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Africa's new urban spaces: deindustrialisation, infrastructure-led development and real estate frontiers

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ABSTRACT
Many African governments have embraced centralised spatial planning and the construction of large-scale connective infrastructure as a means to synergise industrialisation and functional urban development. This article examines the tensions between these economic and urban development objectives in Ghana and Kenya. Infrastructure-led development in both cases has fuelled extended and unplanned urbanisation and the production of new frontiers for real estate investment. However, the evidence indicates that it has failed to contribute to processes of structural transformation. This argument advances debates about the tensions between supply chain and rentier capitalism and problematises the assumed relationship between infrastructure-led development and industrialisation.

KEYWORDS
Deindustrialisation; infrastructure; urbanisation; real estate; Ghana; Kenya

Les nouveaux espaces urbains de l'Afrique : désindustrialisation, développement axé sur les infrastructures, et frontières de l'immobilier

RÉSUMÉ
De nombreux gouvernements africains ont adopté la planification spatiale centralisée et la construction d'infrastructures connectives de grande échelle comme moyen de créer une synergie entre l'industrialisation et le développement urbain fonctionnel. Cet article examine les tensions entre ces objectifs de développement économique et urbain au Ghana et au Kenya. Dans les deux cas, le développement axé sur les infrastructures a alimenté une urbanisation étendue et non planifiée et la création de nouvelles frontières pour l'investissement immobilier. Toutefois, les données indiquent que cela n'a pas permis de contribuer à des processus de transformation structurelle. Cet argument fait avancer les débats sur les tensions entre la chaîne d'approvisionnement et le capitalisme rentier, et problématise la relation supposée entre le développement porté par les infrastructures et l'industrialisation.

MOTS-CLÉS
Déindustrialisation ; infrastructures ; urbanisation ; immobilier ; Ghana ; Kenya

Introduction

Many developing countries have experienced deindustrialisation since the 1980s, and industrial decline has been particularly severe across much of Africa (Rodrik 2016).

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Africa has concurrently undergone a process of rapid urbanisation: African cities are now among the fastest growing in the world, and much urban growth is unplanned (Pieterse and Parnell 2014; United Nations 2019). In response to the challenge of urbanisation without industrialisation (Gollin, Jedwab, and Vollrath 2016), many African governments have embraced national development planning, with a focus on centralised spatial planning. A cornerstone of national development strategies is the construction of transnational 'development corridors' intended to integrate territories into global value chains by connecting frontiers of resource extraction and agro-industrial production to cities, special economic zones and ports via large-scale connective infrastructure, such as highways and railways (Enns 2018; Scholvin, Breul, and Revilla Diez 2021). Schindler and Kanai (2021) refer to this as 'infrastructure-led development', and its proponents assert that the incorporation of historically isolated places into global markets will attract foreign direct investment (FDI), catalyse structural transformation (or industrial upgrading/diversification at the very least), foster export-oriented growth and ultimately reduce poverty (AfDB 2019a; UN-Habitat 2018). Furthermore, the reintroduction of spatial planning into the repertoire of African statecraft has empowered planners to attempt to address uncontrolled urban sprawl and enhance the competitiveness of urban regions in the global economy through the construction of master-planned urban nodes, such as 'new cities', on peri-urban greenfield sites (Côté-Roy and Moser 2019; Kanai and Schindler 2019; Wiig and Silver 2019).

The promise of synergising industrialisation and functional urban development explains why many African governments have pursued increased connectivity with the global economy through large-scale infrastructure investments. As such, studying this development approach is key to understanding what Ouma (2017, 504) terms 'the complex socio-spatiality of (global) capitalism "in Africa"'. In this article we respond to Arboleda and Purcell's (2021) call to explore the relationship between rentier and supply chain capitalism by examining the tensions between the economic and urban aspects of infrastructure-led development in Ghana and Kenya. We demonstrate that rather than foster significant re-industrialisation, the spatialised development strategies embraced by the Kenyan and Ghanaian governments catalyse the proliferation of 'new urban spaces' (Brenner 2019, 376): extended urban landscapes characterised by the outward expansion of major cities along transport corridors, the integration of national urban systems into transnational urban regions, and the rapid urbanisation of peri-urban and rural areas. This incentivises rentierism (accumulation through the control of land assets and appropriation of land rents) and leads to the explosion of what Gillespie (2020) refers to as 'real estate frontiers'. Given the presence in urban Africa of political-economic incentives that draw capital away from productive sectors towards real estate (Goodfellow 2017), therefore, it is necessary to question the assumed relationship between infrastructure-led development and industrialisation (i.e. upgrading, diversification and structural transformation) in this context.

The article begins by introducing infrastructure-led development and recent debates on the relationship between large-scale infrastructure projects, urbanisation and real estate investment in the global South. Next, it contextualises deindustrialisation in Africa since the 1980s and the subsequent emergence of infrastructure-led development on the continent. It then examines the tensions between the economic and urban aspects of infrastructure-led development in the cases of Ghana and Kenya. Finally, it concludes by reflecting on the limitations of large-scale infrastructure projects for addressing the challenge of urbanisation without industrialisation in Africa.

Infrastructure-led development, urbanisation and real estate frontiers

The world is in the process of a profound urban transition as many countries in the global South are, for the first time in their histories, becoming predominately urban. Fox and Goodfellow (2022, 1962) term this 'late urbanisation', arguing that in contrast to societies in the Organisation for Economic Co-operation and Development (OECD) that urbanised in the course of the industrial revolution, 'countries undergoing urbanisation and urban growth today are experiencing these processes under historically unique conditions of *demographic intensity, hyperglobalisation, centripetal state politics and the spectre of environmental catastrophe*'. Under these conditions, many societies are experiencing urbanisation that is delinked from industrialisation (Gollin, Jedwab, and Vollrath 2016). In response, national governments have increasingly adopted what Schindler and Kanai (2021) refer to as an 'infrastructure-led development' approach that hinges on centralised spatial planning and investment in large-scale, inter-city connective infrastructure (e.g. highways, railways and ports) to transform territory and link frontiers of resource extraction and agro-industrial production with centres of value addition, logistics hubs and export markets. Infrastructure-led development has been promoted since the 2008 financial crisis by a 'global growth coalition' of multilateral development banks, donors, international institutions, private investors and national governments (Schindler and Kanai 2021, 45). For these actors it has become common sense that enhanced connectivity (1) will facilitate integration with global value chains and lead to export-oriented industrialisation (see Dye, Schindler, and Rwehumbiza 2021; Zajonz and Taylor 2021; Scholvin 2021), and (2) is a necessary condition for planned, predictable and standardised forms of urbanisation designed to augment the competitiveness of urban regions in the global economy (see Kanai and Schindler 2019; Wiig and Silver 2019).

Despite the grand promises of infrastructure-led development, the actual results are less than certain. In several documented cases, large-scale infrastructure projects led to increased demand for land and catalysed rapid and unplanned urbanisation (Enns 2018; Schindler and Kanai 2021). Similarly, Goodfellow (2020) found that in some instances infrastructure development in African societies created opportunities for speculation on increasing land values, exacerbating the established tendency for capital to flow into urban real estate at the expense of more productive sectors. Thus, there is a need to identify the relationship between what Brenner (2019, 376) terms 'colossally scaled state spatial strategies' and the explosion of new urban spaces beyond those envisaged by development planners. Arboleda and Purcell's (2021) recent theorisation of the nexus of rentier and supply chain capitalism provides an entry point. In contrast to scholarship that views these as two oppositional varieties of capitalism, they argue that investment in logistics infrastructure (e.g. warehousing) has created the conditions for 'the gravitational shift of large-scale industry … towards the [global] East and the South' (Arboleda and Purcell 2021, 1606). As such, the logistics revolution 'has simultaneously placed assets and landed property – and therefore rentiers – at the forefront of new varieties of class and intra-class conflict' (Arboleda and Purcell 2021, 3). In many African countries a rentier class already thrives due to existing political-economic incentives, such as weak property taxation, that draw capital away from productive sectors and into real estate speculation (Goodfellow 2017, 2020). This has been encouraged by governments that have, in recent years, adopted policies that encourage private investment in urban property development, leading to the proliferation of new 'real estate frontiers' (Gillespie 2020).

These dynamics are not anathema to infrastructure-led development but integral to it. In the following section we discuss the cases of Ghana and Kenya, where central government authorities have embraced infrastructure-led development in pursuit of both industrialisation and functional urban development. However, a marked outcome in both cases is the expansion of sprawling urban landscapes that exceed the expectations of planners, while impacts on industry have yet to materialise. As such, we argue that infrastructure-led development serves to engender new real estate frontiers by creating opportunities for rentierism for a diverse range of actors, from global capitalist developers to disenfranchised local youth. The outcome is a proliferation of new urban spaces: extended urban landscapes that incorporate both large-scale, master-planned real estate projects and unplanned, self-built peri-urban neighbourhoods. This leads us to question claims that infrastructure-led development can foster structural transformation.

These arguments emerged from a process of comparative urbanism that builds on Otiso and Owusu's (2008) comparison of historical urbanisation dynamics in Ghana and Kenya. Although there any many differences between these countries, they share a common historical experience of British colonialism, postcolonial modernisation and neoliberal globalisation that renders them comparable (Otiso and Owusu 2008). This article compares Ghana and Kenya by tracing the 'genetic' interconnections between spatial planning in both countries and identifying 'generative' commonalities in order to theorise the tension between the economic and urban objectives of infrastructure-led development in Africa (Robinson 2016; see also Kanai and Schindler 2022). This comparison is informed by an analysis of relevant academic literature; policy, planning and research documents from national state actors, international institutions and multilateral development banks; marketing materials from real estate developers and other private sector actors; and United Nations data on national economic development in Ghana and Kenya. In addition, this analysis builds on fieldwork in both countries that included interviews with key actors and site visits to locations discussed in this article.

Deindustrialisation, neo-dependency and spatial planning in Africa

Decolonisation in the aftermath of the Second World War opened up vistas of seemingly unlimited change and possibility. Whether governments of newly independent states were constituted by members of an indigenous bourgeoisie or revolutionary Marxists, aligned with the capitalist West or communist East, development policy was underpinned by modernisation theory, which posited that any country could 'take off' and industrialise with the right mix of technocratic management and technological knowhow (Engerman et al. 2003). Many African countries established a mix of policies that generally included (1) large-scale turnkey infrastructure projects, (2) import-substitution industrial policies and (3) the establishment of parastatal companies. These efforts initially paid dividends, and industrial growth in Africa outpaced Latin America and matched Southeast Asia in the 1960s (Mkandawire 1988). Industrial growth tapered off and then plateaued in the 1970s in the context of the global economic slowdown. As the cost of supporting fledgling parastatal enterprises increased, many African countries amassed sovereign debt. Servicing these debts became impossible after a series of US interest rate increases in the early 1980s, and many African countries were forced to turn to the International Monetary Fund and World Bank for emergency aid packages.

The conditions imposed by the international financial institutions in exchange for support served to fundamentally undermine much of the industrialisation that had taken place since independence (Stein 1992). Indeed, rather than arresting or reversing economic decline, neoliberal reforms accelerated it: Ferguson (2006, 11) confirms that 'the structural-adjustment era has seen the lowest rates of economic growth ever recorded in Africa.' Proponents of neoliberal reform argued that markets would allocate factors of production more efficiently than states, so parastatal enterprises were put up for sale. It was hoped that foreign firms would buy these companies and make investments to bolster their competitiveness, but multinational corporations were unsurprisingly unenthusiastic about investing in inefficient enterprises that were only afloat thanks to generous subsidies (Coulson 2013; de Valk 1996). Liberalisation policies exposed African firms to fierce competition from East Asian producers, and the former were disadvantaged by high labour costs, low productivity and rentier profiteering by the new owners of privatised factories (Brooks and Simon 2012; Lal 1995). This led to a prolonged period of deindustrialisation across Africa that lasted from the 1980s to the 2010s (Stein 1992; Rodrik 2016). While foreign investors did not come to the rescue of African industry, they were attracted to African resources and land. Thus, the 1980s was a rupture for many African countries, and they were redirected from a supposedly universal and linear process of modernisation onto a second-tier development trajectory centred on the export of primary commodities (see Gibbon and Ponte 2005). By the beginning of the twenty-first century, most African countries had implemented extractivist development strategies and the continent was firmly rooted in the global division of labour as a resource exporter.

Many African economies experienced high gross domestic product (GDP) growth in the 2000s as a result of the so-called 'commodity super-cycle' fuelled by China's insatiable appetite for resources (see Jepson 2020). This served to insulate resource-exporting countries from the effects of the 2008 financial crisis and bolster a narrative that Africa was 'rising'. However, growth was largely based on a deepening dependence on exporting natural resources and agricultural goods: primary commodities as a share of total exports increased between 2000 and 2009, and manufacturing value added per capita (an indicator of industrialisation) was stagnant during this period (Carmody, Kragelund, and Reboredo 2020; Taylor 2016). Nevertheless, African governments found themselves flush with cash at the very moment that the 2008 crisis undermined neoliberal orthodoxy, and for newly interventionist states structural transformation became an – if not *the* – overarching development objective (see Hickey 2013). Interestingly, however, most development plans do not call for the resurrection of industries that collapsed following structural adjustment. Instead of deviating from an extractivist development model, the objective is to 'move up' value chains in extractive and agricultural sectors by encouraging value-added activity.

It has become common sense among institutions such as the World Bank that industrial upgrading in Africa is hindered by the existence of a significant 'infrastructure gap'

(Goodfellow 2020; UN-Habitat 2018; Fofack 2020). This explains why the current industrial strategies of many African countries are thoroughly spatialised and so-called 'development corridors' have proliferated (Enns 2018; Scholvin, Breul, and Revilla Diez 2021). This approach builds on the 'new regionalism' of the 1990s in which regional integration initiatives were pursued by African governments and intergovernmental organisations with a view to enhancing access to global markets (see Simon 2003 on the new regionalism and spatial planning initiatives in southern Africa). Today, the African Development Bank (AfDB) (2019a, 2019b) has prioritised investment in infrastructure, such as transnational road corridors, as a strategy to achieve economic development through enhanced regional integration and structural transformation.

According to UN-Habitat (2018, 177, 181) the purported benefits of corridors are not limited to economic development – enhanced connectivity is also the key to synergising industrialisation and functional urban development in Africa:

> when a city enhances its road connectivity within the immediate urban region and consequently provides firms with reach to more distant markets, more [multinational enterprises] and investment can be attracted … A diverse and connected system of African cities can accelerate the process of industrialisation, both by opening up new locations for industry and [by] creating access to larger markets.

This is reflected in the growing trend of governments formulating national urban policies in order to address the challenge of rapid urbanisation in Africa. Within these policies, infrastructure investment is envisaged as key to promoting sustainable urban development while also harnessing the contribution of cities to national economic development (UN-Habitat 2017). In sum, infrastructure-led development in general, and corridors in particular, are justified by a 'win–win narrative' (Enns 2018, 105) that promises to address both industrial and urban development challenges across Africa.

Ghana: the Abidjan–Lagos Corridor

Ghana is one of five coastal West African countries connected by a transnational, intercity road-building project named the Abidjan–Lagos Corridor (ALC). The project focuses on the construction of a 1000 km six-lane highway to connect Ghana's capital, Accra, to the port cities of Abidjan, Lome, Cotonou and Lagos, and over 50% of the corridor falls within Ghanaian territory (see Figure 1). Launched in 2014, it is coordinated by the Economic Community of West African States (ECOWAS), supported by the African Union's Programme for Infrastructure Development in Africa (PIDA) and funded by the AfDB, the European Commission and the German Society for International Cooperation. Incorporating sections of the existing road network, the new corridor forms part of the larger ECOWAS Trans-West Africa Highway project that seeks to connect Dakar to Lagos.

According to ECOWAS (2019) and PIDA (2017), ALC will enhance intra-regional economic integration and trade, integrate West Africa more fully into the global economy, and enable the growth of labour-intensive industry, contributing to poverty reduction in the process. As such, PIDA (2017, 27) describes the corridor as 'the true backbone of the economic and social development of the sub-region'. In terms of national policy linkages, this initiative was originally intended to complement the 2012–2017 National Democratic Congress government's Ghana Shared

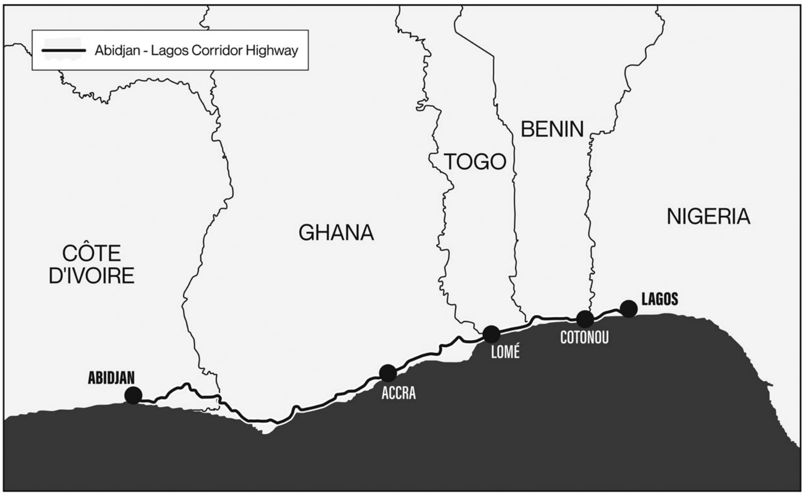

Figure 1. The Abidjan–Lagos Corridor.
Source: Glen Cutwerk, based on PIDA (2017, 14).

Growth and Development Agenda by supporting 'the structural transformation of [Ghana's] economy … through industrialization especially manufacturing, based on modernized agriculture and sustainable exploitation of Ghana's natural resources' (AfDB 2016, 1). Despite the change of ruling party in 2017, the current president of Ghana, Nana Akufo-Addo of the National Patriotic Party, has emphasised the continued importance of the project: 'the significance of the [Corridor], one of the initiatives towards regional integration, cannot be lost on anyone' (GhanaWeb 2019). In sum, the project is intended to contribute to both national and regional economic development by enabling export-oriented industrialisation and greater integration into regional and global value chains.

Although ALC primarily seeks to catalyse economic development, policymakers in Ghana have seized on the new highway as an opportunity to address persistent urban development challenges, such as housing deficits and unplanned urban sprawl. National and local state actors and international institutions have taken advantage of the greater connectivity offered by ALC to initiate a new city-building project on a site 50 km east of central Accra. Strategically located adjacent to the new highway in the largely rural district of Ningo-Prampram, the Accra city extension project is a public–private partnership involving the government of Ghana, the local district assembly and traditional authorities, UN-Habitat and international consultants. The intention is to transform over 100 km^2 of land into a master-planned new city featuring an international airport, university campus, conference centre, tourist resort and mixed-use residential, retail and office developments. The project seeks to use infrastructural development to enhance international connectivity and promote Ghana as the business-friendly 'gateway' to West Africa. Furthermore, it is hoped that new city development will help to address Accra's housing deficit, absorb urban population growth and prevent unplanned urban sprawl through the on-site provision of 5000 subsidised 'affordable' housing units. The project also incorporates sustainable urban design elements, such as infrastructure for pedestrians and cyclists and a solar energy farm (Agyekum 2019; Korah, Matthews, and Osborne 2020; Grant, Oteng-Ababio, and Sivilien 2019).

Beyond state-led, master-planned urban projects, however, ALC has also fuelled a massive unplanned process of extended urbanisation. Although infrastructure-led development is intended to synergise economic and urban development objectives, road building can in fact act as a catalyst for the proliferation of informal peri-urban neighbourhoods. Urbanisation in the Greater Accra Metropolitan Area has been characterised by unplanned, low-density residential development in formerly rural areas, particularly along the corridor route to the east and west of the city. This informal urban sprawl can, in part, be explained by donor-funded road-building projects that have made peri-urban areas with cheaper land more accessible to urban commuters (Owusu 2013; Owusu and Oteng-Ababio 2015). In addition to self-built housing construction, formal real estate developers have contributed to the sprawl of Accra through the proliferation of peri-urban gated housing estates for the wealthy (Grant 2009).

Beyond Greater Accra, the West African coastal road network forms the 'backbone' of an emerging transnational 'mega-city region' of 30 million inhabitants (Choplin and Hertzog 2020, 205, 207). A construction boom along the length of the corridor is evident from the rapidly growing regional market in cement, which is mixed with peri-urban and rural land by various actors to transform it into urban real estate (Choplin 2020). Choplin and Hertzog (2020) describe the emergence of an extended urban landscape characterised by self-built housing, cement depots, hardware stores, illegal electricity networks, private schools, evangelical churches, mobile banking kiosks and motels. This informal construction boom is driven by the aspirations of the poor, middle class, wealthy and diaspora to all build and own housing as a livelihood strategy, and bags of cement are increasingly valued as investment assets by self-builders (Choplin 2020; Choplin and Hertzog 2020). The outcome is an extended coastal urban corridor punctuated by what Grant et al. (2019, 338) describe as a 'string of beads' of large-scale projects such as the Accra city extension.

This combination of formal and informal corridor urbanisation indicates that infrastructure-led development has created opportunities for rentierism by actors operating at multiple scales, including global real estate capital, national political elites and local traditional land custodians. Large-scale projects such as Ningo-Prampram deliberately create new frontiers for transnational real estate investment by opening up rural spaces for master-planned urban development. For example, the Ghanaian government entered into a controversial partnership with a Brazilian developer to provide affordable housing at the Accra city extension (Lartey 2021). In addition, national politicians have been implicated in allegations of illegal land grabbing and leasing in the project area (Agbenyega 2015). Furthermore, urbanisation at Ningo-Prampram has enabled local traditional leaders to profit from the alienation of customary land to private developers (Agyekum 2019; Grant, Oteng-Ababio, and Sivilien 2019). However, opportunities for land rent appropriation are not limited to powerful 'big men': youths excluded from the benefits of land transactions engage in redistributive practices of 'takashie' whereby they threaten to disrupt development unless landowners pay them a fee (Agyekum 2019). These processes of land-based accumulation cause conflict and contestation, particularly as complex customary tenure regimes are subsumed by markets. For example, the initiation of the Ningo-PramPram project has led to landownership

Table 1. Manufacturing value added as a proportion of gross domestic product (GDP, %) – Ghana, 2011–2020.

Year	Ghana: manufacturing value added as a proportion of GDP (%)
2011	13.7
2012	12.8
2013	11.8
2014	11.2
2015	11.4
2016	11.9
2017	12
2018	11.8
2019	11.8
2020	11.6

Source: UNIDO (2022).

disputes between and within families and provoked opposition from indigenous land users whose agricultural livelihoods have been displaced by urbanisation (Agyekum 2019; Korah, Matthews, and Osborne 2020; Grant, Oteng-Ababio, and Sivilien 2019).

In sum, it is clear that infrastructure-led development in Ghana is contributing to the expansion of real estate frontiers by creating opportunities for rentierism by global, national and local actors. However, the evidence suggests that this process of extended urbanisation has not been accompanied by successful industrialisation. Manufacturing value added as a proportion of GDP has stagnated in Ghana since the launch of ALC in 2014 (see Table 1; see also Whitfield 2018 on Ghana's failure to achieve structural transformation). Therefore, while the project remains a work in progress, the indicators are that infrastructure-led development is not a 'magic bullet' for synergising industrialisation and urban development in Ghana. For example, Grant, Oteng-Ababio and Sivilien (2019) compare the Ningo-Prampram project to the new city of Tema built in the 1950s by Ghana's first president, Kwame Nkrumah. Tema was designed as an industrial hub with a seaport and an aluminium plant and was clearly integrated within Ghana's post-independence national industrial strategy. By contrast, in the case of Ningo-Prampram 'the economic basis of the planned extension is barely touched upon in the concept plan' (Grant, Oteng-Ababio, and Sivilien 2019, 332). In addition, Choplin and Hertzog (2020, 208) argue that urbanisation has increased the region's dependence on imports of manufactured goods, and 'the wealth produced in and by these cities, linked to import–export activities and more generally to services, is rarely reinvested in industrial production. Instead, it is injected into property and real estate.' Despite the promises of infrastructure-led development to promote industrialisation, therefore, Ghana's peripheral role in the global economy continues to shape its urban development trajectory (Yeboah, Maingi, and Arku 2020).

Kenya: Vision 2030

The Kenyan government established its commitment to industrialisation with the inauguration of *Kenya Vision 2030* in 2008. Informed by modernisation theory, the vision outlines a comprehensive transformation of Kenya's economy and society (see Manji 2015), and the government initially hoped that manufacturing would nearly double from 11% to 20% of GDP between 2015 and 2022 (EPZA 2022; Government of Kenya

2015). To this end, Kenya's Industrial Transformation Programme identifies a number of sectors, including agro-processing, whose growth is purportedly hindered by infrastructural deficits (Government of Kenya 2015). The assertion that poor infrastructural connectivity has inhibited industrial performance explains the embrace of spatial planning in *Vision 2030*: 'The 2030 Vision aspires for a country firmly interconnected through a network of roads, railways, ports, airports, water and sanitation facilities, and telecommunications. By 2030, it will become impossible to refer to any region of our country as "remote"' (Government of Kenya 2007, 6). In order to achieve this goal, former president Uhuru Kenyatta (2013–2022) acknowledged the significant 'role that the government will need to play in creating the infrastructure backbone to advance our economy' (Government of Kenya 2015, 2).

In addition to enabling the structural transformation of key sectors, state-coordinated infrastructure investments are intended to synergise industrialisation with functional urban development. The catalyst meant to trigger these dynamic processes is large-scale connective infrastructure projects. The most ambitious of these initiatives is the Lamu Port, South Sudan, Ethiopia Transport Corridor (LAPSSET), a transnational region with a north–south axis connecting Nairobi and Ethiopia, and an east–west axis that links Lamu on the coast with South Sudan (see Figure 2). The objective is to integrate this loosely connected transnational space into a seamless territory that is open for business. The project's rationale is captured by Kenyatta who stated that LAPSSET will 'position [Kenya] in the developmental frontline' and 'open up 70% of the country that has been uninvested in since independence [and] triple the investment space in the country' (LCDA 2015, 1). This is to be achieved through the construction of US$24.5 billion worth of infrastructure projects, many of which were first proposed as discrete initiatives in the postcolonial period (Browne 2015; Enns and Bersaglio 2020; Kimari and Ernstson 2020), such as an oil pipeline, port, highways, railways, airports industrial parks and export processing zones (LCDA 2015).

LAPSSET is ostensibly a spatialised industrial development strategy whose aim is to open a frontier for investment in agribusiness, food processing, resource extraction, tourism and logistics. However, although a number of industrial projects are in various stages of completion, many remain behind schedule and there is no evidence that they have had a cumulative effect contributing to structural transformation (see Table 2). For example, many of the industrial initiatives associated with LAPSSET are located in industrial parks and export processing zones, whose management is the responsibility of the Export Processing Zone Authority. The Authority's most recent performance report notes that exports from its licensed zones decreased by 5.3% from 2018–2019 (EPZA 2019). Thus, LAPSSET will most likely not reverse Kenya's industrial fortunes, yet it has already had a marked influence on urbanisation dynamics.

LAPSSET includes an urban development component through the construction of several 'resort cities' with the aim of attracting tourism. While these remain visions, LAPSSET has catalysed urbanisation that exceeds the construction of carefully planned cities. Northern Kenya is witnessing extended urbanisation driven by competition to acquire land strategically located near LAPSSET infrastructure. Colonial authorities considered the area north of the town of Isiolo a buffer with Abyssinia, and after Kenyan independence this area remained a 'low potential' frontier hardly worth exploiting (Kochore 2016; Elliott 2016). However, Isiolo is now a key hub where east–west and

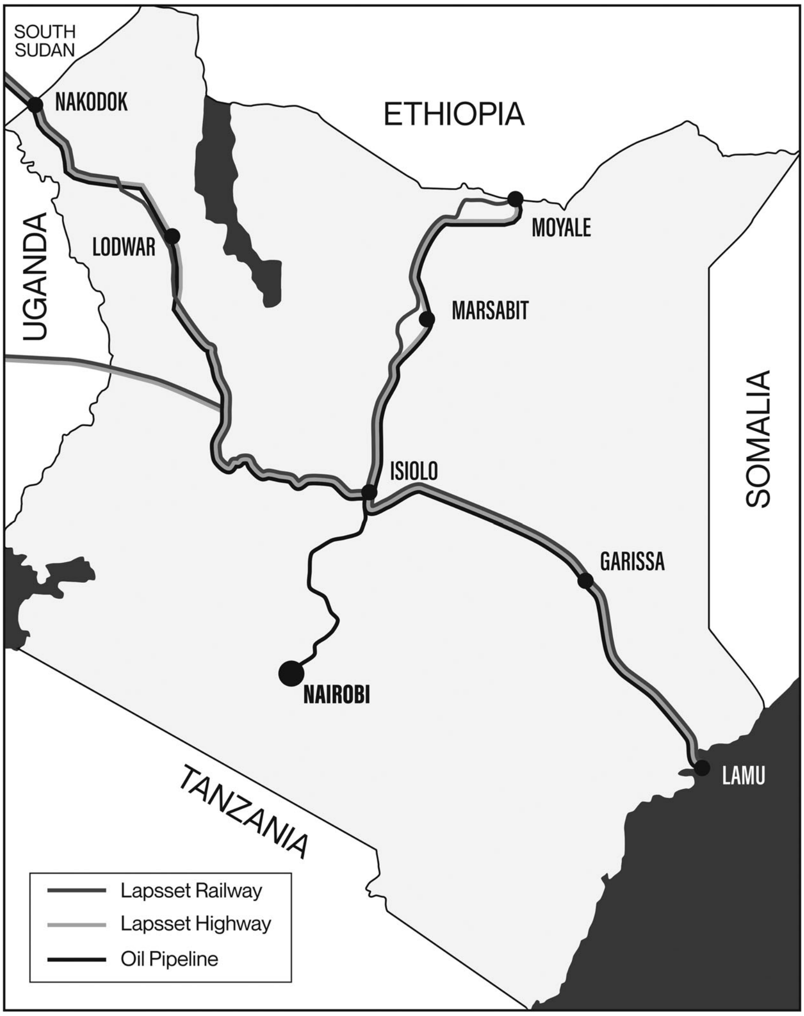

Figure 2. The Lamu Port, South Sudan, Ethiopia Transport Corridor.
Source: Glen Cutwerk, based on LAPSSET Corridor Development Authority (2015, 7).

Table 2. Manufacturing value added as a proportion of gross domestic product (GDP, %) – Kenya, 2011–2020.

Year	Kenya: manufacturing value added as a proportion of GDP (%)
2011	10.4
2012	9.9
2013	9.8
2014	9.6
2015	9.4
2016	9.1
2017	8.8
2018	8.6
2019	8.4
2020	8.5

Source: UNIDO (2022).

north–south LASPSSET infrastructure intersect, resulting in a growing demand for land among investors. Local officials 'adjudicate' the conversion of communal holdings on the town's edges, whose use is determined by complex non-market norms, to commodified land with title (Elliott 2016). As official pronouncements and plans surrounding LAPSSET championed Isiolo's destiny as a future economic hub, both local residents and newcomers rushed to stake a formal claim. The emergence of a lively real estate market has attracted non-local investors, who entice existing land users to sell their plots and relocate. This process, which Elliott (2016, 523) calls 'displacement by money', has led to growing resentment and is reminiscent of events near Lamu.

Lamu is the primary eastern node of LAPSSET, where significant investments include a port, an oil refinery, an industrial zone, transportation infrastructure and a resort. These projects will purportedly transform Lamu into a Mega Economic Zone (Bremner 2013), and land values have skyrocketed in anticipation of this transformation. Despite innumerable delays in the actual construction of infrastructure, central government officials have taken advantage of anticipated growth in Lamu by selling land in violation of legal norms, leading to conflict with local officials and undermining hopes for earnest devolution of political power (Chome 2015, 2020; Lesutis 2021). Local residents have mobilised against LAPSSET for a variety of reasons – some oppose the project *tout court*, while others are frustrated by their perception that non-locals acquire land and are awarded jobs and contracts (Laher 2011; Bremner 2013; Ahmed 2018; Enns 2019; Chome 2020).

The rush to acquire land near large-scale infrastructure projects is not limited to LAPSSET. Another primary example can be found along the Thika Superhighway connecting Nairobi with Kiambu County to the north. Completed in 2012, this *Vision 2030* flagship project to upgrade a four-lane dual carriageway into an eight-lane 'superhighway' has accelerated uncontrolled urban sprawl on Nairobi's northern edge (Siro and Sichangi 2017; Mbataru 2018). Land prices along the corridor increased tenfold between 2007 and 2017, and landowners have responded by subdividing agricultural land into plots for urban real estate development (K'Akamu, Gateri, and Kago 2017; Manji 2015). This infrastructure-driven parcelling of land has created opportunities for rentierism by actors operating at multiple scales. Global real estate developer Rendeavour is building Tatu City, a master-planned new city awarded *Vision 2030* flagship status, close to the Superhighway in Kiambu County. Rendeavour (2021) describes Tatu City as '[A] 5,000-acre, mixed-use development with homes, schools, offices, a shopping district, medical clinics, nature areas, a sport & entertainment complex and manufacturing area for more than 150,000 residents and tens of thousands of day visitors'. By combining master-planned property development with a light industrial park, including a 47,000 m^2 warehousing facility funded by the UK's development finance institution, Tatu City embodies the ambition to synergise industrial and urban objectives through infrastructure-led development.

In addition to global capital, national elites have eagerly participated in rentierism along the Thika Superhighway corridor. Kenyatta and his family own 11,800 hectares adjacent to the superhighway, and plan to build another master-planned new city called Northlands. According to one source, the construction and subsequent expansion of the Nairobi Eastern Bypass along the perimeter of the Northlands site was influenced by Kenyatta's desire to maximise the value of his land assets (Kenyan Wall Street 2018).

Local actors have also taken advantage of infrastructure development to engage in rentierism. For example, the construction of the Eastern Bypass precipitated significant speculation by local land-buying companies, with some speculators colluding with state actors to gain access to advance information about planned infrastructure investments (Kinuthia, Majale, and Letema 2021). In addition, Mathare Valley, an informal settlement to the south of Thika Superhighway, has experienced unregulated verticalisation as local investors build upwards to capitalise on city's lucrative rental market (Mwau and Sverdlik 2020). Following the Superhighway expansion, Mathare's traditional shack housing has been gradually replaced by 5- to 10-storey tenement buildings composed of one-room family units, and research demonstrates that tenement landlords enjoy extremely high returns on their investment (Mwau, Sverdlik, and Makau 2020).

In sum, under *Vision 2030* Kenya is forging ahead with infrastructure-led development designed to catalyse a synergy between industrialisation and functional urban development. However, large-scale infrastructure projects such as LAPSSET and the Thika Superhighway have in fact catalysed uncontrolled processes of extended urbanisation. As the value of land in areas adjacent to infrastructure projects has increased tremendously, the expansion of real estate frontiers is fuelled by rentierism by global, national and local actors. The former invest in gated new towns while the latter are responsible for the proliferation of the high-rise tenements that are a distinctive feature of Nairobi's rental housing market. However, the government of Kenya has fallen short of meeting its industrial objectives, and its substantial infrastructure investments have failed to revitalise Kenyan industry (see Table 2). Thus, in the case of Kenya it is clear that urbanisation and industrialisation remain decoupled, and policymakers must urgently ask whether the country's real estate frontiers are absorbing capital at the expense of more productive sectors.

Conclusion

Many African countries experienced industrialisation in the immediate post-colonial period, followed by a prolonged period of deindustrialisation combined with rapid urbanisation since the 1980s. In response, a 'global growth coalition' of state and non-state actors advocate the deployment of large-scale inter-city infrastructure as a means to foster industrialisation and upgrading in primary commodity and agro-industrial value chains (Schindler and Kanai 2021, 45). This coalition has also identified enhanced infrastructural connectivity as an opportunity to engineer planned, predictable and standardised forms of urbanisation with a view to enhancing the global competitiveness of urban regions (Kanai and Schindler 2019; Wiig and Silver 2019). However, this article demonstrates that one consequence of infrastructure-led development in Africa has been urbanisation that exceeds the intensions of policymakers and planners. Infrastructure projects in Ghana and Kenya have contributed to the emergence of vast extended urban landscapes characterised by the outward expansion of major cities along transport corridors, the integration of national urban systems into transnational urban regions, and the rapid urbanisation of peri-urban and rural areas. Quite simply, contemporary industrial strategy has become thoroughly spatialised, and although this has not resulted in structural transformation in either Kenya or Ghana, it is driving the explosion of what Brenner (2019) refers to as 'new urban spaces'. This is contributing to the production of new real estate frontiers in which capital accumulation depends on the ability to extract rents from control over land and its conversion from non-urban to urban use.

This article has problematised the assumed relationship between infrastructure-led development and industrialisation, especially in the context of rapid urbanisation and rising land values. By comparing the cases of Ghana and Kenya, we demonstrated that large-scale infrastructure projects are creating opportunities for land rent appropiation for actors operating at global, national and local scales – what Leitner and Sheppard (2020, 492) call 'inter-scalar chains of rentiership'. However, the evidence indicates that neither the ALC nor Vision 2030 has contributed to processes of structural transformation. Some real estate investment attracted by new corridor projects is certainly flowing into industrial and logistics projects: global real estate agents Knight Frank (2021) argue that corridor development is driving growing demand for, and investment in, prime warehousing in Africa. However, there is little evidence that industrial zones have contributed to structural transformation in Africa (Farole 2011), and the proliferation of logistics parks reflects, in part, changing consumption patterns such as the growing popularity of e-commerce on the continent (Knight Frank 2021). Therefore, although spatial planning initiatives may have attracted some investment in industrial *projects*, they have thus far failed to catalyse wider economic *processes* of structural transformation.

According to Arboleda and Purcell (2021), supply chain and rentier capitalism have combined since the 1970s to transform the global South into a 'global factory'. However, our case studies suggest that infrastructure-led development does not engender industrialisation if accompanied by political-economic incentives that encourage rentierism and draw capital away from productive sectors into urban real estate. One such incentive is ineffective property taxation (Goodfellow 2017), and land value capture mechanisms have been implemented in an ad hoc and inconsistent manner in both Ghana and Kenya (Berrisford, Cirolia, and Palmer 2018; Obeng-Odoom 2014). Furthermore, Obeng-Odoom (2020) identifies rentierism as a primary cause of inequality in Africa, and advcoates the taxation of land rents to encourage the development of the non-rentier economy and generate revenue for public service provision and investment. However, the distribution of rents from urban real estate is central to the maintenance of clientelistic political settlements, such as those in Ghana and Kenya, and attempts to inhibit rentierism are likely to encounter resistance from powerful vested interests (Berrisford, Cirolia, and Palmer 2018; Goodfellow 2020). As such, achieving both structural transformation and inclusive development in Africa will require a distributive politics that challenges the power of the rentier and incentivises productive investment by socialising benefits of land-based accumulation.

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References

AfDB (African Development Bank). 2016. *Study for the Abidjan-Lagos Corridor Highway Development Project*. Accessed January 31, 2022. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Multinational_-_Approved_-_Study_for_the_Abidjan-_Lagos_Corridor_Highway_Development_Project.pdf.

AfDB. 2019a. *Cross-border Road Corridors: The Quest to Integrate Africa*. AfDB: Abidjan.

AfDB. 2019b. *Creating Decent Jobs: Strategies, Policies, and Instruments*. AfDB: Abidjan.

Agbenyega, P. 2015. "JJ Rawlings Exposes Obed Asamoah Over Ownership Of Ningo Family Lands." *Modern Ghana*. September 27. https://www.modernghana.com/news/645371/1/jj-rawlings-exposes-obed-asamoah-over-ownership-of.html.

Agyekum, H. A. 2019. "Takashie: Translating Transnational Policy Circulations in the Ningo-Prampram City Extension Agenda." *Urban Forum* 30 (3): 245–259. doi:10.1007/s12132-019-09376-2.

Ahmed, M. 2018. "Lamu Leaders Plan Protest Over Exclusion of Locals from Lapsset." *Business Daily*. February 14. https://www.businessdailyafrica.com/news/counties/Lamu-leaders-plan-protest-exclusion-locals-Lapsset/4003142-4304454-89gjse/index.html.

Arboleda, M., and T. F. Purcell. 2021. "The Turbulent Circulation of Rent: Towards a Political Economy of Property and Ownership in Supply Chain Capitalism." *Antipode* 53 (6): 1599–1618. doi:10.1111/anti.12737.

Berrisford, S., L. R. Cirolia, and I. Palmer. 2018. "Land-based Financing in Sub-Saharan African Cities." *Environment and Urbanization* 30 (1): 35–52. doi:10.1177/0956247817753525.

Bremner, L. 2013. "Towards a Minor Global Architecture at Lamu, Kenya." *Social Dynamics* 39 (3): 397–413. doi:10.1080/02533952.2013.842340.

Brenner, N. 2019. *New Urban Spaces: Urban Theory and the Scale Question*. New York: Oxford University Press.

Brooks, A., and D. Simon. 2012. "Unravelling the Relationships Between Used-clothing Imports and the Decline of African Clothing Industries." *Development and Change* 43 (6): 1265–1290. doi:10.1111/j.1467-7660.2012.01797.x.

Browne, A. J. 2015. *LAPSSET: The History and Politics of an Eastern African Megaproject*. Nairobi: Rift Valley Institute.

Carmody, P., P. Kragelund, and R. Reboredo. 2020. *Africa's Shadow Rise: China and the Mirage of African Development*. London: Zed Books.

Chome, N. 2015. "“Devolution is Only for Development”? Decentralization and Elite Vulnerability on the Kenyan Coast." *Critical African Studies* 7 (3): 299–316. doi:10.1080/21681392.2015.1075750.
Chome, N. 2020. "Land, Livelihoods and Belonging: Negotiating Change and Anticipating LAPSSET in Kenya's Lamu County." *Journal of Eastern African Studies* 14 (2): 310–331. doi:10.1080/17531055.2020.1743068.
Choplin, A. 2020. "Cementing Africa: Cement Flows and City-making Along the West African Corridor (Accra, Lomé, Cotonou, Lagos)." *Urban Studies* 57 (9): 1977–1993. doi:10.1177/0042098019851949.
Choplin, A., and A. Hertzog. 2020. "The West African Corridor from Abidjan to Lagos: A Megacity-region Under Construction." In *Handbook of Megacities and Megacity-regions*, edited by D. Labbé, and A. Sorensen, 206–222. Cheltenham: Edward Elgar Publishing.
Coulson, A. 2013. *Tanzania: A Political Economy*. 2nd ed. Oxford: Oxford University Press.
Côté-Roy, L., and S. Moser. 2019. "'Does Africa Not Deserve Shiny New Cities?' The Power of Seductive Rhetoric Around New Cities in Africa." *Urban Studies* 56 (12): 2391–2407. doi:10.1177/0042098018793032.
de Valk, P. 1996. *African Industry in Decline: The Case of Textiles in Tanzania in the 1980s*. Basingstoke: Macmillan Press.
Dye, B., S. Schindler, and D. Rwehumbiza. 2021. "The Political Rationality of State Capitalism in Tanzania: Territorial Transformation and the Entrepreneurial Individual." *Area Development and Policy* 7 (1): 42–61. doi:10.1080/23792949.2021.1967175.
ECOWAS (Economic Community of West African States). 2019. *ECOWAS Launches Project Implementation Unit of the Abidjan-Lagos Corridor Highway*. Accessed March 16, 2021. https://www.ecowas.int/ecowas-launches-project-implementation-unit-of-the-abidjan-lagos-corridor-highway/.
Elliott, H. 2016. "Planning, Property and Plots at the Gateway to Kenya's 'New Frontier'." *Journal of Eastern African Studies* 10 (3): 511–529. doi:10.1080/17531055.2016.1266196.
Engerman, D. C., N. Gilman, M. H. Haefele, and M. E. Latham. 2003. *Staging Growth: Modernization, Development and the Global Cold War*. Amherst: University of Massachusetts Press.
Enns, C. 2018. "Mobilizing Research on Africa's Development Corridors." *Geoforum; Journal of Physical, Human, and Regional Geosciences* 88: 105–108. doi:10.1016/j.geoforum.2017.11.017.
Enns, C. 2019. "Infrastructure Projects and Rural Politics in Northern Kenya: The Use of Divergent Expertise to Negotiate the Terms of Land Deals for Transport Infrastructure." *The Journal of Peasant Studies* 46 (2): 358–376. doi:10.1080/03066150.2017.1377185.
Enns, C., and B. Bersaglio. 2020. "On the Coloniality of "New" Mega-infrastructure Projects in East Africa." *Antipode* 52 (1): 101–123. doi:10.1111/anti.12582.
EPZA (Export Processing Zone Authority). 2019. *Export Processing Zones Program Annual Performance Report*, 2019. Nairobi: EPZA.
EPZA. 2022. *Vision 2030*. Accessed February 1, 2022. https://epzakenya.com/vision-2030/.
Farole, T. 2011. *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experiences*. Washington, DC: World Bank.
Ferguson, J. 2006. *Global Shadows: Africa in the Neoliberal World Order*. Durham: Duke University Press.
Fofack, H. 2020. *Making the AfCFTA Work for 'The Africa We Want'*. Washington, DC: The Brookings Institution.
Fox, S., and T. Goodfellow. 2022. "On the Conditions of 'Late Urbanisation'." *Urban Studies* 59 (10): 1959–1980. https://doi.org/10.1177/00420980211032654.
GhanaWeb. 2019. "Establish a Management Authority to Fast-track Implementation of Abidjan-Lagos Corridor Dev't Project - Akufo-Addo." *GhanaWeb*, October 19. https://www.ghanaweb.com/GhanaHomePage/business/Establish-a-management-authority-to-fast-track-implementation-of-Abidjan-Lagos-Corridor-Dev-t-Project-Akufo-Addo-790926.
Gibbon, P., and S. Ponte. 2005. *Trading Down: Africa, Value Chains, and the Global Economy*. Philadelphia: Temple University Press.

Gillespie, T. 2020. "The Real Estate Frontier." *International Journal of Urban and Regional Research* 44 (4): 599–616. doi:10.1111/1468-2427.12900.

Gollin, D., R. Jedwab, and D. Vollrath. 2016. "Urbanization With and Without Industrialization." *Journal of Economic Growth* 21 (1): 35–70. doi:10.1007/s10887-015-9121-4.

Goodfellow, T. 2017. "Urban Fortunes and Skeleton Cityscapes: Real Estate and Late Urbanization in Kigali and Addis Ababa." *International Journal of Urban and Regional Research* 41 (5): 786–803. doi:10.1111/1468-2427.12550.

Goodfellow, T. 2020. "Finance, Infrastructure and Urban Capital: The Political Economy of African 'Gap-filling'." *Review of African Political Economy* 47 (164): 256–274. doi:10.1080/03056244.2020.1722088.

Government of Kenya. 2007. *Kenya Vision 2030: The Popular Version*. Nairobi: Government of Kenya.

Government of Kenya. 2015. *Kenya's Industrial Transformation Programme*. Nairobi: Ministry of Industrialization and Enterprise Development.

Grant, R. 2009. *Globalizing City: The Urban and Economic Transformation of Accra, Ghana*. Syracuse: Syracuse University Press.

Grant, R., M. Oteng-Ababio, and J. Sivilien. 2019. "Greater Accra's New Urban Extension at Ningo-Prampram: Urban Promise or Urban Peril?" *International Planning Studies* 24 (3-4): 325–340. doi:10.1080/13563475.2019.1664896.

Hickey, S. 2013. "Beyond the Poverty Agenda? Insights from the New Politics of Development in Uganda." *World Development* 43: 194–206. doi:10.1016/j.worlddev.2012.09.007.

Jepson, N. 2020. *In China's Wake: How the Commodity Boom Transformed Development Strategies in the Global South*. New York: Columbia University Press.

K'Akamu, O. A., C. W. Gateri, and J. Kago. 2017. *State Capacity and Inclusive Development in Nairobi City: Case Studies of the Densification of Kileleshwa Residential District and Nairobi-Thika Highway Improvement*. Nairobi: Partnership for African Social and Governance.

Kanai, J. M., and S. Schindler. 2019. "Peri-urban Promises of Connectivity: Linking Project-led Polycentrism to the Infrastructure Scramble." *Environment and Planning A: Economy and Space* 51 (2): 302–322. doi:10.1177/0308518X18763370.

Kanai, J. M., and S. Schindler. 2022. "Infrastructure-led Development and the Peri-urban Question: Furthering Crossover Comparisons." *Urban Studies*, advance online publication. doi:10.1177/00420980211064158.

Kenyan Wall Street. 2018. "President Kenyatta Orders Transport Minister to Prioritise Allocation of Funds for Eastern Bypass Extension." Accessed September 7, 2022. https://kenyanwallstreet.com/president-kenyatta-orders-transport-minister-to-prioritise-allocation-of-funds-for-eastern-bypass-extension/.

Kimari, W., and H. Ernstson. 2020. "Imperial Remains and Imperial Invitations: Centering Race Within the Contemporary Large-scale Infrastructures of East Africa." *Antipode* 52 (3): 825–846. doi:10.1111/anti.12623.

Kinuthia, H., C. Majale, and S. Letema. 2021. "Influence of Public Policy Planning on Peri-urban Land Speculation in (Greater) Eastern Bypass in Nairobi Metropolitan." *Land Use Policy* 107: 105515. doi:10.1016/j.landusepol.2021.105515.

Knight Frank. 2021. *Africa Logistics & Industrial Review - H2* 2021. Accessed January 6, 2022. https://www.knightfrank.com/research/report-library/africa-logistics-industrial-review-h2-2021-8474.aspx.

Kochore, H. H. 2016. "The Road to Kenya?: Visions, Expectations and Anxieties Around New Infrastructure Development in Northern Kenya." *Journal of Eastern African Studies* 10 (3): 494–510. doi:10.1080/17531055.2016.1266198.

Korah, P. I., T. Matthews, and N. Osborne. 2020. "Assembling Accra Through New City Imaginary: Land Ownership, Agency, and Relational Complexity." *Habitat International* 106: 102277. doi:10.1016/j.habitatint.2020.102277.

Laher, R. 2011. "The Lamu District at the Crossroads." *Africa Insight* 40 (4): 81–92. doi:10.4314/ai.v40i4.65931.

Lal, S. 1995. "Structural Adjustment in African Industry." *World Development* 23 (12): 2019–2031. doi:10.1016/0305-750X(95)00103-J.
LCDA (LAPSSET Corridor Development Authority). 2015. *Investment Prospectus*. Nairobi: The Presidency of Kenya.
Lartey, N. L. 2021. "A Summary of the Controversial Saglemi Housing Project." *Citi Newsroom*. April 28. https://citinewsroom.com/2021/04/a-summary-of-the-controversial-saglemi-housing-project/.
Leitner, H., and E. Sheppard. 2020. "Towards an Epistemology for Conjunctural Inter-urban Comparison." *Cambridge Journal of Regions, Economy and Society* 13 (3): 491–508. doi:10.1093/cjres/rsaa025.
Lesutis, G. 2021. "Infrastructural Territorialisations: Mega-infrastructures and the (Re)Making of Kenya." *Political Geography* 90: 10259. doi:10.1016/j.polgeo.2021.102459.
Manji, A. 2015. "Bulldozers, Homes and Highways: Nairobi and the Right to the City." *Review of African Political Economy* 42 (14): 206–224. doi:10.1080/03056244.2014.988698.
Mbataru, P. 2018. "An Analysis of the Influence of Road Infrastructure Implementation on Local Development: The Case of Thika Superhighway in Kenya." *Africa Journal of Public Sector Development and Governance* 1 (1): 82–89. doi:10.55390/ajpsdg.2018.1.1.7.
Mkandawire, T. 1988. "The Road to Crisis, Adjustment and De-industrialisation: The African Case." *Africa Development/Afrique et Développement* 13 (1): 5–31.
Mwau, B., and A. Sverdlik. 2020. "High Rises and Low-quality Shelter: Rental Housing Dynamics in Mathare Valley, Nairobi." *Environment and Urbanization* 32 (2): 481–502. doi:10.1177/0956247820942166.
Mwau, B., A. Sverdlik, and J. Makau. 2020. *Urban Transformation and the Politics of Shelter: Understanding Nairobi's Housing Markets*. London: International Institute for Environment and Development.
Obeng-Odoom, F. 2014. "Urban Property Taxation, Revenue Generation and Redistribution in a Frontier Oil City." *Cities* 36: 58–64. doi:10.1016/j.cities.2013.10.003.
Obeng-Odoom, F. 2020. *Property, Institutions, and Social Stratification in Africa*. Cambridge: Cambridge University Press.
Otiso, K. M., and G. Owusu. 2008. "Comparative Urbanization in Ghana and Kenya in Time and Space." *GeoJournal* 71 (2–3): 143–157. doi:10.1007/s10708-008-9152-x.
Ouma, S. 2017. "The Difference That 'Capitalism' Makes: On the Merits and Limits of Critical Political Economy in African Studies." *Review of African Political Economy* 44 (153): 499–509. doi:10.1080/03056244.2017.1318360.
Owusu, G. 2013. "Coping with Urban Sprawl: A Critical Discussion of the Urban Containment Strategy in a Developing Country City, Accra." *Planum* 26: 1–17. http://media.planum.bedita.net/4d/34/26_CTBT2012_by_Planum_no_26-2013_Owusu_Section_2.pdf.
Owusu, G., and M. Oteng-Ababio. 2015. "Moving Unruly Contemporary Urbanism Toward Sustainable Urban Development in Ghana by 2030." *American Behavioral Scientist* 59 (3): 311–327. doi:10.1177/0002764214550302.
PIDA (Programme for Infrastructure Development in Africa). 2017. *Abidjan-Lagos Transport Corridor: One Road - One Vision*. Accessed March 16, 2021. http://aid.nepad.org/m_assets/uploads/document/1509234122244212809.pdf.
Pieterse, E., and S. Parnell. 2014. "Africa's Urban Revolution in Context." In *Africa's Urban Revolution*, edited by E. Pieterse, and S. Parnell, 1–17. London: Zed Books.
Rendeavour. 2021. *Tatu City*. Accessed March 16, 2021. https://www.rendeavour.com/projects/tatu-city/.
Robinson, J. 2016. "Thinking Cities Through Elsewhere: Comparative Tactics for a More Global Urban Studies." *Progress in Human Geography* 40 (1): 3–29. doi:10.1177/0309132515598025.
Rodrik, D. 2016. "Premature Deindustrialization." *Journal of Economic Growth* 21 (1): 1–33. doi:10.1007/s10887-015-9122-3.
Schindler, S., and J. M. Kanai. 2021. "Getting the Territory Right: Infrastructure-led Development and the Re-emergence of Spatial Planning Strategies." *Regional Studies* 55 (1): 40–51. doi:10.1080/00343404.2019.1661984.

Scholvin, S. 2021. “Getting the Territory Wrong: The Dark Side of Development Corridors.” *Area Development and Policy* 6 (4): 441–450. doi:10.1080/23792949.2021.1940227.
Scholvin, S., M. Breul, and J. Revilla Diez. 2021. “Diversity in Brokerage: How do Gateway Cities Interlink Their Hinterlands?” *Regional Studies. Advance Online Publication*, doi:10.1080/00343404.2021.1991570.
Simon, D. 2003. “Regional Development-environment Discourses, Policies and Practices in Post-apartheid Southern Africa.” In *The New Regionalism in Africa*, edited by A. Grant, and F. Soderbaum, 67–89. Aldershot: Ashgate.
Siro, B. M. A., and A. Sichangi. 2017. “Analysis of the Impact of New Road Infrastructure Development on Urban Sprawl and Modelling Using Remote Sensing-Thika Road Superhighway and Eastern Bypass of the Nairobi Metropolitan, Kenya.” *IOSR Journal of Environmental Science, Toxicology and Food Technology* 11 (3): 41–49. doi:10.9790/2402-1103034149.
Stein, H. 1992. “Deindustrialization, Adjustment, the World Bank and the IMF in Africa.” *World Development* 20 (1): 83–95. doi:10.1016/0305-750X(92)90138-L.
Taylor, I. 2016. “Dependency Redux: Why Africa is not Rising.” *Review of African Political Economy* 43 (147): 8–25. doi:10.1080/03056244.2015.1084911.
UN-Habitat. 2017. *National Urban Policy: Sub Saharan Africa Report*. Nairobi: UN-Habitat.
UN-Habitat. 2018. *The State of African Cities 2018: The Geography of African Investment*. Nairobi: UN-Habitat.
UNIDO (United Nations Industrial Development Organization). 2022. *UNIDO Statistics Data Portal*. Accessed January 31, 2022. https://stat.unido.org/.
United Nations. 2019. *World Urbanization Prospects: The 2018 Revision*. New York: United Nations.
Whitfield, L. 2018. *Economies After Colonialism: Ghana and the Struggle for Power*. Cambridge: Cambridge University Press.
Wiig, A., and J. Silver. 2019. “Turbulent Presents, Precarious Futures: Urbanization and the Deployment of Global Infrastructure.” *Regional Studies* 53 (6): 912–923. doi:10.1080/00343404.2019.1566703.
Yeboah, I. E., J. K. Maingi, and G. Arku. 2020. “‘World Trade Center, Accra’: Production of Urban Space for the Continued Peripheral Linkage of Ghana Under Globalization.” *African Geographical Review* 40 (1): 19–32. doi:10.1080/19376812.2020.1755323.
Zajonz, T., and I. Taylor. 2021. “Capitalism and Africa’s (Infra)Structural Dependency: A Story of Spatial Fixes and Accumulation by Dispossession.” In *Africa and the Global System of Capital Accumulation*, edited by E. O. Oritsejafor, and A. D. Cooper, 190–213. New York: Routledge.