3

THE SPREAD OF CHINESE SURVEILLANCE TOOLS IN AFRICA

A Focus on Ethiopia and Kenya

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3.1 Introduction

To date, 16 African countries are using Chinese digital surveillance technology (Feldstein, 2020). The digital surveillance technologies arrive predominantly under Huawei's "smart city" banner, as a development infrastructure and supplementary technology to the Belt and Road project. Chinese officials began promoting the "Digital Silk Road" (DRS) initiative in 2015 (Kurlantzick, 2020), as part of the Belt and Road project, aiming to expand Chinese corporate engagement globally by promoting internet connectivity, digital economies, so-called smart cities, and artificial intelligence. Digital infrastructure, from this perspective, is how politicians plan and imagine the future of African cities. Research and media coverage disproportionally focus on Chinese reasons and incentives for the proliferation of surveillance technology (Biryabarema, 2019; Feldstein, 2019; Parkison, Bariyo and Chin, 2019; Mozur, Kessel, and Chan, 2019). This chapter, however, examines Beijing's growing geopolitical footprint on the continent. It investigates the part played by local demand factors that contribute to the growing use of digital surveillance technology. The work lends weight to an examination of the spread of surveillance technologies as a dynamic multilateral social process.

Based on a review of literature, the chapter investigates the impact of Chinese surveillance tools in Africa, focusing on Kenya and Ethiopia's capital cities: Nairobi and Addis Ababa, respectively. Both countries have received substantial financial and technical assistance from China to build their digital infrastructure. In Nairobi the digital infrastructure is Huawei-driven initiatives, consisting of fibre-optic cables, surveillance cameras, interconnected tracking devices, software, and cloud storage systems. The aim is that these digital infrastructures will buttress law and order in an open society. By contrast, Addis Ababa has

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sought to expand its digital infrastructure, which consist of fibre-optic cables and cloud storage systems, while maintaining a state monopoly. In both cases, the infrastructure is perceived to be responding to state inefficiency, ambitions, and concerns around state security. The difference in local conditions and political arrangement raises important questions: What effects can be observed as digital infrastructure becomes enmeshed in local technology, discourses, and institutions? What similarities are observable? What differences in application of technology are partly contingent on differences in sociopolitical environments?

The chapter is divided into three parts. I begin with a brief review of the literature. Then, I discuss China's engagement with Africa because of its domestic circumstances and transnational systems of investment. By investigating both cases (Ethiopia and Kenya) and seeking to situate the emergence of digital surveillance technologies in a web of local relations, I aim to illustrate the factors that determine the distribution of technologies and the future of Africa-China relations. Finally, I examine the consequences of China's engagement with Kenya and Ethiopia in digital technologies. I attempt to demonstrate that Chinese companies and government are locally engaged and have agreed to support the visions of the African host countries. This argument challenges the idea that China simply aims to export a model of digital governance and surveillance.

The chapter examines instead how Beijing engages on the terms made available both in Kenya and in Ethiopia. Critically, however, I point out that China's locally responsive engagements do not necessarily result in neutral outcomes. How China chooses to define neutrality is contingent on the promotion of political equality among nations, which aims to maintain economic activity between Africa and China. This posture systematically presents Beijing as an amiable development partner while also de-emphasising its preference for state-driven capital. In the absence of clear and robust privacy and data protection measures, this tendency to privilege state actors regardless of the political regime type leaves many people vulnerable to the misuse of surveillance technologies, even though the Chinese partners profess neutral intentions. Indeed, even in the context of a democratic government, the bolstering of state power reinforces the ambitions of the state towards utilising digital technologies to conduct surveillance for political and economic ends.

3.2 Africa-China Relations

The heightened scholarly attention being paid to Africa-China relations is chiefly inspired by the growing trade, investment, and aid relations. Current research has many threads of thought: one major line considers the contemporary challenges surrounding Africa-China relations. This is best represented by remarks on China's assumed neocolonial motivations that seek to extract mineral resources, which exacerbate inequalities, environmental degradation, and political instability (Ado and Su, 2016; Klare and Volman, 2006; Rich and Recker, 2013; Rotberg, 2009). These authors argue that new aid and investments

simply reproduce the same exploitative relations of dependence that characterised Africa's relationship with Europe and the United States. In digital and telecommunication discourses, the discourse is about China's export of an authoritarian version of digital surveillance practices (Biryabarema, 2019; Parkison, Bariyo, and Chin, 2019; Mozur, Kessel, and Chan, 2019). Most accounts presume a coordinated effort between the Chinese Communist Party (CCP) and Huawei. From this vantage point, the adoption of digital surveillance technologies hinges on Beijing's objective to promote its version of digital surveillance via corporate—public partnerships. Yet, critical studies illustrate that there is in fact little evidence that demonstrates Beijing's strict interest in exporting practices and models of development (Brautigam, 2011; Gagliardone, 2019; Mohan and Lampert, 2013).

Other work relates to the agency of African governments in shaping Chinese bilateral relations (Corkin, 2016; Gadzala, 2015; Kragelund, 2015; Mohan and Lampert, 2012; Phillips, 2019). By utilising the concept of agency, literature in this category examines the relationship between enduring geopolitical structures and local efforts in shaping development outcomes. While these studies draw attention to African agency and the asymmetric conditions of China–Africa relations, they tend to ignore non-state actors and unduly focus on Chinese "grand" strategy at the expense of local public and private actors (Mohan, 2015).

Taylor (2006) rejects the idea that China has a grand strategy towards Africa. He asserts that a nuanced analysis of Africa—China relations transcends talk of such a grand "Chinese strategy", which invokes fears among proponents of the liberal order. Indeed, the asymmetric conditions between Africa and China should inspire some scepticism (Chipaike and Knowledge, 2018; Mthembu and Mabera, 2021) — but not a scepticism that is simply contingent on assumed Chinese neocolonial behaviour. Rather, I attempt to explore the degree to which the interests of African digital ecosystem actors are shaping Africa—China relations and yet conditioned by enduring local and global structural arrangements. To presume agency without illuminating the obstacles to its expression romanticises African actors. On the other hand, some recognition of such agency is salient in discourses on structural analyses and representations of Africa and its people. The chapter pays attention to both the broader context of Chinese corporate expansion and the local conditions where multiple actors, discourses, and partnerships work towards establishing digital surveillance practices.

3.3 China's Expansion into Africa

China's expansion into Africa's digital infrastructure sector has been rapid, but not necessarily linear or coordinated in its operations. The push consists of various actors in the public and private arena who have pursued distinct goals. For example, the "Go Out" strategy in 1999, later incorporated into the tenth five-year plan, urged Chinese enterprises to invest abroad as a way to strengthen China's global business presence and to foster Beijing's integration into the global economy

(Wang and Hu, 2017). Drawing on Harvey's (2003) concept of the spatio-temporal "fix", Taylor and Zajontz (2020) interpret China's push abroad via private corporate entities as a necessary element to establish channels for investment as a way to address domestic economic challenges. Precisely, surplus capital was lent abroad to create new commercial and productive enterprises. The promise of higher rates of profit engendered an incentive to support capital flows to Africa. He Yafei, China's Vice Minister of Foreign Affairs, echoed this sentiment in a carefully worded 2014 op-ed piece, when arguing to "move out' China's economic overcapacity on the basis of its development strategy abroad and foreign policy" (He, 2014).

He Yafei's reading conceptualises the Go Out strategy and the Belt and Road Initiative (BRI) as a push for new markets, consumers, and profit. Beijing's investments in Africa are directed towards infrastructure and extraction to facilitate the needs of its domestic economy. Taylor and Zajontz (2020), like He, see the move to novel geographies as a possible ameliorant to China's own economic challenges. This approach draws attention to the current iteration of global capital and asks how the structural features of the economy motivate Beijing's actions in Africa. This is a salient intervention because many studies decontextualise China's behaviour on the global state; they assume its exceptional quality, while not closely examining the political and economic features that condition its actions.

President Xi Jinping announced the BRI during official visits to Kazakhstan and Indonesia in 2013. Beijing's most ambitious transnational infrastructure building project, according to Huang (2016), includes networks of railways, highways, and energy pipelines. The initiative mainly seeks to expand intercontinental connectivity with China and the circulation of the renminbi, the Chinese currency (Yu, 2018). As a continuation of Beijing's commercial interests abroad, the vast collection of development and investment initiatives stretch from Central Asia to Africa (Cox, 2018). At the same time, Beijing hopes that these global networks will link up with its own neglected Western regions, promoting economic development in places like Xinjiang, which have historically provoked separatist violence (Chatzky and McBride, 2020). This push abroad is in part about ameliorating domestic concerns, while also establishing China's global business presence.

In 2015, Chinese officials began promoting the "Digital Silk Road" (DSR) initiative as a supplementary project to the BRI. The DSR aims to foster internet connectivity, digital economies, smart cities, and artificial intelligence (Hillman, 2021). Reports indicate that five African countries (Angola, Ethiopia, Nigeria, Zambia, and Zimbabwe) have signed DSR agreements with China (Garcia, 2019). Yet, it must be said that the exact number of agreements is hard to verify because many of these memoranda of understandings (MOUs) are unreported (Kurlantzick, 2020). Although BRI and DSR constitute key elements of China's expanding geopolitical footprint, BRI and DSR have no central governing institutions. China has not published a master list of BRI and DRS projects, the terms of which are often negotiated behind closed doors.

Even though natural resources continue to be core interests of China's engagements in Africa, its interests in telecommunications have rapidly expanded. In 2006, the third Forum on China-Africa Cooperation (FOCAC), held in Beijing, marked this diversification of investments. China announced that it would grow its investments in multiple African sectors, including ICT, medicine, and renewable energy (FOCAC, 2006). Alden and Large (2011) claim that China's growing investments and strategic partnerships are not simply a means to secure natural resources and novel consumers, but also a strategy to win favour with African countries. Likewise, Lee (2019) investigates China's diplomatic goodwill efforts in Zambia. Convincingly, she argues that Beijing's ambitions are not always defined by corporate interests or immediate domestic needs. Challenging conventional assumptions about China's strict economic interests in Africa, Lee maintains that the Chinese state capital is also concerned with promoting political goodwill with African governments. Through ethnographic studies of the mining industries of Zambia, Lee (2019) demonstrates how Chinese investors made more compromises to accommodate Zambian state and labour demands than Western private corporations did.

3.4 China's ICT Investments in Africa

Ethiopia and Kenya have limited raw materials bases. Both nations have enjoyed considerable Chinese investments in the ICT sector (Figure 3.1). Regarding digital infrastructure, the evidence suggests that both Chinese companies and government appear to have agreed to support the visions of host African countries. The cases of Kenya and Ethiopia challenge assertions that China seeks to export a model of digital governance and surveillance. It illustrates how China engages

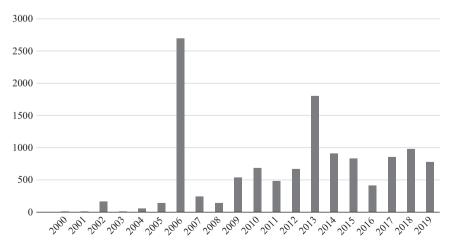


FIGURE 3.1 Chinese ICT Loans to Africa 2000–2019 (USD Million). Source: China Africa Research Initiative: https://chinaafricaloandata.bu.edu/.

on the terms made available in local contexts, which result in both locally and globally determined digital infrastructure projects.

For Chinese corporations that have expanded into Africa, profit margins remain relatively high, even in challenging political environments. Surveys conducted on Chinese enterprises in Africa indicate that profit margins are as high as 20%, leading companies like Huawei to expand their operations on the continent. Kirby (2020) contends that Huawei was not shy about pursuing profit in politically challenging environments. Its success was partly contingent on the absence of Western competition, which was averse to African political instabilities. As Ren Zhengfei, the founder of Huawei, put it: "many wars broke out in Africa in the 1990s. All the Western companies pulled out of the market, so we took that opportunity and sold some of our products" (as cited in Kirby, Chan, and Mchugh, 2020, p. 5). Huawei also sold their products 20-30% cheaper than Western companies remaining in Africa. By 2005, Huawei's international sales exceeded its domestic sales. It is these achievements abroad that garnered Beijing's attention (Huawei, 2020). As early as 2004, the China Development Bank opened a USD 10 billion credit line to customers of Huawei's digital products (Hu, 2011). Mackinnon (2019) notes that Huawei has built 70% of Africa's 4G networks, which vastly outpaces Western competitors. A 2016 World Bank report notes that, compared to Huawei, "other foreign firms with shorter time horizons and a higher profit requirement face a unique challenge when competing for contracts in Sub-Saharan Africa" (Sanghi and Johnson, 2016, p. 20).

Chinese loans mostly offered by the EXIM bank amount to USD 9.1 billion in the ICT sector in Africa (CARI, 2018). As shown in Figure 3.1, significant investments were made in 2006 and 2013. The remaining years between 2000 and 2018 were marked by moderate investments. This fluctuating trend is in part a consequence of local interest in digital infrastructure; a conclusion that is antithetical to established presumptions about China's steadily rising investments. Figure 3.2 shows the total number of loans made to Africa in the last two decades. According to SAIS-CARI, China has committed USD 153 billion to Africa between 2000 and 2019. Despite this large economic footprint, there is little data on the specifics of China's lending in the public domain. After rapid growth, annual lending commitments to Africa peaked in 2013, the year the BRI was launched. China's lending to African governments fell by 30% in 2019. China has sharply curtailed lending to the continent partly due to debt sustainability concerns (Song, 2021; Yun, 2020). This observation about the oscillating quantity of ICT loans is reflected in the cases of Ethiopia and Kenya. Both cases show that loans are provided within contexts where Beijing is aiming to advance diplomatic relations with Africa, Chinese corporations are expanding their geopolitical footprint, and local Ethiopian and Kenyan actors are demanding digital infrastructural investments to support development ambitions. I discuss the two cases further in the next section.

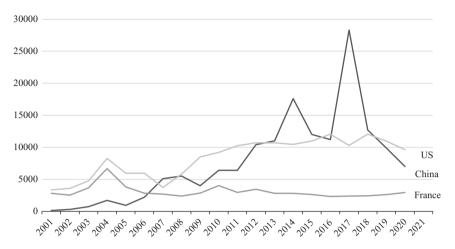


FIGURE 3.2 Total Chinese Loans and U.S. & French Aid to Africa. Sources: China Africa Research Initiative, https://chinaafricaloandata.bu.edu/; OECD Statistics, total official development flows by country and region, https://stats.oecd.org/Index.aspx?DataSetCode=REF_TOTAL_ODF.

3.5 Ethiopia's Digital Infrastructure Projects

The Bringing Internet to Ethiopia (BITE) initiative launched in 1995 by the Ethiopian government aimed to produce an actionable policy to engender the infrastructure conditions necessary to support connectivity (ITU, 2002). Initial discussions were favourable to a multi-stakeholder approach. However, the Ethiopian People's Revolutionary Democratic Front (EPRDF) rejected the idea of a privately owned internet provider. As a result, a public network service provider was proposed by BITE, which put forward the idea of a not-for-profit service provider with the chief objective of supporting public interest and development goals. The Ethiopian government rejected the BITE initiative and instead decided to lead the development and management of the internet itself. This decision vexed private actors and civil society organisations seeking to import best practices and digital infrastructure (Gagliardone, 2019). Ultimately, the choice was predicated on the government's desire to maintain a monopolistic grip on digital technologies.

In 2006, the Ethiopian Telecommunication Corporation and Chinese telecom giant Zhongxing Telecommunication Equipment Corporation (ZTE) signed the largest agreement in African telecommunication history. Backed by the China Development Bank, ZTE (partially state-owned) offered a loan of USD 1.5 billion to support the replacement and expansion of Ethiopia's telecommunication infrastructure (Dalton, 2014). The loan was disbursed in three phases and expected to be repaid over a 13-year period. The first phase was branded the "Millennium Plan", which implied digital infrastructure with the capacity

to make development viable by 11 September 2007, the date marking a new millennium on the Ethiopian calendar (Gagliardone and Brhane, 2021). The first phase was to install around 2,000 kilometres of fibre-optic cable, which aimed to connect Ethiopia's 13 largest cities (Cotterill, 2021; Foster and Morella, 2010; Gagliardone, 2019). The second and third phases expanded coverage to include Ethiopia's rural areas. New digital infrastructure capacity was now able to support a million internet broadband users and 20 million mobile users from an earlier 1.2 million.

In 2011, Ethio-Telecom, the country's sole telecom operator, issued a tender to further augment its network capacity to support around 50 million subscribers by 2015 (Human Rights Watch, 2014). Like ZTE, the tender was contingent on vendor-financing. Unlike in 2006, this time a public tender process was launched. Ethiopia ended ZTE's monopoly by inviting Huawei. The tender was jointly won by the Chinese firms, ZTE and Huawei. Together Huawei and ZTE pledged a total of USD 1.6 billion (Dalton, 2014). This deal was backed by concessionary loans from the EXIM bank. ZTE and Huawei agreed to offer USD 800 million each. Interestingly, it was normal for ZTE and Huawei to compete, especially at home. The Ethiopian government invited Huawei because of its growing reputation on the continent, but also because of ZTE's poor job in 2006 (Dalton, 2014).

The loans are partly provided to support Chinese corporate expansion abroad, but also to improve China's diplomatic efforts in Africa. Beijing appears to present itself as a peaceful rising power and impartial development partner willing to meet the demands of African actors (Jakobson, 2009). The loans are offered without political conditions.¹ This "no strings attached" approach has empowered African partners, like Ethiopia, to utilise Beijing's finance to pursue domestic ICT projects while simultaneously also offering legitimacy to Beijing's affable image. This image is developed in contrast to traditional Western partners, which condition aid and loans, asking African actors to adopt particular market and democratic reforms (Taylor, 2009). The lack of political conditions attached to the loans obscures the impact of Chinese engagement. Chinese stateled financial and technical help tends to benefit state actors over private enterprises. China's seemingly neutral engagement means that it seeks to uphold a strict distinction between political conditions and funding. It does not decide how its technologies are put to commercial and political use.

During this time, Ethiopia was also able to work with partners besides China in establishing its surveillance practices. The work by Citizen Lab, a Canadian information controls laboratory, illustrates Ethiopia's aptitude to combine diversely sourced digital infrastructure and surveillance technology. The government has acquired monitoring tools through various channels, namely, the UK- and German-based Gamma International FinFishers company; Cyberbit, an Israel-based cybersecurity enterprise; and the Italian-based Hacking Team Remote-Control System (Citizen Lab, 2014; Horne, 2014). These systems - as much as any provided by China - boost Ethiopia's governance and surveillance capacities and enable access to files on targeted laptops. They also log keystrokes and passwords to turn on webcams and microphones by stealth. These tools, critically, run on Chinese-funded ICT infrastructure (Human Rights Watch, 2014).

Researchers have studied the Ethiopian government's malware campaign, which targeted activists, lawyers, and political opponents (Citizen Lab, 2017). Reports describe how the state uses emails containing spyware posing as Adobe Flash updates and PDF plugins. Several ethnic Oromo activists like Jawar Mohammed, an Oromo activist and executive director of the US-based Oromia Media Network (OMN), were targeted by the Ethiopian government (Human Rights Watch, 2017). These new digital surveillance practices follow a history of surveillance practices aimed at undermining civil liberties (Hawaz and Xi, 2020; Human Rights Watch, 2014).

Evidence leaked by Edward Snowden indicates that it was not China and Europe alone that supported Ethiopia's surveillance practices. The U.S. National Security Agency (NSA) established the Deployed Signals Intelligence Operations Center in Addis Ababa (Turse, 2017). This began as a meagre counterterrorism undertaking that eventually grew into an operation involving eight U.S. military personnel and 103 Ethiopians surveilling Somalia, Sudan, and Yemen by 2005 (Turse, 2017). In exchange for intelligence and an advantageous location that offered unique access to targets, the NSA provided Ethiopia with training and technology to conduct digital surveillance. This shows Ethiopia's hybridised surveillance system, and its diversely sourced technology from China and the West.

The brief progress made in attaining peace and democratising Ethiopian society by current prime minister Abiy Ahmed is slipping in the face of the 2020 Tigray crisis. Since Ahmed's ascendance to power, Ethiopia has embarked on a series of liberalising reforms that have opened the market. This is exemplified by a bid issued to privatise the state-owned Ethio-Telecom, appointing international firms like KPMG to lead the transformation. This change hinges on the newly awarded operating licence, which was given to a consortium led by Kenya's Safaricom, UK's Vodafone Group, and Japan's Sumitomo that included financing from the U.S. Development Finance Corporation (DFC). The winning bid was an USD 850 million offer with a promise to invest USD 8 billion over the next ten years (Woo and Wexler, 2021). The losing bidder was South Africa's MTN Group whose proposal was financed in part by the Silk Road Fund, a Chinese state investment group. Whether this is indeed an inflection point is a pending matter. The Western-backed consortium marks a push to challenge Beijing's economic influence in Africa (Olander, 2021). It must be made clear that one more licence still needs to be announced. It is widely expected that bids, which include MTN, and Silk Road Fund will be more competitive in the next round. If successful, it is likely that Huawei's digital infrastructure will be used to build the networks.

China has indeed become the largest partner of Ethiopia's ICT development ambitions. Without the EXIM bank's concessionary loans, Ethiopia would not have had the financial means to realise its digital infrastructure monopoly

(Thakur, 2009). Elsewhere on the continent, including Kenya, a liberalisation strategy that relied on multiple private and public partners has driven the establishment of digital infrastructure. China's financial support and Huawei's technical provision have enabled the development of Ethiopia's telecommunication infrastructure, and with it, the State's means to surveil and retain control over the digital infrastructure.

3.6 Kenya's Digital Infrastructure Projects

In the case of Kenya, the Kenya Communication Act of 1998 put an end to the Kenya Posts and Telecommunication Corporation (KPTC), a state-run monopoly (Waema, 2005). This liberalisation strategy allowed the Kenyan state to take a leading role in shaping Information and Communications Technology (ICT) policies that aimed at privatising state-owned enterprises (Waema, 2005). Through the docking of four fibre-optic submarine cables between 2009 and 2011, the government was able to create a relatively competitive telecommunication sector that improved internet connectivity and affordability: competition among local and international firms began driving down the cost of phone calls and made internet services affordable for a larger portion of the population (Lancaster, 2017). Consequently, the sector's regulator reduced interconnection tariffs and instituted a range of regulations aimed at developing further competition.

Despite these policy changes in the ICT sector, the Kenyan government in 2006 did not have the infrastructural capacity to realise these development ambitions. Before 2009, Kenya relied on satellite technology for connectivity, which resulted in limited connectivity and was available at prohibitive costs for most citizens. This necessitated the need to transition from narrowband, which operates on satellite technology, to fibre-optic-powered broadband. China's chief entrance into the Kenyan ICT market came through the docking of fibre-optic cables. Led by Huawei and ZTE, the docking of four fibre-optic submarine cables between 2009 and 2011, enabled the government to create a relatively competitive telecommunication sector that improved internet connectivity and affordability: competition among local and international firms began driving down the cost of phone calls and made internet services affordable for a larger portion of the population (Lancaster, 2017).

Huawei and ZTE were jointly contracted to build new digital infrastructures. The Chinese EXIM bank was instrumental in making this infrastructure financially feasible for Nairobi, as was the case in Ethiopia, where Huawei and ZTE worked to expand internet connectivity. Bidding and winning the contract, the Chinese companies worked with the French corporation Sagem to create Kenya's first National Optic Fibre Backbone Infrastructure (NOFBI), which brought high-speed connectivity to the country's largest cities. The government started by building the NOFBI, initially to interconnect the former provincial headquarters and later to the county headquarters. This novel

capacity allowed for e-government projects across the country (ICT Authority, 2021). Each company was expected to manage a different region. Sagem laid the cables for the Coastal and Northeastern region, ZTE worked on the West, and Huawei handled Nairobi and the central parts of the country (Okuttah, 2012; Wahito, 2012). The second phase of extending connectivity was directly funded by the EXIM bank. It offered USD 71 million to cover 36 administrative districts that would provide high-speed internet in rural parts of the country. A condition to this loan was that Huawei had to be the company to build the digital infrastructure.

China's telecommunication companies entered Kenya's ICT sector late and had to navigate a relatively crowded market. National and international companies like MTN from South Africa, Zain from Kuwait, Vodafone from the UK, and Bharti Airtel from India had already entered that market and won shares and customers (Hughes and Lonie, 2007). These corporations localised quickly by shifting from contract-based purchasing plans to prepaid data, calls, and messaging. To go even further, the partly state-owned company Safaricom instigated an initiative intended to expand financial inclusion. Launched in 2007, M-PESA is Safaricom's mobile money transfer and micro-financing service (Avgerou, Hayes, and Rovere, 2016; Morawczynski, 2009). By using funding from the UK's Department for International Development (DFID), Safaricom was able to improve access to financial services for unbanked communities. The Chinese government and companies operating in Kenya adopted a receptive posture towards the wishes of Nairobi and the currents of the business environment. This strategy was similar to their labours in Ethiopia, where China supported the state's ambition to introduce digital infrastructure.

Huawei's 2018 annual report maintained that its Safe Cities project (anguan chengshi) serves over 100 countries (Huawei, 2018). According to data collected by the Endowment for International Peace and the Center for Strategic and International Studies, 16 African states have contracted with Huawei to receive digital surveillance and governance technology. These surveillance and governance devices offer multiple services which include smart metering, emergency assessments, and predictive policing. A popular example is the first African safe city system built in Kenya. Huawei was able to connect 1,800 high-definition cameras and 200 high-definition traffic surveillance infrastructures across Nairobi. Additionally, a national police command centre was established to provide support to over 9,000 police officers and 195 police stations (Huawei, 2018). These technologies aim to support crime prevention, accelerated response, and recovery. Due to the dearth of data, the benefits of the Safe City project are hard to verify and appear exaggerated (Epoch Times, 2019; Hillman, 2019). According to Huawei, crime rates from 2014 to 2015 decreased by 46% in areas supported by their technologies in Kenya (Huawei, 2014). But Kenya's National Police Service reports indicate smaller reductions in crime during those years in Nairobi. Nairobi and Mombasa, the two cities with surveillance technologies, have also seen increases in reported crimes in 2017 and 2018.

Equally important, Nairobi's central business district is reliant on digital CCTV cameras purchased from Huawei, but also suppliers like Hikvision, a Chinese state-owned provider of video surveillance technology. The facial recognition technology used on its national borders is powered by Sensetime, a Hongkong-based company. This case, like the example of Ethiopia, also illustrates a hybridised surveillance system that is diversely sourced to establish state security ambitions to manage crime and terror. In particular, Kenya's experience with terrorist attacks by Islamist militants in 2013 has led to the government utilising surveillance technologies and legal powers to manage the threat. Local civil society organisations point out the risks involved in digital surveillance and governance technologies and how the pretext of terror enables the atrophy of personal privacy and extended surveillance practices.

Rather than asserting a Chinese-based vision of digital governance and surveillance in Kenya, Chinese companies and the government have agreed to the propositions of their host. Digital surveillance tools are embedded within state processes that are a result of private-public ventures. Whether operating in Kenya's open market or Ethiopia's closed market, China and its companies have shown dexterity in adapting to local expectations and to sharing the unique vision of the host country. In Ethiopia, Beijing is the largest supporter of Addis Ababa's digital infrastructure projects. Without the EXIM bank's concessionary loans of USD 3.1 billion, the EPRDF would not have been able to realise its state capacity goals. Yet, it is also fair to say that Beijing is not aiming to export a strict normative basis of digital governance and surveillance in Africa. On the contrary, it seems to engage on the terms made available in the local context, which leads to context dependent outcomes. This raises questions about how we should interpret China's adaptive diplomatic strategy and its willingness to meet African states on their terms.

3.7 Conclusion: China's Neutrality

This chapter challenges the conception that China seeks to export a model of surveillance. Chinese companies operating in Africa tend to adapt to local business practices, rather than follow Beijing's supposed geopolitical strategy. Alves and Alden (2008) contend that China's financial and technical support does not result categorically in the exportation of its normative values. The evidence suggests that China helps fortify the political and social processes that were already in place in Ethiopia and Kenya. The lack of a digital governance and surveillance model to export does not negate the possibility of other strategies. Relevant questions, then, are: what kind of political, social, and legal environments are these digital surveillance tools embedding themselves in? How do we interpret China's adaptive diplomatic strategy? How are digital tools being utilised to meet public goals versus other ambitions? China's tendency to privilege state actors over other agents is problematic in the context of authoritarian regimes such as Ethiopia, which has a track record of human rights violations, and the

government has shown a predilection towards conducting unwarranted surveillance on citizens. The new technologies enhance the government's capacity. This latter point is not exclusive to authoritarian governments: skewing power towards the state, even in a democracy like Kenya, can result in unwarranted surveillance practices that undermine civil liberties.

China has incessantly repudiated the notion that it is exporting its values and surveillance practices abroad. During the 2018 Beijing Summit of FOCAC, President Xi spoke of the "five no" strategy that shapes its Africa policy: "no interference in the development paths of individual countries; no interference in their internal affairs; no imposition of China's will; no attachment of political strings regarding assistance; and no seeking of selfish political gains in investment and financing cooperation" (Liangyu, 2018). Xi's claims of neutrality do not eliminate concerns or negate the possibilities of recipients of Chinese aid conducting surveillance operations, especially after receiving support to establish digital surveillance capacities. It is clear, however, China's strategy towards Africa has never been explicit, strict, or coercive, but always remunerative in orientation. It is predicated on providing financial support and incentives to promote diplomatic relations. China is not actively promoting surveillance practices and advocating for specific models of development in the same way Western donors explicitly do, where compliance to specific market and democratic reforms is expected. The fact that it financially supports African governments and their ambitions to build digital infrastructure, still, prompts doubts about its neutral impact - and gestures towards a general strategy towards African partners. For these reasons, we must engender more proportional accounts that accent the degree to which African volition is shaping these unfolding relations while also examining the interplay between Chinese tech providers and Beijing's ambitions to promote its interests in Africa.

As I have shown, Beijing's remunerative engagements with Africa reinforce domestic political processes. Beijing's willingness to do business with authoritarian states enables surveillance practices. The way in which China chooses to define neutrality is simply contingent on the promotion of state sovereignty and the absence of political conditions. This framing allows for economic activities to persist while obfuscating the asymmetric conditions that structure relations. But this position also obscures the fact that, while offering aid and loans, China, like others, enables state capacities for surveillance (Jili, 2020). The "no strings attached" approach does not categorically result in neutral outcomes but is a beguiling posture that maintains China's image as a generous development partner, while also deemphasising its tangible impact on the ground. While China's involvement does not actively promote surveillance practices, it does create the conditions for it. How long Beijing maintains this posture of "neutrality" is a paramount matter as it expands its geopolitical footprint. Unfortunately, the few publicly available Chinese state documents remain vague as they pertain to regulating African investments. They lack explicit direction, legally enforceable obligations, and effective accountability measures to mitigate the misuse of digital governance and surveillance infrastructure. It is this lacuna that enables Chinese corporations to adapt to host country ambitions, even at the expense of civil liberties.

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Without friends and family's companionship, it would have been an arduous task to muster the thew to bring this work to conclusion. It is their love that is the fuel of today, and the harbinger of hope to come.

Note

1 China draws a distinction between political and economic conditions. There are economic conditions associated with Chinese loans. For instance, the resource-backed lending model allows for financing infrastructural projects, which requires borrowing countries to commit future revenues to be earned from its natural resources to pay loans secured from Beijing. This method allows resource-rich and high-risk borrowers to secure needed finance, but it also makes nations more financially vulnerable. With the collapse of volatile commodity prices, the borrower bears all the risk of debt default if the collateral is not enough. To participate in this program, the African countries need to be resource-rich, which obviously excludes Kenya and Ethiopia.

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