

Post-Commodity Africa: Industrial Strategy and Systems as Assemblage.

Pádraig Carmody, Associate Professor of Geography, Trinity College Dublin and University of Johannesburg. carmodyp@tcd.ie +353-1-8961243, Museum Building, TCD, Dublin 2, Ireland.

Global development and development theory are arguably in crisis (Selwyn 2014). The development crisis manifests in issues ranging from the continuing ramifications and impact of the global financial crisis (Lewis 2011; Crouch 2015) to climate change (Klein 2014; Parr 2013; Parenti 2011), to increasing numbers of people living in poverty in much of the developing world, particularly Africa (Beegle et al. 2016).

The imminent force of globalisation appears to many to be overwhelming, and according to some inevitable and unstoppable (Clinton 2005). This has led some analysts to write about a new era of the 'post-political' (Swyngedouw 2010) or 'post-democracy' (Crouch 2004). However, human societies, economies and polities are complex and characterised by socio-spatial dialectics, such as Polanyian 'double movements' (Polanyi 1944).

Chakrabarty (2008) has written about what he calls 'History 1', which is a discourse in which all societies are meant to be on a teleological path to progress laid out by Europe and North America. However the reality more closely accords to what he calls 'History II', which is the much more messy reality of actually existing human interaction, shaped not only by the seemingly powerful, but also those holding more subaltern positions.

Geographers have recently drawn on this theory. For example Derickson (2015, 647) discusses what she calls 'Urbanization 1' and 'Urbanization 2'... Urbanization 1 is exemplified by the planetary urbanization thesis that posits the complete urbanization of society, whereas Urbanization 2 is characterized by a more diverse set of interventions, united by a political and epistemological strategy of refusing Eurocentrism and 'provincializing' urban theory'. We can extend this analysis into thinking about contemporaneous types of globalisation - Globalisation I and II - where financial or corporate globalisation 'from above' (Korten 1999) (Globalisation I) seems overwhelming, whereas in reality there are a variety of different types of globalisation from below, such as African traders migrating to China (Lee 2014) or small firms establishing marketing links and exporting internationally (Globalisation II). This diversity offers potential not only for development theory, but practice. For example Africa is often thought to have failed at industrialization, but there are successful examples of niche industrialisation on the continent.

How do these successful, internationally competitive firms emerge and what lessons can be learnt and applied from their experiences? This is a vitally important time to examine this question given the end of commodity super-cycle, and the fact that generally improved governance and business environments (Radelet 2010; Mills and Herbst 2012; Radelet 2015; Rotberg 2013), combined with dramatic changes in the structure of global trade relations, particularly the increased importance of global value chains (Taglioni and Winkler 2016) and associated 'network' trade in tasks (Kaplinksy and Morris 2015a) offer potential for African industrial development. Furthermore countries such as China, Malaysia and Thailand are increasingly concentrating on medium and high-technology manufactured exports (Newman et al., 2016), potentially opening up product space for Africa. Recently 13% of apparel chief procurement officers interviewed ranked Ethiopia as a top three sourcing destination over the next five years, with 40% saying that Sub-Saharan Africa would increase in importance (Berg, Hedrich, and Russo 2015)¹. Some analysts also refer

¹ By way of example, Philip Van Huesen, the owner of the Tommy Hilfiger and Calvin Klein brands has begun producing clothing, at scale, in a major new industrial park in Hwasa, outside of the Ethiopian capital of Addis Ababa. This zone is meant to employ 60,000 people when it is completed.

to four countries in East Africa as Part of the 'Post-China 16: Ascendant Manufacturing Countries' (Stratfor 2013), although the empirical basis for these claims requires further research. Furthermore Chinese public and private sectors have constructed numerous special and industrial economic zones across Africa (Cheru 2016; Braeutigam and Tang 2014; Gu 2009). However if endogenous industrialization is to take hold, African companies need to meet Asian competition, create ties to international markets with high import propensities, such as China (Subramanian and Matthijs 2007), and overcome other challenges to growth and innovation (e.g. infrastructure and access to finance) (Broadman and Isik 2007).

Where and how do successful manufacturing and service firms and investment-development pathways (Duran and Ubeda 2005) emerge in Africa, and what is their potential for replication?² While Africa has often been a site where development theory from elsewhere has been applied, with often disastrous results (Amin 2011), there is scope for the inductive development of 'innovation theory from the South' which is more contextually and theoretically informed and policy relevant and applicable.

Africa's Development Problematic

Africa is the world's least industrialized continent, and concomitantly its poorest. The central problematic of the continent's development is rooted in its economic structure (Rodney 1973), with not a single Africa country having a manufactured product in its top three exports, according to the United Nations' Comtrade data (Cramer 2016). While there were a number of international factors, such as resource demand from China and the extension of 'global extraction networks' (Carmody 2010), which when combined, resulted in a new 'scalar alignment' favourable to economic growth in Africa during the 2000s. For some, this seemed to preclude the need for more active industrial strategies (Roxburgh and et al. 2010; Thakkar 2015). However despite rhetoric about 'Africa as a 'global powerhouse' (Bright and Hruby 2015), 'rising' (Mahajan 2008) or 'the fastest billion' (Robertson 2012), a large part of Africa's continuing developmental impasse (Andreasson 2010) is the general absence of functional economic regions and territorial innovation systems (Carmody 2013b; Morgan 2004), and its continued dependence on primary commodity exports (Taylor 2014; Taylor 2015), with some exceptions such as the Durban auto cluster in South Africa (Lorentzen, Robbins, and Barnes 2006) or the Otigba computer cluster in Nigeria (Oyelaran-Oyeyinka 2006). The recent commodity price decline, or bust, has again reinforced the importance of industrial strategy for sustainable economic diversification, and generalised income growth: distributed rather than 'compressed' development (Whittaker et al. 2010).

The end of the recent commodity boom has once again revealed the weaknesses and vulnerabilities of many African "economies", reinforcing the imperative of moving beyond primary commodity³ export dependence (Radelet 2016), and potentially providing incentives to do so (Azmeah 2016). Primary commodity production tends to be of relatively low productivity and generate fewer technological breakthroughs, linkages and consequently multipliers than manufacturing and some services. Furthermore, primary commodities are notoriously volatile in terms of their prices (Dehn 2000) and the recent super-cycle

² In recent years there has been an increasing recognition in the literature for contextually relevant, adapted and iteratively adaptive approaches to development policy formulation and implementation (Andrews, Pritchett, and Woolcock 2013). However, for development policy to have a better chance of success it should be based on what has already been shown to work in the contexts in which it is being developed and applied.

³ The term commodity of course has different meaning. For Marx (1990) it is any product produced through human labour and for sale on the market. However, I am using it in the non-Marxist sense of an unprocessed good, such as tea, cotton, or cocoa beans. As Deaton (1999, 30) notes in relation to primary commodity prices they will 'eventually revert to base because, while short-run events can increase prices, sometimes for many years, long-run marginal cost is set by the poverty of the tropics and supply will eventually be forthcoming'.

notwithstanding, the long-term trend of primary commodity prices continues downwards (Moseley 2014), giving added impetus to the imperative to move beyond primary commodity dependence for Africa.

Whereas conventional trade theory assumes a positive sum game between participating parties (Scott 2012), critical political economists and, more recently, some mainstream economists have noted how mechanisms of unequal trade and competitive displacement may result in underdevelopment (Senghaas 1985; Krugman 1991; Emmanuel and Pearce 1972; Romer 1986). Given the intense competition in the global economy between regions and pervasive scale economies and positive externalities, and other handicaps such as the underfunding of universities in Africa (Saad and Zawadie 2011), the establishment of territorial innovation⁴ systems has proven very difficult there. However, while Africa as a whole performs poorly on traditional measures of innovation such as patents or numbers of scientific and technical publications (Oluwatobi et al. 2015), there are nonetheless many successful manufacturing and service firms on the continent. While previous quantitative research has shown a relationship between production innovation and growth amongst small firms on the continent, for example (Goedhuys and Sleuwaegen 2010) it has not explored these issues in more depth and such quantitative approaches tend to treat firms as ontologically separate units of analysis thereby often methodologically ignoring how networks and social relations may have contributed to firm growth and development.

The Theoretical and Development Policy Challenge

How and why do such firms emerge and what policy lessons can be drawn from their experience more broadly for Africa and beyond? While the 'inclusionary bias' in GPN theory, or the tendency to focus research on areas which are plugged into them, has recently be noted (Bair and Werner 2011), theoretically, while there has been some work done in this area (cf. Alila and Pedersen 2001), there is also a need to focus on more 'ordinary' firms, rather than just high-tech ones or those connected into GPNs. Theoretically this will enable new breakthroughs by explaining alternative modes of globalisation of firms and regions, such as direct exporting to end consumers⁵, currently largely excluded from the gaze of GPN research⁶. Furthermore it is small and medium-sized enterprises which generate most jobs, globally and in Africa⁷.

While it is well known that there are many major corporations which have originated from South Africa (White 2012; Taylor 2012), recent research has revealed that there are now a multitude of other African originating companies operating transnationally on the continent (Rolfe, Perri, and Woodward 2015; Ibeh 2015)⁸ (a form of Globalisation I). This includes

⁴ There are a variety of definitions of what constitutes innovation such as 'putting new products and services on the market or new means for producing them' (Bannock, Baxter, and Davis 1992, 215). It is common to differentiate between product and process innovation, but there are also other forms of innovation such as those technological adaptation, generating financing, marketing, after-sales care etc. According to Freeman and Soete (1997, 2) 'innovation is of importance not only for increasing the wealth of nations in the narrow sense of increased prosperity, but also in the more fundamental sense of enabling people to do things they have never done before', whereas for Paul Roemer (2008) 'economic growth occurs whenever people take resources and rearrange them in ways that are more valuable'. Consequently 'innovation policy is invariably linked to economic growth in general' (Christensen et al. 2016, 135).

⁵ More than 40% of Kenyan manufacturers export (Newman nd)

⁶ Coe and Yeung (2015, 1-2) define a GPN as 'an organizational arrangement, comprising interconnected economic and non-economic actors coordinated by a global lead firm, and producing goods or services across multiple geographical locations for worldwide markets'. According to Kaplinsky (2016) global value chains account for 75% of world trade, but only 25% for Africa, and that is mostly accounted for by South Africa and Mauritius.

⁷ Robinson (2006) has written about the need to focus on ordinary cities, rather than just "global" ones.

⁸ Some prominent examples of these include the Nigerian-based Dangote group, which has operations across the continent and has grown initially on the basis of extensive protection in its home market, of cement for example,

Africa's only 'unicorn' technology company⁹ – the Africa Internet Group from Nigeria. However a somewhat disturbing trend is that 'African MNCs [multi-national companies] have targeted their FDI [foreign direct investment] activities mainly at other African countries, including the conflict-affected and fragile states' (Ibeh 2015, p. 135) and these investments appear to be mostly market serving rather than efficiency seeking (Dunning and Lundan 2008) – a form of economic introversion (Kirby and Carmody 2010), also visible in other sectors on the continent, such as business process outsourcing (Mann and Graham 2016). This economic introversion inherently limits growth potential by militating against a 'leap into global network trade' (Subramanian and Matthijs 2007)¹⁰; which is potentially important to the continent's economic development. However there are also many other smaller, successful manufacturing and service companies on the continent, many of whom export, with great potential for expansion and replication.

How do successful learning and exporting firms and investment- development pathways emerge and stabilise in Africa. Sometimes these are based on 'frugal' innovations and involve different forms of connection to the global economy than that posited in the global production network (GPN) literature (or what I am calling Globalisation II). Examples of frugal innovation include using smart phones and cameras to manage production lines remotely in a furniture factory in South Africa (Carmody 2014) to designing and building an aircraft from scratch using locally available metal and other materials (Muchie, Gammeltoft, and Lundvall 2003). Often small and medium sized enterprises from Africa export directly to end consumers, or through intermediaries, rather than being embedded in GPNs with lead firms. How does socio-technical innovation emerge in Africa and what is its relationship to firm success?

A relational economic-geographic perspective (Bathelt and Glückler 2003) directs us to the ways in which economic outcomes are socially and historically co-produced, in part through firms, with concrete territorial effects (Pierce, Martin, and Murphy 2011; Smith 2015; Niebuhr 2016). Theoretically, while the specifics behind each firm and cluster experience vary, successful industrial development experiences in Africa are often a result of what I term multiple strategic couplings¹¹, including those between firms and, perhaps the state, described in more detail below, combined with locally innovative firm practices and technological adaptations, otherwise known as technology diffusion management (Mathews and Cho 2000). Such productive couplings or 'institutional thickness' (Amin and Thrift 1994) have been largely absent in Africa (Pedersen and McCormick 1999), or in some cases the couplings between state and firms has been unproductive or obstructive (Hampwaye and Jeppesen 2014; Urassa 2014). Nonetheless, many successful and growing firms exist on the continent and understanding their success is vital to understanding the evolving and dynamic, but understudied, economic geography of Africa.

Industrial Systems as Assemblage

Multiple and effective strategic couplings can also be conceived of as an assemblage (see Figure 1).

One of the most recent successful industrial development experiences on the continent - the Huijian shoe company investment in the Bole Lemi special economic zone in Ethiopia (Staritz, Plank, and Morris 2016) - involves foreign investment and is an outcomes of a

and the Madhvani group of Uganda which is involved in sugar and chemical production amongst other subsectors.

⁹ A technology start-up valued at more than US \$1 billion.

¹⁰ However, there are also counter examples of Mauritian clothing companies manufacturing in Madagascar for global buyers (Gibbon 2002; Morris, Plank, and Staritz 2015) and of smaller companies, such as Sole Rebels in Ethiopia, which now sells its shoes in 30 countries around the world (Nsehe 2012).

¹¹ Although depending on the context, strategic decoupling may also be developmentally beneficial (Horner 2014)

transnational assemblage involving multi-axis strategic couplings between foreign investors, regional assets, government, and a 'third party state' - China¹². As (Brautigam, Weis, and Xiaoyang 2015) note 'Ethiopia has adopted an active, state driven industrial policy aimed at incentivising exports, attracting lead firms and foreign direct investment (FDI), supporting local firms, and creating local linkages to promote priority sectors such as apparel and textiles'. However such assemblages are, in-turn, composed of sub-assemblages of actors and artefacts, within firms for example. These nested assemblages can be examined and understood through the deployment of other theories, such as resource-based views (RBV) of the firm. Consequently the analysis for this project will be both relational and multi-scalar.

RBVs of the firm were developed in management studies and attempt to understand how enterprises achieve sustained competitive advantages with the development of strategic resources which allow them to find new market opportunities and counter threats from the competition (Carmeli and Tishler 2004). Resources are found both in the firm's human and organizational (labour, technical and managerial skills) and its physical capital. A key question to answer is how these resources develop and how they are upgraded in African firms, which is key to other forms of upgrading; particularly product, process, functional, chain and social upgrading¹³ (Humphrey 2002; Barrientos, Gereffi, and Rossi 2011; Milberg and Winkler 2013)¹⁴.

Rather than conceptualizing firms as ontologically separate units, they can also be conceived of as nodes within networks¹⁵, such as those of global production, trade or national political economy. Territorially embedded development processes can be conceived of as outcomes of transnational and transnationalising assemblages of artefacts and actors who have different skills, capabilities, subjectivities and interests which are shaped by their shifting positionalities in networks (Gereffi 2014). Consequently examining the role of networks is vitally important.

For example, Africa has the highest inter-firm productivity differentials of any world region (Newman et al., 2016) and this may partly reflect connections between large-businesses and political elites, which may create certain advantages for some of these firms (Kelsall 2013; Tvedten, Hansen, and Jeppesen 2014)¹⁶. Thus it is important to examine state-firm relations and networks as part of the project, rather than simply assuming the state to be a barrier to enterprise development (Oluwatobi et al. 2015). However in terms of developmental impact what is important is the scale, productivity growth, rent capture and local and national linkages and untraded interdependencies created (Chandler and Hikino 1990; Kaplinsky 2005; Storper 1997; Hirschmann 1980).

Are currently successful exporting firms in Africa outliers, whose performance depends on niche 'internal' characteristics and market (or state) opportunities, or are 'vertical spillovers' between firms in value chains (Newman et al. 2016), emergent clusters and functional regions (Oyelaran-Oyeyinka and McCormick 2007; Zeng 2008) GPNs and states on the continent playing an increasingly important role in enabling, facilitating and creating firm

¹² Eighty per cent of leather used by Huijan in Ethiopia is locally sourced (Hauge 2016). In Uganda more than 50% of manufacturers are foreign-owned (Newman et al. 2016), for example, and the 'endogeneity factor' where better performing economies attract more foreign investment may also be operative (Moghalu 2014).

¹³ This refers to improvements in wages, working conditions and rights.

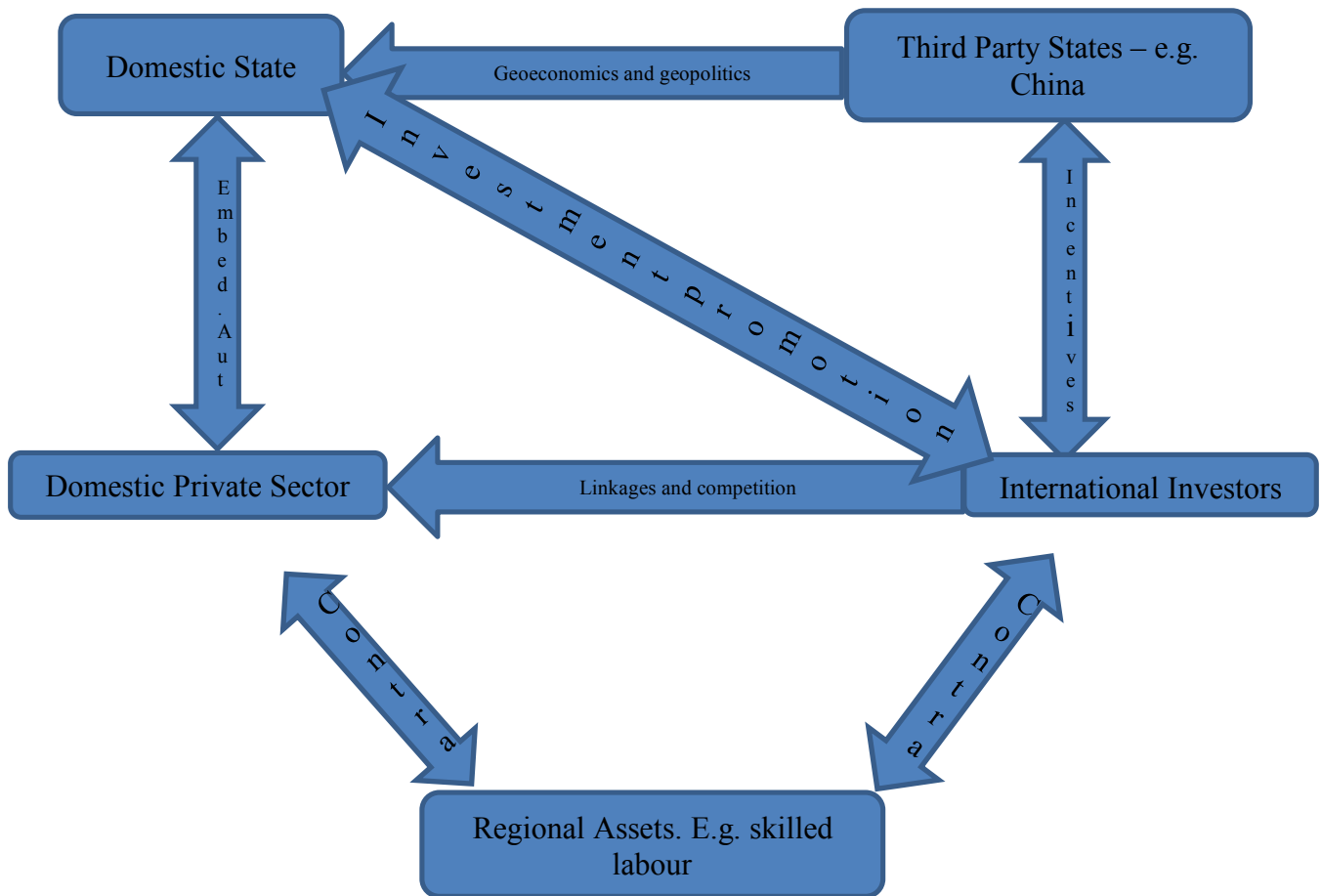
¹⁴ Although there is also a debate about what constitutes upgrading (Ponte and Ewert 2009).

¹⁵ Such an approach shares similarities with the ideas of 'soft' or 'relational infrastructure' of firms developed by (Storper et al. 2015; Benner 2003) and the theory of the new institutional economics which views the firm as a collection of contracts and relationships (Biggs and Shah 2006).

¹⁶ While some literature posited a conflict between state, market and development logics and outcomes in Africa (Bates 1981; Bates 2008), other work has recently acknowledged the possibility of developmental patrimonialism on the continent (Booth and Cammack 2012).

success through the reconfiguration of selection environments (Boschma and Lambooy 1999) and the creation of new networks which may, at times, ‘substitute for the state’ (Brautigam 1997; Meagher 2010)? Creating firms, markets and GPNs requires assembly work (Ouma 2015).

Figure 1: Industrial Systems as Assemblage



What are the critical factors in firm growth and upgrading in often difficult selection environments? What kind of assemblages facilitate the construction of competitive advantage and scaling or upgrading of firms? The positive relationship between industrialisation and development¹⁷ is well established (Weiss and Tribe 2015; Gerschenkron 1965), however there are a variety of definitions of what constitutes industrialization in the literature (Kiely 1998; Alemayehu 2000; Newman et al. 2016). For the purposes of this research it entails the sustained raising of productivity across sectors¹⁸. This is often an inherently difficult process given the established competitive advantages, such as capabilities and economies of scale, already developed by regional production complexes or units in other parts of the world (Senghaas 1985; Krugman 1991; Lall 1992b; Lall and Kraemer-Mbula 2005; Stiglitz, Lin, and Patel 2013). However in recent years there has been

¹⁷ This is a contested term, but for the purposes of this paper Seers’ (1969) classic definition of development as combined falls in poverty, inequality and unemployment is employed.

¹⁸ Total factor productivity in services in Africa is roughly double what it is in agriculture, whereas for manufacturing the figure is six times (McMillan and Hartgen 2014). Manufacturing, and increasingly services, offer the greatest potential for combined productivity and employment growth and consequently this project focusses on these.

a substantial resurgence of interest in industrial policy as a mechanism through which to achieve 'late development' (Rodrik 2008; Noman and Stiglitz 2015; Mazzucato 2011; Stiglitz, Lin, and Patel 2013; Clark, Lima, and Sawyer 2016; Lin and Chang 2009).

While a variety of industrialization strategies have been attempted over recent decades in different countries in Africa, ranging from basic industries (Thomas 1974) and import-substitution (Riddell 1990) to economic liberalization and export-promotion (Noman and Stiglitz 2015), the continent as a whole continues to deindustrialise (United Nations Economic Commission for Africa 2016; Newman et al. 2016). However there are also many examples of successful and internationally competitive manufacturing and service firms, and some thriving industrial clusters on the continent (Berman 2013; Oyelaran-Oyeyinka and McCormick 2007; Zeng 2008; Adeleye et al. 2015; Murphy and Carmody 2015; Kiggundu 2002; Haakonsson 2009; Chuhan-Pole and Angwafo 2011; Tvedten, Hansen, and Jeppesen 2014). In order to understand their experiences it is necessary to draw on recent theoretical innovations in the literature.

A number of important theoretical innovations have also been made in recent years in understanding the nature multi-scalar development in the context of deepening globalisation, such as product space (Hidalgo et al. 2007; Abdon and Felipe 2011; Hausmann and Klinger 2009), political settlements (Khan 2013; (Hansen et al. 2016) and global production network (GPN) theories (Coe and Yeung 2015; Henderson et al. 2002). In particular GPN theories have focussed on the importance of 'strategic couplings' between regional assets and lead firms (Yeung 2016b), although others have argued that there is a need for a 'geographical political economy of evolution' approach, which pays attention the ways in which regions¹⁹ and global production networks interact, co-constitute and evolve (MacKinnon 2012). However as (Traub-Werner 2016), p. 14 notes 'regions, then, are not slotted into global divisions of labour [but] are dynamically reproduced in relation to value hierarchies of production, themselves not fixed', giving emphasis to global structures of articulation and disarticulation (Bair and Werner 2011).

While Africa is often used as a site where theories from elsewhere can be (mis)applied (Dunn and Shaw 2001), there has also been recent work which has put Africa at the centre of the analysis of globalisation (Horner 2016). New concepts such as 'globalisation from the inside out' (Carmody 2002), the 'new scalar alignment' affecting the continent's development (Carmody 2008, 2009; Carmody 2010), thin integration (thintegration) of the continent into the global (informational) economy (Carmody 2013b), and competitive, consumptive, extractive and complementary types of trade have recently been developed (Carmody 2013c)²⁰, for example. Critical work has also been undertaken recently applying actor-network theory to Africa development (cf. Ouma, 2015(Kohonen 2012; Niebuhr 2016).

Previous approaches to examining industrial performance have sometimes relied on relatively static conceptualisations, lacking "agency"²¹, such as the structure-conduct-

¹⁹ The term region is a contested one, but Coe and Yeung (2015, 168) define it as 'referring to a sub-national space with some kind of coherence to its economic relationships and, importantly, some kind of territorial governance apparatus'.

²⁰ Competitive trade refers to products which are locally produced which are competitive in terms of price/quality ratios on international markets. Consumptive trade refers to imports of products for domestic consumption, whereas extractive trade refers to exports of raw materials for processing overseas. Complementary trade refers to trade which facilitates additional productive economic activity, such as mining equipment imports, or components for assembly. It is complementary in the sense of either being complementary or facilitative of existing economic activity, or in the sense that components imports are complementary to existing regional assets, such as semi-skilled labour (Kaplinksy and Morris 2015b).

²¹ This term is being used as a heuristic device. For a critique deploying actor-network theory see (Carmody and Kragelund 2016).

performance (SCP) framework (Mason 1939), whereby industry structure determines conduct and subsequently performance. More recent strategic management approaches are less teleological, emphasising interactions between contextual, strategy and performance factors (Hoskisson et al. 1999). However the conceptualisation of strategy is an “internal” one, as opposed to examining processes of ‘industrial recomposition’, where actors remake the social relations and connections in their industrial systems as sources of competitive advantage (Herrigel 2010). Viewed in this frame capability development is partly a relational, or network, rather than an individual firm project.

The Role of the State

To-date explanations for the relative success or failure of industry, and technology policies, in Africa have concentrated on the impacts of economic liberalization (Stein 1992; Carmody 1998) and/or political settlements (the balance of power between political elites, bureaucrats and private sector interests and the institutional arrangements put in place to reflect and stabilise these) (Whitfield et al. 2015)²². Political settlements are structured by the nature of economies and how these interact with past histories of conflict, identity and other contextual factors (Kelsall 2013). They are also influenced by forces of ‘globalisation’, often originating from outside the national territory (Hart 2002). However the political settlements literature still has an incomplete methodologically nationalist focus and consequently needs to be complemented and expanded through its deployment with and engagement with other theories.

The most poorly capacitated states, at least in terms of directing economic transformation, are often found in the poorest countries, where regime maintenance is often the over-riding government priority (Joseph 1999). State capacities can however be developed (Moore 1999; UNECA 2016) and developmental ambition may be an important spur to this (Cramer 2016), as the relatively successful case of Ethiopia has shown (Chandra 2013; Oqubay 2015)²³. This in turn may develop into a recursive feedback loop as the realisation of profit through exchange feeds directly back to state power and capabilities, as profits from production augment state power through the taxes levied on labour and companies during the production and circulation processes and through processes of learning by doing industrial policy (Hirschman 1945; Cox 1987; Schmitz and Hewitt 1991; Mazzucato 2011). Thus, what is often seen to be a form of globalisation disconnected from the state; namely the global sale of commodities, in fact represents a fused form of ‘commodity power’ (Carmody 2016) which may benefit not only corporations, but also the states in which they are headquartered or where production takes place. Whether states prioritise development however depends on the nature of their social bases and issues such as whether or not they face a security threat which encourages prioritisation of national economic development (Migdal 1988; Leftwich 2000).

The political opportunity structure facing states plays a critical role in determining whether or not they adopt a ‘nurture capitalism’ (Kennedy 1988; Schatz 1977) or anti-developmental, neopatrimonial, regime maintenance stance (Van de Walle 2001). The World Bank argues that African states need to match capabilities and roles (World Bank 1997) – providing basic infrastructure and macro-economic stability, for example, while otherwise allowing the “free” operation of the market. Typically in World Bank studies the African state is viewed as a constraint on enterprise development to be removed, rather than conceptualised as an institution which can promote actively guide and promote economic transformation (Amsden

²² While relatively neglected by geographers, this latter theory has recently made major contributions to our understanding of industrial development processes in the majority world (Khan 2013; Whitfield et al. 2015; Khan 2010).

²³ Although current Ethiopian development is also associated with accumulation by dispossession (Harvey 2003). The global commodification of food and related price increases have spurred ‘land grabbing’ in the country (Carmody 2013a), creating labour; an enactment of global commodification chains.

1989; Wade 1990; Samatar 1999). Thus rather than simply asking about the way in which the state may constrain firm growth this project will also interrogate the ways in which states may have facilitated growth amongst well-performing firms from both 'top down' (state) and 'bottom up' (firm) perspectives (Leftwich, Sen, and Velde 2008). Consequently it will adopt a (post)structuralist political economy approach (Carmody and Owusu 2016), which examines the ways in which assemblages²⁴, comprising states, capital, labour and other institutions emerge, and their developmental impacts.

The Impact of Global Development and Conclusion

Immanent²⁵, as opposed to imminent or more guided, development (Cowen and Shenton 1996), also plays an important role in industrial development in Africa (Gibbon 2002; Gibbon and Ponte 2005; Edwards and Jenkins 2015, 2014). For example the 'Chinese dragon' economy "inhales air" (natural resources) and "breathes" out fire – low priced manufactures which displace producers in other world regions (Kragelund and Carmody 2016). Given the multi-fold advantages which Chinese firms often have, such as active state support and soft financing, a booming domestic market etc. this makes it very difficult for firms without natural protection in Africa to compete. For example in previous work on the determinants of differential inter-firm performance I found that while the textile and clothing industry in Zimbabwe suffered a massive and generalised contraction on foot of economic liberalisation (Carmody 2001), mining boomed and some niche protective clothing suppliers were able to benefit from this. The intensely competitive and highly uneven nature of the global economy makes the establishment and expansion of exporting African service and manufacturing firms all the more interesting, vital and important to study, particularly as there may be important policy implications and lessons to be learnt for national governments, international development agencies and others involved in industrial development.

Successful, if to-date niche, industrialisation in Africa is an outcome of capability development (Dutrenit et al. 2013) and multiples axes of strategic coupling, which themselves reduce information and other market failures in relation to regional assets, shape factors markets in more advantageous ways, and create incentives and institutions which, in-turn, promote capability development, innovation and exports (Lall 1992a). Through the development of 'innovation theory from the South'(Comaroff and Comaroff 2012) the goal of 'making visible the otherwise invisible' (Wong 2014), 15) such as forms of 'embedded' and 'frugal innovation' (McGahan, Rezaie, and Cole 2014; Clark et al. 2009) happening amongst firms in Africa²⁶ can happen.

References

- Abdon, A., and J. Felipe. 2011. *The Product Space: What Does it Say About Opportunities for Growth and Structural Transformation of Sub-Saharan Africa*. *Levy Economics Institute of Bard College Working Paper No. 670*.
- Adeleye, I., K. Ibeh, A. Kinoti, and L. White. 2015. *The Changing Dynamics of International Business in Africa*. Basingstoke and New York: Palgrave MacMillan.
- Alemayehu, M. 2000. *Industrializing Africa : development options and challenges for the 21st century*. Trenton, N.J.: Africa World Press.

²⁴ I use the concept of assemblage here as a heuristic device, recognizing that these are not are not ontologically discrete entities.

²⁵ The historically and geographically evolving laws of motion of the capitalist mode of production on a world scale (De Janvry 1981).

²⁶ Of course not all of the innovations and innovative practices occurring are 'invisible'. For example a joint venture between a French agro-industrial firm and local social enterprises to produce organic fertilizer from plant and animal waste recently won the 'solutions initiative' for the Sustainable Development Solutions – Great Lakes branch (SDSN 2015).

- Alila, P., and P. O. Pedersen. 2001. *Negotiating Social Space: East African Micro Enterprises*. Trenton, N.J. : Africa World Press.
- Amin, A., and N. J. Thrift. 1994. *Globalization, institutions, and regional development in Europe*. Oxford: Oxford University Press.
- Amin, S. 2011. *Maldevelopment : anatomy of a global failure*. 2nd ed. ed. Oxford: Pambazuka.
- Amsden, A. H. 1989. *Asia's next giant : South Korea and late industrialization*. New York ; Oxford: Oxford University Press.
- Andreasson, S. 2010. *Africa's development impasse : rethinking the political economy of transformation*. London: Zed.
- Andrews, M., L. Pritchett, and M. Woolcock. 2013. Escaping Capability Traps Through Problem Driven Iterative Adaptation (PDIA). *World Development* 51:234-244.
- Azmeh, S. 2016. Global Production and Trade Shifts and their Implications for Industrialization in Africa - An Introduction. In *Africa's Turn to Industrialize: Shifting Global Value Chains, Industrial Policy and African Development*. London School of Economics and Political Science.
- Bair, J., and M. Werner. 2011. The place of disarticulations: global commodity production in La Laguna, Mexico. *Environment and Planning A* 43 (5):998-1015.
- Banerjee, A. V., and E. Duflo. 2012. *Poor economics : barefoot hedge-fund managers, DIY doctors and the surprising truth about life on less than \$1 a day*. London: Penguin Books.
- Bannock, G., R. Baxter, and E. Davis. 1992. *The Penguin Dictionary of Economics*. London: Penguin.
- Barnes, T. J., and E. Sheppard. 2010. 'Nothing includes everything': towards engaged pluralism in Anglophone economic geography. *Progress in Human Geography* 34 (2):193-214.
- Barrientos, S., G. Gereffi, and A. Rossi. 2011. Economic and social upgrading in global production networks: A new paradigm for a changing world. *International Labour Review* 150 (3-4):319-340.
- Barrientos, S., P. Knorringa, B. Evers, M. Visser, and M. Opondo. 2016. Shifting regional dynamics of global value chains: Implications for economic and social upgrading in African horticulture. *Environment and Planning A* 48 (7):1266-83.
- Bates, R. 1981. *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies*. Berkeley: University of California Press.
- Bates, R. H. 2008. *When things fell apart : state failure in late-century Africa*. Cambridge: Cambridge University Press.
- Bathelt, H., and J. Glückler. 2003. Toward a relational economic geography. *Journal of Economic Geography* 3 (2):117-144.
- Beegle, K., L. Chritianensen, A. Dabalén, and I. Gaddis. 2016. *Poverty in a rising Africa*. Washington D.C.: World Bank Group.
- Benner, C. 2003. Learning communities in a learning region: the soft infrastructure of cross-firm learning networks in Silicon Valley. *Environment and Planning A* 35 (10):1809-1830.
- . 2006. 'South Africa on-call': Information technology and labour market restructuring in South African call centres. *Regional Studies* 40 (9):1025-1040.
- Berg, A., S. Hedrich, and B. Russo. 2015. East Africa: The next hub for apparel sourcing? <http://www.mckinsey.com/industries/retail/our-insights/east-africa-the-next-hub-for-apparel-sourcing>: McKinsey and Company.
- Berman, J. 2013. *Success in Africa: CEO Insights from a Continent on the Rise*. Brookline, MA: bibliomotion.
- Bessant, J., A. Alexander, G. Tsekouras, H. Rush, and R. Lamming. 2012. Developing innovation capability through learning networks. *Journal of Economic Geography* 12 (5):1087-1112.
- Bharadwaj, A. 2000. A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly* 24 (1): 169-196.

- Biggs, T., and M. K. Shah. 2006. African SMES, networks, and manufacturing performance. *Journal of Banking & Finance* 30 (11):3043-3066.
- Biggs, T., and P. Srivastava. 1996. Structural Aspects of Manufacturing in Sub-Saharan Africa: Findings from a Seven Country Enterprise Survey, World Bank Discussion Paper No. 346, Africa Technical Department Series. Washington D.C.
- Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts. 2013. Does Management Matter? Evidence from India. *The Quarterly Journal of Economics*:1-51.
- Booth, D. a., and D. R. a. Cammack. 2012. *Governance for development in Africa : solving collective action problems*. London: Zed
- Boschma, R. A., and J. G. Lambooy. 1999. Evolutionary economics and economic geography. *Journal of Evolutionary Economics* 9 (4):411-429.
- Braeutigam, D., and X. Y. Tang. 2014. "Going Global in Groups": Structural Transformation and China's Special Economic Zones Overseas. *World Development* 63:78-91.
- Brautigam, D. 1997. Substituting for the state: Institutions and industrial development in eastern Nigeria. *World Development* 25 (7):1063-1080.
- Brautigam, D., T. Weis, and T. Xiaoyang. 2015. Ethiopia's Industrial Policy: The Case of the Leather Sector.
- Bright, J., and A. Hruby. 2015. *The Next Africa: An emerging continent becomes a global powerhouse*. New York: St. Martin's Press.
- Broadman, H. G., and G. z. Isik. 2007. *Africa's silk road : China and India's new economic frontier*. Washington, DC: World Bank.
- Carmeli, A., and A. Tishler. 2004. Resources, capabilities, and the performance of industrial firms: A multivariate analysis. *Managerial and Decision Economics* 25 (6-7):299-315.
- Carmody, P. 1998. Neoclassical practice and the collapse of industry in Zimbabwe: The cases of textiles, clothing, and footwear. *Economic Geography* 74 (4):319-343.
- . 2002. Between globalisation and (post) apartheid: the political economy of restructuring in South Africa. *Journal of Southern African Studies* 28 (2):255-275.
- . 2008. Exploring Africa's Economic Recovery. *Geography Compass* 2 (1):98-117.
- . 2009. An Asian-Driven Economic Recovery in Africa? The Zambian Case. *World Development* 37 (7):1197-1207.
- . 2013a. A Global Enclosure: The Geo-Logics of Indian Agro-Investments in Africa. *Capitalism, Nature, Socialism* 24 (1):84-103.
- . 2013b. A knowledge economy or an information society in Africa? Thintegration and the mobile phone revolution. *Information Technology for Development* 19 (1):24-39.
- Carmody, P. 2014. The World is Bumpy? Power, Uneven Development and the Impact of new ICTs on South African Manufacturing. *Human Geography*, 7 (1):1-16.
- Carmody, P. 2016. The Geopolitics and Economics of BRICS' Resource and Market Access in Southern Africa: Transnational Capital and Underdevelopment in Zambia. *submitted to Journal of Southern African Studies*.
- Carmody, P., and P. Kragelund. 2016. Who is in Charge? State Power, Agency and Sino-African Relations . . *Cornell International Law Journal* 49: 1-24.
- Carmody, P., and F. Owusu. 2016. Neoliberalism, Urbanization and Change in Africa: The Political Economy of Heterotopias. *Journal of African Development* 18 (1): 61-73.
- Carmody, P. d. R. 2001. *Tearing the social fabric : neoliberalism, deindustrialization, and the crisis of governance in Zimbabwe*. Portsmouth, NH: Heinemann.
- . 2010. *Globalization in Africa : recolonization or renaissance?* Boulder, Colo.: Lynne Rienner Publishers.
- . 2013c. *The rise of the BRICS in Africa : the geopolitics of south-south relations*. London ; New York: Zed Books.
- Carr, E. 2010. The Place of Stories in Development: Creating Spaces for Participation Through Narrative Analysis. *Development in Practice* 20 (2):219-226.
- Carr, E. R. 2011. *Delivering development : globalization's shoreline and the road to a sustainable future*. Basingstoke: Palgrave Macmillan.
- Chakrabarty, D. 2008. *Provincializing Europe : postcolonial thought and historical difference*. New ed. ed. Princeton, N. J. ; Oxford: Princeton University Press.

- Chandler, A. D., and T. Hikino. 1990. *Scale and scope : the dynamics of industrial capitalism*. Cambridge, Mass.: Belknap Press.
- Chandra, V. 2013. How Ethiopia Can Foster a Light Manufacturing Sector. In *The Industrial Policy Revolution II: Africa in the 21st Century*, eds. J. Stiglitz, J. Lin and E. Patel. Basingstoke and New York: Palgrave MacMillan.
- Cheru, F. 2016. Emerging Southern powers and new forms of South-South cooperation: Ethiopia's strategic engagement with China and India. *Third World Quarterly* 37 (4):592-610.
- Christensen, J. L., I. Drejer, P. H. Andersen, and J. R. Holm. 2016. Innovation policy: how can it best make a difference? *Industry and Innovation* 23 (2):135-139.
- Chuhan-Pole, P., and M. Angwafo. 2011. *Yes Africa can : success stories from a dynamic continent*. Washington, D.C.: World Bank ; London : Eurospan [distributor].
- Clark, D., L. Lima, and C. Sawyer. 2016. Stages of Diversification in Africa. *Economics Letters* 144:68-70.
- Clark, N., N. Chataway, R. Hanlin, D. Kale, R. Kaplinsky, L. Muraguri, T. Papaioannou, P. Robbins, and W. Wamae. 2009. Below the radar: What does innovation in the asian driver economies have to offer other low income economies. <http://oro.open.ac.uk/15241/1/>; Economic and Social Research Council.
- Clinton, W. 2005. *My Life*. New York: Arrow.
- Coe, N. M. a., and H. W.-C. a. Yeung. 2015. *Global production networks : theorizing economic development in an interconnected world*. First edition. ed.
- Collier, P., and A. J. Venables. 2007. Rethinking trade preferences: How Africa can diversify its exports. *World Economy* 30 (8):1326-1345.
- Comaroff, J., and J. L. Comaroff. 2012. *Theory from the south, or, How Euro-America is evolving toward Africa*. Boulder, CO: Paradigm Publishers.
- Cowen, M. P., and R. W. Shenton. 1996. *Doctrines of development*. London: Routledge.
- Cox, R. W. 1987. *Production, power and world order : social forces in the making of history*. New York ; Guildford, Surrey: Columbia University Press.
- Cramer, C. 2016. Guns and Roses: crossing the river by feeling for stones in Ethiopian industrialisation - at speed. In *Africa's Turn to Industrialize? Shifting Global Value Chains, Industrial Policy and African Development*. London School of Economics and Political Science.
- Crouch, C. 2004. *Post-democracy*. Cambridge: Polity.
- Crouch, C. a. 2015. *The knowledge corrupters : hidden consequences of the financial takeover of public life*. Cambridge: Polity.
- De Janvry, A. 1981. *The agrarian question and reformism in Latin America*. Baltimore, Md. ; London: Johns Hopkins University Press.
- De Janvry, A. a., and E. a. Sadoulet. 2015. *Development economics : theory and practice*. Oxford Routledge.
- Deaton, A. 1999. Commodity prices and growth in Africa. *The Journal of Economic Perspectives* 13 (3):23-40.
- . 2009. INSTRUMENTS OF DEVELOPMENT: RANDOMIZATION IN THE TROPICS, AND THE SEARCH FOR THE ELUSIVE KEYS TO ECONOMIC DEVELOPMENT. *National Bureau of Economic Research Working Paper 14690* <http://www.nber.org/papers/w14690.pdf>.
- Dehn, J. 2000. Commodity Price Uncertainty and Shocks: Implications for Economic Growth. Oxford: Centre for the Study of African Economies, University of Oxford.
- Derickson, K. D. 2015. Urban geography I: Locating urban theory in the "urban age". *Progress in Human Geography* 39 (5):647-657.
- Dinh, H., and G. Clarke, . . 2012. Performance of manufacturing firms in Africa : an empirical analysis. Washington, DC: World Bank.
- Dinh, H. T. 2012. *Light manufacturing in Africa : targeted policies to enhance private investment and create jobs*. Washington, D.C.: World Bank.
- Dunn, K. C., and T. M. Shaw. 2001. *Africa's challenge to international relations theory*. Basingstoke: Palgrave.

- Dunning, J. H., and S. M. Lundan. 2008. *Multinational enterprises and the global economy*. 2nd ed. / John H. Dunning and Sarianna M. Lundan. ed. Cheltenham: Edward Elgar.
- Duran, J., and F. Ubeda. 2005. The investment development path of newly developed countries. *International Journal of the Economics of Business* 12 (1):123-137.
- Dutrenit, G. e. o. c., K. e. o. c. Lee, R. R. e. o. c. Nelson, A. O. e. o. c. Vera-Cruz, and L. e. o. c. Soete. 2013. *Learning, capability building and innovation for development*. Basingstoke and New York: Palgrave MacMillan.
- Edwards, L., and R. Jenkins. 2014. The margins of export competition: A new approach to evaluating the impact of China on South African exports to Sub-Saharan Africa. *Journal of Policy Modeling* 36:S132-S150.
- . 2015. The Impact of Chinese Import Penetration on the South African Manufacturing Sector. *Journal of Development Studies* 51 (4):447-463.
- Emmanuel, A., and B. Pearce. 1972. *Unequal exchange : a study of the imperialism of trade*. N.Y.: Monthly Review Press.
- Ettlinger, N. 2016. The governance of crowdsourcing: Rationalities of the new exploitation. *Environment and Planning A* DOI: 10.1177/0308518X16656182.
- Freeman, C., and L. Soete. 1997. *The Economics of Industrial Innovation*. Cambridge, MA: The MIT Press.
- Gereffi, G. 2014. Global value chains in a post-Washington Consensus world. *Review of International Political Economy* 21 (1):9-37.
- Gereffi, G., and K. Fernandez-Stark. 2010. The Offshore Service Global Value Chain. North-Carolina: CORFO-Report, Center on Globalization, Governance and Competitiveness.
- Gerschenkron, A. 1965. *Economic backwardness in historical perspective, etc. [A reduced photographic reprint of the edition of 1962.]*. New York: Frederick A. Praeger.
- Gibbon, P. 2002. Present Day Capitalism, the New International Trade Regime and Africa. *Review of African Political Economy* 29 (91):95-112.
- Gibbon, P., and S. Ponte. 2005. *Trading down : Africa, value chains, and the global economy*. Philadelphia, Pa.: Temple University Press ; Chesham : Combined Academic [distributor].
- Goedhuys, M., and L. Sleuwaegen. 2010. High-growth entrepreneurial firms in Africa: a quantile regression approach. *Small Business Economics* 34 (1):31-51.
- Gu, J. 2009. China's Private Enterprises in Africa and the Implications for African Development. *European Journal of Development Research* 21 (4):570-587.
- Haakonsson, S. J. 2009. 'Learning by importing' in global value chains: upgrading and South-South strategies in the Ugandan pharmaceutical industry. *Development Southern Africa* 26 (3):499-516.
- Hagerstrand, T. 1974. How about people in regional science? *Papers of the Regional Science Association* 24:7-21.
- Hampwaye, G., and S. Jeppesen. 2014. The role of state- business relations in the performance of Zambia's food processing sub-sector. *Bulletin of Geography: Socio-Economic Series* (26):83-92.
- Hanna, P. 2012. Using internet technologies (such as Skype) as a research medium: a research note. *Qualitative Research* 12 (2):239-242.
- Hansen, M. W., L. Buur, A. M. Kjaer, and O. Therikildsen. 2016. The Economics and Politics of Local Content in African Extractives: Lessons from Tanzania, Uganda and Mozambique. *Forum for Development Studies* 43 (2):201-228.
- Harrison, A., and A. Rodriguez-Clare. 2010. Foreign Investment and Industrial Policy for Developing Countries In *Handbook of Development Economics*, eds. D. Rodrik and M. Rosenzweig. Amsterdam: North Holland.
- Hart, G. 2002. *Disabling Globalization: Places of power in post-apartheid South Africa*. Berkeley: University of California Press.
- Harvey, D. 2003. *The New Imperialism*. Oxford and New York: Oxford University Press.
- Hauge, J. 2016. Africa's industrial policy challenge amid the expansion of global value chains: Industrial Policy in Ethiopia since 2002. In *Africa's Turn to Industrialize? Shifting Global*

- Value Chains, Industrial Policy and African Development*. London School of Economics and Political Science.
- Hausmann, R., and B. Klinger. 2009. South Africa's export predicament (vol 16, pg 609, 2008). *Economics of Transition* 17 (1):211-212.
- He, Y. 2013. Does China's trade expansion help African development? - an empirical estimation. *China Economic Review* 26:28-38.
- Henderson, J., P. Dicken, M. Hess, N. Coe, and H. Wai-Chung Yeung. 2002. Global production networks and the analysis of economic development. *Review of International Political Economy* 9 (3):436-64.
- Herrigel, G. 2010. *Manufacturing Possibilities: Creative Action and Industrial Recomposition in the United States, Germany and Japan*. Oxford and New York: Oxford University Press.
- Hidalgo, C. A., B. Klinger, A. L. Barabasi, and R. Hausmann. 2007. The product space conditions the development of nations. *Science* 317 (5837):482-487.
- Hirschman, A. O. 1945. *National power and the structure of foreign trade*. [S.l.]: [s.n.].
- Hirschmann, A. 1980. *Strategy of Economic Development*. New York: Norton.
- Horner, R. 2014. Strategic decoupling, recoupling and global production networks: India's pharmaceutical industry. *Journal of Economic Geography* 14 (6):1117-1140.
- . 2016. Book Review of The Rise of the BRICS in Africa: The Geopolitics of South-South Relations' by Pdraig Carmody, . *International Development Planning Review* 38 (3):339-340.
- Hoskisson, R. E., M. A. Hitt, W. P. Wan, and D. Yiu. 1999. Theory and research in strategic management: Swings of a pendulum. *Journal of Management* 25 (3):417-456.
- Humphrey, J. a. H. S.,) : . . 2002. How Does Insertion in Global Value Chains Affect Upgrading in Industrial Clusters? *Regional Studies* 36 (9):1017-1027.
- Ibeh, K. 2015. Rising Africa and its Nascent Multinational Corporations. In *The changing dynamics of international business in Africa*, eds. I. e. Adeleye, K. e. Ibeh, A. e. Kinoti and L. e. White. Basinstoke and New York: Palgrave MacMillan.
- Joseph, R. 1999. State, Conflict and Democracy in Africa. In *State Conflict and Democracy in Africa*, ed. R. Joseph. Boulder, CO: Lynn Rienner.
- Juma, C. 2015. Afro-Chinese Cooperation: The Evolution of Diplomatic Agency. In *Africa and China How Africans and their Governments are Shaping Relations with China*, ed. A. Gadzala. London: Rowman and Littlefield.
- Kapila, S., and D. C. Mead. 2002. *Building businesses with small producers : successful business development services in Africa, Asia and Latin America*. London: ITDG.
- Kaplinsky, R. 2005. *Globalization, Poverty and Inequality*. Cambridge: Polity.
- . 2016. Thinning and Thickening: Productive Sector Policies in The Era of Global Value Chains. In *Africa's Turn to Industrialize: Shifting Global Value Chains, Industrial Policy and African Development*. London School of Economics and Political Science.
- Kaplinsky, R., and M. Morris. 2015a. Thinning and Thickening: Productive Sector Policies in The Era of Global Value Chains. *European Journal of Development Research* doi:10.1057/ejdr.2015.29.
- . 2015b. Thinning and Thickening: Productive Sector Policies in the Era of Global Value Chains. *European Journal of Development Research* 10.1057/ejdr.2015.29.
- Keijser, C. 2016. Changing geographies of service delivery in South Africa: towards regional value chains. In *Globalisation and Services Driven Economic Growth: Perspectives from the Global North and South*, eds. N. Beerepoot, B. Lambregts and J. M. Kleibert. London and New York: Routledge.
- Kelsall, T., et al. 2013. *Business, Politics and the State in Africa: Challenging the Orthodoxies of Growth and Transformation*. London: Zed.
- Kennedy, P. T. 1988. *African capitalism : the struggle for ascendancy*. Cambridge: Cambridge University Press.
- Khan, M. 2013. Political Settlements and the Design of Technology Policy. In *The Industrial Policy Revolution II. Africa in the 21st Century*, ed. J. a. L. Stiglitz, Justin Yifu and Patel, Ebrahim, 243-280. London: Palgrave.

- Khan, M. H. 2010. Political Settlements and the Governance of Growth-Enhancing Institutions, ed. [http://eprints.soas.ac.uk/9968/1/Political Settlements internet.pdf](http://eprints.soas.ac.uk/9968/1/Political_Settlements_internet.pdf).
- . 2012. Governance during Social Transformations: Challenges for Africa. *New Political Economy* 17 (5):667-675.
- Kiely, R. 1998. *Industrialization and development : a comparative analysis*. London: UCL Press.
- Kiggundu, M. 2002. Entrepreneurs and entrepreneurship in Africa: What is known and what needs to be done. *Journal of Developmental Entrepreneurship* 7 (3):239-258.
- Kirby, P., and P. d. R. Carmody. 2010. *The legacy of Ireland's economic expansion : geographies of the Celtic tiger*. London: Routledge.
- Kleibert, J. M. 2015a. Global production networks, offshore services and the branch-plant syndrome. *Regional Studies* <http://www.tandfonline.com/doi/full/10.1080/00343404.2015.1034671>.
- . 2015b. Industry-academe linkages in the Philippines: Embedding foreign investors, capturing institutions? *Geoforum* 59:109-118.
- . 2015c. Islands of globalisation: offshore services and the changing spatial divisions of labour. *Environment and Planning A* 47 (4):884-902.
- Klein, N. a. 2014. *This changes everything : capitalism vs. the climate*. New York: Allen and Lane.
- Kohonen, M. 2012. Actor-network theory as an approach to social enterprise and social value: a case study of Ghanaian social enterprises, Sociology, London School of Economics, London.
- Korten, D. C. 1999. *The post-corporate world : life after capitalism*. San Francisco, CA ; [United Kingdom]: Berrett-Koehler.
- Kragelund, P., and P. Carmody. 2016. BRICS' impacts on local economic development in the Global South: the case of a tourism town and mining provinces in Zambia. *Area Development and Policy*, 1 (2): 218-237.
- Krugman, P. 1991. *Geography and Trade*. Cambridge, MA: MIT Press.
- Lall, S. 1992a. Technological Capabilities and Industrialisation. *World Development* 20 (2):165-186.
- . 1992b. Technological Capabilities and Industrialization. *World Development* 20 (2):165-186.
- Lall, S., and E. Kraemer-Mbula. 2005. *Industrial competitiveness in Africa : lessons from East Asia*. London: ITDG.
- Lee, M. 2014. *Africa's World Trade: Informal Economies and Globalization from Below*. London: Zed.
- Leftwich, A. 2000. *States of development : on the primacy of politics in development*. Oxford: Polity.
- Leftwich, A., K. Sen, and D. W. t. Velde. 2008. *The economics and politics of state-business relations in Africa : preliminary findings*. Manchester: IPPG, University of Manchester.
- Lewis, M. 2011. *Boomerang : the Meltdown Tour*. London: Allen Lane.
- Lin, J., and H. J. Chang. 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.
- Lorentzen, J., G. Robbins, and T. J. Barnes. 2006. The Durban Auto Cluster: Global Competition, Collective Efficiency and Local Development. In *Industrial Clusters and Innovation Systems in Africa: Institutions, Markets and Policy*, eds. O. Oyelaran-Oyeyinka and D. McCormick. Hong Kong: United Nations University Press.
- MacKinnon, D. 2012. Beyond strategic coupling: reassessing the firm-region nexus in global production networks. *Journal of Economic Geography* 12 (1):227-245.
- Mahajan, V. 2008. *Africa Rising: How 900 Million African Consumers Offer More Than You Think* New Jersey: Pearson Prentice Hall.
- Mann, L., and M. Graham. 2016. The Domestic Turn: Business Process Outsourcing and the Growing Automation of Kenyan Organisations. *Journal of Development Studies* 52 (4):530-548.

- Marx, K. 1990. *Capital: Critique of Political Economy v. 1* London: Penguin.
- Mason, E. 1939. Price and Production Policies of Large-Scale Enterprise. *American Economic Review* 29 (1):61-74.
- Mathews, J., and D. Cho. 2000. *Tiger Technology: The Creation of Semiconductor Industry in East Asia*. Cambridge and New York: Cambridge University Press.
- Mattoo, A., and L. Payton. 2007. *Services Trade and Development : The Experience of Zambia*. Washington, DC: World Bank and Palgrave Macmillan.
- Mazzucato, M. 2011. *The entrepreneurial state*. London: Demos.
- McGahan, A., R. Rezaie, and D. Cole. 2014. Embedded Innovation in Health. In *Innovating for the Global South: Towards an Inclusive Innovation Agenda*, eds. D. Soman, J. Stein and J. Wong, 94-114. Toronto, Buffalo, London.
- McMillan, M., and K. Hartgen. 2014. What is Driving the African Growth Miracle? NBER Working Paper 2077. Cambridge, MA. : National Bureau of Economic Research.
- Meagher, K. 2010. *Identity economics : social networks & the informal economy in Nigeria*. Oxford: James Currey.
- Melbourne Institute of Applied Economic and Social Research, and D. o. I. a. S. Australian Government. 2015. *Randomised Controlled Trials and Industry Program Evaluations* Canberra: Commonwealth of Australia.
- Migdal, J. S. 1988. *Strong societies and weak states : state-society relations and state capabilities in the Third World*. Princeton, N.J. ; Guildford: Princeton University Press.
- Milberg, W., X. Jiang, and G. Gereffi. 2014. Industrial policy in the era of vertically specialized industrialization, Publisher: (ILO), Editors: . In *Transforming Economies: Making industrial policy work for growth, jobs and development.*, eds. J. Salazar-Xirinachs, I. Nübler and R. Kozul-Wright. Geneva: International Labour Office.
- Milberg, W. S., and D. Winkler. 2013. *Outsourcing economics : global value chains in capitalist development*. Cambridge ; New York: Cambridge University Press.
- Mills, G., and J. Herbst. 2012. *Africa's Third Liberation: The New Search for Prosperity and Jobs*. Penguin: London.
- Moghalu, K. C. a. 2014. *Emerging Africa : how the global economy's 'last frontier' can prosper and matter*. [Updated] edition. ed. London: Penguin.
- Moore, D. 1999. 'Sail on, o ship of state': Neo-liberalism, globalisation and the governance of Africa. *Journal of Peasant Studies* 27 (1):61-96.
- Morgan, K. 2004. The exaggerated death of geography: learning, proximity and territorial innovation systems. *Journal of Economic Geography* 4 (1):3-21.
- Morris, M., J. Bessant, and J. Barnes. 2006. Using learning networks to enable industrial development - Case studies from South Africa. *International Journal of Operations & Production Management* 26 (5-6):532-557.
- Morris, M., and J. Fessehaie. 2014. The industrialisation challenge for Africa: Towards a commodities based industrialisation path. *Journal of Africa Trade* 1 (1):25-36.
- Morris, M., R. Kaplinsky, and D. Kaplan. 2012. *One thing leads to another: Promoting Industrialisation by Making the Most of the Commodity Boom in Sub-Saharan Africa*. Self-published.
- Morris, M., L. Plank, and C. Staritz. 2015. Regionalism, end markets and ownership matter. *Environment and Planning A* 10.1177/0308518X15614745.
- Moseley, W. 2014. Structured Transformation and Natural Resources Management in Africa. In *Managing Africa's natural resources : capacities for development*, eds. K. T. e. Hanson, C. e. D'Alessandro and F. e. Owusu. Basingstoke and New York: Palgrave MacMillan.
- Muchie, M., P. Gammeltoft, and B.-A. Lundvall. 2003. Introduction: African Systems of Innovation and Competence Building. In *Putting Africa First: The Making of African Innovation Systems*, eds. M. Muchie, P. Gammeltoft and B.-A. Lundvall. Aalborg: Aalborg Universitetsforlag.
- Murdoch, J. 2006. *Post-structuralist geography : a guide to relational space*. London: SAGE.

- Murphy, J. T., and P. d. R. Carmody. 2015. *Africa's information revolution : technical regimes and production networks in South Africa and Tanzania*. Chichester, West Sussex, UK ; Malden, MA, USA: John Wiley & Sons Inc.
- Newman, C. nd. Learning to Compete: Cross-country comparison of Investment Climate Assessment Data. Dublin: Trinity College Dublin.
- Newman, C., J. Page, J. Rand, A. Shimeles, M. Soderbom, and F. Tarp. 2016. *Made in Africa: Learning to Compete in Industry*. Washington, D.C.: Brookings.
- Niebuhr, D. 2016. *Making Global Value Chains: Geographies of Market-Oriented Development in Ghana and Peru*. Wiesbaden: Springer Gabler.
- Noman, A., and J. Stiglitz. 2015. *Industrial Policy and Economic Transformation in Africa*. New York: Columbia University Press.
- Nsehe, M. *Africa's Most Successful Women: Bethlehem Tilahun Alemu*. Forbes 2012 [cited. Available from <http://www.forbes.com/sites/mfonobongnsehe/2012/01/05/africas-most-successful-women-bethlehem-tilahun-alemu/#2309f0c811bc>].
- Oluwatobi, S., U. Efobi, I. Olurinola, and P. Alege. 2015. Innovation in Africa: Why Institutions Matter. *South African Journal of Economics* 83 (3):390-410.
- Oqubay, A. 2015. *Made in Africa: Industrial Policy in Ethiopia*. Oxford and New York: Oxford University Press.
- Ouma, S. 2015. *Assembling Export Markets: The Making and Unmaking of Global Food Connections in West Africa*. Malden and Oxford: Wiley Blackwell.
- Oyelaran-Oyeyinka, B. 2006. Learning in local systems and global links: The Otigba computer hardware cluster in Nigeria. In *Industrial Clusters and Innovation Systems in Africa: Institutions Markets and Policy*, eds. O. Oyelaran-Oyeyinka and D. McCormick. Tokyo, New York, Paris: United Nations University Press.
- Oyelaran-Oyeyinka, O., and D. McCormick. 2007. *Industrial clusters and innovation systems in Africa : institutions, markets, and policy*. Tokyo: United Nations University Press.
- Pack, H. 1993. Productivity and Industrial-Development in Sub-Saharan Africa. *World Development* 21 (1):1-16.
- Parenti, C. 2011. *Tropic of chaos : climate change and the new geography of violence*. New York: Nation Books.
- Parr, A. 2013. *The wrath of capital : neoliberalism and climate change politics*. New York: Columbia University Press.
- Pedersen, P. O., and D. McCormick. 1999. African business systems in a globalising world. *Journal of Modern African Studies* 37 (1):109-135.
- Pickles, J., A. Smith, and e. al. 2016. *Articulations of Capital: Global Production Networks and Regional Transformations*. Malden and Oxford: Wiley Blackwell.
- Pierce, J., D. G. Martin, and J. T. Murphy. 2011. Relational place-making: the networked politics of place. *Transactions of the Institute of British Geographers* 36 (1):54-70.
- Polanyi, K. 1944. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston Beacon Books.
- Ponte, S., and J. Ewert. 2009. Which Way is "Up" in upgrading? Trajectories of Change in the Value Chain for South African Wine. *World Development* 37 (10): 1637-1650.
- Radelet, S. 2015. *The Great Surge: The Ascent of the Developing World*. New York: Simon and Schuster.
- . 2016. Africa's Rise - Interrupted. *Finance and Development* 53 (2):<http://www.imf.org/external/pubs/ft/fandd/2016/06/radelet.htm>.
- Radelet, S. C. 2010. *Emerging Africa : how 17 countries are leading the way*. Baltimore, MD: Center for Global Development.
- Ravenhill, J. 2014. Global value chains and development. *Review of International Political Economy* 21 (1):264-274.
- Reardon, T., and L. Flores. 2006. Viewpoint: "Customized competitiveness" strategies for horticultural exporters - Central America focus with lessons from and for other regions. *Food Policy* 31 (6):483-503.
- Riddell, R. 1990. *Manufacturing Africa: Performance and Prospects of Seven African Countries*. London: James Currey.

- Robertson, C., et al. . 2012. *The Fastest Billion: The Story Behind Africa's Economic Revolution*. London: Renaissance Capital.
- Robinson, J. 2006. *Ordinary Cities: Between Modernity and Development*. London: Routledge. Oxford: Routledge.
- Rodney, W. 1973. *How Europe under-developed Africa*. [S.l.]: Bogle-L'Ouverture.
- Rodrik, D. 2008. Normalising Industrial Policy. Washington, D.C.: World Bank.
- Roemer, P. 2008. Economic Growth. In *The Concise Encyclopedia of Economics*, ed. D. Henderson. Indianapolis: Liberty Fund.
- Rogerson, C. M. 2005. Globalization, economic restructuring and local response in Johannesburg – the most isolated ‘world city’. In *Public problems – private solutions? Globalizing cities in the South*, eds. K. Segbers, S. Raiser and K. Volkmann. Aldershot: Ashgate.
- Rolfe, R., A. Perri, and D. Woodward. 2015. Patterns and Determinants of Intra-African Foreign Direct Investment. In *The Changing Dynamics of International Business in Africa*, eds. I. e. Adeleye, K. e. Ibeh, A. e. Kinoti and L. e. White. Basingstoke and New York: Palgrave MacMillan.
- Romer, P. M. 1986. Increasing Returns and Long-Run Growth. *Journal of Political Economy* 94 (5):1002-1037.
- Rotberg, R. I. a. 2013. *Africa emerges : consummate challenges, abundant opportunities*. Cambridge: Polity.
- Roxburgh, D., and et al. 2010. Lions on the Move: The Progress and Potential of African Economies
file:///C:/Users/CARMODYP.COLLEGE/Downloads/MGI_Lions_on_the_move_african_economies_full_report.pdf: McKinsey Global Institute.
- Ruming, K. 2009. Following the Actors: mobilising an actor-network theory methodology in geography. *Australian Geographer* 40 (4):451-469.
- Saad, M., and G. Zawadie. 2011. The emerging role of universities in socio-economic development through knowledge networking. *Science and Public Policy* 38 (1):3-6.
- Samatar, A. I. 1999. *An African miracle : state and class leadership and colonial legacy in Botswana development*. Portsmouth, N.H.: Heinemann.
- Sassen, S. 1991. *The global city : New York, London, Tokyo*. Princeton, N.J. ; Oxford: Princeton University Press.
- Schatz, S. P. 1977. *Nigerian capitalism*. Berkeley ; London: University of California Press.
- Schmitz, H., and T. Hewitt. 1991. In *States or markets? : neo-liberalism and the development policy debate*, eds. C. Colclough and J. Manor. Oxford: Clarendon.
- Scott, A. J. 2012. *A world in emergence : cities and regions in the 21st century*. Cheltenham, UK and Northampton, USA: Edward Elgar.
- SDSN. *SDSN Great Lakes Holds Regional Conference on SDGs and Announces New Solutions Initiative 2015* [cited].
- Seers, D. 1969. The Meaning of Development. *International Development Review* 11 (4):3-4.
- Selwyn, B. 2014. *The Global Development Crisis*. Cambridge: Polity
- Senghaas, D. 1985. *The European experience : a historical critique of development theory*. Leamington Spa: Berg.
- Smith, A. 2015. The state, institutional frameworks and the dynamics of capital in global production networks. *Progress in Human Geography* 39 (3):290-315.
- Soderbom, W., and F. Teal. 2003. Are manufacturing exports the key to economic success in Africa? *Journal of African Economies* 12 (1):1-29.
- Stanford Encyclopedia of Philosophy*. [cited].
- Staritz, C., L. Plank, and M. Morris. 2016. Global Value Chains, Industrial Policy, and Sustainable Development - Ethiopia's Apparel Export Sector. Geneva: International Centre for Trade and Development.
- Stein, H. 1992. Deindustrialization, Adjustment, the World-Bank and the Imf in Africa. *World Development* 20 (1):83-95.
- Stiglitz, J., J. Lin, and E. Patel. 2013. *The Industrial Policy Revolution II: Africa in the 21st Century*. Basingstoke and New York: Palgrave MacMillan.

- Storper, M. 1997. *The regional world : territorial development in a global economy*. New York ; London: Guilford.
- Storper, M. a., T. a. Kemeny, N. P. a. Makarem, and T. a. Osman. 2015. *The rise and fall of urban economies : lessons from San Francisco and Los Angeles*. Stanford: Stanford University Press.
- Stratfor. 2013. The Post-China 16: Ascendant Manufacturing Countries. <https://www.stratfor.com/image/post-china-16-ascendant-manufacturing-countries>.
- Subramanian, U., and M. Matthijs. 2007. Can Sub-Saharan Africa Leap into Global Network Trade? <http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-4112>: World Bank, Policy Research Working Paper WPS4112.
- Surborg, B. 2011. World cities are just “basing points for capital”: Interacting with the world city from the global south. *Urban Forum* 22:315-30.
- Swyngedouw, E. 2010. Apocalypse Forever? Post-political Populism and the Spectre of Climate Change. *Theory, Culture and Society* 27 (2-3):213-232.
- Taglioni, D., and D. Winkler. 2016. *Making Global Value Chains Work for Development*. Washington D.C.: World Bank.
- Taylor, I. 2014. *Africa rising? : BRICS - diversifying dependency*. Oxford: James Currey.
- Taylor, I. 2015. Dependency redux: why Africa is not rising. *Review of African Political Economy*.
- Taylor, P. J., B. Derudder, M. Hoyler, and P. F. Ni. 2013. New regional geographies of the world as practised by leading advanced producer service firms in 2010. *Transactions of the Institute of British Geographers* 38 (3):497-511.
- Taylor, S. D. 2012. *Globalization and the cultures of business in Africa : from patrimonialism to profit*. Bloomington: Indiana University Press.
- Thakkar, A. 2015. *The Lion Awakes: Adventures in Africa's Economic Miracle*. New York: St. Martin's Press.
- Thomas, C. Y. 1974. *Dependence and transformation : the economics of the transition to socialism*. New York ; London: Monthly Review Press.
- Traub-Werner, M. a. 2016. *Global displacements : the making of uneven development in the Caribbean*. Oxford and Malden: Wiley.
- Tvedten, K., M. W. Hansen, and S. Jeppesen. 2014. Understanding the rise of African business: In search of business perspectives on African enterprise development. *African Journal of Economic and Management Studies* 5 (3):249-268.
- United Nations Economic Commission for Africa. 2016. *Transformative Industrial Policy in Africa*. Addis Ababa: UNECA.
- Urassa, G. 2014. The effect of the regulatory framework on the competitiveness of the dairy sector in Tanzania. *International Journal of Public Sector Management* 27 (4):296-305.
- Van de Walle, N. 2001. *African economies and the politics of permanent crisis, 1979-1999*. Cambridge: Cambridge University Press.
- Wade, R. 1990. *Governing the market : economic theory and the role of government in East Asian industrialization*. Princeton, N.J. ; Oxford: Princeton University Press.
- Weiss, J. e., and M. A. e. Tribe. 2015. *Routledge handbook of industry and development*. Oxford: Routledge.
- White, L. 2012. South Africa, the home of global champions. In *Going Global: insights from South Africa's top companies*, ed. M. Makura. Pretoria: MME Media in association with the Gordon Institute of Business Science.
- Whitfield, L. 2016. New paths to capitalist agricultural production in Africa: Experiences of Ghanaian pineapple producer-exporters. *Journal of Agrarian Change* DOI: 10.1111/joac.12152.
- Whitfield, L., O. Therkildsen, L. Buur, and A. M. Kjær. 2015. *The politics of African industrial policy : a comparative perspective*. New York, NY: Cambridge University Press.
- Whittaker, H., T. Zhu, T. Sturgeon, M. Han Tsai, and T. Okita. 2010. Compressed Development. *Comparative Studies in International Development* 45 (4):439-467.

- Wong, J. 2014. Poverty, Invisibility and Innovation. In *Innovating for the Global South: Towards an Inclusive Innovation Agenda*, eds. D. Soman, J. Stein and J. Wong, 10-28. Toronto, Buffalo, London: University of Toronto Press.
- World Bank. 1997. *The State in a Changing World* New York: Oxford University Press for the World Bank.
- Yeung, H. W.-C. 2016a. *East Asian Industrial Transformation in the New Global Economy*. Ithaca: Cornell University Press.
- . 2016b. *Strategic Coupling: East Asian Industrial Transformation in the New Global Economy*. Ithaca, NY: Cornell University Press.
- Zeng, D. 2008. *Knowledge, Technology, and Cluster-Based Growth in Africa*. Washington, D. C.: World Bank.