

CHAPTER 1

Concrete Politics

In 2017, the CEO of *Nouvelle Cimenterie du Bénin* reluctantly invited me into his large office at the company's headquarters in Cotonou to discuss the future of the region's booming concrete industry. "I'm not going to tell you anything about cement," he warned, "in our business, we do not talk. Cement is secret". But what precisely is there to hide about such a mundane and ubiquitous material? The CEO's secrecy concerning concrete seems all the more strange considering how, across the continent, concrete is far from concealed: it has become the foundational material of contemporary African urbanization. In Africa as elsewhere, concrete allows the regeneration of capitalism and the consolidation of political power (Harvey 2016). In his book *Brutalisme*, Achille Mbembe (2020: 12) notes that "power is, through and through, a method of instrumentalism and of construction. It needs grout, concrete, cement, mortar, beams, gravel, lead, steel. . . ." Following Mbembe, I understand concrete and cement to be crucial elements of the construction of power. But the power of concrete is not a new cultural phenomenon. Consider, for example, V.S. Naipaul's novel *A Bend in the River* (1979). In this novel, the president of a fictional African country in the 1970s, who calls himself "the Big Man", satisfies his thirst for power and development by building tower blocks.

In this first chapter, I investigate the relationships between concrete, politics, and economics in contemporary West Africa. I reveal how the politics and economics of concrete are shaping this urbanization, focusing in particular on how the cement industry and the concrete value chain drive urban development. And I consider how the Concrete City itself is both a motor and a result of these ambiguous relations as it becomes

increasingly intertwined with economic transformations across the region. To do this, I mobilize the vast literature from history to political science that has analyzed the reconfiguration of African states (Bayart 1993; Hibou 1999) and, in particular, the shift from state-led development to private investment which appeared as governments embraced neoliberal economic policies (Pitcher 2012). Recent research on economic development issues helps to understand the close links between politics, development, and the power of economic elites (Ferguson 2006; Chalfin 2010; Appel 2019; Soares de Oliveira 2021). Anthropologists and political scientists have shown how the analysis of infrastructure and the built environment offers insight into the formation of political ideologies and national identities: the rhetoric of “emergence” – the new watchword of development plans across the continent (Péclard et al. 2020) and the world – relies on infrastructures to provide “a sense of belonging to a broader modernity project” (Larkin 2013). Foucault’s (1978) concept of “governmentality” also helps clarify how concrete is linked to power and domination. Concrete has become a key element of governmentality as African states seek to control and to benefit from the private sector, particularly the construction industry, in an effort to consolidate their power over national populations. These states govern through concrete: they legitimize their authority by erecting buildings, bridges, and dams, by laying asphalt roads, intersections, and all sorts of “enchanted” infrastructures (Harvey and Knox 2015) that demand large quantities of concrete.

This first chapter retraces the history of this basic material, formerly associated with the colonists who imported it. This “gray gold” is now an integral part of African aspirations for economic growth – it has catapulted the concrete industry’s wealthy CEOs, such as Aliko Dangote, into the public spotlight as models of African corporate success and development. I explore this political economy of concrete through an analysis of state transformation, business competition, price regulation, sweetheart deals, reduced import duties, and subsidies for new cement plants. I pay close attention to the relations between politics and the private sector as they join forces to govern through concrete: ambitious presidents keen to see concrete projects reach fruition quickly, local officials in search of resources, financiers, and cement companies looking for profits, businessmen self-proclaimed philanthropists eager to develop their continent. This array of actors is today constructing what I term the Concrete City, a material form of urbanism which has come to embody new aspirations for the African capitalist economy and a new style of governmentality taking shape through this gray, mundane material.

Africanizing Cement

From Colonial Import to Gray Gold “Made in Africa”

Cement is not new to Africa. Cement’s long history in the region began with European colonists who imported cement to build concrete urban settlements in areas often previously settled by Africans in wooden or mud huts. However, unlike other products in wide use across the continent today – such as alcohol or oil (Nyuur and Sobiesuo 2016; Van Beemen 2019; Yates 2012) – the history of cement’s arrival in Africa remains a marginally documented aspect of colonization. What accounts do exist reveal that, prior to opening local cement plants, European colonists carried cement with them to construct early colonial towns along the coasts. In 1890, for instance, cement accounted for a quarter of imports into Benin, and by 1930 it became the dominant material used in colonial housing (Lombard 1953: 90). In the 1950s, cement remained an imported material. According to the annual ledger of Benin’s commodity board in 1950’s, products arriving at the wharfs of Cotonou contained “wheat flour, canned foods, wine and liqueurs, as well as cement” (quoted in N’Bessa 1997: 70). For the European colonists, concrete was understood to be a safe, secure, and modern building material which they contrasted with the flammable and ephemeral qualities of traditional straw huts (see Bigon 2016 for Dakar, Morton 2019 for Maputo). Certain place names in Africa continue to bear traces of this colonial distinction linked to materials. For example, many Mozambican people refer to Maputo as the “Cement City” (*Cidade de cimento*), a legacy of the city’s founding by the Portuguese and its early construction in concrete in the eighteenth century. In contrast, the poor, unplanned areas of Maputo are called the “Cane City” (*Cidade de caniço*) (Morton 2019), a reference to the sugar cane that Africans used to construct their own settlements in the same time period. Reflecting these early means of racial segregation, cement continues to embody social inequalities across Africa today.

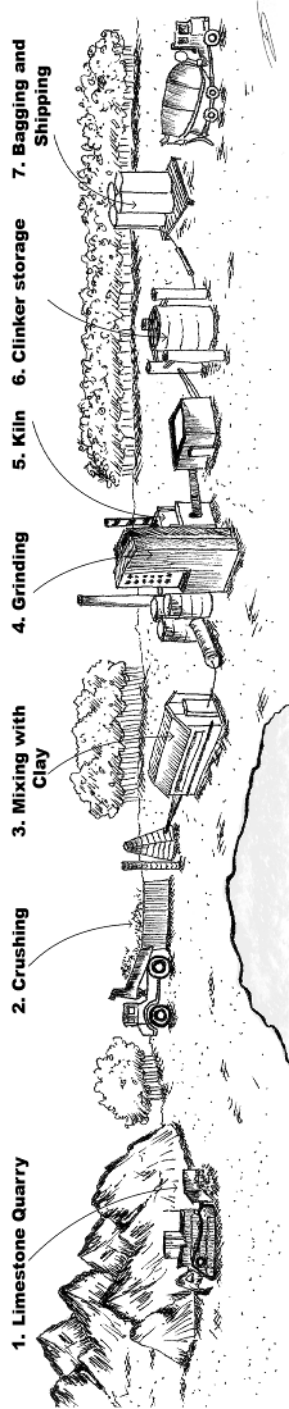
Yet, in the past century, African urban residents themselves adopted concrete as a preferred – and sometimes legally required – building material which, in many cities, has generalized its usage from the city center and out into the peripheries. Breeze blocks gradually supplanted straw, bamboo, and clay, but also the Afro-Brazilian earth architecture introduced by freed former slaves on their return from Latin America. In the nineteenth century, many Afro-Brazilians (the *Aguda*) came back with new methods of construction (Coralli and Houénoudé 2013; Mengin and Godonou 2013) and left their

mark on the old town centers of the Gulf of Guinea. The urban cores of Accra in Ghana, Lomé and Aného in Togo, Ouidah and Porto-Novo in Benin, and Lagos Island in Nigeria all share a rich architectural heritage which emerged in the wake of the Atlantic slave trade. This Afro-Brazilian legacy blended with the concrete architectural styles of the French, German, and British colonists (Sinou and Oloudé 1988; Sinou 2011; Mengin and Godonou 2013; Meuser and Dalbai 2021, see volume 3). As a result, cement slowly diffused throughout local architecture. The mosque of Porto-Novo symbolizes such change: this treasure of Afro-Brazilian architecture is now covered in cement (Figure 1.1).

During colonialism, the French and British were reluctant to invest heavily in costly cement plants and were content to export raw cement to the colonies (Akinyoade and Uche 2016). West Africa's first cement plant, the *Société des Chaux et Ciments du Sénégal*, opened in 1930 in Rufisque, a coastal city not far from the capital of Dakar,¹ and in 1948 became the *Société Coloniale des Ciments*, and subsequently *Société Commerciale du Ciment* (SOCOCIM). This was one of the first integrated cement plants, which differed from the then much more common grinding plants. In an integrated cement plant, cement is produced entirely in situ from local limestone deposits. Once extracted, the limestone is combined with clay respectively in proportions of 80–20%. The substance is then heated in a kiln to 1,450°C to produce clinker, small nodules that constitute the intermediary product. This solid clinker is then crushed and mixed with



FIGURE 1.1 Mosque of Porto-Novo, 2016. Source: A. Choplin.



Adapté de « Ciments du Maroc »

FIGURE 1.2 An integrated cement plan. Source: D. Bertrais 2020.

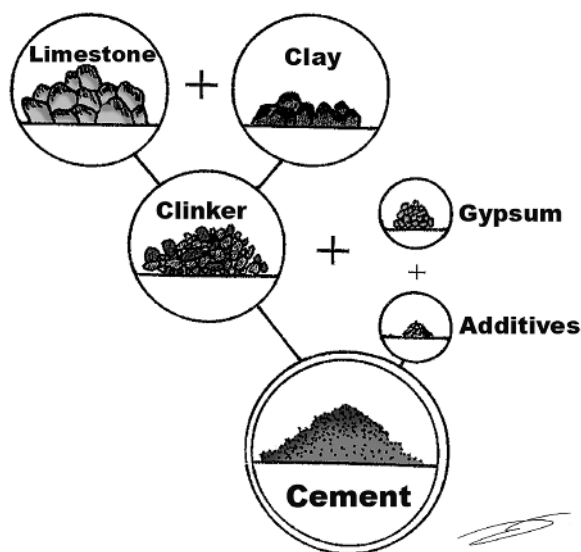


FIGURE 1.3 Cement production. Source: D. Bertrais 2020.

gypsum to make the gray powder we call Portland cement (Figures 1.2 and 1.3). By contrast, grinding plants only perform the second phase: they crush and mix the clinker with gypsum, both of which were imported from Europe or North Africa. Integrated cement plants demanded a great deal of energy and were costly to run, since access to sufficient and uninterrupted power was complicated in this region. Moreover, limestone deposits were rare. In Nigeria, it was not until 1961 that the West African Portland Cement Company Limited (WAPCO) opened the Ewekoro cement plants (now Lafarge Africa WAPCO, a subsidiary of LafargeHolcim). And it was only in 1978 that the Onigbolo cement plants (SCB-*Société des Ciments du Bénin*, now SCB Lafarge), opened around 100 km away, in Benin. Alongside the opening of this handful of integrated cement plants, grinding units – which were easier to set up – proliferated. Clinker, cement, and gypsum were imported in bulk, hence the location of the grinding units near the ports: *Société des Ciments du Bénin* (SCB) was set up near Cotonou Wharf in 1967, while Cimtogo was built in 1969 next to the port of Lomé. These imports made the industry heavily dependent on foreign countries, which was a problem at a time of fast-growing demand.

The 1980s marked a turning point in the production and distribution of cement in Africa. Serge Theunynck (1994) notes that the price of cement had previously stood at around \$40–\$60 per ton, i.e., two to three times higher on average than the output from plants in the industrialized world. The reason for this was the much higher cost of energy, the cost of investment (1.5–2.5 times

greater) and the overcapacity of the plants relative to demand (which therefore often ran at 30% of capacity). And the European construction market was beset with its own sets of challenges. The global economic crisis of the 1970s led to structural overcapacity and hence to a price collapse of cement. In response, European cement producers sought to expand their external markets and began exporting cement to Africa, a shift also made possible by the fall in maritime freight costs (Theunynck 1994: 343). By the early 2000s, the largest of the European companies began to invest heavily in Africa, opening multiple integrated cement plants supplied from West African limestone deposits. For the first time in history, the old colonial practice of importing cement had largely been replaced by cement produced in situ by integrated factories located on the continent itself.

Patriotic Consumption and National Identity

No fewer than 15 cement plants opened in the 2010s in West Africa, with investment from concrete manufacturing firms like LafargeHolcim and Heidelberg, but especially from Dangote (Figure 1.4). More are due to open soon. Limestone reserves are limited, but of good quality. Similar to the once mineral-rich Copperbelt in Zambia, there is today a “Limestone Belt” emerging in West Africa which is anticipated to shape the future of the region’s industry. Limestone is the base mineral of most concrete produced in West Africa. As such, its extraction underpins the growth of cement-based construction and, in turn, the emergence of concrete cities. A large limestone vein crosses West Africa from Togo to Nigeria via Benin, drawing a line that runs through Tabligbo (Togo)/Lokossa–Onigbolo (Benin)/Ibese–Abeokuta–Obajana–Benue (Nigeria). This deposit is tapped by LafargeHolcim in Ewekoro, Dangote in Ibese/Ilaro, SCB Lafarge in Onigbolo and, since 2013, by *Nouvelle Cimenterie du Bénin* (Nocibé–Ciments du Sahel Group). In 2015, the German concrete giant Heidelberg opened an integrated cement plant in Tabligbo, a town near Togo. The plant was a strategic shift for the group, which had previously owned only grinding plants in Cotonou, Ouagadougou, Tema, Takoradi, and Lomé. These new cement plants are set to supply the markets of Togo, Benin, and Nigeria through which the deposit runs, but also those of neighboring countries without significant limestone deposits.

The lack of access to energy – especially electricity – was an obstacle to the installation of integrated cement plants in the region. Heating a kiln to 1,450 °C to produce clinker requires a lot of power. The building of cement plants and the construction of dedicated power plants to serve these factories require huge financial resources. The high cost of electricity explains why the German firm Heidelberg found it more viable to import clinker from China

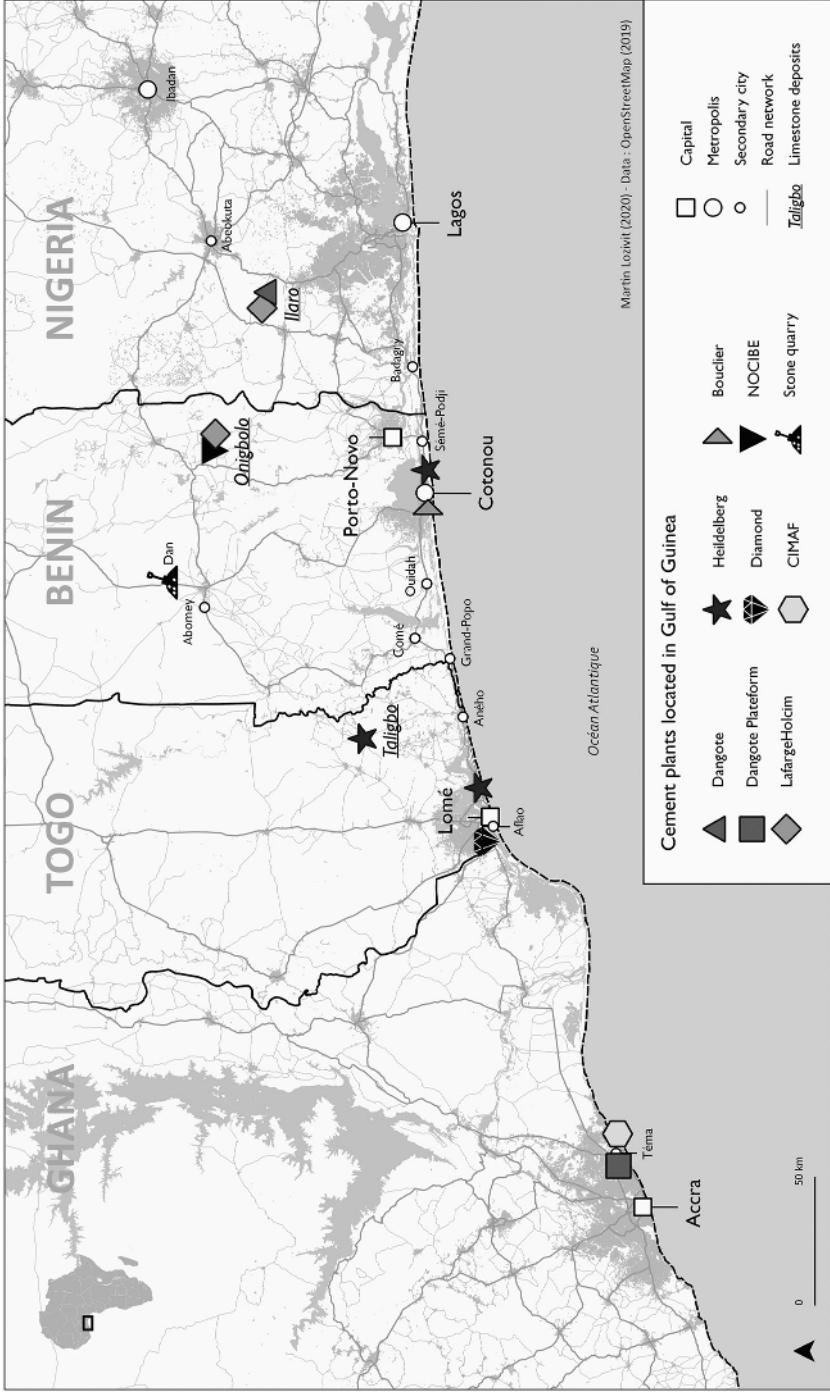


FIGURE 1.4 Cement plants in the Gulf of Guinea. Source: A. Choplin, M. Lozvit 2020.

or Indonesia to supply its grinding plants near the ports of Lomé (Cimtogo) and Cotonou (Cimbénin): according to a former Heidelberg sales manager, one ton of the Chinese product cost \$35 as compared with \$80 in Africa. As a result, it was not until 2014 that Heidelberg opened an integrated cement plant in Tabligbo. The same was true for Dangote who has begun the challenging work of supplying energy to rural limestone quarries in his push to produce cement locally. Despite these efforts at integration, African cement plants are still highly dependent on external inputs: petcoke for the kiln comes from Venezuela, gypsum for the mixing from Spain. As a result, the cost price of a bag of cement is very sensitive to changes in raw material prices. To mitigate the costs of these imports and limit dependency on overseas production, companies have in recent years invested massively in integrated cement plants.

While there is nothing new about cement in Africa, full local production is a recent phenomenon. Cement, formerly a symbol of colonial domination, has been rapidly incorporated into local material culture to the point that it has now become a foundational building material. After independence, cement plants were nationalized and became a point of national pride in the same way as oil refineries, car assembly plants, breweries, airlines, or flour mills (Dubresson 1989). Almost 60 years later, there is no doubt that cement has been Africanized: many people in the region are proud to buy and use “home-grown” cement, one of the few commodities produced in situ, along with beer, iron, and some agri-food products. Concrete is a global commodity but strongly linked to local and national identity. At the same time, cement firms develop a rhetoric which argues that consuming locally-produced cement is a patriotic act, as this picture promoting Togolese cement – *le ciment du pays* (the country’s cement) – demonstrates (Figure 1.5). As a product that is now perceived as African, cement has become a symbol that accompanies the denunciation of the former colonial domination and, conversely, the affirmation of West-African postcolonial identity. Cement and concrete contribute to a very strong sense of identity, similar to how the concrete industry was glorified during post-war reconstruction in Europe (Forty 2019). In this part of Africa, there are few other industrial empires on which to link visions of development, pride, and modernity, offering concrete a privileged position as a material signifier of the future of African economic growth.

Dangote, a Cement Magnate

Aliko Dangote is the founder and CEO of Dangote Industries Limited. In his biography, *Aliko Mohammad Dangote: The Biography of the Richest Black Person in the World*, Dangote put his professional ethos in simple yet ambitious terms:



FIGURE 1.5 “Let us build the city with the cement of the country.”
Billboard, Lomé. Source: M. Lozivit 2019.

“to build a successful business, you must start small and dream big” (Fayemiwo and Neal 2013). Dangote’s vision of success mirrors his own personal trajectory. According to this biography, Dangote started out by selling three truckloads of cement thanks to his uncle and grandfather, who were shopkeepers. And in the space of two decades, he became Africa’s leading cement producer and the richest man in Nigeria, indeed in the whole of Africa, and the world’s 25th richest man (Akinyoade and Uche 2016) (Figure 1.6).

Dangote managed to shake up a cement sector largely dominated by big private foreign multinationals that had set up subsidiaries in Africa, such as the French-Swiss LafargeHolcim² and the German Heidelberg. Set up in 1977, the company runs more than 10 integrated cement plants, employs around 30,000 people, and operates across 10 countries: Nigeria, Cameroon, Congo, Ethiopia, Ghana, Senegal, Sierra Leone, South Africa, Tanzania, and Zambia



FIGURE 1.6 Dangote, Africa's Richest Man. Source: Saba Dubai / Wikimedia Commons / CC BY 3.0.

(Akinola 2019). The company is a full-service producer, from quarry to end-user, with a production capacity of 51.55 million tons per year across 10 countries in 2021, and its three cement plants in Nigeria (Obajana, Ibese, and Benue) alone produce 29.3 million tons a year.³ It controls 65% of Nigeria's cement market, which puts it in a position to set prices.⁴ Since April 2020, Dangote has increased his company's earnings by \$4 billion thanks to the rising price of cement and to his oil refinery megaproject which has received generous financial support from the National government.⁵ In 2021, in just one short year, the Nigerian tycoon has seen his wealth grow by 14.8%. A feat made possible by the boom in housing construction in Nigeria and increased government spending on infrastructure, which increased the price of shares in Dangote Cement stock by 30%.

Aliko Dangote – the African dream. His personal fortune is estimated by Bloomberg to be at \$16.7 billion, and by Forbes at \$13.9 billion in 2022. By producing and selling cement, Dangote has become the wealthiest individual in Africa and the only African in Bloomberg's list of the "50 most influential people" in the world. His wealth, his family, and his success inspire respect and admiration among many across West Africa. He has developed a globalized business and established an expansive network of contacts. For example, the wedding of his daughter, Fatima, in Lagos in March of 2018 featured some of the world's wealthiest and most recognized figures – Bill Gates even made an appearance – and every guest was given a Rolex watch as a souvenir.

The Nigerian media reported the wedding as the second most important of the year, outranked only by the royal wedding of Harry and Meghan in Great Britain. Beyond dreaming of becoming star football players, young men in the region are now dreaming of becoming cement makers. As for young women, many now desire to appear in VIP Dangote Holland wax fabric, the latest in West African luxury fashion. As one young woman in Benin put it, just wearing a fabric signed “Dangote” is enough to make you a “Very Important Person.” However, Dangote is not universally admired. His detractors are quick to point out his predatory business practices and his more than ambiguous links with politics. The provocative Nigerian rapper Burna Boy recently took aim at the cement magnate in his song “Dangote,” which criticizes him for making a fortune in one of the world’s poorest countries.

Dangote has created a new model of cement production in which the regional industry is now largely owned by Africans, its materials are sourced and processed in West Africa, and some countries have ceased importing cement. Although African cement remains dependent on the import of certain raw materials, Dangote epitomizes the postcolonial transformation of cement, now framed by political stakeholders, international donors, and local manufacturers as a local material “Made in Africa.” Dangote’s construction of a distinctly African concrete empire marks a shift away from former colonial relations and, in some respects, reverses it: at one point Dangote hinted at plans to buy the famous English football club Arsenal. And in 2019, French President Emmanuel Macron invited Dangote to France as part of *Choose France*, a policy initiative aiming to attract foreign investment.⁶ The Nigerian magnate has played a major role in “Africanizing” the construction industry: many West Africans now view the concrete industry, and Dangote himself, as the embodiment of a distinct kind of African entrepreneurial success.

Cement Business

Conquering Africa

A long way in the distance, at the end of a recently laid laterite track, a brand-new cement plant is emerging from the midst of the African savannah (Figure 1.7). I check the time on the pickup dashboard. I’m running late. Although I left at dawn, the ride from Cotonou has taken longer than expected. I’m nervous. The Deputy CEO of *Nouvelle Cimenterie du Bénin* (Nocibé) had warned me: “I do not have much time. I can see you between 8.30 and 9:00.” The moment I enter his office, he asks me: “Can you tell me who invented cement?” I’m familiar with the debate over the paternity of cement and, knowing that he



FIGURE 1.7 Nouvelle Cimenterie du Bénin (Nocibé), Massé, Benin, 2018. Source: A. Choplin.

is French, I answer: “Louis Vicat.” “And when did he invent it?” the Deputy CEO inquired. I reply: “At the beginning of the eighteenth century, when he was building Souillac Bridge.” He seems satisfied with my answers and, with a slight smile, he shows me the Wikipedia page on Louis Vicat, which he has printed in advance. I recognize the photograph of the Souillac Bridge in the South West of France. He invites me to sit down and offers to take me on a tour of his company’s recently constructed cement plant, quarry, and living quarters for around 50 families. I left this meeting at 1:00 p.m.

Since the 2010s, cement leader firms, such like LafargeHolcim, HeidelbergCement, and of course Dangote, are competing to conquer West African market, together with other, smaller firms like Senegal’s *Ciments du Sahel* (owner of Nocibé in Benin), the Amida group (SCB Bouclier in Benin and *Ciments d’Abidjan*), India’s Wacem (West African Cement, owned by the Diamond Cement and Fortia Group), Morocco’s CIMAF (*Ciments d’Afrique*), Turkey’s Limak, or Burkina Faso’s Kanazoé. The opening of new cement plants, whether integrated or grinding units only, has increased production capacities. The companies have had to adapt to the reshaping of this increasingly competitive market. In Benin, for example, the oldest of the cement plants, the Onigbolo plant, was set up in 1978 as a joint venture between Benin and Nigeria. In 1998, the Benin government sold 51% of its shares to

Lafarge while Nigeria sold its 43% holding to Dangote. Benin retained a 6% share in the plant, which changed its name to SCB-Lafarge. LafargeHolcim is also present in Nigeria with its cement plant in Ewekoro (near Ibese), and in Cameroon, Ivory Coast, and Guinea.

Dangote is undoubtedly the most influential cement manufacturer in West Africa. According to its website, the company has had to develop its business quickly to serve a fast-growing market. Without identifying sources, the website explains that by 2050 the population of Africa will exceed 2.4 billion, of which 1.4 billion will live in cities. In Nigeria, Africa's most populous country and the seventh most populous in the world with 210 million inhabitants, the demand for cement grew from 5 to 23 million cubic meters between 2000 and 2014, an increase of 400% (Akinyoade and Uche 2016). To respond to the growing demand, the company owns three cement plants with enormous production capacities: the Obajana plant (Kogi State), opened in 2008, is the biggest cement plants in sub-Saharan Africa with production of 13.25 million tons per year. The Benue plant (Ogun State), the oldest of the Dangote cement plants, opened in 2007 and produces 12 million tons destined for Eastern Nigeria and Cameroon. The Ibese facility (Ogun State), near the Benin border, produces up to 12 million tons of cement a year. Dangote's infrastructural achievements transformed Nigeria into a self-sufficient cement producing country (Akinyoade and Uche 2018), and the country subsequently became Africa's leader in intra-continental cement exports (see Dangote Cement Plc, *Annual Report and Accounts* 2021).

In Ghana, the subsidiary Dangote Cement Ghana Limited began operations in 2010 and now provides jobs, directly or indirectly, for 5,000 people. It has acquired 10 ha of land in Tema, Ghana's main port, located on the outskirts of Accra, to set up a logistics platform for the trucks and bagging operations, from where it re-exports to Burkina Faso, Mali, and Ivory Coast. In 2020, an integrated cement plant has opened in Takoradi. Dangote plans to compete with the Indian facility Diamond Cement Ghana Limited, built in Aflao, a few hundred meters from the Togo border and the city of Lomé.⁷ The group is open about its ambitions, which they set out annually in a strategic report. In 2015, the group opened a new plant on the outskirts of Dakar. This new plant is in direct competition with SOCOCIM, now owned by the French Vicat Group, which exports 30% of its output to the subregion, in particular to Gambia and Mali.⁸ Another Dangote plant is due to open in Niamey and in Kao, Niger.

Competing with Dangote, HeidelbergCement has also increased its presence and influence in the region by opening a clinker production plant (Scantogo) in 2015 at Tabligbo in Togo (80 km from Lomé).⁹ Since then, the Group has supplied clinker to its grinding plants in Lomé (Cimtogo),

Cotonou (Cimbénin), Ouagadougou (Cimburkina), and Tema (Ghacem), which it has owned since 1999 following its takeover of Norway's Scancem, which had itself acquired the previously nationalized firms. In addition, the company owns three cement plants in Burkina Faso: the last one opened near Ouagadougou in 2015, with an annual production of 0.8 million tons, expected to increase soon to 1.7 million tons. In Togo, the Kara plant is in the process of doubling production. In Benin, the plant has doubled in size in recent years and almost 20% of its production is exported to Niger. As well as being the region's third largest cement producer, Heidelberg is the region's leading gravel producer: the Granutogo gravel plant, 72 km from Lomé, produces 1,000 tons of gravel a day.

"The Price of Cement Is like the Stock Market"

"The price of cement is like the stock market, it changes every day," explains Joël, a cement retailer, as he carries out his daily task of chalking up cement's price per ton. In the last five years, with the opening of new plants, shortages have given way to overproduction and lead to a price drop in the region. Yet despite the competition, average cement prices are 183% higher in Africa than in the rest of the world (The World Bank 2016: 41). This figure conceals large differences between countries: in Benin, the cost of a ton fell from 110,000 francs CFA in 2014 to 67,000 (i.e., US \$100) in November 2017. By comparison, a ton of cement was worth 90,000 francs CFA in Ivory Coast, 82,000 francs CFA in Togo and Niger, and 72,000 francs CFA in Nigeria (Table 1.1).

In several countries in the region, cement is considered a commodity product in the same way as bread or a bag of rice, and its price is therefore capped. Its production and sale are subject to political regulation. In Benin, the official price per ton was 90,000 francs CFA until 2014,¹⁰ but the retail price could be as much as 110,000 francs CFA. The situation changed with the inauguration of the *Nouvelle Cimenterie du Bénin* (Nocibé), which led

TABLE 1.1 Price of a ton of cement in 2020.

Benin	Nigeria	Ghana	Togo	Niger	Ivory Coast	Senegal
67,000 CFAF	49,000 Nairas	711 Cedis	82,000 CFAF	120,000 CFAF	90,000 CFAF	65,000 CFAF
€102	€120	€110	€125	€183	€137	€100

to a fall in prices, an outcome long sought by governments, financiers, and citizens alike. As Pascal, a shopkeeper in Porto-Novo put it, “before, there was a black market and cement smuggling. People went to Nigeria to buy cement and brought it across the frontier illegally”. Smuggling cement between Benin and Nigeria – like the smuggling of adulterated fuels (locally called *payo*) – was previously a common practice, especially as the Nigerian *naira* was weak. But since the opening of the Nocibé plant, cement smuggling has sharply diminished. This is because tax exemptions granted by the Benin government to support the creation of the plant have enabled Nocibé to set a subsidized “ex-factory” price for cement. After the creation of the plant, the price per ton fell immediately, first by 5,000 francs CFA then by 25,000 in the following six months. Competitors had no choice but to reset their prices. They denounced the competition as unfair and are now calling for more government intervention. For example, the sales director of SCB Bouclier has argued in favor of, “the return of the state to regulate the market, because the margins are very tight” and because, in his words, “we are only just breaking even.” Similarly, over the past 10 years Lafarge’s Onigbolo plant has had to cut its workforce from 500 to 380. According to the plant director, the problem is not one of industrial capacity: “The factory produces around 500,000 tons per year. It could produce more, but there would be overproduction and a risk of price collapse.”

The main cement manufacturers are careful not to produce at full capacity, because overproduction would drive prices down. They responded to the competition by closing their sales outlets and forcing the distribution market to reorganize. In Benin, it is not to Dangote’s advantage to drive prices down, as he previously purchased the Nigerian state’s holdings of SCB Lafarge and now holds a 43%. Moreover, several successive presidents of Benin, Thomas Yayi Boni and Patrice Talon, refused to allow Dangote to distribute its cement in Benin. However, the situation could change. In 2018, there was a rumor in Cotonou that Dangote was preparing to distribute its bags in Benin. Indeed, the Benin government was apparently obliged to let Dangote distribute 100,000 tons a year in the country, if it wanted Nigeria to in return allow Benin businesses to sell their products on the Lagos markets.

In Togo, the price equalization system is still operating, with prices held to a maximum of 82,000 francs CFA per ton. However, nothing prevents the companies from selling more cheaply. This is what Dangote wanted to do in the autumn of 2016 by offering cement at 65,000 francs CFA per ton. When the government refused, there was a heated debate in the National Assembly, with some deputies taking Dangote’s side. The Togolese government held firm, saying that it wanted to protect the scarce sectors of local production, such as rice, cereals, and cement. In November 2016, a similar situation arose

in Ghana. The Cement Manufacturers Association of Ghana (CMAG), made up of the local producers Ghacem and Diamond Cement, called for a ban on imports of Dangote cement. The director of Dangote Cement Ghana defended the company, arguing that the company had paid its taxes and that its entry into the local market had stabilized cement prices. Moreover, he pointed out that Ghacem and Diamond Cement employed only 3,000 people after 55 years on the Ghanaian market, whereas Dangote already had a workforce of 2,000 after just 6 years of operation.¹¹

In Senegal, the price of cement is set by the Senegalese government. However, as a result of growing demand from big projects like a toll expressway from Dakar to the new city of Diamniadio, the price of cement in Senegal exploded to around 3,500 francs CFA per bag, as against the official price of 2,900 francs. The government found itself unable to control the prices, instead anticipating that the market would regulate itself and reduce prices with the opening of the Dangote plant and the subsequent increase in production. However, Dangote company claimed that it was more interested in increasing quality than in lowering prices. The media and the population responded with widespread criticisms of the price increase and effectively forced the government to intervene and block it.¹²

While there is dialogue between the cement manufacturers, notably through the cement producer associations, their relationships are often far from amicable. The companies generally tend to complain about their competitors' unfair commercial practices. For example, the CEO of Cimtogo described with some exasperation his relationship to Dangote: "In order to win markets, Dangote relies on volume effects. The company practices dumping by selling its cement almost at cost price. It makes profits by exporting large quantities. We cannot compete with such an industrial giant, which receives support from every quarter" (interview, Lomé, 2018). In 2022, the war in Ukraine continues to have an impact on cement prices. Whether or not the market is directly linked to the war, the price per ton rises throughout West Africa from 60,000 to 80,000 francs CFA. The constant fluctuation of cement prices fuels tough competition, while it also is the driving force behind the circulation of gray gold across the roads of West Africa.

On the Road: Trucks and Logistics

In September of 2016 at the Togo-Benin border, I count almost 300 Dangote trucks waiting, loaded with cement (Figure 1.8). They are registered in Ghana. I am wondering where they have come from with these loads. A few days later, I come across the same convoy of trucks 60 km further on, at the Ghana-Togo border. They are still carrying full loads. Finally, I meet them



FIGURE 1.8 Dangote trucks waiting at the Benin-Togo border, 2017.
Source: A. Choplin.

again three days later, this time empty, at Tema, the industrial and harbor zone on the outskirts of Accra (Chalfin 2010).

In May 2016, Aliko Dangote acquired a logistics platform in Tema as a distribution point for the cement he produces in Nigeria. From here, it is dispersed to resellers located not just in Ghana, but also in Burkina-Faso, in Ivory Coast and in Mali, where it fetches a much higher price. To this end, in July 2016 Dangote bought 1,500 trucks from the Chinese firm SINOTRUK, subsequently creating a joint venture with them to assemble the trucks directly in Nigeria ready to transport the cement produced there to Ghana. The factory is in Ibese, less than 100 km from Porto-Novo, the capital of Benin. In the evenings lines of trucks can be seen filing through the city center. Every truck carries 50 tons of cement, and every convoy consists of 400 trucks so that, with each one, 20,000 tons of cement batter the 500 km of asphalt that runs from Ibese in Nigeria to Tema in Ghana. The drivers are Ghanaian. One driver is responsible for carrying the papers for all the vehicles and conducting the formalities, which is meant to prevent negotiation and limit possible corruption with individual drivers.

Dangote's strategy is officially philanthropic: his stated aim is to reduce prices and distribute cement at affordable prices across the region. Yet it can also be explained as an effort to make new markets for concrete. Since July

2016, Nigeria has been undergoing an economic crisis. The local currency, the naira, has been devalued, rendering Nigerian cement competitively priced for export. Very quickly, lucrative cement smuggling activities started up on either side of the highly porous Benin-Nigeria border. For Dangote, the Nigerian economic crisis represented an opportunity to expand into the sub-region. Following a series of arguments with the governments of Togo and Benin, Dangote has secured approval to transit through these countries and take over the fast expanding Ghanaian market for cement.

Dangote Industries Limited has a vertically integrated structure that enables it to control production and distribution. The strategy is profoundly spatial: it begins with 3,500 trucks crisscrossing West Africa's roads and then the company establishes a permanent base by taking over production premises and distribution points in remote urban outskirts, where the ratio between the kilo of cement and population numbers is growing most rapidly. Vertical integration allows Dangote to control the whole sector, facilitating the company's expansion across the entire region. As part of this expansion, in 2020, Dangote Company signed a deal with the state to rebuild concrete roads across Nigeria. Vertical integration also frees the company from the potential disruptions caused by transport firms, in particular their propensities for lobbies and strikes. This freedom makes Dangote capable of responding quickly to demand and, beyond securing public contracts, it is also a key supplier of private worksites. In this sense, Dangote is exemplary of the broader transformations taking place in Africa's logistics sector (Błaszczewicz 2021).

Dangote trucks are not the only ones on West Africa's coastal roads. There are also the 700 "buffalo" trucks – nicknamed for the buffalo logo on their doors – symbol of the German cement producer Heidelberg. These trucks belong to the rich Nigerien businessman Illiassou Moumouni, alias "Alomaro," who has signed an agreement with the giant Heidelberg company to distribute its cement and the clinker it produces in its Tabligbo plant to all the firm's other cement plants in Benin, Togo, Niger, and Burkina-Faso. Some say that Alomaro owns as many as 2,000 trucks, which never travel empty. The German cement manufacturer claims not to be interested in bringing transport in-house. As the Sales Director of Heidelberg Cimbénin put it, "our business is cement, not logistics" (interview, Cotonou, 2018). A point emphasized by the CEO of Cimtogo: "Our core business is to produce cement, concrete, aggregate. Not to do transport" (interview, Lomé, 2018). Heidelberg's bosses prefer to let Alomaro, who manages 20% of Cimtogo transport, negotiate each border crossing. Like Dangote, Alomaro's special connections have allowed him to benefit from economic arrangements (Walther 2015). Alomaro is the son of a second-hand clothes seller, and he started out as a motorcycle taxi driver in Gaya in the 1980s. According to rumors

across the region, he was skilled at finding any product and selling it at a good profit. In Cotonou, they say that he used to sleep on his motorbike in front of the cement plant. Between 1985 and 2004, he settled in Malanville, a border post between Benin and Niger, buying and selling all sorts of products, then from 2004 in Gaya, where he sold and transported cement. At the time, he worked with Charfo, one of Niger's biggest cement wholesalers. There is another carrier in Togo also known for his role in the cement industry. This big Togolese trader, who goes by the name of Gado, buys the cargoes carried by Dangote's trucks at the border for 66,000 francs CFA per ton, and then sells them for 88,000 on the local market.

Logistics is fundamental, as H  l  ne Blaszkiewicz (2021) describes for the cross-border movements of goods in the Copperbelt Region in Central Africa. She explains how roads are no longer a response to problems of isolation but to the imperatives of transport speed and profitability. And cement is a central commodity driving this increase in speed. Although heavy materials are expensive to transport, cement is constantly traveling across borders on flatbed trucks, on dugouts in the lagoon or on the back of motorbikes, and cement companies are always attempting to speed up this circulation. The export figures reflect this intense traffic: cement and clinker are Benin's fifth largest export product, after cotton, cashew nuts, oleaginous fruits and oils, representing 14.4 billion francs CFA per year (INSAE 2020): this national statistical report specifies that the main destinations for these exports are Niger (60%) and Burkina Faso (40%). As a consequence, cement is everywhere, for sale on the edges of the big road arteries, at every street corner, on every building site, in the outskirts, in containers and pickup (Figure 1.9). For example, the Sales Director of Cement Bouclier underlined that, "getting close to our customers, making sure they can find our cement at anytime, anywhere in Benin. That's our goal" (interview, Cotonou, 2018). The Director of SCB Lafarge agrees: "Distribution has changed. Buyers no longer want to go and fetch the product. The product has to come to them". In Ivory Coast, LafargeHolcim has developed Binastore, a franchise-based local distribution network. The cement manufacturers are careful not to involve too many middlemen, which would cut into their profits, and have instead opted to outsource and develop franchises for sales outlets in response to the general fall in prices and margins. As the director of SCB Lafarge put it: "The current trend is to reduce the number of official outlets and to work through private wholesalers with a licensing system. We are cutting our own outlets and carry out only 15 to 20% of deliveries." (interview, Cotonou, 2018). In this way, cement manufacturers are letting the small retail market develop which has in turn allowed them to argue that they are indispensable to the creation of new jobs in Africa's local economies.



FIGURE 1.9 Cement container in Cotonou, 2017. Source: A. Choplin.

The Rhetoric of Development

African cities are today facing urban sprawl and the increasing needs of urbanization, especially in terms of housing and infrastructure. In Africa as elsewhere (Fry 2013), cement manufacturers claim to be addressing these needs and combating poverty. They argue that they contribute to development, providing the material for houses, opening up national economies by putting asphalt on the roads, and building schools and hospitals for everyone's benefit. West African politicians, for their part, also contribute to this framing and often argue that concrete is a central component of a "rising" Africa today. Hence the enthusiasm and consensus around cement: it is understood to serve the imperatives of economic development, the interests of the wealthy, and to simultaneously benefit the poor by improving their living conditions.

Dangote company, like other cement firms, is presenting itself as a key benefactor of this new industry of urban development. For example, on its website, the company claimed that it is "enriching the life of Africans" through the production of a "vital and irreplaceable" material. LafargeHolcim, for instance, highlights its contribution to the production of an inclusive city through its social housing programmes. The company also funds the 14Trees program to provide access to so-called "decent" housing, with subsidized materials and micro-credits,¹³ as well as the DuraBric[®] product aimed at poor

suburban populations in Malawi.¹⁴ In Kenya, Holcim has delivered Africa's largest 3D-printed affordable housing project, using the 3D-print as a technique that could automate the construction industry. It justifies this program explaining that the need for affordable housing "is most acute in Africa, with countries like Kenya already facing an estimated shortage of two million houses. With 3D printing," the company proclaims, "we are proud of being part of the solution."

The cement manufacturers are keen to describe themselves as essential players in solving local social problems, and Environmental, Social and Governance (ESG) factors have now become an integral part of their business strategies. As one document from the HeidelbergCement Foundation states, "it is strategic, not philanthropic, and linked with our core business." Through their foundations, the corporations launch measures which claim to contribute to the development of the communities where they operate: supply of cement to build schools, health centers and other community infrastructures such as wells and roads. As the head of external relations for Heidelberg Cimbénin described it, these are "charm measures to enhance our local image." To construct this image, the company regularly repairs the roads and roundabouts in the town of Sèmè-Podji where it is located (Figure 1.10). LafargeHolcim takes a similar approach by building schools near the Onigbolo cement plants. For example, the Director of the school at Onigbolo explained that "they bring the cement, their construction crews. Every year, in the annual budget, they include plans for buildings" (interview, Onigbolo, 2017). In its annual sustainable development report, Dangote reports on the work it does on the sustainable development goals with local communities. The company highlights "The Dangote Way" of commitment to local jobs, especially for youth, as well as the development of education, infrastructures, and health centers (Dangote Cement Plc, *Annual Report and Accounts* 2021: 33). For his part, the CEO of Nocibé characterizes his company as "having funded the construction of two modules for Massé College in five years, having built latrines, and provided access to electricity. Two water tankers tour the local villages twice a week distributing water." Nocibé also sponsors the popular *Tour du Bénin* cycle race, with a prize of two tons of cement for the "most competitive" rider. These efforts at social responsibility can be interpreted as "greenwashing" or "social washing": they aim to counterbalance the cement industry's negative impacts on the local environment, and in particular the daily nuisances it creates (e.g., pollution caused by intensive truck traffic and the toxic particles released by the cement plants). Such efforts demonstrate that cement companies are full players in urban affairs.

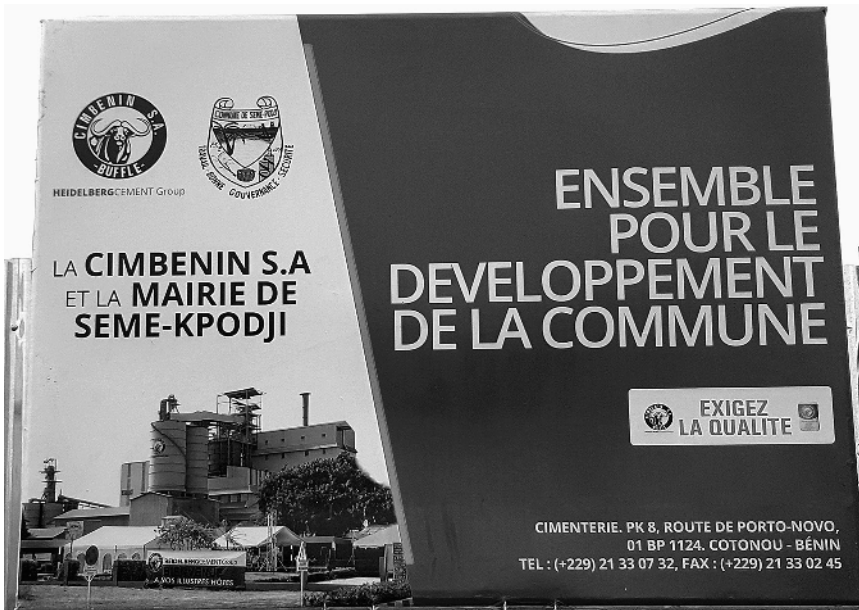


FIGURE 1.10 Billboard “Together for the local development” Heidelberg–Sèmè Podji, 2017. Source: A. Choplin.

Emerging Through Concrete

Promoting Cement and Boosting the Economy

Since the 2000s, development partners and donors have begun to openly support the cement industry as a lever to fight poverty and for “unlocking Africa’s potential” (The World Bank 2016). In its 2016 report *Breaking down barriers, unlocking Africa’s Potential through Vigorous Competition Policy*, The World Bank argues that cement production is an “effective tool for boosting productivity, innovation, and inclusive growth.” The World Bank, as well as the French and German aid agencies (AFD and GIZ), directly support sub-Saharan Africa’s labor-intensive cement industry by providing loans to open new plants (Byiers et al. 2017). According to these development banks, competition in the sector forces cement manufacturers to lower prices and the industry’s labor-intensive growth will provide income and livelihoods for the continent’s poor. For example, the French Development Agency (AFD) via its dedicated private sector investment subsidiary Proparco, invested 20 million euros in the Turkish cement manufacturer Limak to set up on the

outskirts of Abidjan, out of a total investment of 68 million. The German Investment Corporation (DEG) – a subsidiary of the German development bank – has also supported the project. Major cement companies similarly justify increasing production by framing it as a way to make cement bags widely affordable. The cement industry is here presented as a source of substantial profit, not only for the big Western companies and investors now present across Africa, but for the construction sector's diversity of stakeholders, including poor African households.

This endorsement of the cement industry among the funding agencies is linked to the idea of cities as drivers of economic development. For example, UN-Habitat (2012: 6) identified megacities, urban corridors, and megacity regions as areas that can contribute significantly to global economic production. The metropolitan scale has gradually come to dominate as the preferred level of intervention in a context of globalized and neoliberal development (Brenner 2004). This observation, originally based on Western cases, is now seen to apply to the Global South as well. At least, this is what may be inferred from the 2009 World Bank report *Reshaping Economic Geography*, which frames cities as opportunities for economic development. The report explains that certain areas, such as metropolitan regions or coastal zones, are necessary anchorages for globalization and competitiveness, and that economic growth and its corollary, urban growth, can act as levers for development in the surrounding regions. These principles were restated in the Sustainable Development Goals (SDG) in September 2015 and at the UN-Habitat III summit in Quito in October 2016, and recently in the report *The State of African Cities 2018*. This UN-Habitat report, subtitled, *The Geography of African Investment*, defines African cities as the best loci for international investment, an endorsement which indirectly supports the concrete industry (Walls et al. 2018).

A wide array of development banks – such as the African Development Bank, the Islamic Development Bank, and the AFD – fund urban, transport, and infrastructure megaprojects across West Africa, all of which require immense amounts of concrete. For example, the Lagos-Badagry Expressway, a section of the Trans-West African Coastal Highway intended to link Lagos to Dakar, is currently under construction and is funded with the support of the African Development Bank. Conceived as a regional asset, this road is the flagship project of ECOWAS.¹⁵ Inspired by the Schengen model, ECOWAS advocates for the free circulation of people and goods between countries in the region to stimulate trade and grow national economies. Big road arteries are the backbones of this project. CORAL (Abidjan-Lagos Corridor), for example, is a road program designed to improve flows and facilitate exchanges along the Abidjan-Lagos axis that accounts for 75% of the zone's economic

activities (Banque Africaine de Développement 2016). Indeed, large volumes of cement travel along this corridor, thanks to the support of governments who are prepared to remove import duties as part of the ECOWAS efforts to increase free trade along the regional highway network.

As part of its regional integration plan, the African Union (AU) and ECOWAS, give significant support to Dangote and its strategy. Producing concrete in Africa is consistent with the AU's principles, as the company's aim is to limit West Africa's dependence on the outside world and establish more independent African economies. ECOWAS, for example, helped Dangote make maximum use of the regulatory framework for regional trade. The CEO of Diamond Cement Ghana, a Dangote competitor, explains that the latter receives "a 30% subsidy from Nigeria's Export Expansion Grant Scheme (EEG) to export its cement, and a tax exemption from ECOWAS to export to Ghana" (Akinyoade et al. 2017: 292). Because of this arrangements, thousands of trucks are easily able to cross the Nigerian, Ghanaian, and Nigerian borders which are usually subject to heavy international tariffs. Officially, Dangote completes these tax formalities in advance at the state level, thereby escaping the everyday low-level corruption at customs which is common to this cross-border region (Igué and Soule 1992; Blundo and Olivier de Sardan 2007; Chalfin 2010; Walther 2015; Lihoussou 2017). Unofficially, it is possible that the company negotiates a crossing fee with the politicians. Concrete is a prism through which we can interpret the rearrangements with governments, the interplay of alliances, and the clientelism that influence the capitalist sector and even its product prices. No cement plant can open without strong support from a bank, from sponsors, and from government, because "creating a cement plant means a lot of investment, a lot of risk," as the CEO of the *Nouvelle Cimenterie du Bénin* (Nocibé) once put it (interview, Cotonou, 2017). Government intervention and financial support is needed to encourage foreign companies to invest in this sector which, though profitable, demands the commitment of larger sources of capital than other comparable investments (Akinola 2019).

From Developmental States to Entrepreneurial Presidents

"Build often, destroy sometimes, give service always" – this is the slogan painted on the side of a Cotonou prefecture bulldozer at work in the streets of the capital in January 2017. Patrice Talon, president of the Benin Republic since 2016, wants to "clean" the main roads – a practice he describes as "noble" – by removing street traders. Government officials call this an "operation to liberate the public domain." In contrast, many residents call it an "eviction" (*déguerpissements* in French). Talon is trying to turn the economic

capital of Benin into a modern and competitive city, capable of rivaling Africa's other big cities: "Cotonou is in competition with Abidjan and Accra" he tells the press in 2016, and as part of his government action program christened "Benin Revealed," this "builder" president is supporting a litany of urban projects driving the city's construction boom: road infrastructures; a social housing program; a smart city (Sèmè City); a new airport, riverbank, and coastal development projects; and a wide array of other large-scale investments in the urban built environment. In 2018, the government launched the "asphalting project" which José Tonato, minister for the Ministry of Living Environment and Sustainable Development, framed as follows: "The purpose of the asphalting project is to free the public domain. Everyone in Benin knows that if Cotonou is to compete with the other cities in the sub-region, it needs a minimum of development. We need to work to achieve goals of urban quality for our city."¹⁶

In Benin, as elsewhere, political leaders need to make their own mark as builders and win over voters with roads, pipes, pavements, and tar. In this sense, the head of state resembles an entrepreneur trying to attract long-term investors to invest in "enchanted" infrastructures and megaprojects (Harvey and Knox 2015) (Figures 1.11 and 1.12). The figure of the president-builder marks a recent change in the role of the state in society. In this re-formatted role, states develop new investment opportunities in highly symbolic infrastructure projects (highways, railways, ports, energy) and, in doing so, they break with the budgetary orthodoxy imposed by the Bretton Woods institutions which had frozen a wide array of similar projects for several decades (Péclard et al. 2020). There has been a return to a proactive investment policy, placing the state at the heart of planning and economic development strategies. In this context, the president is known and recognized as a state authority for the projects and infrastructures he undertakes. He finds himself trapped between two different timeframes: the relatively short timeframe of presidential terms and the longer timeframe of project cycles. Many West African citizens judge presidents on the material projects they produce, in particular the number of buildings that rise out of the ground. The creation of "dream cities" (Adeniyi-Ogunyankin 2019) from this constellation of urban construction projects is accompanied by new governance practices and new state structures to manage the implementation of large-scale development projects. In order to avoid administrative delays, governments create new agencies directly under the control of the head of state, but these agencies function similarly to corporations (Błaszczewicz 2021). In Benin, for example, the president has created agencies for tourism, drinking water, the living environment, and digital technology, and has appointed foreign-educated Beninese to head them. These agencies are often assisted by international consultancy firms which act as project coordinators, and they are



FIGURE 1.11 Poster supporting the Beninese president Talon: “Porto-Novo, the capital-city under construction”, 2019. Source: Courtesy of G. Dobigny.



FIGURE 1.12 Campaign poster to “Keep Lagos Clean”, 2017. Source: A. Choplin.

capable of signing public-private partnerships by agreement. In other words, their remit – voted directly in the Council of Ministers by presidential order – is opaque. These new agencies play host to well-known private-sector guests and divulge the designs and business plans of future projects in the jargon of management newspeak. As a result, implementing agencies set up in the 1990s at the behest of the World Bank have become obsolete institutions, edged out by these newer more corporate-savvy alternatives. Caroline Melly (2013) came to the same conclusion in her analysis of *Agence nationale de promotion des investissements et des grands projets* (APIX) in Senegal, the national agency in charge of supervising the government's major infrastructure projects, especially the creation of the new satellite city of Diamniadio and the Regional Express Railway project. Located outside the ministerial system, this agency is under the direct executive control of the president, which makes it a “quasi-state office” (Melly 2013). For African citizens, the confusion created by the creation of these parastatal agencies raises issues of not knowing who precisely owns and operates large-scale public infrastructures. Although most infrastructures across the continent are still owned by African states, the rise of parastatal development agencies has also meant that partial ownership of public infrastructures “has changed hands from a public entity (like a state) and shifted to a private entity (like a firm)” (Mizes 2016).

Presidents, like states, have become both entrepreneurs and investors (Pitcher 2012). They legitimate their command of state power through a form of authoritarianism blended with private sector intervention (Péclard et al. 2020). Public-private partnerships are numerous and well known, and they include a diversity of projects ranging from the Cameroonian government's social housing programs to major transport infrastructures in Dakar. For example, the president of Senegal, Macky Sall, has played on the theme of a “fast track” to development in the national “Emerging Senegal Plan.” In this plan, everything happens quickly and visibly. And beyond Senegal, “fast urbanism” (Datta and Shaban 2017; Datta 2021) has emerged as a generalized mode of production in the cities of the Global South, today contributing to the rapid spread of concrete.

Builder Businessmen and Other Africapitalists

In a neoliberal context characterized by the development of public-private partnerships, the relationship between the public and private sectors is becoming increasingly important. It is worth remembering that the links between the construction sector and electoral politics are not new. Thirty years on from the era of structural adjustment programs, the state has not simply disappeared, but has instead merged with entrepreneurs and big capital: notably

capital in the land, real estate, and construction sector, that many investors perceive as safe havens in which to park their capital. Concrete blocks and big construction and infrastructure projects thus become the shaky foundations on which the often-contested legitimacy of certain financial groups, politicians, and businessmen is built. For example, in Central Africa, the scandals surrounding the Dos Santos family in Angola have recently brought these controversial links back into the spotlight (Soares de Oliveira 2021).

It is worthwhile return to Aliko Dangote, an exemplar of the ambiguous connections between business, politics, and capitalism in Africa. Even though he claims to have no electoral ambitions, he is well known for having strong political connections with the Nigerian government. Since the 1990s, Nigeria's successive presidential administrations have broadly supported the establishment of Dangote's monopoly by giving him access to limestone quarries, reducing taxes, selling him government shares following the privatization of the cement industry, and by facilitating the export of his products (Akinyoade and Uche 2018; Akinola 2019). But not all in the private sector see these agreements as fair. As the CEO of a competing European company complained: "Dangote has wrought havoc in the region. He calls up presidents directly and offers them a cheque to let him sell in their countries. He receives tax incentives for extraction and production, and tax exemptions on the goods he exports. So, it's not hard for him to be competitive" (interview, Lomé, 2018). Speaking on behalf of his company, the CEO went on to express his desire to "be a transparent and responsible player in Africa, a model of responsibility." But in his view, foreign companies like his own "start at a disadvantage compared with certain competitors who have somewhat opaque agreements with highly placed individuals."

Confirmed or not, these complaints corroborate the idea that Dangote receives preferential treatment. Nigerian scholars have pointed out this form of "crony capitalism" (Akinyoade and Uche 2018), reminding us that the former Nigerian president Obasanjo had previously allied with Dangote and promulgated the Backward Integration Programme (BIP) for the local cement industry. Dangote was close to President Obasanjo and contributed significantly to the latter's re-election in 2003 by funding his campaign (Akinyoade and Uche 2016). In 2017, President Buhari personally congratulated Dangote for having transformed the country into an exporter of cement. Other Nigerian scholars have recently criticized Dangote's Environmental, Social and Governance (ESG) practices, revealing how the company manages to convert it into strategic commercial practices that enable it to get around public tendering rules and to win contracts on non-competitive terms (Ezeoha et al. 2020). Drawing on the example of cement roads in Nigeria, these authors demonstrate how, when institutional and regulatory controls

are weak, strategic Corporate Social Responsibility can be turned into an instrument of rent extraction and profit maximization.

Dangote is a key figure through which to understand recent transformations in African capitalism. He identifies himself as an Africapitalist, a term coined by Tony Elumelu. These pseudo philanthropic businessmen have today replaced the figure of the highly educated intellectual dominant in the 1980s (Banégas and Warnier 2001). Some of these Africapitalists are rising to become heads of state, similar to the electoral trajectories of Trump in the United States or Berlusconi in Italy. They apply a classical form of “neopatrimonialism” (Médard 1991) characterized by the personification of power, the accumulation of resources, legitimization through redistribution and hence by a high level of clientelism. They follow the trails blazed for them by the entrepreneurs and merchants who made their fortunes in the 1980s, drawing on links inherited from colonization; on traditional and religious, family, and community networks; and on political supporters (Ellis and Fauré 1995). But at the same time, their trajectories are pioneering: they reinvent the relationship to power and money; they consolidate this power by articulating it with new forms of global and offshore capitalism. Some of these businessmen have modest backgrounds and claim to be more discreet than their predecessors by combining business, philanthropy, and charity. Aliko Dangote, for example, describes himself as working for the well-being of the people of Africa: “my secret is that I reinvest my profits in the country instead of hiding the money in Swiss bank accounts, and that I lead a modest lifestyle and stake everything on the domestic market of Africa’s most populous country” (cited in Fayemiwo and Neal 2013). Although he claims to privilege investing in Africa, Dangote is also turning to the American market, where he is creating the first African family financial investment office in New York.¹⁷ Thus, Dangote appears much more than a cement manufacturer: he is a member of the world’s billionaire class and a symbol of how economic development is changing in Africa today.¹⁸

Alongside Dangote, other African CEOs are transforming African economy and the construction sector. More and more construction contracts, especially large projects, are being awarded to local firms and not only to foreign companies. Some of the CEOs operating in the construction sector are similarly rumored to be close to African heads of state. This is the case of the Nigerian Abdul Samad Rabiú, also in the cement business (BUA Cement PLC), who is in competition with Dangote for the title of richest man in Africa. Similarly, the Burkinabe entrepreneur Mahamadou Bonkougou, director of the road construction firm EBOMAF, is another well-known powerful public works contractor. Having enjoyed the favors of Burkina Faso’s former president Blaise Compaoré, he is said to be close to a broad array of West African presidents: Faure Gnassingbé (Togo),

Patrice Talon (Benin), George Weah (Liberia), Alassane Ouattara (Ivory Coast), and Umaro Sissoco Embaló (Guinea-Bissau).¹⁹ Burkina Faso's richest man also has close ties with Aliko Dangote. These Africapitalist entrepreneurs are challenging the quasi-monopolies hereto established by European construction companies at a time when the presence of these European firms in Africa is being contested. For instance, French companies such as Bolloré, one of the leaders in logistics, or Bouygues, a construction company, are regularly under fire in the media for corruption and fraudulent contracts. Many African citizens denounce the presence of these European firms as a "neocolonial" presence. But beyond facing domestic criticism, these European firms also face competition from China, which is investing heavily in Africa, with its Belt and Road initiative, announcing to develop African infrastructures to aid trade on the continent. In 2020, China has designated Ghana as one of its preferred countries for FDI and has reinforced links with Nigeria, especially in the banking sector.

The cement industry and the construction sector shed light on the alliances, connections, and affiliations between elected officials and the private sector; informal – not to say corrupt – practices that are well known in the region (Blundo and Olivier de Sardan 2007). These relations are central to what Jean-François Bayart has referred to as the "politics of the belly" (Bayart 1993): the entangled nature of activities in the postcolonial state rely on tight-knit relations between heads of state, central power, resource grabbing, and unequal wealth distribution. It takes place in a context where entrepreneurship is encouraged by the discourses of funding agencies and by political leaders who see it as a means of emergence. The state supports Africapitalists who claim to develop the African continent and, in doing so, take control of the real estate, construction, and infrastructure sectors. Until recently, African entrepreneurs invested mainly in rural agriculture: Ellis and Fauré's (1995) seminal work on entrepreneurs mentions only two occurrences for "real estate" and "land." Today, the change is notable: a recent study showed that 30% of investments by African millionaires and billionaires goes into an urban land and real estate, primarily in their country of residence.²⁰ The "politics of the belly" has been redirected to the urban sphere and this shift indicates the potential for new forms of urban governmentality and the privatization of the state (Hibou 1999).

Conclusion

Concrete has become a political and geopolitical object of primary importance, in which business and politics are inextricably interwoven. With the recent opening of new cement plants in a now African industry – or at least

one that is presented as such – a whole urban political economy of concrete production is driving local economic development and creating the conditions for the production and reproduction of political and entrepreneurial elites, such as in the oil sector (Appel et al. 2015; Appel 2019). The concrete value chain now stretches across unprecedented scales, distances, and itineraries, and it is reshaping the modes of urban production. The cement industry and the construction sector are at the origin of a new geography of extractivism emerging in limestone hotspots across the region. Nevertheless, the existence of the Concrete City highlights the persistent and unequal relationship between the North and the South. Once again, foreign companies are exploiting African resources in search of new markets. As such, cement industry and the construction sector are clearly embedded in neo-colonial relations. But at the same time, they have also allowed the emergence and affirmation of local African figures who are redrawing and even challenging these North–South relations of domination.

Drawing on works in anthropology, geography, history and political sciences that have underlined the ambiguous connections between political and economic elite, this section has demonstrated that the Concrete City in West Africa greatly depends on the strong relations between Africapitalists and the public authorities driving the construction boom. A large array of individuals and political networks depend on this economy of concrete: presidents, statesmen, local governments, municipalities, donors, businessmen, and international and domestic construction companies are all implicated in concrete politics in West Africa today. Dangote in particular illustrates a shift toward neoliberalism: he brings together a new vision of success with the continent's booming concrete construction. The age of concrete is also the age of a new form of capitalism in which Africa now plays a distinct part: the circulation of money is deeply linked to the circulation of the gray gold traveling in massive quantities around the roads of West Africa and ultimately anchoring itself in the region's urban landscapes. It also reveals that the super-rich elites invest in the real estate sector locally but not only. As Ricardo Soares de Oliveira (2021) explains, African elites are now fully part of the "global offshore political economy": a significant proportion of their capital goes abroad. In-depth studies should be carried out to investigate these links between African capital flows, real estate investment, and the offshore economy. A new geopolitical map of concrete is being drawn, while the state is simultaneously being reshaped by the establishment of new types of partnerships with the private sector and by the emergence of actors governing through concrete. And with this new geopolitical map comes a new way of producing and governing a Concrete City.

Notes

- 1 See the official text published in 1930: http://www.entreprises-coloniales.fr/afrique-occidentale/Chaux_ciments_Senegal.pdf.
- 2 In 2015, the Swiss company Holcim merged with the world's largest cement company, the French group Lafarge. The new entity was temporarily called LafargeHolcim, before reverting to the name Holcim in 2021. In the text, for simplicity, I use the name LafargeHolcim to refer to the company.
- 3 Dangote estimates its limestone reserves for the Obajana site at 647 million tons (45 years), for Benue at 133 million tons (30 years), and for Ibese at 1,150 million tons (78 years).
- 4 Fawehinmi F., 2017, Africa's richest man has a built-in advantage with Nigeria's government. *Quartz Africa*, <https://qz.com/africa/1098137/africas-richest-man-has-a-built-in-advantage-with-nigerias-government>.
- 5 See Forbes website: <https://www.forbes.com/profile/aliko-dangote/?sh=436971cd22fc>.
- 6 See *Jeune Afrique*, '18.01.2019, « Aliko Dangote, Tony Elumelu et Miriem Bensalah-Chaqroun au sommet « Choose France! »', <https://www.jeuneafrique.com/708940/economie/business-aliko-dangote-tony-elumelu-et-miriam-bensalah-chaqroun-au-sommet-choose-france>.
- 7 The Diamond Ghana cement plant is linked to the port of Lomé by a 2.5 km long railway line which carries the clinker. It produces 800,000 tons of cement a year.
- 8 The new cement plant Dangote opened at Pout in 2015 (54 km from Dakar). It has 100 employees and production capacity of 1.2 million tons per year. Like SOCOCIM in Senegal (Société Vicat), Dangote targets both the domestic and the regional market and produces 3.5 million annual tons, one million of which is exported.
- 9 The Tabligbo clinker production plant has capacity of 1.5 million tons. If we add production by Wacem (which has its head office in the mining city of Tabligbo), total output in Togo is 2.5 million tons.
- 10 Up to 2014, with equalization, the price per ton was the same across the whole country. Since then, it has varied depending on the distance from the cement plant: 66,000 in Cotonou, 66,000 in Bohicon, 77,000 in Nattitingou, 80,000 in Tanguietta (February 2018).

- 11 'Dangote cement defends conduct in Ghana', Global Cement, 1.11.2016, <http://www.globalcement.com/news/item/5447-dangote-cement-defends-conduct-in-ghana>.
- 12 See *Jeune Afrique*, "Sénégal: le gouvernement bloque l'augmentation du prix du ciment", 18.03.2019, <https://www.jeuneafrique.com/750578/economie/senegal-le-gouvernement-bloque-laugmentation-du-prix-du-ciment>.
- 13 <https://www.14trees.com/#anchor-1>.
- 14 www.durabric.com and <https://www.holcim.com/largest-3d-printed-affordable-housing-project-africa>.
- 15 The Economic Community of West African States ECOWAS is an intergovernmental organization set up in 1975 With the Aim of Fostering Cooperation and Integration between the 16 Member Countries. It notably facilitates the free circulation of people and goods.
- 16 See #AskGouvBenin: José Didier Tonato rassure les internautes à propos du projet asphaltage, Bénin Révélé Mag, 19.11.2018 <https://www.beninrevele.com/askgouvbenin-jose-didier-tonato-rassure-les-internautes-a-propos-du-projet-asphaltage>.
- 17 See *Jeune Afrique*, 10.01.2020, "Las de l'instabilité des devises africaines, Aliko Dangote veut investir dans la finance à New York », <https://www.jeuneafrique.com/879696/economie/las-de-linstabilite-des-devises-africaines-aliko-dangote-veut-investir-dans-la-finance-a-new-york>.
- 18 See the list of billionaires on Forbes Website: <https://www.forbes.com/africa-billionaires/list/#tab:overall>.
- 19 See *Jeune Afrique*, 28.10.2020, « Comment l'influent Mahamadou Bonkougou, magnat du BTP, est devenu l'ami des présidents », <https://www.jeuneafrique.com/1061720/economie/comment-linfluent-mahamadou-bonkougou-magnat-du-btp-est-devenu-lami-des-presidents>.
- 20 See *Jeune Afrique*, 10.03.2020, « Quels sont les pays africains qui comptent le plus de millionnaires? » https://www.jeuneafrique.com/908229/economie/les-millionnaires-africains-toujours-plus-nombreux-selon-un-classement-de-knight-franck/?utm_source=newsletter-ja-eco&utm_medium=email&utm_campaign=newsletter-ja-eco-10-03-20 See also the website dedicated to African Billionaires: <https://billionaires.africa>.