USD from state loans taken up in 2013, Mozambique defaulted on its foreign debt in 2016, which has become unsustainable for the immediate future. The image of the donor darling has also become tainted in the process. The effect of the debt crisis in relation to China is beyond the scope of this thesis.

significant long-term economic benefits like diversification, industrialisation and domestic capacity building are secured will be contingent on the terms and conditions surrounding the Chinese-led infrastructure projects (Mold 2012). This in turn is influenced by the capacities and interests of the individual African state to formulate and negotiate advantageous outcomes of Chinese involvement in the infrastructure sector. Understanding the challenges to local linkage creation in Chinese-led construction projects, including the power relations involved in policy formulation, negotiation and project implementation, is crucial for assessing how Chinese construction projects contribute to economic development.

To a certain extent, China's increasing activity in development cooperation has turned African development into a contested area. There has been substantial criticism ever since Western media, academics, and policy-makers became aware of China's increased involvement in Africa after the turn of the millennium (Gadzala 2015). Such criticism may reflect fears of the West losing its role as an agenda-setter for African development (Carmody and Kragelund 2016). As noted by Arewa (2016, 108): 'Many of the objections of other powers to Chinese activities in Africa are fairly astonishing given the history of prior unequal and exploitative relationships between Africa and varied external powers.' The fact that many African economies fared quite well throughout the financial crisis, but struggled during China's economic slowdown in 2015–16, gives a clear indication of the importance of new partnerships – and possible new dependencies. China is steadily taking over Europe's role as Africa's leading trading partner, and has become a considerable source of new investments. Moreover, Africa has become China's second-largest supplier of service contracts, particularly in infrastructure construction, according to Chinese analysts (Sun 2014).

While Chinese loans and investments offer potential advantages and sources of diversity (Moss and Rose 2006), today's China–Mozambique relations must be understood within the context of Mozambique's historically strong relations with Western donors and International Financing Institutions (IFIs). How Mozambican stakeholders navigate within the myriad of external interests, requirements, and funds is central to the extent to which Chinese activity contributes to broader development processes in Mozambique.

1.1 Aim and research questions

According to Arewa (2016, 136), infrastructure deficits are symptomatic of broader societal challenges, and that maps of African countries tend to reflect the 'fundamentally incomplete

nature of infrastructure construction, as well as the construction of the post-colonial African state itself' (ibid., 116). To counter this shortcoming, the state needs to develop a set of services linked to logistics, management, business and law, in combination with regulatory services and institutions that can facilitate the maintenance and reconstruction of infrastructures developed and funded from abroad – *in casu*, by China. In moving beyond win–win rhetoric and get closer towards understanding who determines who wins what and why, we need to focus on host economies and the political climate in the individual African country when examining China's role in African development processes (Alden 2007, Taylor 2010). I aim to do precisely that, using qualitative data from fieldwork and situating the analyses of Chinese-led construction projects firmly within Mozambique's economic and political development trajectory. The thesis sheds light on crucial features of broader development debates, feeding into the literature on China–Africa relations and the restructuring of international development assistance. The aim is further to understand how Chinese-led construction projects contribute to broader processes of industrialisation and capacity building in Mozambique's construction sector. I pose three overarching research questions:

1. What characterises the backward economic linkages created in Chinese-led construction projects in Mozambique, and how are such projects linked broader development processes?
2. What characterises agency of the Mozambican government and other Mozambican stakeholders, and how is this expressed in the implementation of Chinese-led construction projects?
3. How can global production networks theory be applied in explaining the role of Chinese construction projects in development processes in Mozambique?

These research questions address the theoretical concepts of agency and backward linkages in the construction sector, understood within a framework of global production networks (GPN). The first two questions can be understood as empirical, involving matters of backward linkages and agency in Chinese-led construction projects. Each of these concepts is elaborated on below. The third question is a theoretical one, to be explored throughout this synopsis and further discussed in the conclusions. Approaching Chinese-led construction projects through a theoretical lens that bridge development geography with economic geography, I aim at moving away from analyses that exoticise 'the China factor', and rather explain how activities

of various external actors intersect and become merged into the political economy in Mozambique.

While several scholars have engaged with the concept of ‘agency’ when examining China–Africa relations, the issue has not been thoroughly explored. Often, Chinese dominance is simply taken for granted, given the sheer size of the Chinese economy compared to African states (Rotberg 2015); or representations of Chinese contributions to African countries’ agency have been overly positive, because China provides a feasible alternative to Western dominance in development assistance and contributes to opening policy space (Ajakaiye 2006, Oya 2008). Main weaknesses of many such analyses are their lack of in-depth contextual understanding of the historical and structural processes that influence how Sino–African relations evolve.

A focus on linkages rests on a certain understanding of development. Morris, Kaplinsky and Kaplan (2012a, 414) claim that ‘successful economic growth is inevitably an incremental (but not necessarily slow) unfolding of linkages between related economic activities.’ They base their understanding on Albert Hirschman, who characterised development as essentially being ‘the record of how one thing leads to another, and the linkages are that record’ (1981, 75). This is a tempting idea, but the speed and scale of globalisation have made it possible for companies to stretch such economic linkages across borders and even continents. A newly built airport or road can thus serve as a symbol of modern development in some discourses, without actually engaging with the socio-economic environments in which it is situated. As such, understanding *economic development* is not just an unfolding of economic linkages: it also involves questions about where and how such linkages unfold, and who can access them. That in turn means that theories of linkages and agency must be placed within a wider understanding of the workings of the global economy. Here, I use the GPN framework as a point of departure for situating national economic development processes within a broader network of actors and production processes. The conceptualisation of power relations within GPNs is influential in informing how the agency of various actors at differing geographical scales is enabled or constrained.

1.2 Structure of thesis

The thesis is structured in two parts, where Part I serves as a comprehensive introduction to the articles that constitute Part II.

In chapter 1, I have introduced the theme, aims and research questions of the thesis. Chapter 2 presents and discusses the theory foundations of the thesis. It offers a literature review of relevant theories, and establishes the analytical framework employed in the thesis. The two main theory strands to be discussed are linkage theory and agency – and how they intertwine within a GPN framework. Chapter 3 presents the methods employed for collecting empirical data, and discusses some practical and ethical considerations related to fieldwork. Chapter 4 gives a short summary of each of the articles of Part II. Chapter 5, the concluding chapter, returns to the research questions posed in the introduction and highlights the main findings of the thesis.

Part II consists of the following articles:

1. Wethal (forthcoming 2018) ‘Development Dilemmas: Challenges to local linkages in Chinese construction projects in Mozambique,’ *Journal of Modern African Studies*, 56 (2)
2. Wethal (2017) ‘Passive hosts or demanding stakeholders? Understanding Mozambique’s negotiating power in the face of China,’ *Forum for Development Studies*, 44 (3), 493-516, doi: 10.1080/08039410.2017.1317660
3. Wethal (2017) ‘Workplace regimes in Sino-Mozambican construction projects: Resentment and tension in a divided workplace,’ *Journal of Contemporary African Studies*, 35 (3), 383-403, doi: 10.1080/02589001.2017.1323379
4. Wethal (submitted) ‘Building Africa’s infrastructure. Reinstating history in infrastructure debates,’ *Forum for Development Studies*, December 2017.

2. Theorising geographies of economic activity

2.1 How to capture the gains?

At the inauguration of the Asian Infrastructure Investment Bank in 2014, the Chinese President Xi Jinping said, ‘In China we have a folk saying, “If you would like to get rich, build roads first”, and I believe that is a very vivid description of the very importance of infrastructure to economic development’ (Bermingham 2014). This is a compelling thought, but problematic in the way in which it indicates an automatic process from infrastructures to economic development – and also fails to explain who gets rich, and how.

In recent decades, Chinese companies have become extremely active in the construction industry in most African countries. The China–Africa literature offers much empirical data, but significantly fewer theory tools for explaining the role and effects of such construction projects. One reason could be that China–Africa relations seem to be viewed as novel and rather isolated processes – whereas in fact they represent *some* features of modern economic globalisation, playing into ongoing dynamics of development, cooperation, and competition. I propose seeking insights from theories that can contribute to explaining how economic activity is coordinated across space, while also highlighting the ability of actors located in specific places to take on different roles to capture the gains.

Global Production Networks (GPN) is one of the middle-range theories that explore how economic activities are interconnected across space, as well as their specific effects in place. All economic activity is grounded in specific places, and how these places are integrated into global economic production networks has important implications for their economic development (Dicken 2011). In this chapter, I discuss how the GPN framework can provide a basis for understanding the role of Chinese construction projects in Mozambique’s

development processes, by connecting it to linkage theory and expanding on the concept of agency.

After reviewing the emergence of the GPN framework, its inauguration and the core concepts of value, embeddedness and power, I assess whether the GPN framework can capture the dynamics of the construction industry, focusing on the specificities of this industry, and how to understand it in light of GPN theory. Next, I discuss the relation between GPN analyses and regional development, and combine this with backward linkages theory. Expanding on the understanding of power in GPN research, I combine these insights with a specific focus on agency. Here I propose using the GPN theory as a framework that can bring together backward linkage theory and agency, jointly helping to explain the role of Chinese construction projects in Mozambique.

2.2 Global Production Networks: economic activity as networks of actors

The GPN framework combines areal concepts of territory/place/region with systemic processes of flow/network/connection, where organisationally fragmented and spatially dispersed networks of economic activity are understood as the form of economic structure that drives the global economy and its uneven development outcomes (Coe and Yeung 2015). A GPN has been defined as ‘an organisational arrangement, comprising interconnected economic and non-economic actors, coordinated by a global firm, and producing goods or services across multiple geographical locations for worldwide markets’ (Coe and Yeung 2015, 1–2).

The GPN framework emerged soon after the turn of the millennium, but its origins can be traced back early attempts to bring together questions of development in territorial units with understandings of a world economic system (Kelly 2013). World-systems approaches explored how different territorial units (mostly at the national scale) were integrated into the organisation of various production systems, leading to a three-tier hierarchy of territories: core, semi-periphery, and periphery (see Wallerstein 1974, Hopkins and Wallerstein 1977 and 1986). This approach was to provide the foundations of the Global Commodity Chain (GCC) framework, which became particularly influential through the works of Gary Gereffi and colleagues (Appelbaum and Gereffi 1994, Gereffi and Korzeniewicz 1994, Gereffi 1999). Related to the GCC framework, and somewhat overlapping with it, is that of Global Value

Chains (GVC), which highlights value in the chain of production activities, from conception, through production, to disposal after use (Gereffi et al. 2001, 3). These chain approaches have been criticised for not providing insights into how specific places affect and are affected by the organisation of economic activities (Coe and Yeung 2015). As the governance concept in GVCs refers mainly to a range of inter-firm relationships, the role of the state and broader institutional and regulatory contexts that shape these relationships is downplayed (Bair 2008). Moreover, GCC research in particular is held to have an underdeveloped geographical conceptualisation, ‘operating at a very high level of spatial aggregation’ (Dicken et al. 2001, 99; see also Hess and Yeung 2006, Coe and Yeung 2015), and has often been used as a methodology rather than a theory (Dussel Peters 2008).

Drawing on earlier chain approaches, but also as a response to the limitations outlined above, a group of geographers formulated the GPN framework (Henderson et al. 2002). While the framework builds on GCC/GVC literature², it includes insights from theories of regional development that have a stronger focus on local transactions (Coe et al. 2004) and political economy for explaining how structures and institutions precondition human action (see Hess and Yeung 2006 for an in-depth review of GPN’s intellectual antecedents). The focus is on the various actors in the production networks, where a lead firm is a central prerequisite, as well as the various locations tied together by these actors. The explicit attention to the firm came about as a response to state-centrism in other political economic approaches of the 1980s (Glassman 2011, Horner 2016); and while the network approach *can* incorporate a full range of actors, GPN research is often criticised for over-focusing on the company level (Selwyn 2011, Hughes et al. 2015).

2.2.1 Value, power and embeddedness in GPNs

Three interrelated variables need to be operationalised within GPN analyses, where each in turn has implications for economic development, the first is *value*, understood both as surplus value and as economic rent.³ The second is *power*, defined as ‘the capacity of one actor to exercise and achieve control over a particular strategic outcome in its own interests that can

² For a comprehensive review and comparison of the different approaches to economic activity as chains and networks, see Bair (2005, 2008, 2009).

³ Value can be understood as surplus value created in a production process that converts labour power into products and services that can be exchanged into value exceeding that of the labour embedded in the production in the process, *and* as various forms of economic rent that can be realised through market and non-market exchange and transactions within GPNs (Coe and Yeung 2015). ‘Economic rent’ is as the extra amount earned by a scarce resource (e.g., land, capital, or labor) through its current use.

be realized only through the process of exercising' (Coe and Yeung 2015, 66). The third is *embeddedness*, referring to the various ways in which firms are rooted in different social, economic and institutional networks, influencing how they operate. Each of these variables is discussed below.

The GPN framework analyses value through three processes, which allows actors to relate to value in several ways in the same network (Coe et al. 2004, Dicken 2011). *Value creation* is generally created in a process where a firm can access resources that provide it with a competitive advantage. While firms are the primary drivers of value creation, extra-firm actors, such as state or labour organisations, may be influential contributors— for instance, through subsidies, indirect investments, or skills development. *Value enhancement* means that actors add inputs to existing goods or services in order to make them more valuable, e.g. knowledge and technology transfers between firms, various forms of industrial upgrading, or product improvement by engaging with subcontractors and suppliers (Henderson et al. 2002). *Value capture* is perhaps the most significant for local or regional development, and the most important here: it reflects the ability and capacity of actors and institutions to capture (parts of) the value created in GPNs (Coe et al. 2004, 475). Understanding which actors, in which places, who are able to capture value in GPNs will in turn depend on government policy, firm ownership and corporate governance in the specific national context (Henderson et al. 2002, 449).

Power and control are crucial variables for analysing value capture and the distributional aspects of regional development. Power in GPNs reflects a relational process as well as uneven structures, where corporate power is 'distributed, exercised and governed' (Coe and Yeung 2015, 65). The conceptualisation of power in GPN rests on a relational understanding: power cannot be possessed or 'stored' by virtue of an actor's size, money, or resources.⁴ While control over resources is often a necessary condition, it is in itself not sufficient for ascribing power to an actor (Dicken et al. 2001). Power differs among the actors involved, and how they mobilise the resources at their disposal (Allen 2003, Allen 2004). How power is balanced among the actors involved will directly influence the potential for actors to capture the gains. Configurations of power tend to be asymmetric and subject to complex bargaining processes, but are also influenced by mutual interests and dependencies. Hence, both

⁴ While the relational aspect is an important distinction from other network theories, GPN scholars hold that 'power should be conceived as a relational practice embedded in the structural position within a network' (Coe et al. 2015, 66).

asymmetry and common goals are important determinants of how power relations evolve in networks (Dicken 2011, 432). In this thesis, I explore power relations through the concept of *agency*, as further discussed in section 2.4.

GPN scholars have developed a specific understanding of embeddedness⁵ for explaining contextual varieties that influence the production networks in place. At core of the concept of embeddedness is the view that economic activities are also shaped by social and cultural processes; further, that every element of the network is grounded in a specific location – materially, through fixed production assets, but also more abstractly through social relationships, local institutions and cultural practices (Coe et al. 2008, 279). Hess (2004) distinguishes between societal, network, and territorial embeddedness. *Societal embeddedness* refers to the corporate practices and culture of the company’s place of origin that influence economic action; and may include attitudes to working conditions and welfare benefits, organisation of suppliers, and expectations of host governments (Coe and Yeung 2015). *Network embeddedness* refers to the relationships in which companies engage to make production possible (Hess 2004): these are not necessarily linked to country of origin or local anchoring. Such a network structure is the result of a process of trust building between actors (Henderson et al. 2002), which affects how stable and successful network relations among and between actors are (Coe and Yeung 2015). Network embeddedness also includes extra-firm actors, like various forms of strategic relationships between firms and the state, business associations, or trade unions (Coe et al. 2004, Yeung 2009). And finally, there is *territorial embeddedness*: economic activities become anchored in the specific places where they operate, affecting how firms engage with or become constrained by the social dynamics and economic activities existing there (Henderson et al. 2002). Although transnational firms are often depicted as relatively ‘footloose’ in their production networks, there are always elements of territorial embeddedness (Dicken 2011). These three elements of embeddedness highlight the potential tension between international activity and places of production, where firms often retain distinct organisational forms and practices reflecting the regulatory environment of their home country (Dicken et al. 2001, 97).

⁵ The embeddedness concept in GPN research builds on, but deviates from, the embeddedness approach of new economic sociology, e.g. Granovetter 1985 and 2001 (Bair 2008).

2.2.2 *The construction industry in GPNs*

Although most empirical analyses in the literature on GPNs concern manufacturing industries, the framework is held to be applicable to all kinds of industries within the global economy (Coe and Yeung 2015). Regarding Chinese engagement in the Mozambican construction industry, this claim seems complicated, as that industry fits rather awkwardly with parts of the framework. This section outlines some specifics that need to be taken into account in order to make sense of the connection between GPN theory and the construction industry.

In general, the construction industry does not behave as a typical ‘industry’,⁶ but more as a “conglomerate of industries”, an “industry of industries,” a “meta-industry” (Fernández-Solís 2008, 33) – various different sectors are connected in order to achieve the final ‘product’. In particular, three aspects make construction differ from other economic activity: (1) each project is generally one of a kind; (2) each project is conducted in situ, under site-specific conditions; and (3) each project is executed by an assembled team that may differ from one project to another (Koskela 2000, in Fernández-Solís 2008, 32). Moreover, ‘the product’ in construction is the finalised project, the construction itself – which is generally non-tradeable (Polenske and Sivitanides 1990); in other words, the product (construction) is sold *before* it is produced (Turin 1980). Thus, Ofori (2003) holds that the construction industry is ‘local’ by nature, because of the specific climatic, regulatory, political and social conditions, in addition to approaches to the procurement of resources and logistics affecting it. However, that is a rather simplistic description, as the conditions influencing how construction projects are developed and implemented extend far beyond the local level – through international agreements, international or private funders, tied aid or the specific embeddedness of the lead firm.

In investigating regional development and construction, the specific construction project naturally becomes the phenomenon under study. One way of approaching the construction industry is to understand a construction project as divided into two parts, on-site and off-site. The on-site part is normally what accounts for the actual construction, under a lead firm and its subcontractors, whereas the off-site part entails a web of sub-industries supplying goods and services to the on-site project (Fernández-Solís 2008). The activities of the main

⁶ I use the term ‘typical industry’ heuristically, as it is debatable whether there is such a thing as a *typical* industry.

contractor and its subcontractors in each project are place-bound, while their supplies might be sourced globally, depending on the embeddedness of the firm in question.

Another aspect that makes the construction industry differ from ‘typical’ industries is the decision-making process. Only rarely does the firm itself decide what is to be constructed, and where: it responds to requirements in national or international tendering processes. Tenders for construction projects are often formulated by host governments with interests that may differ greatly from those of the firms entering the tender. Moreover, much construction work falls under the category of public procurement or development cooperation, which gives the state an especially important role. Grasping the relation between states and other actors in GPNs is crucial for ‘understanding the possibilities for and limitation to certain state roles and associated policies in the context of an integrated world economy’ (Horner 2017, 10). Further complicating things in terms of decision-making, financing may come from a third party, like another state or institution, with its own goals. As a result, the power relations involved may differ considerably from the situation in other production networks. There may be various types of bargaining processes, depending on how the host government and the financial institution understand their mandate, the power relation between them, and the role assigned to the construction project.

Scholars have continued to criticise GPN analyses for not integrating labour into the analysis (e.g. Selwyn 2011). Labour, it is argued, is ‘the ultimate source of value’, and should be at the core when analysing production networks (Pattenden 2016, 1810).⁷ Due to their fragmented structure, large construction projects include several segments of workers ranging from permanent highly skilled technicians to casual low-skilled labour. Moreover, because the construction sector in developing countries tends to be dominated by foreign companies, workplaces are often multicultural. Such aspects create divisions of labour along and across a range of parameters, depending on the embeddedness of lead firms, skills and capacities of domestic industries, and the institutional framework. All these need to be taken into account when exploring the role of labour in construction projects.

To the best of my knowledge, few studies have applied GPN theory to the construction industry, which has typically been analysed in business management literature, in terms of core competencies (Lampel 2001), project management (Edum-Fotwe and McCaffer 2000), risk analyses (Mbachu and Nkado 2007) and competition strategies (Öz 2001), often in

⁷ It should be noted that GPN scholars have tried to remedy this, see e.g. Coe and Jordhus-Lier 2011

journals dealing specifically with construction, like *Construction Management and Economics*. Moreover, apart from the work of George Ofori (1984, 1990, 1993, 2000, 2000b, 2003, 2007) on the construction industry in developing countries and work on globalisation and the construction industry (Raftery et al. 1998, Ofori 2000b), the literature seldom overlaps with literature on international relations or globally organised economic activity. It should also be noted that research on construction decreased significantly when interest from the Western donors and financial institutions faded during the 1970s and 1980s (Ofori 1993). To a certain extent, the magnitude of China's construction activities in Africa has since put construction back on the agenda.⁸ For example, Chen et al. (2007) and Chen and Orr (2009) have explored the intentions and market-entry strategies of Chinese construction companies in Africa finding that their competitiveness derives from cheap capital, low cost labour, cheap building materials and home government support, noting that indigenous companies lack the financial and technical capacity to remain competitive. Corkin and Burke (2006) and Burke (2007) have a similar focus and findings in their evaluation of market-entry models of Chinese construction firms in Angola, Sierra Leone, Tanzania and Zambia. Foster et al. (2009) provide an extensive overview of China's role as a financier for infrastructure in sub-Saharan Africa, focusing on what amounts to which sub-sector, economic complementarity between China and sub-Saharan Africa, and terms and actors in financing (see also Alves 2013). As with other industries, there has been a tendency to focus on the 'China factor', or merely mention the construction industry as a part of broader trends in China–Africa relations, rather than exploring the sector theoretically. Corkin (2012) does use global value chain theory in her analysis of Chinese construction projects in Angola – but it seems unclear how the theory plays into the analysis, apart from introducing the initial premise that 'companies operating internationally should eventually look to localise and develop local linkages in order to out-source their non-core competencies [locally]' (p. 1). In my view, GPN theory can contribute to analyses of Chinese-led construction projects by inviting new ways of exploring how networks of actors evolve, and which places and which actors manage to capture the gains from such projects. The GPN framework is fruitful here: by placing construction projects in a larger context of economic activity, it avoids placing too much emphasis on the 'China factor' as such. That becomes one of several aspects that influence how production networks develop and operate.

⁸ Infrastructures are now firmly on the mainstream agenda, also for traditional donors such as World Bank.

Theorising from economic geography has generally emerged from experiences of Anglo-American regions (Pollard et al. 2008, Hughes et al. 2015), and GPN research mainly from Asian and European contexts. Few have explored the role of GPNs in industries in African countries (however, see Goger et al. 2014). This becomes a challenge for exploring the role of GPNs in Mozambique, as the theory seems partly detached from context, expecting certain conditions, interests and structures not readily apparent in Mozambique. This could relate to Murphy's (2008) point, that our understanding of the spatial dynamics in the *varied* economies of the Global South remains limited. As Ferguson (2006, 25-26) has noted, 'the enormous literature on globalization so far has had remarkably little to say about Africa', calling Africa 'an inconvenient case' for globalisation. To a certain extent, the 'China in Africa' literature and recent renewed economic optimism concerning the continent have placed Africa more firmly within the globalisation discourse, but economic geographers still seem reluctant to focus on African economies. Although this is not investigated explicitly in this thesis, using GPN theory to explain the workings of Chinese-led construction projects in Mozambique gives rise to interesting questions about the regional parochialism in GPN, and in economic geography more generally. My research, set within the Mozambican political economy, shows the need for dialogue between GPN and more contextualised literature for understanding the specific economic geography in question, and avoiding simplistic or naïve theoretical assumptions. In the conclusion, I offer some reflections on how theories derived from European or Asian contexts hold up when situated in an African post-colonial context.

This section has discussed aspects that make construction differ from the industries typically explored in GPN analyses. Still, I hold that the complexity of construction projects, their fragmented structure, and their place-specificity make this industry interesting for exploring how linkages and networks evolve, with whom and why – locally and globally.

2.3 GPN and economic development: incorporating a backward linkage perspective

GPN scholars have made several attempts to use the GPN framework in understanding patterns of uneven economic development (see e.g. Coe et al. 2004, Coe and Yeung 2015). The assumption is that, under the right conditions, GPNs can provide excellent opportunities for national firms and producers, as well as labour, to access markets, capital, knowledge, technology and capabilities (Coe and Yeung 2015, 18). However, work on value chains and

production networks in various African countries has found only limited possibilities for upgrading and sharing the gains from participation in production networks (Goger et al. 2014). Many African economies have been poorly integrated in the global economy, in ways that reinforce structural dependence, and with commodities (often very few) as the major source of growth, rather than industrialisation and diversification (Taylor 2016).

For domestic firms to benefit from GPNs, *inclusion* is essential – and that is not necessarily the case when lead firms can source goods and services outside the location where they operate. If the predominant mode for organising production is through GPNs, it ‘means that it is very difficult indeed for local firms/economies to prosper outside them. Being there – as an insider – is virtually a prerequisite for development’ (Dicken 2011, 448). In order to become such ‘an insider’, the production network must be accessible for local economic actors, with lead firms strategically coupled⁹ to the economy in question (Coe and Yeung 2015). In the absence of a strategic coupling process, the question of regional development remains ‘a moot point’ (Coe et al. 2004, 474).

I argue that *backward linkages* can be understood as an operationalisation of such strategic coupling processes. If backward linkage theory is placed within a GPN framework, the analysis can include how dynamics of the broader network enable or constrain national value capture, and provide a way for examining the premises of national economic development as dependent on the creation, enhancement and capture of value within a GPN.

2.3.1 Backward linkage theory as an analytical tool

Linkage theory is commonly associated with the works of economic historian Albert Hirschman (1970, 1981). He saw successful economic growth as the unfolding of linkages between related economic activities, with development being accelerated by ‘investments in projects and industries with strong forward and backward linkage effects (Hirschman 1981, 63). He initially identified three sets of linkages: fiscal, consumption and production linkages. Production linkages were thought to create profitable market opportunities, in turn leading to the development of a more diversified economic structure in low-income economies.

⁹ Strategic coupling refers to the process where regional/local assets are successfully complemented with global production systems (Coe et al. 2004). The focus on strategic coupling has been criticised for reducing the role of the state to that of an external facilitator mandated to create ‘business-friendly environments’, focusing mainly on meeting the ‘strategic needs’ of lead firms in GPNs (Horner 2017). The role of the state is indeed complex: the state should be recognised as an integral element in a production network. This is further discussed in section 2.4.2.

Whereas production linkages can be both forward and backward, I focus on backward linkages. Backward linkages were seen as more viable than forward linkages, as local economic actors were likely to be more familiar with the technology and production processes in backward linkages than with those associated with the more advanced processing of commodities in forward linkages.¹⁰ Backward linkages rest on the claim that ‘every nonprimary economic activity, will induce attempts to supply through domestic production the inputs needed in that activity’ (Hirschman 1970, 100). Backward linkage effects were held to provide ‘a special push factor’ for technical learning and industrial development (Hirschman 1981, 63), in turn indicating that planners should encourage firms to purchase the intermediate products they needed from other sectors domestically instead of using international suppliers (Polenske and Sivitanides 1990).

Processes of globalisation have intensified greatly since Hirschman presented his analysis, which did not explore the role of market forces, institutions, and governments thoroughly (Morris et al. 2012a, 30). While linkages remain backwards, production supplies might not be sourced domestically, in turn reducing the relative contribution to the national industry (Mlinga and Wells 2002). Moreover, domestic production might be specifically channelled for export (for example, through export processing zones), and thus not available for domestic sourcing. This can also be connected to an ideological shift in dominant economic theories and growth strategies, with a move away from inward industrialisation strategies, and towards export and FDI promotion in much of the world. With this in mind, I introduce the semantic concretisation of *domestic* backward linkages.

Morris et al. (2012a) hypothesise four specific contextual determinants regarding the development of backward linkages: ownership, infrastructure, capabilities and policy. *The ownership* aspect concerns the origin of ownership and place of incorporation of the lead firms and their suppliers, the specific nationality of foreign firms, as well as firm-specific attributes. It is widely assumed that national ownership leads to more domestic linkages, as local firms are more embedded in networks and territories in the local economy and more committed to local economic development. Transnational firms with strong vertical links at the global level may be less likely to establish local supply chains (Dicken 2011). Moreover, the place of origin may influence the firm’s time-horizon, its attitudes towards risk, and

¹⁰ Forward linkage effects are defined as how ‘every activity that does not by its nature cater exclusively to final demands, will induce attempts to utilize its outputs as inputs in some new activities’ (Hirschman 1970, 100). Thus, different actors would attempt to benefit from economic activity in a given area.

expectations of the host government. Some foreign firms may have guidance or support from home governments that encourage the development of domestic backward linkages, perhaps linked to pressures for Corporate Social Responsibility standards (Morris et al. 2012a).

Infrastructure is the second determinant, here understood broadly to include physical infrastructure (roads, railways, telecommunication, utilities) as well as social infrastructure (efficiency and cost of the administrative and regulatory regime supporting the productive sector). The characteristics of the supporting infrastructures are crucial to any economic activity – for lead firms as well as their subcontractors and suppliers. Importantly, if the infrastructure in a developing country focuses on meeting the needs and requirements of lead firms (as regards transport, electricity, water, etc.), this would make it more difficult for local suppliers and subcontractors to link with and participate in the production network (Morris et al. 2012a).

Third is the question of *local or domestic capabilities*, reflecting how every industry requires a set of skills and technological knowledge. In order to develop and enhance domestic backward linkages, domestic companies and labour must develop skills and enhance technological knowledge in line with the requirements of lead firms. And if local staff are to fill skilled and managerial positions, it is necessary to invest in local education and training. National institutions are particularly important for developing domestic capabilities that keep up with technology innovation – which links directly with the idea of strategic coupling discussed above. Dicken (2011) points out how some knowledge can be transferred by foreign firms simply hiring local labour, although there are several examples of foreign firms using local labour solely for low-skilled positions.

Policy is the fourth factor determining the development of domestic backward linkages noted by Morris et al. (2012a). The issue of policy gives rise to several concerns,

Are the policies backed by incentives that ensure that they are implemented effectively? Do policy makers have the capacity, and the will, to implement these policies? Does policy making involve processes of reflexivity, that is, do the various stakeholders who relate to the management of linkage policy interact and do they, as a collectivity, display the capacity to adjust policies dynamically? (Morris et al. 2012a, 43).

The policy aspect can be linked to local content, where specific policy or contractual agreements specifically promote domestic backward linkages by requiring foreign firms to use local workers, supplies or subcontractors. However, the host government is not the only factor influencing policy, which requires abilities in both public and private sectors, and an

alignment of visions and capabilities among the various actors operating in local communities. According to Whitfield and Buur (2014), policies, industrial policies in particular, ‘are shaped by incentives arising from the imperatives of the ruling elites to remain in power and thus build and maintain political support’ (p. 127). Hence, state bureaucrats charged with designing and implementing industrial policy must be familiar with the targeted industry and trusted by the ruling elites, while simultaneously able to mediate between the political and economic objectives of the ruling elite. Moreover, they must have the capacity to enforce new rules and conditions on relevant capitalists (ibid).

2.3.2 Domestic backward linkages in construction

Domestic backward linkages make possible the creation of employment in the main construction project, while also creating linkages with input-providing enterprises in related areas like material, transport, and local expertise (Njoh 2000). A construction project requires a range of different inputs – from the very basic, like sand and stone, to the more advanced, like machinery, trucks and pipes of specific qualities. Domestic backward linkages may also include provision of food and accommodation for the workforce, transport and logistics, security, and basic maintenance and repair (Morris et al. 2012a, 37–38). The many inputs and high transportation costs of construction materials could make it advantageous to source input close to location rather than from abroad (Ofori 2003). To avoid having to be the sole investor in all the resources required for a project, large construction companies often prefer to divide services among various contractors (Lopes 2007, Jerónimo 2012).

Given the localised nature of construction, home-country firms are (at least in theory) assumed to have a competitive advantage, thanks to their familiarity with local languages, methods, culture, practices, climate, law, regulations, policies, administrative system, established reputation, existing networks, etc. (Ofori 2003). Still, construction is a sector where foreign companies tend to dominate as main contractors, particularly in developing countries. According to Ofori (2000), this shows that the capabilities required to develop and implement major construction project are often beyond the reach of domestic industries. While domestic capabilities are surely an important factor, which actors become involved can also be linked to broader political processes of how the state seeks to control industrial activities or promotes liberal investment policies.

Foreign construction firms are often embedded in regulatory relationships with their home states that influence company behaviour, and they may have specific expectations to the host governments in question. Support to international contractors from their home governments may influence their international competitiveness, as through politicians soliciting projects, tied or targeted aid, soft loans for contractors, or market information (Ofori 2003). Several scholars have argued that developing country governments should use national construction work to support the growth of domestic contractors, in order for them to replace foreign companies in the long term (Turin 1973, Drewer 1980, Ofori 2000) – but governments face significant challenges when trying to pursue this. Firstly, even though the construction sector is often understood to be controlled by host governments using their public funds for investments, many developing countries rely on development assistance or foreign investments for the execution of construction projects. This makes them highly vulnerable to donor or investor preferences, and issues of tied aid. Secondly, the liberal investment policies that have been (and continue to be) promoted in many developing countries, in combination with various trade agreements, leave governments with few tools for promoting domestic growth or participation in GPNs. After the neoliberal turn of the 1980s, much industrial development has been left to the private sector, and industrial policies have generally not been on the political agenda. Instead, governments have sought to promote industrial development through the facilitation of relevant infrastructures, without necessarily controlling, directing, or promoting the participation of domestic companies in these processes. A dominant assumption is that construction, especially in infrastructure, is a prerequisite for further economic development: that it in turn will lead to more productive industrial activities.

The integration of local labour has often been a main (or only) effort of host governments when negotiating backward linkages in foreign-led construction projects. According to ILO (2001, 58), ‘three-quarters of the world’s estimated 111 million construction workers to be found in the developing countries’, where construction represents a labour-intensive sector that can provide extensive employment even with limited investment (*ibid*). Foreign-led construction projects are seen as significant job creators, but the focus tends to be on the number of jobs created rather than their quality. Moreover, labour is often excluded from analyses of backward linkages, even though it can be the most extensive domestic backward linkage in foreign-led construction projects.

In this thesis, I operationalise domestic backward linkages to refer to national subcontractors, national suppliers and local labour in Chinese-led construction projects in Mozambique. This

makes it possible to explore how (some of the) value is captured from the value created in Chinese-led projects in the national economy. Moreover, by defining local labour as a domestic backward linkage, I can place workers and their working conditions firmly in the analysis. Crucial aspects from an economic development perspective are the quality of the content and the degree to which such linkages include technology and knowledge transfers to domestic companies and workers.

2.4 Actors and agency in GPNs

Stevenson and Greenberg (2000) find that many network researchers neglect the possibility of agency or fail to connect the actions of individuals to their network position. The position of actors in a network is assumed to explain their actions in social settings; or networks are presented mainly as constraints on social action (ibid). Such implicit assumptions can lead to the danger of assuming that everyone shares the same goals – when in fact the actors linked together in production networks represent a diversity of interests and strategies. As noted, the GPN framework can include a range of actors: firms, extra-firm actors (like states, international organisations, labour and consumers), and intermediaries (like business associations, trade unions, banks and financial institutions, and regional administrative units). Scale is particularly important, because network formation and network processes entail a complex intermingling of different geographical scales (Dicken et al. 2001). I approach power relations and governance at various levels in the construction industry through the concept of *agency*.

Agency can be broadly conceived as ‘the ability to effect change’ (Carmody and Kragelund 2016, 8). A similar definition is used by Castree et al. (2004), who see agency as ‘the capacity possessed by individuals and groups to act for their own benefit or for the well-being of others’ (p. 159). These definitions highlight the *ability or capacity* to act – leading to a search for explanations for what enables or constrains this capacity, greatly influenced by power relations in the networks involved. Agency describes capacity, but the impact of this agency is closely linked to the various actors’ types and sources of power, which determine whether they succeed in their strategies (Kiil and Knutsen 2016). Put differently, all actors embody agency, but power relations condition the outcome of this agency. How to approach and investigate agency will depend on the actor one seeks to understand and the power relations in

their networks. What is considered ‘change’ or ‘benefit’ in a given context will also depend on the actors, their networks, and the concrete negotiation in question.

2.4.1 Labour agency in GPNs

A specific focus on labour agency brings workers more firmly into the analysis. Because networks are bound up in the production of goods and services, ‘GPNs are ultimately networks of embodied labour’ (Cumbers et al. 2008, 372). The concept of ‘labour agency’ emerged during the 1990s as an alternative to viewing workers as passive victims of the workings of capitalism (Cumbers et al. 2008, Carswell and de Neve 2013). Such an approach focuses on how workers themselves may attempt to ‘...shape the landscape of capitalism to their own advantage’ (Herod 2001, 4).

To counter the focus on economic upgrading in analyses of GPNs and highlight the role of labour, scholars have proposed adding the concept of social upgrading (Barrientos et al. 2010, Mayer and Pickles 2011, Milberg and Winkler 2011). This implies an adoption of the International Labour Organisation’s ‘decent work’ approach, including conditions of employment, social protection, workers’ rights, and social dialogue, in addition to different levels of bargaining power. Importantly, these authors seek to counter the assumption that economic upgrading automatically brings social upgrading for workers. In approaching the aspects highlighted above in connection with construction projects, I find the concept of *workplace regimes* useful. Such regimes entail two interlinked levels of politics: the micropolitics of the workplace (or the labour process); and the politics of production (Burawoy 1985, Peck 1996). The latter level refers to how workplace regimes develop under the influence of local, national and global regulations and institutions (Magnusson et al. 2010). The micropolitics of the workplace refers to the technical and social organisation of the labour process – and here Nichols et al. (2004) identify three issues in connection with identifying and describing the organisation of a workplace. The first is *labour control issues*, involving management methods like autonomy vs control, empowerment of labour vs intensification of work, fear vs commitment, and working conditions, cultural control, and teamwork. The second is *material support issues*, including wages and non-main wage material support. Central here are both the composition of wages (basic/variable part) and wage level in relation to the local labour market. Thirdly, there are *contract issues*: whether workers hold internal or external contracts for permanent, temporary, or part-time work. For example, permanent workers may be treated differently from temporary workers. The links among these three –

labour control issues, material support issues, and contract issues – are also central to how workers perceive their own conditions, like work environment, and terms and conditions of employment. How workplace regimes are structured through the micropolitics of the workplace and the politics of production will affect how workers make use of their agency. This approach influences my exploration of what enables or constrains labour agency in specific Chinese-led construction projects in Mozambique.

Workers' agency has often been excluded from analyses of company behaviour, on the assumption that labour holds a subordinate position in production networks, especially in the South (see discussion in Pattenden 2016). This can be linked to weak institutions and legal frameworks that could shield workers from the effects of capital accumulation, as well as the more obvious embeddedness of labour in place. Understanding workers' agency entails exploring how workers, as a group and individually, 'play a role in seeking, and obtaining, incremental and sometimes highly significant changes in microspaces of work and living' (Rogaly 2009, 1984). While labour agency can be understood as 'strategies that shift the capitalist *status quo* in favour of workers, even if only temporarily' (Coe and Jordhus-Lier 2011, 216), such strategies do not necessarily challenge the hierarchy of the capitalist system *per se*. What workers seek is often a better distribution of gains, or to improve their own position *within* the system. Furthermore, discussions of labour agency involve a certain discrepancy between what strategies attempt to do and what they actually accomplish, as workers' agency may be constrained by various social structures. In any case, including labour in the analysis can be seen as recognition that some workers do have the agency to improve their relative position in production networks, and might contribute to the reshaping of economic geographies (Herod 2001).

2.4.2 Understanding the role of the state

This thesis explores state agency in the host economy in relation to foreign firm activity – but also in relation to other states and financial institutions it engages with through bilateral and multilateral agreements. How the state navigates between, and seeks to control, these various goals and interest is influenced by global, national, and local interest groups. As regards governing economic activities, Dicken (2011) holds that host governments seek to capture as much as possible of the value created from production within their territories – to embed the activities of foreign firms firmly in the national economy. If much of the economic activity in a host country is effectively controlled by foreign firms, the host government may find it

difficult to maintain specific economic policies (ibid). The picture becomes even more complex in the context of development cooperation or aid, where the bargaining process includes the interests and goals of the development partner – countries, organisations, or lending institutions (see e.g. Whitfield and Fraser 2010 for a comprehensive discussion of aid negotiations), in addition to the firm executing the economic activity in the host economy. Moreover, rather than becoming embedded in the host economy, foreign firm activity may create islands of growth (Ferguson 2006).

Discussions about the state appear to be returning to the agenda of African development through a broad range of themes. The financial crisis and the role of the state in the China and other emerging economies have led many Western states to rethink their role and their models for development cooperation (Kragelund 2015, Mawdsley 2015). The Chinese approach is generally seen as providing a viable alternative development model with a far more central role for the state – which often seems appealing to African governments (Gill and Reilly 2007). Moreover, industrial policies are increasingly in focus in discussions of the role of the state (see e.g. Altenburg 2011, ACET 2014, UNECA 2016), although there has been little consensus on how to use industrial policies for economic development (see e.g. Lin and Chang 2009, Altenburg 2011, Lin 2011). In the China–Africa literature, there has been a shift towards emphasising agency within the African state (Dietz et al. 2011, Corkin 2013, Harman and Brown 2013, Mohan and Lampert 2013). However, Carmody and Kragelund (2016, 5) hold that the focus on African state agency risks implying that African political elites (in their relations with China) have ‘the power to reshape fundamentally the nature of their state-societies’, without recognising the concrete realities and structural conditions of the global political economy. Any assessment of agency should be situated within the power asymmetries of international relations, as well as the deepening power of transnational capital (ibid). In this thesis, I seek to contribute to the debate on state agency by seeing the state as part of a broader network of actors that influence how economic activity is organised across space.

State authorities remain key regulators of uneven market access. Seeking market power, foreign-led firms enter into negotiations with state authorities in various national markets. State actors, by contrast, enter into such negotiations seeking to benefit from the economic and social outcomes of being integrated into GPNs (Coe and Yeung 2015). Building on earlier chain approaches to the state (Evans 1995, Dicken 2011, Lee et al. 2014), Horner (2017) proposes a fourfold typology for identifying state roles in production networks: the

facilitator, the regulator, the producer and the buyer (p. 6). The *facilitator* rests on the assumption that when power asymmetry is high, states should focus on creating an attractive business environment, facilitating the development of domestic industries likely to be integrated into networks on transnational companies (Dicken 1994). The concept of the state as facilitator for the market also fits well within a liberal policy environment, where the policy space of many developing countries has shrunk as a consequence of WTO membership and other bilateral and regional trade agreements (Wade 2003, Oya 2006).

The *regulator*, on the other hand, works more actively with ‘limiting and restricting economic activity within its boundaries’ (Horner 2017, 7). The regulator might defend a range of interest groups, as with the protection of selected industries, protection of consumers through quality standards, or workers through labour regulations (ibid). State policies that regulate global firms have proven successful in states with sufficient capacity to discipline firms through restrictive as well as facilitative measures (Evans 1995, Amsden 2001), especially as regards stimulating growth in domestic firms (Chang 2004). As Horner (2017) notes, the regulatory role was especially prominent prior to the WTO era, but declined in the face of structural adjustment and broader neoliberal policy shifts.

The state assumes a *producer* role when operating through its state-owned companies (SOEs). The motivation can be to initiate production in sectors with low private interest, or to take control over productive capacity. SOEs have become a large part of international trade – comprising some 10% of the world’s largest public companies (Horner 2017). The establishment and operation of SOEs are justified through a combination of economic and political goals, as both a solution to market imperfections and a means of promoting ideological and political strategies (Cuervo-Cazurra et al. 2014).

Finally, there is the state as *buyer*, mainly as regards public procurements. Public procurement refers to the purchase ‘of goods, works, and services, mainly from the private sector, that uses public funds or guarantees from the government (de Mariz et al. 2014). In sub-Saharan Africa, public procurement accounts for about 15% of GDP and could make up as much as 50% of government expenditure, depending on the size of the government, the importance of SOEs, etc. (ibid). Public procurement often involves different tariff barriers, making it possible to favour domestic suppliers over foreign ones (Rickard and Kono 2014).

This typology of the state in GPNs can be useful for identifying the features of state action in relation to other economic actors, both firm and extra-firm. However, such a categorisation

should not be used to organise states, as the same state might shift between roles or use combinations in various networks. Moreover, this typology says little about why the state acts as it does, or whose interests it seeks to promote or defend in each case of role choice. Central here is the question of state capacity: ‘the ability of states to plan and execute policies, and to enforce laws cleanly and transparently’ (Fukuyama 2004, 22). Skocpol (1985) adds that state capacity is linked to elite dynamics, encompassing the ability of states to implement goals when opposed by powerful social groups. As a consequence, state capacity relies on an independent, rule-following bureaucracy (Knutsen 2012). This aspect is further problematised by Randeria (2007), who introduces the concept of ‘cunning states’ to describe how states shift tactically between showing ‘strength or weakness depending on domestic interests at stake’ (p. 3).

State capacity also influences negotiating power, through a state’s ability to negotiate effectively, whether it is able to devise and defend development strategies, and conditions of the state’s bureaucracy (Whitfield and Fraser 2010). As in discussions about policy space, the liberal policies promoted by traditional donors have been criticised for depleting state capacity (Sparke 2006). Due to externally driven political shifts and development priorities (Dietz et al. 2011), many African countries have remained dependent on external actors for policy formulation, through neoliberal reforms, bilateral agreements, or aid conditionality. Exploring agency within the state requires an understanding of the existing political institutions, and how they negotiate with other countries and institutions (Mohan and Power 2008).

2.4.3 Intermediaries in GPNs

Various intermediaries seek to influence policy and economic activity. Trade unions operate in-between the state, firms and labour, and between sections of labour, but which interests they seek to defend will depend on the context in which they function, how their mandate is formulated and secured, and the resources available for reacting to firm behaviour: ‘Unions are not monolithic entities but instead are themselves the site of class struggle, composed of multiple positionalities in relation to capital’ (Cumbers et al. 2008, 373). Business associations generally seek to promote the interests of national businesses within a specific industry, but they can also seek to establish strategic relations with the state or foreign capital that may work against the interests of the firms they are assumed to promote. Financial institutions have a distinct function in host countries that rely on foreign capital for pursuing

their economic strategies. Many financial institutions operate under specific recommendations or requirements that condition how loans or grants are spent, in political or economic terms. Thus, financial institutions can have considerable power in directing economic activity – directly through tied aid, or indirectly through political requirements, both of which can condition the policy space available to state authorities.

To provide a general conceptualisation, I find it useful to understand agency as *the capacity of actors, either as groups or individuals, to act for the benefit of themselves or others* (see Castree et al. 2004). This is in line with Dicken et al. (2001, 93): ‘the task of a network methodology for understanding the global economy must be to identify the actors in these networks, their power and capacities, and the ways through which they exercise their power through association with networks of relationships.’ Linking this to the broader research questions of the thesis, I employ the concept of agency to explore relations between various actors in the host economy, and how they engage – through action, resistance, agreement and negotiation – with Chinese firms and Chinese financial institutions, to capture gains from Chinese-led construction projects in Mozambique.

2.5 Towards an analytical framework

This chapter has discussed and coupled various theories for analysing the construction sector and national economic development, which together form the analytical framework for analysing Chinese–Mozambican cooperation in the construction sector. The GPN framework provides tools for analysing highly global and politically contingent processes of economic activity, whereas *backward linkage theory* facilitates the inclusion of local economic factors that enable or constrain domestic linkage development. In conjunction, the two enable me to investigate the social, political and economic factors that influence how Chinese-led construction projects in Mozambique are structured. Agency directs focus towards the various actors that make up production networks, allowing me to explore how they understand and use their networked position. Drawing on the work of Morris et al. (2012a; 2012b), Buur et al. (2013), and Whitfield and Buur (2014), I find it fruitful to understand domestic backward linkages as the outcome of interplay among policies, institutions, and local capabilities, also highlighting the matter of political will, where ‘governments not only have to create the institutions required for implementation, but also have to be willing and able to enforce implementation of socially contested decisions’ (Whitfield and Buur 2014, 127).

The GPN framework has influenced my understanding of how economic activity is structured globally, and provides a set of tools for exploring economic activity, but I pivot the analysis in order to grasp how network dynamics can lead to an absence of strategic coupling processes and weak domestic backward linkages. The ways in which I have developed my understanding of the concepts of ‘domestic backward linkages’ and ‘agency’, and how I analyse challenges to domestic backward linkages, are rooted in GPN theory. However, the specific conceptual tools employed in the four articles constituting Part II of the thesis do not necessarily refer directly to the GPN framework. The main focus is on the Mozambican actors, where the concept of agency is used specifically for explaining the power relations involved in Chinese-led construction projects. The articles differ in their point of departure, analytical scope, and the actors in focus, all feeding into the analytical framework developed in this chapter.

To return to the words of President Xi quoted at the beginning of this chapter: China’s way of presenting infrastructures as the key to economic development reflects the visions and expectations of many developing countries regarding investments in the construction sector. However, as shown by the discussions in this chapter, complex network dynamics influence the extent to which investments in construction actually lead to value capture and broader processes of economic development in a country like Mozambique.

3. Methodology and data collection

H.R. Bernard (2011, 54) describes research as ‘a messy process that’s cleaned up only in the reporting of results’. This methodology chapter is intended to provide insights into this process, and the exercise of flexibility, learning and exploring entailed in fieldwork and research. The chapter charts the various experiences and choices that have influenced the structure and content of this thesis. The reflections in this chapter should further provide an ‘audit-trail’ (Hammersley 2010, 29), documenting each stage of the research process and allowing others to evaluate the quality of the research presented.

I begin by describing and discussing the methodology approach of the thesis, including an introduction to the field and the cases, before elaborating on my fieldwork experience and methods of data collection. Then I turn to some of the ethical issues encountered in this project, before presenting the strategies employed in analysing the data material. Lastly, I discuss the quality of this research in relation to issues of rigour and generalisation.

3.1 Approach

The tools and techniques used for collecting data on Chinese construction projects in Mozambique fall within the qualitative approach. According to Denzin and Lincoln (2005, 3), qualitative research involves ‘a set of interpretive, material practices that makes the world visible’. These practices turn the world into a set of representations, such as interviews, conversations and field notes. The researcher attempts to make sense of these representations by interpreting the phenomenon in question from the meanings people bring to them (ibid). Most qualitative research initiatives take an iterative approach, where openness and flexibility are built into the research process (Guest et al. 2013). The research design of this thesis has undergone continuous construction and reconstruction throughout the research process, from developing the questions to the data analysis.

My choice of a qualitative approach reflects the research questions formulated for the thesis (see Chapter 1), which aim at achieving a holistic understanding of the complex processes involved in the development of Chinese-led construction projects in Mozambique. My choice was further motivated by the fact that the ‘China–Africa literature’ still suffers from the bias towards quantitative analyses describing macro-relations in aid cooperation or trade (Mohan and Power 2009). Moreover, several sources of macro-data on China–Africa relations are quite unreliable (Corkin 2013), exacerbated by the fact that the Chinese government has been reluctant to disclose details about its official spending in Africa and elsewhere. In parallel, there has also been a tendency to use findings from one case-study to apply to *all* activities on the continent (Mohan and Power 2008), in the absence of in-depth research on the multitude of relationships within the category of Chinese–African cooperation. While the shortcomings in the literature are continuously being mitigated, there is still a need for qualitative studies that can shed light on how this relationship is perceived by those who develop and negotiate it at ‘the recipient end’, and the populations who influence and are affected by it.

As my research involves actors of several nationalities, I could have chosen to incorporate fieldwork data from both China and Mozambique. However, as my research questions were directly connected to construction projects in Mozambique, I focused on searching for data in Mozambique, also seeking information from relevant Chinese sources based there. Trying to learn Chinese, in addition to refreshing my Portuguese, would have been overly ambitious for the timeframe available.

3.1.1 The field

As argued in the introduction, the construction sector is a highly relevant point of departure for exploring China–Africa relations, as China has become active in the construction industry of almost every African country. The choice of sector was based on an extensive review of existing literature that led me to question how such construction projects are embedded in place and contribute to broader development processes in individual African countries. In Mozambique, the Chinese involvement has included a mixture of aid, loans and technical agreements: constructing roads, bridges, the Maputo airport and public buildings, housing projects, hydroelectric dams and agricultural research centres (AFRODAD 2008, Ilhéu 2010, Alden et al. 2014). More than 30 Chinese construction companies are currently based in Maputo, working on infrastructure projects funded through various sources, outbidding South African and other foreign companies in international tenders (Alden et al. 2014). Most

Chinese contractors entered the Mozambican market around the year 2000 (Bosten 2006), and have thus had a longer-term physical presence in Mozambique and participated in key construction projects of national rehabilitation (Robinson 2011).

Exploring Mozambican–Chinese cooperation in the construction sector entailed a mapping exercise and some delimitation, for practical reasons. Most construction projects to date have been either in the far north of Mozambique, linked to coal and gas exploration, or in and around the capital, Maputo, situated far south. Mozambique covers an area of 800 000 km², with a coastline of some 2500 km,¹¹ and travelling large distances can be extremely time-consuming due to poor-quality infrastructure and public transportation. Therefore I studied public announcements and local media to find areas with several Chinese-led construction projects within reasonable distance. In the Maputo region, there were several ongoing projects for the time set for my fieldwork, as well as numerous Chinese-led construction projects there since the early 2000s. Moreover, having lived, studied and travelled in and around the capital, gave me an invaluable head-start for understanding the context for my research. Choosing Maputo as the geographical location also made sense for practical reasons: state ministries are located there, as well as major trade unions and business organisations, the headquarters of NGOs, various Chinese and Mozambican construction companies, research institutes, and the Eduardo Mondlane University – all of which could supply informants for this study.

3.1.2 Cases

Using case-studies as a research strategy seeks to examine ‘(a) a contemporary phenomenon in its real-life context, especially when (b) the boundaries between phenomenon and context are not clearly evident’ (Yin 1981, 59). As case selection should reflect the research questions posed for a study, the three cases examined in this thesis are understood as instances of Chinese engagement in the Mozambican construction sector. Focusing on three projects that each represented a distinct form of China–Mozambican cooperation could, I hoped, help me to tease out implications of financing structures for particular business strategies and project features that could influence domestic backward linkages and negotiating power. This can be said to be a purposive sampling of cases, where cases are selected because ‘they offer useful manifestations of the phenomenon of interest’ (Patton 2002, 40). As such, the aim is not empirical generalisation from sample to population, but insight into a phenomenon (ibid). All cases are from the same sector, with the lead firm Chinese. The projects can also be deemed

¹¹ http://www.mozambique.co.za/About_Mozambique-travel/mozambique-facts.html (accessed 23.01.17)

large, in terms of costs (USD 148–440 million), timespan (3–5 years), and number of workers employed (550–650). In order to provide some basis for comparison, I sought to find similar informants or groups of informants in each case, who were asked the same types of questions about certain aspects of the projects (George and Bennett 2005). Apart from that, I did not choose a specific comparative strategy in advance, as I could not know the extent to which features of these cases would allow comparison.

The first case is a roadworks project (further referred to as *the road project*) financed by a non-concessional loan of more than USD 300 million from the China Export–Import Bank (the ExIm Bank). The project involves 74 kilometres of road, including several bridges; the main contractor is a Chinese SOE. According to the literature, this project represents a type of infrastructural lending quite common in Chinese–African cooperation in the sector. For example, Foster et al. (2009) have noted that the Exim Bank accounted for 92 per cent of Chinese finance commitments for infrastructure in Africa between 2001 and 2007. The ExIm Bank is fully owned by the Chinese government, and loans are designed to: 1) ‘fund manufacturing projects, infrastructure construction projects and social welfare projects in the borrowing country, which can generate promising economic returns or good social benefits, and 2) finance the procurement of Chinese mechanical, electronic products, complete sets of equipment, technology and service and other goods by the borrowing country (Corkin 2013, 64–66). Given the latter point, such funding can be understood as tied, where the requirements of ExIm Bank influence supply-chain management. The Chinese main contractor was selected through a closed tender, organised by the ExIm Bank, as is often the case in Chinese turn-key projects. A Mozambican public company was established as the project owner. The Chinese SOE hired its own consultant company, a Zimbabwean firm with a long history of involvement in Mozambique.

The second project (*the water project*) involves the expansion and rehabilitation of the urban water system in Maputo and the neighbouring municipality, also falling into the category of infrastructure projects. It is financed by the French Development Agency (AFD), and executed by three Chinese SOEs (one of which is in focus here). Total project costs amounted to almost USD 150 million, where the part in focus here cost USD 40 million USD. A Mozambican state investment fund, controlled by the Ministry of Public Works, functioned as project owner, and a US company served as technical consultant to the project. This project represents a different trend in Chinese involvement in African construction, where Chinese companies win international tenders for construction work. This case appeared interesting for

comparison with the road project, potentially giving basis for examining whether business strategies would differ in a project financed by a ‘traditional’ donor.

The third project (*the housing project*) has involved the construction of 5000 homes, intended to provide affordable housing for the (lower) middle class. The main contractor is a joint venture between a Chinese SOE and a Mozambican development fund, controlled by the Ministry of Public Works, now forming a private company. It is financed by an investment of USD 440 million, where the state-owned Chinese company holds 85% and the Mozambican development fund 15%. The joint venture formed the administration structure; the actual construction work was undertaken by four subcontractors – three Chinese and one Mozambican.¹² The formation of joint ventures is apparently becoming an important feature of China–Africa cooperation and China’s official approach to Africa (Braütigam and Xiaoyang 2011); and this type of structure gives rise to certain expectations as to greater local integration of the companies’ economic activities. The case seemed interesting to compare with the two others, as regards whether the ownership aspect influences issues of local integration and domestic backward linkages.

3.2 Doing Fieldwork

The analyses in the articles of Part II are based on data from fieldwork conducted in Maputo, May–September 2013, with additional data collected from October 2014 to January 2015.¹³ The aim of doing fieldwork is to discover how a given setting works: the researcher may have a well-conceived research plan, but it is essential to see how the phenomenon in question plays out on the ground (Crabtree et al. 2012, 95). This method is relatively unstructured in the sense that it often does not follow a specified detailed research design from the beginning, but can evolve and be reconfigured throughout the research process (ibid).

As put by Sæther (2006, 42), ‘Fieldwork is [...] about learning while coping with multiple sources of insecurity’. Because the field site is not already known to the researcher in detail, it is not always possible to know what will be relevant or not. The researcher can only define the scope of the research and identify certain activities of interest (Crabtree et al. 2012, 95). In my case, the fieldwork area was familiar beforehand, but not the specific construction sites. This led me to choose a broad approach in the initial stages, trusting that the relevance of

¹² The company was actually Paraguayan, but considered itself Mozambican due to its long presence on the ground in Mozambique. The company management was still Paraguayan, however.

¹³ The additional data were collected by research assistant Sérgio António Cossa.

information could become evident over time. However, that does not mean that I embarked on the fieldwork without any idea about whom to speak with and what to look for. My intention was to get in touch with relevant informants at labour, company, industry and state level, in order to get a broad picture of the role of Chinese construction projects in the Mozambican economy, and understand the dynamics and interactions between these levels.

3.2.1 Accessing the field

One of the first tasks during fieldwork is to secure access, which often requires some form of permission (Crabtree et al. 2012). Before arriving, I had established a connection with the research centre Instituto de Estudos Sociais e Económicos (IESE) in Maputo, where I was offered an office space which, I had thought, would help with initial navigation in the field. However, I soon realised that I was an outsider also there, with the other researchers all busy with their own projects and fieldwork; moreover, those who were working on topics similar to my own were away, or on research leave in other countries. As explained by Sæther (2006, 47), fieldwork is about entering people's daily lives in different places – you cannot expect people to sit around and wait for you. In retrospect, I realise that I could have engaged more actively with the researchers at IESE from the beginning and not let my own feelings of being an inconvenience or asking too many questions get in the way. After some time in the field, it became easier to engage in conversations about the general political economy of Mozambique with researchers from IESE, and before I left I held a seminar presenting my preliminary findings, which elicited valuable feedback.

My first interview was with the World Bank country office in Maputo, one of the few (if not the only) appointments that was arranged while I was still in Oslo. This interview allowed me to test some hypotheses, rumours, and arguments from secondary sources, without fearing that I would provoke the person I spoke to, as he was not really 'in the thick of things'. It also made me feel that I had 'got started' somehow.

A significant turning point in my fieldwork came when I managed to get in contact with a Mozambican research assistant, Sérgio António Cossa. This encounter turned extremely valuable for both practical and academic reasons. We could and discuss how to approach the projects and visit them together. We could discuss what our informants had told us, and compare information from different informants and sources. He was familiar with the transport system and geographies of the larger Maputo area, and had contacts who would

know just where construction would be taking place on the days we wanted to visit. His knowledge saved considerable time when it came to figuring out where to go and how to get where – using public transport for moving in and around the city is time-consuming enough as it is. When we occasionally had to hitchhike into quite remote areas in search of the construction area of the day, his companionship also provided an element of safety. Moreover, he became a useful and necessary buffer, being a male Mozambican, in a context where I could not possibly ‘fit in’. We established a well-functioning division of labour in the interviews, where we both participated actively. Although I speak Portuguese, his assistance was invaluable, as it allowed me to concentrate on understanding what was being said. He would often pose the questions, while I would listen, ask follow-up questions and take notes.

We continued the fieldwork by visiting the three selected projects. In the road project, one of the first things I did was to walk along a stretch of the roadworks, speaking informally to people I met about how the work had progressed so far and what they thought the project would mean to them. This was how I came to meet one of my key informants among the Mozambican workers in the road project, who told me about the locations of company premises and the workers’ daily schedules. We later met there, and he put us in contact with various types of workers on the site, and assisted us in locating the Chinese project manager. This project manager later became a door-opener for speaking with other Chinese engineers and the consultant company, as they needed reassurance from him that it was acceptable to talk to us.

In the water project, we simply went there. Because the water system was being rehabilitated in urban open spaces, these sites were not enclosed. However, it was not as simple to approach the people working there, as they needed to be assured that we were permitted to do so. We tried approaching the Chinese superiors, but they did not speak English, or were reluctant to communicate with us without any guarantees. We still managed to get information about where to find the company premises, and the project manager there put us in contact with the head of engineers. Once we had spoken with the administration, it was easier to visit and talk to the workers at the construction site. During observations, we were even supplied with protective gear to wear, and our presence seemed accepted.

With the housing project we employed a similar strategy, simply entering the construction site. Representatives from the joint venture had just started sales meetings with potential customers, and agreed to speak with us between appointments. This conversation was extremely valuable

for understanding the set-up of the joint venture and the project, and how to contact the project administration. Moreover, this initial conversation opened the door to the project and allowed us to move quite freely around the construction site and approach the workers. On this first visit, we also managed to secure contact with the consultant company.

Approaching governmental bodies required a very different procedure, which started with a tedious process of trial and error. After trying numerous communication channels, I finally realised it would be necessary to go through the formal process of submitting a detailed request at the reception desk of each institution. This document explained who I was, and what I needed information about and why. It then had to be approved at the very top of the ministry/institution, before I was assigned a relevant representative with whom an interview could be arranged. Thus, I did not choose who to speak with myself – which could have influenced the type of data collected. As the representatives I spoke to were chosen on the basis of their work responsibility and relevance in relation to the information I had submitted about my project (which included a one-page project outline), I believe that it would have been more difficult to find the ‘right’ person should I have searched for informants on my own. I soon realised that most informants from the ministries were quite reluctant to speak freely or generally about the topics in question, or move beyond their particular area of responsibility and expertise. While this may have constrained the richness of data, it did prevent the interviews from producing general guesswork or assumptions based on informants' personal beliefs.

3.2.2 Data collection

In qualitative research and fieldwork, the style of questioning and observation is often open-ended and explorative. The qualitative methods employed in this thesis consist mainly of interviews and observations, supplemented by informal conversations (including phone calls and emails), and some document analysis. As explained, a research assistant accompanied me in the field for the most of the interviews and observations.

Observation

Participant observation ‘rests on the assumption that it is possible to participate in the lives of the people you are studying, that it is possible for a while to become one of ‘them’ and immerse yourself in daily on-going activities’ (Wind 2008, 79–80). In my case, moving in and out of construction sites observing workplaces and interactions between Chinese and

Mozambican construction workers, I find it hard to justify the ‘participatory’ aspect, and will simply use the term ‘observation’. We were definitely outsiders, observing, taking notes and asking questions. After the initial phase of securing access, our observations took place on the construction sites, where we noted the construction work in question, the division of labour and work routines, as well as interactions, cooperation and communication between the Mozambican workers and their Chinese superiors. As the projects progressed, we visited company premises and the construction sites, both the same construction site several times and the same construction team at different locations. At times, we sat down with workers during lunch-time or short breaks, but mostly we observed them at work. In addition, we had tours around the sites with workers or consultants who explained why the work was done in specific ways; we also had conversations with the job-seeking Mozambicans queuing up outside the company premises. This made it possible to ask ad hoc questions about what we observed, and guaranteed that we were talking about the same issues. We were also granted access to documentation such as pay cheques, contracts and time-sheets (which we were allowed to photograph), and could discuss equipment, tasks, and working conditions in an informal manner.

An interesting part of observing communication involved noting down the specific phrases used by Chinese superiors when instructing the Mozambican workers, and later discussing with the Mozambican workers what the phrases meant and the languages involved. Such expressions were often combinations of several languages, including Chinese, Portuguese, English and various local languages. Basing the conversation on specific phrases taught us a lot about communication in the construction sites. Data from observations proved extremely important in the analysis of work relations in Chinese-led construction projects, as these contextualised and illustrated the answers we received in interviews, and provided material for discussions, conversations and interviews with other informants.

Interviews

The main part of the data was collected through interviews (for a schematic overview, see Table 1). The purpose of the research interview is to obtain descriptions from the perspective of the informant, and interpret the significance of the phenomena described (Kvale 1997, 41). The researcher holds a ‘privileged position’ as the one who structures the conversation, decides which questions to ask, and later interprets and presents the information obtained (Rose 1997, 307 citing McLafferty 1995). Although acknowledging this privileged position, I

must add that the individual informants were often quite influential in deciding how structured the interviews proved to be, depending on how eager they were to speak and what they wanted to focus on.

One group of informants consisted of Mozambican workers with whom we conducted individual and group interviews. The group interviews proved particularly helpful, as informants could correct each other or include several viewpoints about an issue. An interview would often start out with only a few or one talking, but then others would follow when they disagreed or felt strongly about a subject. All these interviews were conducted at or around the construction sites, and were generally not arranged in advance. They lasted from 20 minutes to one hour, depending on the informants, and were audiotaped. Occasionally, workers hesitated to speak with us for fear of provoking their Chinese superiors, but most of the time they appeared quite eager to tell of their experiences. Their openness may have been influenced by the fact that their Chinese superiors did not understand much Portuguese.

The second group of informants consisted of Chinese company administration and engineers. Most of these interviews were conducted in English, except with the *housing project*, where we only accessed the ‘Mozambican side’ of the Chinese–Mozambican joint venture. These interviews were arranged in advance and took place in more formal settings. On one occasion, the Chinese informants refused to be audiotaped, and this interview was then documented with detailed interview notes. I kept in contact with some of the Chinese informants several times, in order to follow up on issues from other interviews or when new questions emerged. In the course of some of these interviews and conversations, I obtained access to contracts, proposals, work plans and pictures, some of which I was allowed to store for my own use.

A third group of informants consisted of Mozambican ministries and governmental bodies linked to the projects. These included high-level representatives from the Ministry of Public Works and Housing, Ministry of Labour, Ministry of Finance, and Ministry of Foreign Affairs – the state ministries most closely connected to the projects in question and Chinese–Mozambican cooperation more generally. In addition, we interviewed the governmental bodies that served as project owners, and representatives from the National Roads Administration and the Municipality of Maputo. All these interviews were audiotaped. I also had several less-formal conversations with various agencies, including the Ministry of Planning and Development and the National Directorate of Buildings.

Supplementary interviews were conducted with the consultancy company for each project, the Investment Promotion Centre, the national trade union that organised construction workers, the Mozambican Federation of Contractors (business association), a Mozambican non-governmental organisation, the World Bank country office, Mozambican construction companies, Mozambican subcontractors, and a former Mozambican government official who had been involved in previous project negotiations with China and had considerable technical knowledge of the sector in question. Also these interviews were arranged in advance, and were conducted in formal settings. They varied in duration from 30 minutes to 1.5 hours, depending on the informants' schedules. Most interviews were audiotaped; the rest were documented with detailed interview notes. Contact with these informants also gave me access to statistics on foreign investments, and an overview of construction companies in Mozambique.

Informants were selected by means of various sampling strategies. 'Snowball sampling' is often used in relatively unplanned fieldwork, and involves the help of established contacts or informants in identifying relevant new informants (Cohen and Ariel 2011). That sampling strategy was used for parts of my fieldwork, but I was more in control of which institutions to contact than is often the case when researchers explicitly use snowballing as strategy. I had conducted extensive mapping of relevant actors in advance; not all of these materialised as interviews, most of them did. This could be described as a purposive or strategic sampling strategy, where informants are chosen on the basis of their relevance and knowledge about the subject under study (Sumner and Tribe 2008, Thagaard 2009). With regard to Mozambican workers, the process was more random, depending on who was present when we arrived at a site and whom these workers in turn put us in contact with. This was largely a question of accessibility, giving a convenience sample of informants (Thagaard 2009, 56). However, with the additional observations that we conducted at the construction sites, we felt that we managed to get a good overview of the tasks, processes, and actors involved.

Table 1 Overview of semi-structured interviews

Type of informants	Number of interviews
Mozambican workers	11 (6 group interviews)
Chinese company administration and engineers	5 (1 group)
Chinese–Mozambican joint venture	2
Ministries	4
Other governmental bodies	7
Other organisations	4 (1 group)
Consultant companies	4 (1 group)
Mozambican construction companies	3
Former Mozambican government official	1
Total	41

Secondary sources

Using primary sources to access data on certain issues about the economic and political climate in Mozambique is difficult – especially on issues that seem ingrained in the ‘system’, such as corruption. This made it important to substantiate my data with secondary sources. Such data became crucial for understanding the political climate in Mozambique, political and economic elite formations, and relations with traditional donors – information that could contextualise the primary data. I analysed policy documents on current and previous government policies and macro-economic strategies, including the Poverty Reduction Strategy Papers, the Government’s Five-Year Plans, and National Development Strategies, in order to be able to compare and contrast these with findings in primary data. Such policy documents were helpful for clarifying how governmental bodies framed construction, foreign investments, employment and economic linkages between foreign and national companies in policy documents, so that I could compare these with practices in the cases under study.

3.2.3 Leaving the field

How the researcher leaves the field and which information channels are kept open for communicating at distance can have great implications for further analyses. When I left the field in 2013, I had plans to return. However, expecting twins in 2014 effectively put an end to that plan, both because I was advised against travelling to Mozambique during pregnancy, and the fact that fieldwork seemed impossible in any near future afterwards. In trying to

mitigate my distance to the field site, my research assistant became more directly involved in collecting data. He visited construction sites, contacted informants and conducted interviews while I was in Norway. I felt confident that, with his familiarity with the research project, and his experience from doing fieldwork with me and other researchers, he could continue our work in a systematic and ethical manner. We maintained close contact through email and weekly Skype meetings discussing the interviews and observations he had done, and he would send me the interview recordings before he transcribed them. That made me more in control of the process despite the distance. He re-visited the projects to keep me updated, sent relevant media updates, and provided information about workers whom we had talked to but had since been fired or changed jobs. All in all, I felt that I managed to extend the fieldwork beyond my physical departure.

3.3 Ethical Considerations

The concept of ‘research ethics’ involves a complex set of values, standards and institutional schemes to assist the researcher in organising and regulating research activity. Ethical reflections should be integrated in all phases of a research project, as the interplay between researcher and research object will affect the people involved and the knowledge created in the process.

3.3.1 Informed consent

Informed consent is a basic principle for ethical research in the social sciences. It implies that the researcher must provide all research subjects with adequate information about the project in question, the purpose of the research, and the potential consequences of participating. This information should be given before initiating the project; and informants should also be informed that they have the right to withdraw at any time, or to refuse permission for the researcher to use the information they have made available (NESH 2016). While this at first glance might seem straightforward, it does spur several questions that can be challenging in practice: How informed should your informants be to be considered ‘adequately informed’? How to know if you have given enough information? How will this affect the data you get?

During fieldwork, the way informed consent was dealt with depended on the informant in question. In the more formalised interviews, I would present my project on the phone or by email, while also bringing a one-page project outline (in Portuguese or English) for

informants to read before the interviewing started. Some informants would have read the project outline in advance, as I submitted it as part of the formal request described in section 3.2.1. We would often start out by discussing my project, what a doctorate in Norway entails, and my research interests. At the end of each interview I would also ask informants whether they had anything to ask, if they wanted to add anything, and I would repeat how the information they had provided would contribute to the project. I followed the same procedure with the formalised interviews with Chinese informants, but additionally repeated the information from the project outline verbally if I felt that they had not read the entire description or if I was uncertain about their fluency in English. I explained to each informant that their names would be anonymised; further, that the tape recording was solely for me and my research assistant, as a necessary aid for quoting correctly.

I did not use such a formalised way of obtaining informed consent from the Mozambican workers, but focused on explaining the project and the purpose as clearly and detailed as possible before starting the interview. Here it became particularly important for to distinguish my role as a researcher from other types of organisations, journalists or governmental bodies that might have asked them questions about workplace relations. Moreover, it was crucial to make it clear that my research would not lead to any immediate result, and thus would not influence their specific situation. When approaching potential informants, we always started out with explaining the research project in detail, my role as a Ph.D. student from Norway, and the types of questions we would like to ask them. My research assistant was very helpful in presenting the project to potential informants without intimidating or confusing them, also being able to explain some issues in local languages. We stressed that participation was voluntary and that we would not use their names or any other type of personal information in the research. While we did tape the interviews, we never mentioned names on tape, in order for them not to be concerned about anonymity. We also highlighted that this research project would not lead to any changes for them, whether for the better or worse: we were interested in how they understood the project, their workplace and their relations with the Chinese administration and workers. In a few cases, some workers would leave the group conversation halfway, which confirmed for me that they had understood the voluntary aspect and did not feel any pressure to participate.

3.3.2 Positionality

The multiple, interweaving and intersecting ways in which our various positionalities and identities are revealed, negotiated and managed in research encounters are crucial to the conduct of ethical research (Hopkins 2007, 388–9).

The idea that social science researchers can represent social reality in a straightforward and objective manner has been widely rejected (Hammersley and Atkinson 2007). Rather, researchers ‘produce’ certain types of data based on their understanding of society, which influences how they use and understand concepts, and how they interact with informants (Thagaard 2009, 47). Research findings can thus never be unaffected by social processes and personal characteristics (Hammersley and Atkinson 2007, Moser 2008). These issues cannot be ‘fixed’, but should be reflected upon as part of the research process (Hopkins 2007). This relates to what Haraway (1988) refers to as ‘situated knowledge’ – where we, as researchers, should be ‘answerable for what we learn how to see’ (p. 583). My being a Norwegian female and academic, age 27 at the time of fieldwork, entailed specific experiences that influence how I see the world, what questions I ask, what I find interesting or puzzling, and how I believe the world ought to function in order to be ‘just’ and ‘right’. Positionality is not just about how informants perceive me, but also how I perceive them and their social reality. My background, in African studies and economic and development geography, has clearly influenced where I look and what I look for – in this case, the dynamics in and between industry and workers in a capitalist world economy, understanding the interplay between actors and structures, and the outcome of this interplay for economic development. My upbringing and life in social democratic Norway and political orientation have given me a certain way of seeing actors in a society, which influences, *inter alia*, my views on the role of the state in relation to the market, and to labour. Thus I agree with Haraway (1988), who argues that being open about subjectivity is in fact the only way to strive for objectivity.

While all field encounters, and interviews in particular, are enmeshed in various power relations, the researcher is often seen as ‘the holder of power’ (Mullings 1999, 339). After all, it is the researcher who decides what the conversation is to be about, has formulated the questions, and will be the interpreter of the information given. In academic discussions about elite interviews, however, scholars have argued that this is not necessarily the case when interviewing people in influential positions (Schoenberger 1991). Here there seems to be an assumption about there being ‘something intrinsically different with interviewing “up”’ (Smith 2006, 643). Mullings (1999), however, has questioned this, indicating that ‘there has

been a tendency to understate the dynamism of encounter between researcher and researched and the shifting nature of the power relations that ensue' (p. 340). In my own field context, I did not find this distinction between 'elites' and 'ordinary people', the powerful and the powerless, to be particularly fruitful for understanding positionality and power. When power is understood as relational, it is not something ascribed to certain institutions or people under the category of 'elites': rather, power relations vary in form from one interview to another, and even during one single interview (Smith 2006).

According to Sæther (2006), positioning in the field becomes 'an interplay of *difference* and *sameness*. The difference is necessary as it legitimates the observation and the questions the fieldworker asks, while the construction of sameness, of some kind of common ground, is necessary because it enables communication' (p. 44, emphasis added). This approach to understanding positionality speaks to me as a way to describe how positioning is constantly negotiated and renegotiated in field encounters. In my field context, meeting mostly Mozambican males from various levels of society, the difference aspect was the most obvious of these roles. Interestingly for me, and perhaps surprisingly to some, the gender issue was not something I had reflected on extensively before entering the field, even though construction is a male-dominated sector worldwide. This could partly reflect my coming from fairly gender-equal Norway and consequently having a naïve attitude, and partly reflect that I had previous experience from a male-dominated field context when doing research on the clothing industry in Durban, South Africa (Wethal 2011). In retrospect, I believe that having a male Mozambican research assistant helped in overcoming potential gender hurdles: it might have been difficult to get in contact with Mozambican workers without him. Beyond the question of access, how gender influenced the interviews we conducted remains uncertain. However, while acknowledging that the data material has been influenced by my presence and by informants' reactions to my presence (England 1994), responses did not appear to differ greatly in the interviews my research assistant conducted on his own, from those ones we had conducted jointly.

As discussed by Pratt et al. (2007), difference as such cannot be overcome, but the researcher must try to use this difference in the most productive way possible during fieldwork. In interviews with Mozambican ministries and various institutions, my foreignness made it easier for me to take on the role of a learner or supplicant (England 1994). Discussions centred on matters where my informants had much more in-depth information than me. I encouraged them to speak in detail, and could ask basic questions without annoying them.

Despite somewhat patronising or condescending attitudes in a few instances, I generally felt that mutual respect was created in the interview situations. The difference aspect also felt productive as it provoked curiosity on the part of the informants: for example, questions about why I was interested in Mozambique and China led to conversations about my studies in Mozambique and previous research projects, which gave a good foundation for the interviews. I had to struggle somewhat with finding sameness, but felt that this was obtained in the conversations through a shared concern about making the most of Chinese activities, and frustrations about public debates on reducing Mozambique's cooperation with China to a question of either being good or bad. We could also find sameness and agreement when discussing traditional aid vs the Chinese model, and development in more abstract terms.

In talks with Chinese sources, my foreignness was even more obvious, but at the same time we shared the circumstance of being foreign in Mozambican society. Once again, I opted for the learner role when discussing the projects, but also found some common ground when conversing about the Mozambican society, practical issues and language difficulties. Many Chinese workers find themselves highly isolated from Mozambican society, and they seemed to enjoy being able to talk with someone from outside the workplace.

Finding sameness with the Mozambican workers was probably the hardest, as our realities differed so greatly. My Mozambican research assistant could help our worlds meet to a certain extent – but also he, as an educated middle-class Mozambican, was an outsider in this context. Seeking to achieve sameness with Mozambican workers became more about being an attentive listening partner and a channel for complaints. I felt – and this was also confirmed by several informants – that the workers appreciated being able to talk with us about their jobs and struggles at the construction sites. They seemed to find value in these conversations, as many of them felt unfairly treated by the company as well as abandoned by trade unions and other institutions that were supposed to be ‘on their side’.

3.4 Analytical Strategies

As noted by Wolcott (1994, 16), data are ‘tainted with an analytical or interpretive cast in the very process of becoming data’. Researchers develop their ideas, their research questions, project designs and interview guides based on their own baggage of theoretical considerations and past experiences (ibid). This section outlines how I have worked with the data material in

order to develop my analysis, but that is not to say that analysing has not been part of every step of the research process (Patton 2002).

The analytical strategy used in this thesis draws on *abduction*, often described as an interplay between deductive and inductive approaches (Thagaard 2009). Abduction can be divided into separate stages of analysis. Firstly, one must discover how social actors perceive and understand ‘that part of their world of interest to the researcher’ (Blakie 2007, 101). This stage involves identifying everyday concepts and the meanings ascribed to them, as well as why social actors interpret their world in these ways. The second step is then to ‘abstract or generate second-order concepts’ (Blakie 2007, 101), involving more technical academic language. Abduction further involves ‘correlating and integrating the facts [observations] into a more general description that is, relating them to a wider context’ (Svennevig 2001, 2). Abduction thus differs from strictly inductive or deductive approaches by entailing a pragmatic mode of reasoning, ‘concerning appropriateness of context, importance, relevance, similarity or explanation’ (Givón 2014, 7). This strategy offers room for choosing theories best-suited for clearly specifying the ideas that arise from working with the data material (ibid).

In my own material, most of the interviews were later transcribed, and the transcripts and field notes were organised and coded in the Nvivo software for qualitative analysis. This software facilitates qualitative analysis by allowing specific sections of various text sources to be linked with the researcher’s own concepts or themes for analysing the material. The first round of coding involved organising the data into thematic areas that reflected the empirical material.¹⁴ This provided a basis for grouping these areas into broader themes, which could create an empirical foundation for each article. The next step was to develop an analytical framework that was able to grasp the thematic areas, before re-coding the material with each analytical framework. The analytical frameworks could also be modified and expanded when new themes emerged in informants’ responses. By working through the data material in several rounds, and with the various analytical frameworks, I have aimed at bringing out the complexity of this material.

¹⁴ This is not to claim that I entered the field without theoretical assumptions that guided my fieldwork, but that I still allowed the content in my data material to determine the themes for the articles. The analytical framework for each article was developed after having finalized the data collection.

3.5 Ensuring Research Quality

How to evaluate quality in qualitative analyses has been the subject of intensive debate among scholars (see e.g. Bryman et al. 2008). Some have adopted terms like ‘validity’ and ‘reliability’ from quantitative research, whereas others hold that these are not transferrable to qualitative research and should thus be discarded (Becker et al. 2006). Alternative terminologies have been proposed, but there is no universal agreement about the criteria for evaluating research quality. Spencer et al. (2003, 7) put forward four guiding principles for assessing qualitative research: (1) research should be contributory, expanding knowledge or understanding of a phenomenon; (2) it should be defensible in design, with the research strategy chosen in line with the questions asked; (3) it should be rigorous in conduct, meaning that collection, analysis and interpretation of data is done systematically and transparently; and (4) the research should make credible claims, with arguments well substantiated in the data material. In light of these principles, I discuss research quality under the umbrella term ‘rigour’, in relation to data collection, analysis and presentation of findings (Haugen 2013). I further discuss the issue of generalisations.

3.5.1 Rigour in qualitative analyses

Rigour in the process of data collection concerns how the data are collected, how informants are selected and where data collection has taken place. In this chapter, I have included a thorough description and discussion of my fieldwork and the methods employed, in order to provide the necessary transparency and justification of choices in the process of data collection. My findings have been generated from various methods of data collection, from several types of informants in three cases of Chinese-led construction projects, which are analysed together. The empirical data cannot reflect reality as such: the presentation reflects the informants’ interpretation of social reality, as well as my interpretations of this reality. However, by cross-checking consistency in information from the various data sources and informants, and attempting to explain why differences appear, I have aimed at enhancing the credibility of findings (Patton 2002). Further, I believe the discussions and reflections presented in this chapter provide an in-depth description of my methodological choices and how these have affected the data collected.

It should be noted that the data collected are numerically biased towards Mozambican informants and sources. In part, this is due to the difficulty in accessing Chinese informants in

Mozambique because of language barriers, and the relatively isolated lives of project workers. However, this was also a deliberate choice made early in the research process, where I decided to focus on bringing out the views of the recipient end – the Mozambican perspective on relations with China. While more information from Chinese sources in Mozambique would have been useful and interesting, secondary sources came to play an important role in understanding the Chinese ‘side of the story’.

Rigour in relation to analysis concerns the credibility of findings, and whether the researcher’s interpretations have a foundation in the empirical material. This requires transparency in accounting for how the analysis provides a basis for the conclusions drawn (Thagaard 2009). According to Hastrup (2004), knowledge is organised information, and this organisation entails both selection and reduction of the material at hand. ‘Reduction’ refers to the fact that the empirical complexity is reduced in order to provide clarification, and ‘selection’ means that parts of the information are discarded (ibid). While choices regarding reduction and selection should reflect the research questions the study seeks to explore, *how* they are done will also influence the credibility of findings. Deciding on an article-based thesis as the format for my research has made the choices of selection and reduction even more apparent, as I focus on certain parts of the data material in order to present a coherent ‘story’ in each article. That being said, through the structure and content of the articles, with a clear presentation and discussion of methods, the analytical frameworks developed and how they are connected with the empirical data, I have sought to make the causal relations clear and comprehensible, and thus the conclusions credible for the readers. The ways in which I have worked with the data material, testing various analytical frameworks in search of the ‘best fit’, should also enhance the credibility of my findings (Patton 2002, 553). This synopsis has been aimed at systematically clarifying and tracing the various steps taken in the analysis. Additionally, I have sought to make clear which parts of the analysis are based on empirical data and which are grounded in theory or secondary sources.

Rigour in relation to presentation refers to whether the wider community of researchers can scrutinise and review the trustworthiness of the research (Bradshaw and Stratford 2010). This is made possible by accounting for each step in the research process so that others can determine whether the choices and analysis made are appropriate for achieving the research objective. By engaging with the research community at various stages in the analytical process, this can contribute to refining the approach and enhancing the credibility and trustworthiness of interpretations and findings (Tjora 2010). I have actively interacted with

the wider research community, by presenting frameworks and articles at my home institution, by presenting preliminary findings at my host institution in Maputo, through draft articles and contributions at international conferences, and by participating in discussion groups in order to ensure rigour in relation to presentation. The processes of peer review in the journals in which I have published or intend to publish are also relevant here. On the other hand, the restrictive format of journal does not always allow for extensive methodological discussions, making it difficult to convey the steps taken to ensure rigour.

3.5.2 Analytical generalisations

While generalisation is often seen as a main goal of social research, generalisation from qualitative data remains a contested area (Halkier 2011, Gobo 2008, Delmar 2010, Polit and Beck 2010). Recognising that research is not impartial, but is subjective and steered by my own and my informants' positioning, has made me somewhat uncomfortably aware that I cannot make universalising claims on the basis of this research (see further discussions in Haraway 1988, England 1994, Rose 1997). Here I will use the term *analytical generalisation*, which refers to a specific way of using 'theoretical concepts to enable a more general perspective on specific qualitative patterns' (Halkier 2011, 787). Theoretical concepts are used to generalise patterns and findings from a specific case or a sample of cases, in order to enlarge the significance of the empirical findings or patterns, in line with two specific principles: The first is that analytical generalisations should recognise and attempt to represent the 'dynamisms, ambivalences, conflicts and complexities that constitute various overlapping contexts and the knowledge-production processes in relation to these contexts' (Halkier 2011, 788). The second is that the basis of generalising must be much more specific and bound to context than understandings of generalisations as universalising. It should produce 'context-bound typicalities', where social relationships, categories and processes are unique and typical at the same time (ibid).

In terms of analytical generalisations, the ways in which I have developed the analytical frameworks for exploring certain aspects within these projects – workplace regimes and agency, backward linkages, and negotiating power – could provide important insights into other analyses of similar construction projects by indicating certain analytical frameworks for exploring such projects. This relates to what Halkier (2011) has called 'category zooming', where the analysis focuses on particular single aspects of the data material. These single categories are contextualised and their nonessential character underlined. Here, it is important

to be clear as to which part of the analysis applies to many or all of the study participants, and which experiences are unique (Polit and Beck 2010). I have attended to this aspect by allowing direct quotations and excerpts from interviews play a significant role in the analyses, and highlighted where perceptions are supported by several informants or groups of informants. I have sought to be explicit about which parts of the analyses draw on secondary literature, and which parts draw on primary data. Moreover, the findings contribute to developing and expanding theory, such as suggesting how to understand GPN theory in relation to the construction industry, and one way of combining GPN with theories of backward linkages and agency (further discussed in Chapter 5). Thus, the findings of this thesis should contribute to a broad set of academic discussions, including China–Africa relations, multi-cultural workplaces, general development discourses, and the role of construction and construction workers in GPNs.

Some researchers have linked generalisation to the concept of transferability (Polit and Beck 2010), but that does not mean to generalise research findings from one case to cases that have not yet been explored. Obviously, the findings from these three construction projects explored in Maputo will not apply to all Chinese-led construction projects in developing countries or in African countries – or all Chinese-led construction projects in Mozambique, for that matter. However, some of the features in the cases explored in this thesis should have relevance in other cases of Chinese-led construction work, in or beyond Mozambique. The three cases share certain features that could be relevant in other cases, especially as regards workplace organisation and wider reference to the role of industrial policy and construction in development planning.

It is up to the consumers of this research to assess whether the findings from this study apply to new cases and situations, and will thus do the work of ‘transferring’ its results (Polit and Beck 2010, 1453). The researcher must provide detailed descriptions that can allow the readers to draw such inferences. This I have sought to ensure through in-depth descriptions of the research setting, the various types of informants, observations and the selected cases. Any attempts at transferring the findings from this thesis must account for the specific context of new cases. Mozambique’s strong relations with its traditional donors and the dynamics of economic and political elites in Mozambique are examples of context-specific aspects that influence the findings of this thesis. Moreover, the particularities of the construction sector must be acknowledged and discussed if one is to transfer findings from this research to other sectors of Chinese–African cooperation.

3.6 Summarising remark

This chapter has provided an ‘audit-trail’, documenting each stage of the research process in order for others to evaluate the quality of my research (Hammersley 2010). In relation to the focus and purpose of this thesis, I have sought to design the study, and collect and analyse the data, in a systematic and ethical manner faithful to the research questions throughout the process. The overall intention has been to contribute to a better understanding of the role of Chinese-led projects in the construction sector in Mozambique.

4. Summaries of the articles

The four articles in Part II of this thesis explore the role of Chinese-led construction projects in Mozambique (and beyond), analysed with different analytical scope and empirical focus (summarised in table 1 below). The articles form the analysis of this research project, and the significance of this synopsis is to tie them together. The articles are submitted to, accepted or published in different peer-reviewed journals.

The first article examines challenges to creating domestic backward linkages in the construction sector in Mozambique, illustrated with the developments in three different cases of Chinese-led construction projects. In doing so, the analysis contests the existing tendency to exaggerate how the Chinese business model is a main challenge to economic integration through backward linkages. The second article uses the more recent focus on African state agency as a starting point for discussing the negotiating power of Mozambican government officials when entering into negotiations with China. The analytical framework combines concepts from negotiation theory and frameworks for aid negotiations, which allows me to explore the conditions under which negotiations between China and Mozambique take place that influence the ability of Mozambican stakeholders to achieve their preferred outcomes. The third article explores the most significant domestic backward linkage found in the Chinese-led construction projects examined, namely labour, and focuses on how Chinese engagement in the construction sector affects how workplaces are organised and regulated, and the agency of Mozambican labour under these conditions. The fourth article take a broader perspective, examining what it is about infrastructure that holds such high promises of development, and how this has changed between the postwar period and the infrastructure boom currently underway.

This chapter outlines the main findings, arguments and theoretical positions of the four articles. The last paragraph of each summary connects the articles with the research questions.

Table 2 Overview of articles

Title and journal	Empirical focus	Theoretical approach	Relevance to GPN literature	Main argument
<p>1.</p> <p>Beyond the China factor: Challenges to local linkages in Chinese construction projects in Mozambique</p> <p><i>Journal of Modern African Studies</i> (forthcoming 2018)</p>	<p>Investigates three Chinese-led projects in order to examine the challenges to creating domestic backward linkages in construction projects in Mozambique.</p>	<p>Local linkage theory and its contextual determinants ownership, local capabilities, infrastructure and policy.</p>	<p>Illustrates how value capture in place can be operationalised as domestic subcontractors, local suppliers and labour.</p> <p>Exemplifies how lack of strategic coupling can lead to domestic SMEs falling outside GPNs in construction</p>	<p>Weak development of backward linkages in Chinese-led projects caused by inadequate capabilities in the Mozambican construction industry, and lack of supporting structures and policies addressing this. Factors related to Chinese ownership shape this outcome to a lesser extent.</p>
<p>2.</p> <p>Passive Hosts or Demanding Stakeholders? Understanding Mozambique's Negotiating Power in the Face of China</p> <p><i>Forum for Development Studies</i> (published 2017)</p>	<p>Examines how government officials understand, manage and negotiate their relationship with China, illustrated with the negotiation and implementation of a roadworks project in Maputo.</p>	<p>Negotiating power and frameworks for understanding aid relationships: Negotiations as a combination of process (potential power, perceived power and power tactics) and outcome (realised power).</p>	<p>Provides a way for including state actors in GPN analyses and show how relations between firm and extra-firm actors shape GPNs.</p>	<p>Negotiating power of Mozambican officials in deciding project details remains limited as the structural conditions of asymmetry and dependence in development cooperation are not really altered when cooperating with China. Further constrained by use of tied aid and elite dynamics in Mozambique</p>
<p>3.</p> <p>Workplace regimes in Sino-Mozambican construction projects: Resentment and tension in a divided workplace</p> <p><i>Journal of Contemporary African Studies</i> (published 2017)</p>	<p>Explores the causes of tension and resentment, and agency of Mozambican labour in three Chinese-led construction projects.</p>	<p>Workplace regimes operationalised as labour control issues, material issues and contract issues. Labour agency and response strategies as voice, loyalty, neglect and exit.</p>	<p>Explores the role of labour in GPNs, and how integration into GPNs does not necessarily involve any social upgrading on behalf of the workers, illustrated by the weak diffusion of knowledge and technology through this linkage.</p>	<p>The Sino-Mozambican workplaces are characterised by strong divisions between the Chinese and the Mozambican workers, which exacerbates tension and resentment.</p> <p>Agency of Mozambican workers is constrained due to lack of constructive space for participation and voice strategies, lack of institutional support and alternative employment opportunities</p>
<p>4.</p> <p>Building Africa's infrastructure. Re-instating history in infrastructure debates</p> <p><i>Forum for Development Studies</i> (submitted 2017)</p>	<p>Examines the differences between how infrastructure investments are understood and implemented now and in the postwar period, and seeks to explain what it is about infrastructure that holds such high promises of development.</p>	<p>Infrastructure and economic development theory</p>	<p>Provides an overarching perspective on the persistent challenges with value capture from infrastructure investments in place</p>	<p>The main challenges related to absorptive capacity and weak domestic industrial sectors were never dealt with after the first boom, rather exacerbated through policy shifts and privatisation processes. Reached consensus around infrastructure because it manages to satisfy the interests of a range of different actors.</p>

Article 1

Beyond the China factor:

Challenges to backward linkages in the Mozambican construction sector

(Forthcoming 2018, the Journal of Modern African Studies)

China has become a significant contributor to closing Africa's infrastructural gap, but Chinese companies are repeatedly criticised for not involving local businesses in their operations, and for isolating themselves from the socio-economic environment. To what extent can this be attributed to a 'typical Chinese business practice'? This article uses the concept of domestic backward linkages to understand how cooperation in the construction sector could contribute to broader economic development goals. Four contextual determinants are used to explain the challenges experienced with creating domestic backward linkages in Chinese-led projects in Mozambique: ownership, local capabilities, infrastructure and policy.

The analysis is based on qualitative data from three Chinese-led construction projects in roadworks, water and housing. Each project represents a distinct form of China–Mozambican cooperation, to elicit the implications of financing structures for certain business strategies and project features that could influence domestic backward linkages.

The analysis shows that Chinese companies involve Mozambican businesses in their activities only to a minor extent – but this has less to do with a 'Chinese business model', and more to do with capabilities in the local industry and the domestic policy environment. The Mozambican experience illustrates the tension between long-term development goals like local content and transfer of skills and technology to the local construction industry, and short-term measures to address infrastructural needs. The competitive pricing, high speed, and efficiency that Mozambican stakeholders highlight as the competitive advantages of Chinese firms are not compatible with domestic backward linkages. Industrial policies that stimulate backward linkages require longer-term perspectives on industrial growth, long downplayed in Mozambique's development strategies. This reflects the legacy of decades of liberalisation policies in Africa, driven by Western donors and IFIs, creating dynamics that are crucial for understanding why Chinese construction companies are so competitive in the Mozambican market today.

The analysis highlights characteristics of domestic backward linkages in Chinese-led construction projects (research question one), and explains the challenges connected to developing such linkages in the Mozambican context. The analysis further illustrates how lack of strategic coupling makes economic activity operate almost unattached to local businesses, shedding light on research question three.

Article 2

Passive Hosts or Demanding Stakeholders?

Understanding Mozambique's Negotiating Power in the Face of China

(Published 2017, Forum for Development Studies)

Recent debates on African agency in China–Africa relations highlight how China provides African governments with an alternative to traditional donors that should allow African policy-makers to experiment with policy approaches and play a more assertive role in negotiations. How this is translated into negotiations between China and individual African countries remains unclear. Using a combination of negotiating power and aid negotiations as the analytical framework, I explore the conditions under which negotiations between China and Mozambique take place that influence the ability of Mozambican stakeholders to achieve their preferred outcomes. The article uses the negotiation of a Chinese-funded construction project in Mozambique as the basis to discuss the extent to which the Mozambican public administration involved in project negotiation manages to align such projects with broader development goals in the construction sector.

This analysis shows that China provides Mozambique with a greater choice regarding which projects to develop and which development partner to cooperate with. China offers crucial funding for Mozambique's priority projects without policy conditions, and is prepared to fund infrastructure projects that have been neglected by traditional donors. However, specific project details, such as the use of national suppliers, subcontractors, and skills-transfer to local workers do not indicate increased leverage. The analysis suggests that several dynamics shape the outcome of project negotiations between Mozambique and China. First, the structural conditions of asymmetry and dependence in development cooperation are not really altered when cooperating with China. China offers a package of financing, equipment, and

knowledge, all of which are deemed in short supply in Mozambique. The public administration seems to accept Mozambique's dependent position in negotiations, settling for Mozambique's 'win' to be the fast delivery of affordable infrastructures. Second, the liberal policies promoted in Mozambique have not focused particularly on industrial policies, leaving the public administration with a weak policy footing for negotiating on local content in the construction sector. Third, the ExIm Bank has clear requirements for how their funding should be used in project implementation, which restricts the scope for public servants to negotiate on project details. This use of economic conditionality illustrates a rescaling of conditions from the macro-political to the project level in Chinese-led ventures. Finally, small and medium construction companies in the Mozambican construction sector are insignificant to the political elite. The public administration thus lacks incentives to promote and negotiate on capacity building in the construction sector, especially in the context of a weak policy framework for industrial development.

This article responds directly to research question two, on characterising agency of government officials and how this is expressed in the implementation of construction projects. Moreover, the analysis sheds light on how these stakeholders link construction projects to broader development processes (research question one), which is also crucial for understanding the weak domestic backward linkages in the Chinese-led construction projects explored.

Article 3

Workplace regimes in Sino-Mozambican construction projects:

Resentment and tension in a divided workplace

(Published 2017, Journal of Contemporary African Studies)

This article explores how Chinese engagement in the construction sector affects workplace regimes, using the analytical concepts of workplace regimes and labour agency. First, the article explores why the workplace regimes created give rise to resentment and tension, by examining labour control issues, material issues and contract issues in China-Mozambican workplaces. Second, the article examines how labour agency of the Mozambican workers is constrained or enabled within these workplace regimes. Labour responses to the workplace regime are understood through the concepts of voice, loyalty, neglect and exit.

The data reveals that the Chinese companies are granted great freedom to develop workplace regimes as they see fit, characterised by functional flexibility, low pay, and few benefits. Furthermore, the Sino-Mozambican workplaces are characterised by strong divisions, both spatially and metaphorically. This signifies the existence of two workplace regimes in one workplace, one regime for the Chinese, and another for the Mozambicans. I argue that the 'divided workplace', where different workers are subject to different workplace regimes, is one of the main contributors to resentment and tension.

The Mozambican workplace regime is traditionally not one of high pay, social benefits, or training schemes, but positive informal relationships between employers and employees seem to be compensating for this. This social relationship is lacking in the Sino-Mozambican workplace, where divisions between Chinese and Mozambican workers are pervasive. Should Chinese companies continue to isolate themselves and their workers from the societies in which they operate, socio-cultural misunderstandings are bound to be perpetuated.

Mozambican workers find themselves locked in their current work situation, with their agency heavily constrained. The workplace regime does not provide constructive space for participation and voice strategies because of the degree of distance between Chinese and Mozambicans. Moreover, the workers lack institutional support to respond to company violations of their rights and regulations. The workers' unsuccessful attempts to organise collective strategies illustrate the difficulties in accomplishing their objectives when negotiations lack institutional support that could provide political scale. In addition, the workers are prevented from exiting because of the lack of alternative employment opportunities in the local labour market. This analysis illustrates the challenges of a development strategy that relies on foreign capital but lacks the institutional capacity to monitor and control whether foreign activities are in line with national law and regulations.

This article characterises the most extensive economic linkage in Chinese-led construction projects, the economic linkage of labour, responding to research question one. The analysis is further connected to research question two explaining how Mozambican workers practice agency in the workplace, and how agency is constrained in the Sino-Mozambican workplace regime.

Article 4

Building Africa's infrastructure.

Reinstating history in infrastructure debates.

(Submitted December 2017, Forum for Development Studies)

During the last couple of decades, infrastructure has gone from being yesterday's news to a main focus in development cooperation, particularly on the African continent.

This article examines what it is about infrastructure that holds such high promises of development, and to what extent this changed between the postwar period of large infrastructure investments in Africa and the investment boom currently underway. In this article, I compare the two infrastructure booms in terms of development ideology and discourse, type of projects in focus and major actors, and identifying some continuing challenges related to neglect of domestic construction sectors in project implementation and increasing debt levels. I further highlight the historical processes that have contributed to the persistence of these challenges, before turning to the underlying reasons why infrastructure has again become a major focus of development cooperation.

When examining the two infrastructure booms, I find that little has changed in project focus, but there is a more diverse set of actors on board with the 'infrastructure-induced development' narrative. The explanations for development disappointment in Africa have changed slightly between the two periods, but both rest on an understanding of development as synonymous with GDP growth. This can partly explain why the challenges related to weak capacities in domestic construction sectors have continued, but this is also connected to the policy shift and privatisation processes of the 1980s and 1990s. With privatisation hailed as the answer to failed infrastructure projects, the challenges related to weak capacities in many African countries were further exacerbated, not resolved. The use of China as a prominent example of successful development based on infrastructure investments has helped to reinforce this narrative. Chinese companies have also emerged as major beneficiaries of the current infrastructure boom, taking advantage of the conditions created through decades of liberalisation policies.

In an increasingly diverse development landscape, infrastructure investment has taken centre stage because it connects very different developmental visions: of various donors, of the state

and of the private sector, accompanied by the poverty-reduction ‘effect’ of labour-intensiveness.

This article responds particularly to the last part of research question one, which seeks to understand how construction projects are linked with broader development processes. Moreover, the analysis sheds light on difficulties in creating backward economic linkages from Chinese-led construction projects given how little focus capacity building in domestic sectors in African countries have received since the post-war infrastructure boom.

5. Concluding discussion

I started this synopsis by noting that to be writing about China–Africa relations could mean almost anything. Still, the China–Africa literature continues to grow, and China–Africa events, conferences, and special issues in journals are flourishing. Years of working with this material have convinced me that the time has come to develop more sophisticated approaches to the research area often referred to as ‘China in Africa’, because that term covers so many widely differing, non-comparable actors, networks and relationships. With this thesis, I have sought to contribute by approaching Chinese-led construction projects through a theoretical lens with a basis in economic geography. This has enabled me to explain how construction projects are shaped by far more than ‘Chinese factors’ as they unfold in the Mozambican context.

Chinese development assistance has made African development issues more complex and contested. Too often, a dichotomy between ‘the traditional model’ vs ‘a new model’ led by China is constructed, and researchers, politicians and media then set about making comparisons. However, by constructing such a stark division, analyses and commentaries often fail to historicise and contextualise current events. A main aim of this thesis has been to counter this, seeking to explain how the activities of various external actors intersect and merge with the political economy in Mozambique.

Bridging perspectives from economic geography and development geography, the research process of this doctoral thesis has been guided by three overarching research questions:

- (1) What characterises the backward economic linkages created in Chinese-led construction projects in Mozambique, and how are such projects linked broader development processes?
- (2) What characterises agency of the Mozambican government and other Mozambican stakeholders, and how is this expressed in the implementation of Chinese-led construction projects?

(3) How can global production networks theory be applied in explaining the role of Chinese construction projects in development processes in Mozambique?

In this concluding chapter, I take up each of the research questions in turn, drawing some overall conclusions based on the empirical material and showing how these contribute to broader theoretical discussions. The chapter ends with some remarks on new areas of research that could emerge from the findings of this thesis.

5.1 Characterising backward linkages

This research project has focused on *domestic* backward economic linkages, motivated by the understanding that economic linkages are crucial for developing domestic industrial capacity and stimulating the processes of industrialisation. This is in line with the Mozambican Development Strategy that envisions the construction industry as becoming a dynamic sector with strong links to local economic agents, creating jobs and business opportunities for local contractors and suppliers of building materials, and acting as a catalyst for the transformation and industrialisation of the Mozambican economy (translated from Maugeri et al. 2015, p. 5). My empirical findings show that these visions have *not* been translated into practice; any domestic backward linkages from the Chinese-led projects studied here are few indeed. As discussed in article one, economic linkages in the Chinese-led projects explored are dominated by Chinese and South African actors, not domestic companies.

5.1.1 Few suppliers, fewer subcontractors

The weak development of domestic backward linkages is constantly noted by Mozambican stakeholders, and highlighted as a major challenge in connection with Chinese-led projects. In articles one and two I show how Chinese lead-contractors in the projects explored in this research project make use of domestic subcontractors and suppliers only to a minor extent.

Weak domestic linkages can be explained by the fact that Chinese companies have superior experience and skills in delivering construction services. As discussed in article one, the Chinese government issued a set of policies to assist its companies in establishing themselves abroad when the domestic market became crowded and competitive in China. These policies became instrumental in the globalisation of Chinese construction services. Many companies found it lucrative to invest in African markets that had been dominated by more expensive

Western companies and weak domestic industries, with a booming economy triggering more tenders for construction work.

In the Mozambican market, Chinese companies tend to out-compete the traditionally strong South African or Portuguese companies as regards construction work. Price is their main competitive advantage, facilitated in part by upholding existing supply chains and using Chinese technicians and engineers who are housed together in simple dorms on the project site. Further, the flexible use of unskilled Mozambican labour enables these companies to let the number of workers fluctuate according to actual project needs, as discussed in article three.

Tied aid from Chinese financing institutions such as China ExIm Bank limits the possible development of domestic backward linkages, as discussed in articles one and two. Still, the responsibility for weak domestic linkages can only to a minor extent be attributed to ownership factors in Chinese lead firms. As explained in article one, I theorise the ownership aspect as *one* determinant of backward linkages: the overall outcome should be understood as a *combination* of ownership, social infrastructure, local capabilities and policies. I hold that the three latter factors have greater explanatory power than the first, so over-emphasis on ownership will deliver knowledge that is partial at best.

Weak local capabilities challenge cooperation between domestic and Chinese firms. Mozambican construction companies are small, often informal, and lack the skills or/ and equipment necessary to win large tenders for construction work, or supply the goods and services required by larger construction firms. Chinese companies in Mozambique therefore prefer to keep everything 'in-house'— in contrast to the general trend of outsourcing typical of large construction multinationals. Alternatively, Chinese lead firms turn to South Africa for goods and services, seen as more reliable than what is available in the Mozambican market. This does not necessarily mean that Chinese businesses perform worse in terms of economic linkages than other foreign firms, but since they dominate the Mozambican market, criticism is directed primarily at them. I take this argument further in article four, showing how capacity building in domestic sectors and stimulation of the absorptive capacity in African economies have not been focus areas, despite being highlighted as a main cause for disappointing results from infrastructure investments already in the postwar period.

My findings represent an important empirical contribution in explaining how the conditions crucial to achieving domestic economic linkages are beyond the control of Chinese ownership.

A central factor is the issue of local capabilities, which in turn should be recognised as intertwined and influenced by social infrastructures and industrial policies.

5.1.2 The economic linkage of labour

Mozambican officials highlight the generation of local employment as a major contribution to development. As pointed out in article four, the labour-intensiveness of infrastructure projects is often used to connect such projects to poverty reduction objectives. Indeed, local labour provides the most extensive domestic backward linkage in the Chinese-led projects studied here. Although Chinese companies have been depicted as notorious for bringing their own crews for construction work in African countries (Wang and Flam 2007; Afrodad 2008), in fact more than two thirds of the workers in the projects examined here were Mozambican. Admittedly, these workers filled positions that were often casual and required few skills.

At managerial and ministerial levels, both Chinese and Mozambican, communication challenges on the ground were often trivialised – noting, for instance, how Chinese and Mozambican co-workers would base their communication on a handful of odd words and commands. The analysis in article three, however, shows that much more than words get lost in translation. Workplaces divided along nationality lines reduce both the potential for knowledge diffusion and the foundation for creating meaningful social relationships, in turn fostering conditions conducive to tensions and resentment.

The economic linkage can be described as one of long hours, low pay and insecure positions. Besides the much-needed income, Mozambican workers had little positive to say about their workplaces. Most workers I spoke with described their situation as being at the mercy of their Chinese superiors, knowing that they could be fired at any time, and without understanding why. A main concern was that they did not learn anything, but were used as unskilled servants doing whatever heavy jobs were needed. The fact that workers were hired for a specific position but could in practice be set to do any job contributed to this frustration – there was no career ladder to climb.

As discussed in article three, the economic linkage of labour is further characterised by deep divisions between the two nationalities. This aspect has added to the discontent of the Mozambican workers, as they felt that they received unfair treatment, with lower pay and fewer benefits, but still had the heaviest workload. The fact that the Mozambican workers

could observe tangible benefits available only to the Chinese – like lunch, housing and medical services – further fuelled workplace tensions. Communication challenges added to these divisions, cementing the division between the two nationalities.

5.2 Construction and development

My empirical findings indicate further implications of how construction projects are connected to development processes. Macroeconomic strategies often highlight the extended effects of foreign investments, such as the need to link foreign and domestic companies in order to absorb knowledge and technology. However, in the activities actually promoted in the sector there is pressure for cheap and fast implementation, which does not allow for the inclusion of such broader strategic elements.

5.2.1 Construction and development in Mozambique (and beyond)

In the Mozambican context, construction projects are connected to development in three ways. First, government officials highlight the labour-intensiveness of construction projects and thus their positive contribution to employment generation. This was often cited as evidence of the connection between construction projects and poverty reduction, as mentioned in article three (and problematized in article four). Government officials generally felt that any worker dissatisfaction in the workplace would gradually resolve itself as both cultures adapted to one another.

Second, construction projects are seen as fundamental for developing other productive activities, which automatically brings a justification of projects as connected to development, as discussed in article four. This connection lies in the product – the value of a road, bridge, or water system lies in what it may become for its consumers. Regardless of who is doing the work, a busy construction sector is often deemed essential to the process of economic growth. As discussed in article four, this argument builds on theories that rest on a growth and technology-focused approach to development, where the goal is GDP growth and trade integration. This way of measuring development conceals details about which firms (for example size and origin), in which sectors and places actually benefit from these investments, and value capture (for example by domestic companies) falls under the radar. This linking of infrastructures and development has been dominant in neoliberal policy discussions, and thereby in many sub-Saharan countries – including Mozambique – in recent decades.

Construction framed as development in this way reveals a discourse that prioritises development for the market.

Third, investments in construction satisfy the impatience for development understood from a modernisation perspective, as discussed in article two and four. Large-scale investments in infrastructure hold the promise of progress and modernisation that becomes synonymous with development within the political discourse. This view is adopted by sectors of the local population: in particular, urban construction projects and modern roads strike a note among groups where generations have seen development assistance and foreign aid projects, without really experiencing any difference. The promotion of investments in infrastructure can be a way for governments to demonstrate that they are ‘making development happen’, that a country or region is progressing and growing, with construction projects like those of advanced capitalist societies. Construction projects can transform a city or a region, without contributing to economic development as such. This rests on the idea that development is basically a catch-up process with the advanced capitalist world (Hansen and Wethal 2015b), and investment in modern construction projects becomes one way of ‘catching up’.

The Mozambican experience of weak development of domestic backward linkages further illustrates the tension between long-term development goals like local content and transfer of skills and technology to the local construction industry, and short-term measures for dealing with infrastructural needs (as shown in articles one, two and three). Developing countries’ continuing preoccupation with industrialisation can lead development planners to prioritise manufacturing services over construction – in turn making construction projects short-term oriented, with selection and implementation processes driven by political and commercial needs rather than long-term developmental goals (Zawdie and Murray 2013). Moreover, focusing on the sector’s contribution to development with short-term, low-skilled employment acts to restrict the domestic construction sector from developing the capabilities necessary to deal with future socio-economic and environmental pressures, and there have been few attempts to invest in physical infrastructure as a foundation for long-term sustainable development (ibid). The competitive pricing, high speed, and efficiency that Mozambican stakeholders highlight as the competitive advantages and main benefit of using Chinese firms as lead contractors are simply not compatible with developing domestic backward linkages.

According to Zawdie and Langford (2002), the factors that affect weak states in relation to infrastructure in sub-Saharan Africa fall into two groups: the first relate to shortfalls in

financing, and the second to ‘deficiencies in the engineering and management capabilities of [domestic] construction firms’ (p. 165). My research project shows that while China’s focus on infrastructure investment in Africa has help to relieve the financing issue, domestic sector development is often forgotten in infrastructure debates. As shown in article four, this is not a recent phenomenon. For construction projects to contribute to broader economic development goals, parallel investment in capacity building of the domestic construction sector is crucial, as is examination of how such projects are implemented, who are involved, and whose interests the projects serve. As the findings of this thesis show, the connection between construction and development cannot be achieved simply by mobilising new resources for investments.

5.3 Actors and agency in a global construction industry

The second question guiding this research project concerns agency of the Mozambican government and other Mozambican stakeholders, and how this is expressed in the implementation of Chinese-led construction projects. The agency of the state is examined through a conceptualisation of negotiating power in article two; article one sheds light on the agency of Mozambican SMEs in the construction sector by explaining their networked position; and article three explores what enables or constrains labour agency in a divided workplace. Article four sheds further light on these dynamics in a broader context.

5.3.1 Agency and negotiating power within the state

In order to understand the networked position of Mozambican state officials, I have explored how they relate to the Chinese state and funding institutions, and lead firms. These networks are also intertwined with long-established relationships with traditional donors and IFIs. By viewing ‘negotiating power’ as a combination of process and outcome, I can show how crucial dynamics that shape negotiating outcomes can be found in the process that starts before the actual negotiation. Despite the debate on the growing leverage of African policymakers as a consequence of China’s increase in development assistance activities (Dietz et al. 2011, Corkin 2013, Harman and Brown 2013, Mohan and Lampert 2013), my analysis in article two indicates that the dynamics that have previously constrained policy space in Mozambique are not significantly altered in negotiations with China.

Mozambican officials cannot be deemed passive: they act within what they consider their (admittedly limited) room for manoeuvre. What, then, of the *state*? While the development literature seems to acknowledge a ‘return of the state’ as an important development actor, it is less clear what type of state is in focus. Horner’s (2017) distinction between the state as a facilitator, regulator, producer or buyer takes us one step further in acknowledging a multifaceted state, which opens up for explaining how states navigate in the myriad of interests and strategies involved in construction sector development.

The Mozambican state holds the role of a buyer or client in the construction projects examined in this study, but the potential agency inherent in this role has not been fully exploited. For decades, the Mozambican state has served as a facilitator for foreign interests – through investments and aid, and by keeping external funding flowing. The neoliberal policy frameworks of Mozambique have hailed foreign investment-led development as a beacon of hope, on the assumption that benefits will ‘trickle down’ in the future. Similar thinking dominates how state officials work with construction projects, hoping that further development will somehow be ignited. The liberal policies promoted in Mozambique have not focused particularly on regulating industrial activity, leaving the public administration with a weak policy footing for negotiating on local content in the construction sector (as shown in articles one and two). Pressures for national development priorities that highlight the importance of creating linkages between domestic and international companies lose priority when this could mean that planned projects are not executed, or that future cooperation is placed in doubt.

The structural conditions of asymmetry and dependence in development cooperation are not really changing in Sino–Mozambican cooperation. China offers a package of financing, equipment, and knowledge, all of which are of short supply in Mozambique, especially since it has been hard to secure funding for construction projects through traditional sources. Additionally, China ExIm Bank uses economic conditions that tie funding to Chinese goods and services, which may restrict the capacity and opportunity of public officials to negotiate on project details, as discussed in articles one and two. Such re-scaling of conditions from the macro-political to the project level in Chinese-led ventures has restrictive effects on recipient countries’ negotiating power in connection with specific projects.

That Mozambican state officials are reluctant to use their position to take on a more regulating role is also connected with the interests of the economic elite. Their interests tend to intersect

with political power, influencing the choice of cases where government officials actively seek to promote and facilitate cooperation between Chinese (or other international) and domestic companies. To understand why and how states shift between different roles, the concept of the ‘cunning state’, developed by Randeria (2007, 6) in his discussion of the Indian state, can prove useful. Basically, cunning states are in a position to negotiate the terms on which they share sovereignty in certain fields of policy-making while retaining control over others. They deny power only to deploy it in order to evade responsibility. They play on their perceived weakness to justify specific policy choices to citizens and to international donors, short-changing both in the process. Faced with popular discontent at their policies, they point to external pressure for reforms, or simply to the demands of “globalization”. Such a view of the state can be particularly informative here, as local content and cooperation with domestic large companies have been conspicuous in other Chinese-led projects in Mozambique, but not in the project examined in article two.

This research project makes a significant empirical contribution by explaining the many different factors that influence how state officials in Mozambique understand their agency and practise their negotiating power. The analysis in article two highlights crucial elements in the debate on state agency in African countries – the various interests that make up the Mozambican state and influence which aspects are subject to negotiation, and the historical and structural conditions that shape how state actors enter into negotiations with China. Negotiating power is conditioned by Mozambique’s history with external relations and foreign aid, by elite dynamics, and how officials understand Mozambique’s position vis-à-vis that of China. Additionally, negotiating power may be constrained by the financial conditions attached to projects funded by China ExIm Bank. Most of these issues relate to the negotiation *process* that starts well before the actual negotiation gets underway, which in turn results in government officials entering negotiations with weak strategies and power tactics. The outcome may be exactly what is bargained for, but is still disappointing from the perspective of Mozambican stakeholders. The potential for strategic coupling is not fully exploited – essentially because the state has focused on value creation and not on capture, except where that can benefit large companies in control of the elite.

5.3.2 Networked industrial relations

As established by Dicken (2011), it is very difficult to succeed outside production networks when that is the dominant way of organising economic activities. The Mozambican case,

discussed particularly in article one, offers a clear illustration of how domestic SMEs fall outside the networks of industrial relations. While there has been an upsurge of construction work in Mozambique over the last decades, this has not benefited the country's many SME contractors and material suppliers. Instead, the booming sector is increasingly hosting foreign companies and their suppliers – especially Chinese entities.

The Chinese dominance of the sector is a challenge in itself – because of closed tenders and tied contracts of Chinese financing institutions, but also because of the highly competitive pricing of Chinese companies and their access to low-cost goods and services through supply chains in China (as highlighted in articles one and two). However, other important constraints on the agency of domestic construction companies lie in the lack of facilitating structures and policies supporting the domestic private sector.

Most domestic SMEs are found in the informal sector. Informality is generally high in Mozambique, but is particularly harmful in the construction sector when the state is a major buyer. Domestic companies are surrounded by weak social infrastructures, lacking the necessary sources of funding and equipment; bureaucratic procedures are lengthy and complex, and there are few facilitating mechanisms to assist domestic companies in establishing connections with Chinese or other foreign firms. This can be seen as a consequence of the weak industrial policies in Mozambique, where the government has focused on attracting foreign investments and development assistance, but not necessarily on guiding and regulating these inflows and activities (discussed in articles one and two).

Articles one, two and three illustrate how the Mozambican government has struggled to find ways of promoting domestic backward linkages in foreign construction projects. Chinese companies have enjoyed relative freedom in structuring and controlling their supply chains; and Mozambican officials have very few tools to promote domestic participation in large construction projects – further exacerbated by WTO requirements and liberal trade policies in the region. While the state has a key role in promoting technology transfers and creating learning opportunities, African governments have generally lacked relevant policies (Zawdie and Murray 2013). Mozambique is no exception: it lacks policies that can focus on technical training of local workers and firms and can provide support-mechanisms for local firms, with clear requirements as to employment, and skill and technology transfers in foreign firms. Article four places the Mozambican experience in a broader context, discussing similar dynamics in the Sub-Saharan region.

State officials have generally little confidence in domestic construction companies, claiming that they do not have the experience, equipment or management needed to take on larger construction projects. This is linked to elite dynamics in Mozambique, discussed in articles one and two. SMEs have little importance for the survival of the political elite and are thus not prioritised in practice; by contrast, foreign companies, aid donors and financial institutions are vital to the elite and its interests. In many ways, this represents the continuation of relations that have developed since independence, contributing to upholding state legitimacy in Mozambique.

My empirical material shows that lack of integration into GPNs leads not only to domestic construction companies losing tenders for construction work; such companies are simply not prioritised in policy-making. Although official political strategies highlight domestic SME development and a strong domestic private sector as crucial for the country's economic development, there are very few mechanisms that support domestic SMEs in Mozambique.

5.3.3 Lost in translation: the agency of Mozambican labour

Article three uses the concept of agency to examine how Mozambican workers respond to their workplace, and which factors enable or constrain workers' agency.

The divisions between Chinese and Mozambicans in the workplace give little room for productive voicing strategies. Mozambican workers may express their discontent through short strikes or brief work-halts; others may simply put up with conditions for fear of losing their jobs. The strategies employed have failed to effect real change in the workplace because of their ad hoc nature and lack of institutional support or political scale. This makes clear the importance of distinguishing between intentions and actual accomplishments in workers' strategies.

The local trade union was not seen as useful in promoting workers' strategies, as it was often brought in by the Ministry of Labour to relieve a specific conflict situation. Consequently, the workers came to associate the trade union with state officials or the company, not as being an entity that could assist them in achieving decisive power. The trade union saw this as a result of its weak position vis-à-vis large foreign companies and weak cooperating structures between the trade union and the government. The weak regulating and monitoring state agencies add to the constrained position of local labour, where Chinese lead companies

become relatively free to organise workplaces as they see fit. These challenges constrain the workers' strategies and their opportunities to result in negotiations and possible change.

Lack of commitment was defining of workers' attitudes. Low commitment is connected to the companies' use of functional flexibility, where workers feel they have no individual value in the workplace and set to doing simple, unskilled, physically hard work. Furthermore, payment is also a factor: the workers do not feel valued, as they receive very low wages despite working longer hours and with heavier workload than in other local jobs. Lack of commitment further relates to communication: the strict separation of Chinese and Mozambican workers limits the potential for creating better personal relationships between individuals of different nationalities. Workers clearly expressed the wish to leave their current job situation, but tough labour market conditions prevented them from pursuing that option.

In sum, labour agency emerges as constrained on three levels. First, the degree of distance between Chinese and Mozambicans in the workplace leaves little room for participation and voice strategies. Second, workers lack institutional support to react to company violations of their rights and labour regulations. Third, workers lack alternative employment opportunities in the local labour market. Mozambican labour is positioned on the margins of the production network, with weak capacity for improvement. Thus, integration into this GPN through employment has involved only limited social upgrading.

5.4 Global production networks as a theoretical lens

This research project has also been guided by an overarching theoretical question: how can GPN theory be applied in explaining the role of Chinese construction projects in development processes in Mozambique? The main insight gained from applying GPN theory here has been the focus on value and how value is created, enhanced and captured in a given area. The latter is especially important: how value can be captured to benefit economic development (Coe et al. 2004, 475). As discussed in chapter two of this synopsis, GPN theory offers insights into how value can be captured to benefit economic development in place. This led to my focus on domestic backward linkages as local workers, suppliers and subcontractors – in line with

Dicken's (2011) focus on local firm stimulus, knowledge diffusion, and local employment creation – as crucial determinants of value capture.¹⁵

How then to explain value capture (or lack thereof) and its determinants in the Mozambican context? My data material shows that value is captured mainly through the use of local workers. However, this possibility has been not fully exploited, given the low levels of skills and knowledge diffusion through this linkage, as discussed in article three. Beyond local workers, there has been very little direct value capture in the Chinese-led construction projects studied here, as discussed in articles one and two.

Chapter two also notes how GPN scholars have not really focused on the construction industry. This is partly because construction is not understood as a productive activity, but instead as constituting projects thought to support and encourage private investment and thus further growth in industry and trade. Still, the final construction project is very much the result of actor networks that stretch across borders and continents, and the insights from GPN theory have proven extremely valuable for creating the analytical framework that explains how economic activities in construction are implemented and organised. Moreover, GPN theory brings together the analyses of Chinese-led construction projects in Mozambique, serving as an overarching theoretical lens through which to understand the relations between states, firms, labour and economic development in Mozambique. The construction industry is well suited as a basis for exploring the linkages among these different actors – and also, given the strong connections between the public sector and demand for construction work, as a way of bringing the state back into GPN analyses.

A main theory contribution from this research project comes from connecting GPN theory and linkage theory. My approach to theorising domestic backward linkages serves to operationalise value capture as articulated in GPN theory. Moreover, it provides guidance in exploring economic development beyond economic growth. Exploring agency of different actors in these value-capture processes has enabled me to explain how actors understand, work and re-work their position in production networks. These connections have made it possible to include economic and political processes at several geographical levels – in turn

¹⁵ Dicken (2011) also mentions capital injection, which can be, but is not necessarily, related to local linkages, as it would mainly involve tax yield from foreign-controlled operations. Such tax yields can in turn be used to promote local linkages, but this is not empirically explored in the thesis.

explaining how economic linkages in Chinese-led projects develop, and directing the focus towards missed opportunities of strategic coupling.

5.4.1 Beyond 'the China factor'

Grimm (2014) writes that no other emerging economy is facing as such strong expectations as China: 'the mere size of China and its power potential makes it a location for hopes and demands' (p. 1010). In addition to expectations about what development cooperation could and should mean for recipient countries, China has also been exposed to various forms of 'unfair' comparisons and criticism. These two avenues for addressing China's economic activities on the African continent have been symptomatic in the literature, with an exaggerated focus on what has been seen as the 'Chinese' mode, model or practice, as opposed to a traditional or Western model. But as Fejerskov et al. (2016, 1) rightly ask, 'to what extent [do] the binary concepts of new and old actors, interests, ideas and relationships adequately enable us to analyse the nature of the current dynamics of development cooperation'?

A main objective of my research project has been to explain how Chinese-led construction projects unfold in the Mozambican context. One of the clearest findings is that crucial explanatory factors lie beyond 'the China factor' – in the Mozambican political economy and the wider policy space that shapes it. This argument is strengthened by fact that, despite very different financing structures, the outcomes as to domestic economic linkages are quite similar across the three cases of Chinese-led construction projects explored in this study.

In article one, the analytical framework for exploring domestic backward linkage creation as determined by ownership, infrastructure, local capabilities and policy, helped to explain the complexity of economic development in the construction sector in a developing-country context. While the ownership aspect can be influential, it is also clear that any analysis which explains outcome solely on the basis of ownership aspects will result in skewed depictions of Chinese activity in African countries. The reasons why many African economies struggle to industrialise and diversify are much more complex. Analyses aimed at explaining how Chinese-led construction projects unfold need to move beyond the 'China factor', and pay proper attention to the contextual and historical factors that influence the economic and political climate in African host economies.

The analysis in article two seeks to contribute directly to the academic debate on the extent to which China's role as a development partner has opened up policy space and enhanced negotiating power for African governments. By focusing on the negotiating power of Mozambican officials, the analysis adds a more nuanced understanding of the agency of African countries in dealings with China. China may agree to finance projects neglected by traditional donors, but it will take more than a broader selection of financiers to get public administration to play a more assertive role in specific negotiations.

Article three is somewhat different. Here the 'China factor' is found to impact on the relationship and attitudes of workers, because the lack of common language and cultural reference-points hampers the creation of positive social relationships between the two nationalities in the workplace. However, the factors that influence how Chinese companies are allowed to organise and structure the workplace originate in the institutional framework – the weak position of construction workers and their trade union, and state officials who highlight employment generation through a quantitative lens rather than providing structures that can allow a political scale to labour struggles.

Article four takes an overarching approach, placing Chinese activities within a broader context: both among other main actors and drivers of the current infrastructure boom, and in a historical context by examining how infrastructure investments are understood and implemented in this most recent turn compared to some decades ago. Here, I find that the challenges related to weak capacities in domestic construction sectors were main concerns already in the postwar period, and have been further exacerbated through decades of privatisation processes and a return to cruder development thinking as synonymous with GDP growth. Chinese companies are major beneficiaries of the current infrastructure boom, taking advantage of the conditions created through decades of liberalisation policies.

As emphasised particularly in articles one, two and four, it is important to acknowledge that Chinese investments or development assistance cannot be understood in terms of opposition to Western ways of providing aid or doing business: the point must be to recognise how these activities intersect and overlap. The China–Africa literature often ignores the role of Western donors, although it is obvious that Chinese companies would not have been able to penetrate African markets and control entire value chains without the highly liberal investment climate promoted in African countries in recent decades (Kragelund 2009). Mozambique's history of

networks and relationships, with external actors and within its own political economy, shape how Chinese-led construction projects today unfold in the Mozambican context.

The ongoing relations that unfold between African countries and China, and the specific cases of construction work explored in this study take place within a neoliberal world order that has shaped and continues to shape international competition and industrial policies in individual developing countries. Mozambique's role as a 'donor darling' has made the Mozambican government quite responsive to the dominant policy regime in the West, seeking to facilitate the continuing inflow of foreign capital. Industrial policies that stimulate backward linkages require longer-term perspectives on industrial growth – but have systematically been downplayed in Mozambique's development strategies.

China's growing role as a development partner and financier has not changed these dynamics to any extent. In fact, Chinese companies benefit from the current policy environment, by outcompeting domestic and other foreign companies in tenders for construction work. Therefore I am inclined to agree with Taylor (2014) that engaging with China represents merely a diversification of dependency, rather than strengthening the independence of individual African states. My examination of construction projects framed as development also makes it clear that construction projects are thought to facilitate trade integration, as the hegemonic discourse has reduced economic development to GDP growth.

5.4.2 Avenues for future research

The findings of this PhD study contribute to a broad set of academic discussions – ranging from China–Africa relations, the changing architecture of international development assistance, general development discourses and industrial policies, to multi-cultural workplaces, and the role of construction and construction workers in GPNs. While this study offers insights into an emerging field of literature that acknowledges the growing heterogeneity among development actors, it also points to the shortcomings of constructed binaries between old/new, traditional/non-traditional development partners in explaining current development trajectories in African countries. The time has come to move away from polarised and politicised debates on general China–Africa thematic, and towards more nuanced, contextualised knowledge that take both 'the newness' and persisting structures into account in analysing current modes of development assistance. Let me therefore offer some suggestions for future research:

First, it is important to explore the issue of re-scaled conditionality in development projects. Are we witnessing a general trend towards project-based economic conditionality rather than macro-level political conditionality? And to what extent can economic conditions constrain policy space similarly to political conditions? How are such conditions experienced differently, and by what actors?

Second, it can be fruitful to use GPN theory in analyses that seek to explain cooperation and competition between international construction companies in African countries. This can help to promote a deeper understanding of the varying competitive advantages of international companies, possible new divisions of labour in construction projects, and serve as a lens for exploring trilateral cooperation in construction.

Thirdly, broader discussions of sustainable development should be brought into analyses of cooperation in the construction industry, to explain how African countries can engage more effectively with development partners in implementing the sustainable development goals and further realise aspirations for economic development. That would also help to expand the significance of economic development beyond growth as such.

In chapter 2, I wrote that I would reflect further on how the GPN theory deriving from European or Asian contexts holds up when situated in an African post-colonial context. The main difficulty of applying GPN theory in the Mozambican context concerns the state – its interests, strength and legitimacy. In GPN theory, the state has a crucial role in facilitating processes of strategic coupling that can enable value capture in specific places. However, such a conceptualisation seems to assume that state institutions are autonomous and informed, and with the strength and political will to monitor, regulate and penalise foreign company activity. This is not necessarily the case, as seen in the case of Mozambique. In order for the state to facilitate strategic coupling processes, it must also engage in long-term planning and development of domestic industrial capacity. Analyses that build on GPN theory must be firmly contextualised if they are to explain the dynamics and effects of production in many African economies.

6. References

- ACET, 2014. 'Growth with debt', 2014 African Transformation Report. African Centre for Economic Transformation, Accra.
- African Forum and Network on Debt and Development, 2008. 'Mapping Chinese Development Assistance in Africa'. AFRODAD, Harare.
- Ajakaiye, O., 2006. 'China and Africa: opportunities and challenges', African Union Task Force on Strategic Partnership Between Africa and the Emerging Countries of the South. AERC CREA, Addis Ababa,.
- Alden, C., 2007. *China in Africa*. Zed Books, London.
- Alden, C., 2012. 'China and Africa: The Relationship Matures'. *Strategic Analysis* 36 (5), 701-707.
- Alden, C., Chichava, S., Roque, P.C., 2014. 'China in Mozambique: Caution, Compromise and Collaboration', in: Alden, C., Chichava, S. (Eds.), *China and Mozambique: From Comrades to Capitalists*. Fanele, Sunnyside, South Africa, pp. 1-24.
- Alden, C., Davies, M., 2006. 'A profile of the operations of Chinese multinationals in Africa'. *South African journal of international affairs* 13 (1), 83-96.
- Allen, J., 2003. *Lost geographies of power*. Blackwell Publishing, Malden.
- Allen, J., 2004. 'The whereabouts of power: politics, government and space'. *Geografiska Annaler: Series B, Human Geography* 86 (1), 19-32.
- Altenburg, T., 2011. 'Industrial policy in developing countries: overview and lessons from seven country cases', The German Development Institute (DIE), Bonn.
- 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.
- Amoako, K., 2011. 'Transforming Africa: Start Now, We Can't Wait', *African Business*, pp. 24-27: <https://www.thefreelibrary.com/Transforming+Africa+-+start+now%2C+we+can%27t+wait.-a0262145478> (accessed 26.11.17)
- Amsden, A.H., 2001. *The rise of "the rest": challenges to the west from late-industrializing economies*. Oxford University Press, USA.
- Anderson, E.J., 2012. 'What does Hydrocarbon Wealth mean for Foreign Aid in Mozambique?' SAIIA Policy Briefing 50, Global Powers and Africa Programme, Johannesburg.
- Appelbaum, R.P., Gereffi, G., 1994. 'Power and profits in the apparel commodity chain', in: Bonachich, E., L. Cheng, N. Chinchilla, N. Hamilton, and P. Ong (Eds.) *Global production: The apparel industry in the Pacific Rim*, pp. 42-62.
- Arewa, O.B., 2016. 'Constructing Africa: Chinese Investment, Infrastructure Deficits, and Development'. *Cornell International Law Journal* 49 (39), 101-139.
- Bair, J., 2005. 'Global capitalism and commodity chains: looking back, going forward'. *Competition & Change* 9 (2), 153-180.

- Bair, J., 2008a. 'Analysing global economic organization: embedded networks and global chains compared'. *Economy and Society* 37 (3), 339-364.
- Bair, J., 2008b. *Frontiers of commodity chain research*. Stanford University Press, Stanford.
- Bair, J., 2009. 'Global Commodity Chains: Geneology and Review', in: Bair, J. (Ed.), *Frontiers of commodity chain research*. Stanford University Press, Stanford, pp. 1-34.
- Barrientos, S., Gereffi, G., Rossi, A., 2010. 'Economic and social upgrading in global production networks: Developing a framework for analysis'. *International Labor Review* 150 (3-4), 319-340.
- Bates, R., 2012. 'Africa Through Western Eyes: The World's Dark Continent or Capitalism's Shining Light?', Think Africa Press: <http://www.thehabarinetwork.com/africa-through-western-eyes-the-worlds-dark-continent-or-capitalisms-shining-light> (accessed 26.11.17)
- Becker, S., Bryman, A., Sempik, J., 2006. *Defining 'quality' in social policy research*. Social Policy Association, Suffolk.
- Behuria, P., 2017. 'The Cautious Return of Import Substitution in Africa', Willoughby, S. (Ed.), Africa at LSE, Firoz Lalji Centre for Africa, LSE: <http://blogs.lse.ac.uk/africaatlse/2017/06/12/the-cautious-return-of-import-substitution-in-africa/> (accessed 14.06.17)
- Bermingham, F., 2014. 'China Launches AIIB to Rival World Bank Without US Allies After Pressure from Washington', International Business Times: <http://www.ibtimes.co.uk/china-launches-aiib-rival-world-bank-without-us-allies-after-pressure-washington-1471582> (accessed 07.06.16)
- Bernard, H.R., 2011. *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman Altamira, Lanham, Maryland.
- Blaikie, N., 2007. *Approaches to Social Enquiry: Advancing Knowledge*. Polity Press, Cambridge.
- Bosten, E., 2006. 'China's Engagement in the Construction Industry of Southern Africa: the case of Mozambique', Asian and other Drivers of Global Change Workshop, St. Petersburg, January, pp. 19-20.
- Bradshaw, M., Stratford, E., 2010. 'Qualitative research design and rigour', in: Hay, I. (Ed.), *Qualitative Research Methods in Human Geography*. Oxford University Press, Ontario, pp. 117-129.
- Bryman, A., Becker, S., Sempik, J., 2008. 'Quality Criteria for Quantitative, Qualitative and Mixed Methods Research: A View from Social Policy'. *International Journal of Social Research Methodology* 11 (4), 261-276.
- Bräutigam, D., Xiaoyang, T., 2011. 'African Shenzhen: China's special economic zones in Africa'. *The Journal of Modern African Studies* 49 (01), 27-54.
- Burawoy, M., 1985. *The politics of production: Factory regimes under capitalism and socialism*. Verso, London.
- Burke, C., 2007. 'China's Entry into Construction Industries in Africa: Tanzania and Zambia as Case Studies'. *China Report* 43 (3), 323-336.
- Buur, L., Therkildsen, O., Hansen, M.W., Kjær, M., 2013. 'Extractive Natural Resource Development: Governance, Linkages and Aid'. DIIS Reports, Danish Institute for International Studies.
- Carmody, P., Kragelund, P., 2016. 'Who is in Charge? State Power and Agency in Sino-African Relations'. *Cornell International Law Journal* 49 (1), 1-23.
- Carswell, G., De Neve, G., 2013. 'Labouring for global markets: Conceptualising labour agency in global production networks'. *Geoforum* 44 (0), 62-70.
- Castree, N., Coe, N.M., Ward, K., Samers, M., 2004. *Spaces of work: Global capitalism and geographies of labour*. Sage, London.

- Chang, H.-J., 2004. 'Regulation of foreign investment in historical perspective'. *The European Journal of Development Research* 16 (3), 687-715.
- Chen, C., Chiu, P., Orr, R., Goldstein, A., 2007. 'An empirical analysis of Chinese construction firms' entry into Africa', International Symposium on Advancement of Construction Management and Real Estate, pp. 8-13.
- Chen, C., Orr, R.J., 2009. 'Chinese contractors in Africa: Home government support, coordination mechanisms, and market entry strategies'. *Journal of Construction Engineering and Management* 135 (11), 1201-1210.
- Christensen, B.V., 2010. 'China in Africa: A macroeconomic perspective'. Working Paper no. 230, Center for Global Development.
- Coe, N.M., Dicken, P., Hess, M., 2008. 'Global production networks: realizing the potential'. *Journal of Economic Geography* 8, 271-295. doi:10.1093/jeg/lbn002
- Coe, N.M., Hess, M., Yeung, H.W.C., Dicken, P., Henderson, J., 2004. 'Globalizing' regional development: a global production networks perspective'. *Transactions of the institute of British Geographers* 29 (4), 468-484.
- Coe, N.M., Jordhus-Lier, D.C., 2011. 'Constrained agency? Re-evaluating the geographies of labour'. *Progress in Human Geography* 35 (2), 211-233.
- Coe, N.M., Yeung, H.W.-C., 2015. *Global production networks: Theorizing economic development in an interconnected world*. Oxford University Press, Oxford.
- Cohen, N., Arieli, T., 2011. 'Field research in conflict environments: Methodological challenges and snowball sampling'. *Journal of Peace Research* 48 (4), 423-435.
- Corkin, L., 2012. 'Chinese construction companies in Angola: A local linkages perspective'. *Resources Policy* 37 (4), 475-83
- Corkin, L., 2013. *Uncovering African agency: Angola's management of China's credit lines*. Ashgate Publishing, Ltd.
- Corkin, L., Burke, C., 2006. 'China's interest and activity in Africa's construction and infrastructure sectors'. Report prepared for DFID China. Stellenbosch, South Africa: Centre for Chinese Studies.
- Crabtree, A., Rouncefield, M., Tolmie, P., 2012. 'Doing Fieldwork', in: Crabtree, A., Rouncefield, M., Tolmie, P. (Eds.), *Doing Design Ethnography*. Springer, London, pp. 89-109.
- Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., Ramaswamy, K., 2014. 'Governments as owners: State-owned multinational companies'. *Journal of International Business Studies* 45 (8), 919-942.
- Cumbers, A., Nativel, C., Routledge, P., 2008. 'Labour agency and union positionalities in global production networks'. *Journal of Economic Geography* 8 (3), 369-387.
- Cunguara, B., Hanlon, J., 2012. 'Whose Wealth Is It Anyway? Mozambique's Outstanding Economic Growth with Worsening Rural Poverty'. *Development and Change* 43 (3), 623-647.
- de Mariz, C.L., Ménard, C., Abeillé, B., 2014. *Public Procurement Reforms in Africa: Challenges in Institutions and Governance*. Oxford University Press, Oxford.
- Delmar, C., 2010. "'Generalizability" as Recognition: Reflections on a Foundational Problem in Qualitative Research'. *Qualitative Studies* 1 (2), 115-128.
- Denzin, N.K., Lincoln, Y.S., 2011. *The SAGE handbook of qualitative research*. Sage Thousand Oaks, California.
- Dicken, P., 1994. 'Global-Local Tensions: Firms and States in the Global Space-Economy'. *Economic Geography* 70 (2), 101-128.
- Dicken, P., 2011. *Global Shift: Reshaping the Global Economic Map in the 21st Century*, 7 ed. Sage Publications, London.

- Dicken, P., Kelly, P.F., Olds, K., Wai-Chung Yeung, H., 2001. 'Chains and networks, territories and scales: towards a relational framework for analysing the global economy'. *Global networks* 1 (2), 89-112.
- Dietz, T., Havnevik, K., Kaag, M., Oestigaard, T., 2011. 'African engagements: on whose terms? Africa negotiating an emerging multipolar world', in: Dietz, T., Havnevik, K., Kaag, M. (Eds.), *African Engagements: Africa Negotiating an Emerging Multipolar World*. Brill, pp 1-32.
- Drewer, S., 1980. 'Construction and development: a new perspective'. *Habitat International* 5 (3), 395-428.
- Dussel Peters, E., 2008. 'GCCs and development: A conceptual and empirical review'. *Competition & Change* 12 (1), 11-27.
- Economic Commission for Africa, 2012. 'Unleashing Africa's Potential as a Pole of Global Growth'. Economic Commission for Africa and the African Union, Addis Ababa.
- Economic Commission for Africa, 2013. 'Economic Report on Africa 2013: Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation'. Economic Commission for Africa, Addis Ababa.
- Edum-Fotwe, F.T., McCaffer, R., 2000. 'Developing project management competency: perspectives from the construction industry'. *International Journal of Project Management* 18 (2), 111-124.
- England, K.V.L., 1994. 'Getting Personal: Reflexivity, Positionality, and Feminist Research'. *The Professional Geographer* 46 (1), 80-89.
- Ernst & Young 2011. 'It's Time for Africa', Ernst & Young's 2011 Africa Attractiveness Survey. Ernst and Young, London.
- Evans, P.B., 1995. *Embedded autonomy: States and industrial transformation*. Princeton University Press, Princeton.
- Fejerskov, A.M., Lundsgaarde, E., Cold-Ravnikilde, S., 2016. 'Recasting the "New Actors in Development" Research Agenda'. *The European Journal of Development Research*, 1-16.
- Ferguson, J., 2006. *Global shadows: Africa in the neoliberal world order*. Duke University Press, Durham, London.
- Fernández-Solís, J.L., 2008. 'The systemic nature of the construction industry'. *Architectural Engineering and Design Management* 4 (1), 31-46.
- Foster, V., Butterfield, W., Chen, C., 2009. 'Building bridges: China's growing role as infrastructure financier for Sub-Saharan Africa'. World Bank Publications.
- French, H., 2012. 'The Next Asia Is Africa: Inside the Continent's Rapid Economic Growth', *Atlantic Monthly*: <https://www.theatlantic.com/international/archive/2012/05/the-next-asia-is-africa-inside-the-continent-rapid-economic-growth/257441/> (accessed 26.11.17)
- Fukuyama, F., 2004. 'The imperative of state-building'. *Journal of democracy* 15 (2), 17-31.
- Gadzala, A.W., 2015. *Africa and China: How Africans and Their Governments are Shaping Relations with China*. Rowman & Littlefield, Lanham.
- George, A.L., Bennett, A., 2005. *Case studies and theory development in the social sciences*. Mit Press, Cambridge, Massachusetts.
- Gereffi, G., 1999. 'International trade and industrial upgrading in the apparel commodity chain'. *Journal of International Economics* 48 (1), 37-70.
- Gereffi, G., Humphrey, J., Kaplinsky, R., 2001. 'Introduction: Globalisation, value chains and development'. *IDS Bulletin* 32 (3), 1-8.
- Gereffi, G., Korzeniewicz, M., 1994. *Commodity Chains and Global Capitalism*. Praeger, Westport.
- Gill, B., Reilly, J., 2007. 'The tenuous hold of China Inc. in Africa'. *Washington Quarterly* 30 (3), 37-52.

- Givón, T., 2014. *Mind, code and context: Essays in pragmatics*. Psychology Press, Hillsdale.
- Glassman, J., 2011. 'The geo-political economy of global production networks'. *Geography Compass* 5 (4), 154-164.
- Gobo, G., 2008. 'Re-conceptualizing generalization: Old issues in a new frame'. in: Pertti Alasuutari, P. L. Bickman, J. Brannen. (Eds.), *The SAGE handbook of social research methods*. Sage, pp 193-213.
- Goger, A., Hull, A., Barrientos, S., Gereffi, G., Godfrey, S., 2014. 'Capturing the Gains in Africa: Making the most of global value chain participation'. Duke Center on Globalization, Governance & Competitiveness at the Social Science Research Institute.
- Grimm, S., 2014. 'China–Africa Cooperation: promises, practice and prospects'. *Journal of Contemporary China* 23 (90), 993-1011.
- Guest, G., Namey, E., Mitchell, M., 2013. 'Qualitative research: defining and designing'. *Collecting Qualitative Data: A Field Manual for Applied Research*, Sage, California, pp 1-40.
- Halkier, B., 2011. 'Methodological practicalities in analytical generalization'. *Qualitative inquiry* 17 (9), 787-797.
- Hammersley, M., 2010. *Methodology: Who needs it?* Sage, London.
- Hammersley, M., Atkinson, P., 2007. *Ethnography: Principles in practice*. Routledge, Oxon.
- Hansen, A., Wethal, U., 2015a. Emerging economies and challenges to sustainability, in: Hansen, A., Wethal, U. (Eds.), *Emerging Economies and Challenges to Sustainability: Theories, Strategies, Local Realities*. Routledge, Oxon, pp. 3-18.
- Hansen, A., Wethal, U., 2015b. Global sustainability and the rise of the South: development patterns and emerging challenges, in: Hansen, A., Wethal, U. (Eds.), *Emerging economies and challenges to sustainability. Theories, strategies, local realities* Routledge, Oxon, pp. 263-274
- Haraway, D., 1988. 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective'. *Feminist Studies* 14 (3), 575-599.
- Harman, S., Brown, W., 2013. 'In from the margins? The changing place of Africa in International Relations'. *International affairs* 89 (1), 69-87.
- Hastrup, K., 2004. 'Getting it right: Knowledge and evidence in anthropology'. *Anthropological Theory* 4 (4), 455-472.
- Haugen, H.Ø., 2013. *Changing markets from below. Trade and the movement of people between China and Africa*, Department of Sociology and Human Geography. University of Oslo, Oslo.
- Haugen, H.Ø., Carling, J., 2005. 'On the edge of the Chinese diaspora: The surge of baihuo business in an African city'. *Ethnic and Racial Studies* 28 (4), 639-662.
- Henderson, J., Dicken, P., Hess, M., Coe, N., Yeung, H.W.-C., 2002. 'Global production networks and the analysis of economic development'. *Review of international political economy* 9 (3), 436-464.
- Herod, A., 2001. 'Labor Internationalism and the Contradictions of Globalization: Or, Why the Local is Sometimes Still Important in a Global Economy'. *Antipode* 33 (3), 407-426.
- Hess, M., 2004. "'Spatial" relationships? Towards a reconceptualization of embedded ness'. *Progress in Human Geography* 28 (2), 165-186.
- Hess, M., Yeung, H.W.-c., 2006. 'Whither global production networks in economic geography? Past, present and future'. *Environment and Planning A* 38 (6), 1193-1204.
- Hirschman, A.O., 1970. *The strategy of economic development*, 14 ed. Yale University Press, New Haven and London.
- Hirschman, A.O., 1981. *Essays in trespassing: Economics to politics and beyond*. Cambridge University Press, Cambridge.

- Hopkins, P.E., 2007. 'Positionalities and knowledge: Negotiating ethics in practice.' *An International Journal for Critical Geographies* 6 (3), 386-394.
- Hopkins, T.K., Wallerstein, I., 1977. *Patterns of development of the modern world-system*. Review (Fernand Braudel Center), 111-145.
- Hopkins, T.K., Wallerstein, I., 1986. *Commodity chains in the world-economy prior to 1800*. Review (Fernand Braudel Center) 10 (1), 157-170.
- Horner, R., 2016. 'A new economic geography of trade and development? Governing South-South trade, value chains and production networks'. *Territory, Politics, Governance* 4 (4), 400-420.
- Horner, R., 2017. 'Beyond facilitator? State roles in global value chains and global production networks'. *Geography Compass* 11 (2), 1-13.
- Hughes, A., McEwan, C., Bek, D., 2015. 'Postcolonial perspectives on global production networks: insights from Flower Valley in South Africa'. *Environment and Planning A* 47 (2), 249-266.
- Ilhéu, F., 2010. 'The Role of China in the Portuguese Speaking African Countries: The Case of Mozambique'. *Economia Global e Gestão* 15 (3), 27-41.
- ILO, 2001. 'The construction industry in the twenty-first century: Its image, employment prospects and skill requirements', Tripartite Meeting on the Construction Industry in the Twenty-first Century: Its Image, Employment Prospects and Skill Requirements. International Labour Organization, p. 72.
- Jerónimo, M.P., 2012. 'Business Plan: uma empresa portuguesa do setor de construção no mercado moçambicano'. MSc in Business Administration at Universidade Católica Portuguesa.
- Kelly, P.F., 2013. 'Production networks, place and development: Thinking through Global Production Networks in Cavite, Philippines'. *Geoforum* 44, 82-92.
- Kiil, M.B., Knutsen, H.M., 2016. 'Agency by exit: Swedish nurses and the "Not below 24,000" movement'. *Geoforum* 70, 105-114.
- Knutsen, C.H., 2013. 'Democracy, state capacity, and economic growth'. *World Development* 43, 1-18.
- Kragelund, P., 2009. 'Knocking on a wide-open door: Chinese investments in Africa'. *Review of African Political Economy* 36 (122), 479-497.
- Kragelund, P., 2015. 'Towards convergence and cooperation in the global development finance regime: closing Africa's policy space?' *Cambridge Review of International Affairs* 28 (2), 246-262.
- Kvale, S., 1997. *Interview - en introduksjon til det kvalitative forskningsinterview*. Hans Reitzels Forlag, København.
- Lampel, J., 2001. 'The core competencies of effective project execution: the challenge of diversity'. *International Journal of Project Management* 19 (8), 471-483.
- Lee, M.C., 2006. 'The 21st century scramble for Africa'. *Journal of Contemporary African Studies* 24 (3), 303-330.
- Lee, Y.-S., Heo, I., Kim, H., 2014. 'The role of the state as an inter-scalar mediator in globalizing liquid crystal display industry development in South Korea'. *Review of international political economy* 21 (1), 102-129.
- Lin, J., Chang, H.J., 2009. 'Should Industrial Policy in developing countries conform to comparative advantage or defy it? A debate between Justin Lin and Ha-Joon Chang'. *Development Policy Review* 27 (5), 483-502.
- Lin, J.Y., 2011. 'New Structural Economics: A Framework for Rethinking Development'. *The World Bank Research Observer*, Washington.
- Lin, J.Y., Wang, Y., 2015. 'China's Development cooperation: Ideas, opportunities and finances', Working Paper. FerDi, Clermont-Ferrand, pp. 1-30.

- Lopes, M.A.R., 2007. 'Desafios e mudanças nas empresas de construção civil e as relações de trabalho'. *Cadernos de Estudos Africanos* (11/12), 221-236.
- Macauhub, 2015. 'Angola e Moçambique entre os países africanos com melhores perspectivas de crescimento', Macauhub, Macau: <https://macauhub.com.mo/pt/feature/angola-and-mozambique-among-african-countries-with-best-growth-prospects/> (accessed 28.02.17)
- Magnusson, O.A., Knutsen, H.M., Endresen, S.B., 2010. 'Between coercion and consent: Understanding post-Apartheid workplace regimes', in: Bergene, A.C., Endresen, S.B., Knutsen, H.M. (Eds.), *Missing links in human geography*. Ashgate, Surrey, Burlington, pp. 169-181.
- Maugeri, N., Nhabinde, V., Quintella, R., 2015. 'Estudo de base para a elaboração de políticas e estratégias de desenvolvimento da indústria de construção e materiais de construção em Moçambique'. International Growth Center, London.
- Mawdsley, E., 2015. 'Development geography 1: Cooperation, competition and convergence between "North" and "South"'. *Progress in Human Geography* 41 (1), 108-117.
- Mayer, F.W., Pickles, J., 2011. 'Re-embedding governance: Global apparel value chains and decent work'. *International Labour Review* 150. Working Paper 2010/01, 1-23.
- Mbachu, J., Nkado, R., 2007. 'Factors constraining successful building project implementation in South Africa'. *Construction Management and Economics* 25 (1), 39-54.
- McLafferty, S.L., 1995. 'Counting for Women'. *The Professional Geographer* 47 (4), 436-442.
- Meidan, M., 2006. 'China's Africa policy: business now, politics later'. *Asian Perspective* 30 (4), 69-93.
- Milberg, W., Winkler, D., 2011. 'Economic and social upgrading in global production networks: Problems of theory and measurement'. *International Labour Review* 150 (3-4), 341-365.
- Mlinga, R.S., Wells, J., 2002. 'Collaboration between formal and informal enterprises in the construction sector in Tanzania'. *Habitat International* 26 (2), 269-280.
- Mohan, G., Lampert, B., 2013. 'Negotiating China: Reinserting African agency into China–Africa relations'. *African Affairs* 112 (446), 92-110.
- Mohan, G., Power, M., 2008. 'New African Choices? The Politics of Chinese Engagement'. *Review of African Political Economy* 35 (115), 23-42.
- Mohan, G., Power, M., 2009. 'Africa, China and the 'new' economic geography of development'. *Singapore Journal of Tropical Geography* 30 (1), 24-28.
- Mold, A., 2012. 'Will it all end in tears? Infrastructure spending and African development in historical perspective'. *Journal of International Development* 24 (2), 237-254.
- Monson, J., 2009. *Africa's Freedom Railway. How a Chinese Development Project Changed Lives and Livelihoods in Tanzania*. Indiana University Press, Bloomington.
- Morris, M., Kaplinsky, R., Kaplan, D., 2012a. *One Thing Leads to Another: Promoting Industrialisation by Making the Most of the Commodity Boom in Sub-Saharan Africa*. LULU Press.
- Morris, M., Kaplinsky, R., Kaplan, D., 2012b. "'One thing leads to another"—Commodities, linkages and industrial development'. *Resources Policy* 37 (4), 408-416.
- Moss, T., Rose, S., 2006. 'China ExIm Bank and Africa: new lending, new challenges'. CGD notes, Centre for Global Development.
- Mullings, B., 1999. 'Insider or outsider, both or neither: some dilemmas of interviewing in a cross-cultural setting'. *Geoforum* 30 (4), 337-350.
- Murphy, J.T., 2008. 'Economic geographies of the Global South: missed opportunities and promising intersections with development studies'. *Geography Compass* 2 (3), 851-873.

- NESH, 2016. 'Forskningsetiske retningslinjer for samfunnsvitenskap, humaniora, juss og teologi'. De nasjonale forskningsetiske komiteene, Oslo.
- Nichols, T., Cam, S., Chou, W.-c.G., Chun, S., Zhao, W., Feng, T., 2004. 'Factory regimes and the dismantling of established labour in Asia: a review of cases from large manufacturing plants in China, South Korea and Taiwan'. *Work, Employment & Society* 18 (4), 663-685.
- Njoh, A.J., 2000. 'Transportation infrastructure and economic development in sub-Saharan Africa'. *Public Works Management & Policy* 4 (4), 286-296.
- OECD, 2013. 'Mozambique - OECD Investment Policy Review'. OECD, Washington DC.
- Ofori, G., 1984. 'Improving the construction industry in declining developing economies'. *Construction Management and Economics* 2 (2), 127-132.
- Ofori, G., 1990. *The construction industry: Aspects of its economics and management*. NUS Press.
- Ofori, G., 1993. 'Research on construction industry development at the crossroads'. *Construction Management and Economics* 11 (3), 175-185.
- Ofori, G., 2000a. 'Challenges of construction industries in developing countries: Lessons from various countries', 2nd International Conference on Construction in Developing Countries: Challenges Facing the Construction Industry in Developing Countries, Gaborone, November, pp. 15-17.
- Ofori, G., 2000b. 'Globalization and construction industry development: research opportunities'. *Construction Management & Economics* 18 (3), 257-262.
- Ofori, G., 2003. 'Frameworks for analysing international construction'. *Construction Management and Economics* 21 (4), 379-391.
- Ofori, G., 2007. 'Construction in developing countries'. *Construction Management and Economics* 25 (1), 1-6.
- Oya, C., 2006. 'The political economy of development aid as main source of foreign finance for poor African countries: loss of policy space and possible alternatives from East Asia', Second Annual Conference of the International Forum on the Comparative Political Economy of Globalization, Renmin University of China, Beijing.
- Oya, C., 2008. 'Greater Africa-China Economic Cooperation: Will This Widen 'Policy Space'?' *Development Viewpoint* (4). SOAS
- Pattenden, J., 2016. 'Working at the margins of global production networks: local labour control regimes and rural-based labourers in South India'. *Third World Quarterly* 37 (10), 1809-1833.
- Patton, M.Q., 2002. *Qualitative research & evaluation methods*, 3 ed. Sage Publications, Thousand Oaks.
- Peck, J., 1996. *Work-place: The social regulation of labor markets*. Guilford Press, New York.
- Polenske, K.R., Sivitanides, P., 1990. 'Linkages in the construction sector'. *The Annals of Regional Science* 24 (2), 147-161.
- Polit, D.F., Beck, C.T., 2010. 'Generalization in quantitative and qualitative research: Myths and strategies'. *International journal of nursing studies* 47 (11), 1451-1458.
- Pollard, J., McEwan, C., Laurie, N., Stenning, A., 2009. 'Economic geography under postcolonial scrutiny'. *Transactions of the institute of British Geographers* 34 (2), 137-142.
- Pratt, G., Kindon, S., Pain, R., Kesby, M., 2007. 'Working with migrant communities: Collaborating with the Kalayaan Centre in Vancouver, Canada'. In: S Kindon, R Pain, M Kesby (Eds) *Participatory Action Research: Connecting People, Participation and Place*, Routledge, London, pp, 95-103.
- Radelet, S.C., 2010. *Emerging Africa: How 17 countries are leading the way*. CGD Books, Washington DC.

- Raftery, J., Pasadilla, B., Chiang, Y., Hui, E.C., Tang, B.-S., 1998. 'Globalization and construction industry development: implications of recent developments in the construction sector in Asia'. *Construction Management & Economics* 16 (6), 729-737.
- Randeria, S., 2007. 'The state of globalization: Legal plurality, overlapping sovereignties and ambiguous alliances between civil society and the cunning state in India'. *Theory, Culture & Society* 24 (1), 1-33.
- Rickard, S.J., Kono, D.Y., 2014. 'Think globally, buy locally: International agreements and government procurement'. *The Review of International Organizations* 9 (3), 333-352.
- Robinson, D., 2011. 'The Political Economy of China in Africa: The Case of Mozambique', 34th AFSAAP Conference, Finders University, p. 19.
- Rogaly, B., 2009. 'Spaces of Work and Everyday Life: Labour Geographies and the Agency of Unorganised Temporary Migrant Workers'. *Geography Compass* 3 (6), 1975-1987.
- Rose, G., 1997. 'Situating knowledges: positionality, reflexivities and other tactics'. *Progress in Human Geography* 21 (3), 305-320.
- Rotberg R., 2015. 'China's economic slowdown threatens African progress', Khan, S., The Conversation: <http://theconversation.com/chinas-economic-slowdown-threatens-african-progress-49544> (accessed 15.01.17)
- Schoenberger, E., 1991. 'The corporate interview as a research method in economic geography'. *The Professional Geographer* 43 (2), 180-189.
- Selwyn, B., 2011. 'Beyond firm-centrism: re-integrating labour and capitalism into global commodity chain analysis'. *Journal of Economic Geography* 12 (1), 205-226.
- Shelton, G., 2001. 'China and Africa: Building an economic partnership'. *South African journal of international affairs* 8 (2), 111-119.
- Skocpol, T., 1985. 'Bringing the state back in', in: Evans, P.B., Rueschemeyer, D., Skocpol, T. (Eds.), *Bringing the state back in*. Cambridge University Press, Cambridge.
- Smith, K.E., 2006. 'Problematizing power relations in "elite interviews"'. *Geoforum* 37 (4), 643-653.
- Sparke, M., 2006. 'Political geography: political geographies of globalization (2)-governance'. *Progress in Human Geography* 30 (2), 1-16.
- Spencer, L., Ritchie, J., Lewis, J., Dillon, L., 2003. 'Quality in qualitative evaluation: a framework for assessing research evidence', Government Chief Social Researcher's Office, Capinet Office: <http://dera.ioe.ac.uk/21069/2/a-quality-framework-tcm6-38740.pdf> (accessed 26.11.17)
- Stevenson, W.B., Greenberg, D., 2000. 'Agency and social networks: Strategies of action in a social structure of position, opposition, and opportunity'. *Administrative Science Quarterly* 45 (4), 651-678.
- Sumner, A., Tribe, M.A., 2008. *International development studies: theories and methods in research and practice*. Sage, London.
- Sun, Y., 2014. 'Africa in China's foreign policy'. The Brookings Institution.
- Svennevig, J., 2001. 'Abduction as a methodological approach to the study of spoken interaction'. *Norskraft* 103, 1-22.
- Sæther, E., 2006. 'Fieldwork as coping and learning', in: Heimer, M., Thøgersen, S. (Eds.), *Doing fieldwork in China*. University of Hawaii Press Honolulu, p. 42.
- Taylor, I., 2010. *The International Relations of Sub-Saharan Africa*. Bloomsbury Publishing, London, New York.
- Taylor, I., 2014. *Africa rising? BRICS-diversifying dependency*. James Currey, Boydell & Brewer Ltd, Suffolk.
- Taylor, I., 2016. 'Dependency redux: why Africa is not rising'. *Review of African Political Economy* 43 (147), 8-25.

- Thagaard, T., 2009. *Systematikk og Innlevelse - en innføring i kvalitativ metode*, 3 ed. Fagbokforlaget Vigmosatd & Bjørke AS, Bergen.
- The Economist, 2011. 'Africa rising', The Economist: <http://www.economist.com/node/21541015> (accessed 28.02.17)
- The Economist, 2013. 'A hopeful continent', The Economist: <http://www.economist.com/news/special-report/21572377-african-lives-have-already-greatly-improved-over-past-decade-says-oliver-august> (accessed 26.11.17)
- Tjora, A., 2010. *Kvalitative forskningsmetoder i praksis*. Gyldendal Norsk Forlag, Oslo.
- Turin, D., 1973. 'The construction industry: its economic significance and its role in development', University college environmental research group, UCERG. London.
- Turin, D.A., 1980. 'What do we mean by building?' *Habitat International* 5 (3-4), 271-288.
- Wade, R., 2003. 'What strategies are viable for developing countries today? The World Trade Organization and the shrinking of "development space"'. *Review of international political economy* 10 (4), 621-644.
- Wallerstein, I., 1974. *The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth century*. Academic Press, New York.
- Wang, C., Flam, D., 2007. 'Bridging the gap: Experiences and attitudes in Sino-African relations', China Rights Forum, pp. 196-208.
- Wethal, U., 2011. 'Strategies of avoidance. Value chain reactions in the Durban clothing industry', Department of Sociology and Human Geography. University of Oslo Oslo.
- Wethal, U., 2015. 'Searching for sustainability in Mozambique's development strategy', in: Hansen, A., Wethal, U. (Eds.), *Emerging Economies and Challenges to Sustainability: Theories, Strategies, Local Realities*. Routledge, Oxon.
- Whitfield, L., Buur, L., 2014. 'The politics of industrial policy: ruling elites and their alliances'. *Third World Quarterly* 35 (1), 126-144.
- Whitfield, L., Fraser, A., 2010. 'Negotiating Aid: The structural conditions shaping the negotiating strategies of African governments'. *International Negotiation* 15 (3), 341-366.
- Wind, G., 2008. 'Negotiated interactive observation: Doing fieldwork in hospital settings'. *Anthropology & Medicine* 15 (2), 79-89.
- Wolcott, H.F., 1994. *Transforming qualitative data: Description, analysis, and interpretation*. Sage, Thousand Oaks.
- 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.
- Yin, R.K., 1981. 'The case study crisis: Some answers'. *Administrative Science Quarterly* 26 (1), 58-65.
- Zawdie, G., Langford, D., 2002. 'Influence of construction-based infrastructure on the development process in Sub-Saharan Africa'. *Building Research & Information* 30 (3), 160-170.
- Zawdie, G., Murray, M., 2013. 'The role of construction and infrastructure development in the mitigation of poverty and disaster vulnerability in developing countries', in: Murray, M., Dainty, A. (Eds.), *Corporate Social Responsibility in the Construction Industry*. Taylor & Francis, Oxon, pp. 73-97.
- Zhang, C., Gutman, J., 2015. 'Aid procurement and the development of local industry: a question for Africa'. Brookings Global Working Paper Series. Working Paper 88, Washington: Brookings.
- Öz, Ö., 2001. 'Sources of competitive advantage of Turkish construction companies in international markets'. *Construction Management & Economics* 19 (2), 135-144.

Part II

Article 1: Beyond the China factor: Challenges to backward linkages in the Mozambican construction sector

Wethal, U. (forthcoming 2018) 'Beyond the China factor: Challenges to backward linkages in the Mozambican construction sector,' *Journal of Modern African Studies*, 56 (2).

Article 2: Passive Hosts or Demanding Stakeholders? Understanding Mozambique's Negotiating Power in the Face of China

Wethal, U. (2017) 'Passive Hosts or Demanding Stakeholders? Understanding Mozambique's Negotiating Power in the Face of China,' *Forum for Development Studies*, 44 (3): 493-516.
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Article 3: Workplace regimes in Sino-Mozambican construction projects: Resentment and tension in a divided workplace

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Article 4: Building Africa's infrastructure: Reinstating history in infrastructure debates

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