

FOCAC at 21: Future Trajectories of China-Africa Relations



2018年中非合作论坛北京峰会

The 2018 Beijing Summit of the Forum on China-Africa Cooperation

Sommet de Beijing 2018 du Forum sur la Coopération Sino-Africaine

3-4 September 2018

2018年9月3-4日

3-4 Septembre 2018





China Foresight

Analysing Chinese strategy, foreign policy and influence from the inside out.

China Foresight focuses on the internal drivers and global implications of Chinese foreign policy and strategy. On the one hand, this includes understanding the domestic policy making processes and ongoing debates among Chinese academics and senior policy makers. On the other, the programme analyses the global implications of China's rise across different regions and sectors. By making use of its affiliation to a world-leading research university, China Foresight aims to deliver policy relevant and actionable advice to strategic circles in the UK and beyond to further a better understanding of Chinese foreign policy and help formulate constructive policy responses by connecting academic knowledge of diplomacy and strategy with the people who use it.

For inquiries, please contact
Lukas Fiala, China Foresight Project Coordinator
l.d.fiala@lse.ac.uk.

Contents

- 4 Executive Summary
- 6 **CHRIS ALDEN**
Introduction: FOCAC in a Time of COVID-19
- 7 **STEPHEN PADUANO**
Can China Pull Back?
A Balance-of-Payments Assessment of the Decline in
China's Overseas Investment
- 11 **MZUKISI QOBO**
Africa's Priorities at FOCAC:
Economic Recovery and Resilience
- 16 **LUKAS FIALA**
Seeking Stability: China's Security Engagement in Africa
- 24 **IGINIO GAGLIARDONE**
Going beyond the stereotypes:
China's digital infrastructure in Africa
- 30 **YU-SHAN WU**
Education and Knowledge Production
- 37 **GIDON GAUTEL**
Expanding Horizons:
China-Africa cooperation on space technology
- 44 **LINA BENABDALLAH**
China-Africa Public Health Cooperation and Vaccine Diplomacy
- 48 The Authors

Executive Summary

The eighth iteration of the Forum on China-Africa Cooperation in Senegal reflects the broadening of the relationship to include economic, cultural, security, technological and health cooperation at a time when Africa becomes more diplomatically important for a post-COVID China. While any analysis of “Africa” and “China” is bound to engage in simplification, the aim of this report is to highlight emerging trends that have the potential to shape China-Africa relations in the near to medium-term future. By bringing together an international team of experts, this report provides important and timely background reading to ongoing discussions in Africa, Europe, the US and beyond on how to best understand and respond to China’s growing influence as we move towards a post-COVID world.

Can China pull back financially from Africa?

While Xi Jinping’s recently unveiled Dual Circulation strategy pledges to reduce overseas capital flows and rebalance growth towards domestic consumption, forecasting an end to China’s overseas spending spree, it is far from certain whether China actually can pull-back, given that a decline in overseas capital flows necessarily requires a decline in China’s trade surplus—which in turn would face a variety of political obstacles and financial risks.

How can Africa benefit more from trade with China?

As Africa’s largest trading partner since 2009, China is well-positioned to support African countries’ post-COVID economic recovery, and FOCAC represents a critical opportunity to improve trade relationships with China to boost Africa’s economic health. As such, African decision-makers must use their agency more effectively to seek more market access in China, while also using the African Continental Free Trade Agreement as a basis for industrial development and engagement with external actors.

Why and how does China engage in Africa’s security landscape?

The burgeoning economic ties and ensuing influx of Chinese companies and citizens in Africa have prompted the institutionalisation of security cooperation through FOCAC since 2012. While China’s main interest lies in protecting commercial entities and citizens, security capacity building and military diplomacy are increasingly used as tools to strengthen existing bilateral relationships with African counterparts. During the COVID-19 pandemic, the PLA has further been embedded in the Chinese government’s broader health diplomacy, providing PPE and vaccines as well as training to several African militaries.

Does China export a model of digital governance to Africa?

While the foray of Chinese tech companies has often been depicted as a digital panopticon descending onto African citizens, actual evidence points towards a more complex picture. China neither exports a coherent version of digital governance to Africa, nor do Chinese surveillance technologies work as often proclaimed. The success of Huawei’s Safe City and ZTE’s Smart City projects in Africa has varied considerably

from country to country and China is by far not the only actor to provide services and technology to enable the surveillance of African civil societies.

What are the effects of China's public diplomacy in Africa?

China has invested considerable resources into shaping the production of knowledge about China and Africa. However, despite China's emergence as a top-destination for African students, the founding of a China-Africa Think-Tanks Forum and the proliferation of Confucius Institutes and government scholarships, the fostering of tacit knowledge especially beyond government-to-government ties to overcome existing racial and cultural stereotypes at the level of civil society, remains challenging.

How do Africa and China cooperate on space technology?

While Africa's space sector is diverse and heterogeneous, China is nonetheless playing an increasingly influential part in several emerging trends. China has launched 6 of 45 African satellites, for which it has also provided Tracking,

Telemetry and Control (TT&C) support. Most of these projects included extensive training and support of local engineers. The most important element of China-Africa space engagements to observe over coming years is how ongoing initiatives shape the approach of partners and groupings of like-minded nations in intra-continental and multinational fora.

What are the drivers and effects of China's health diplomacy in Africa?

China's public health diplomacy in Africa during the COVID-19 pandemic has flowed from the legacy of Chinese medical teams which have operated in Africa since the Mao period as well as from China's previous engagement in fighting the Ebola epidemic. While highly publicised for public diplomacy purposes and certainly one of the core topics of this year's FOCAC, China's provision of COVID-19 vaccines to African countries has been considerably less concerted than in other parts of the world including the Asia-Pacific. Questions surrounding intellectual property when localising production of Chinese vaccines in African countries remain a challenge to realising Xi Jinping's pledge of making vaccines a public good. ■

Introduction: FOCAC in a Time of COVID-19

Chris Alden

The convening of the triennial Forum on China Africa Cooperation (FOCAC) in November 2021 finds a continent still in the grip of a worldwide pandemic and its economic aftershocks. For a relationship that has done so much to define Africa's accelerated growth over the past two decades, the present circumstances offer an opportunity for reflection on its possible future path.

The onset of COVID-19 and Chinese responses through what is characterised as 'vaccine diplomacy' boosted China's image in an Africa seemingly abandoned by the West. Longer-term public health initiatives, similar to the US government's multi-billion dollar PEPFAR programme aimed at addressing HIV/Aids, would be a logical next step in expanding Beijing's commitment to delivering public goods to Africa.

As regards economic recovery, development aspirations to promote inter-regional trade are integral to the new African Continental Free Trade Area (AfCFTA). The retooling of China's special economic zones based in Africa to focus on domestic African markets, as well as the encouragement of agro-industrial processing, should feature in this potentially decisive phase in the continent's development.

Over the last decades, China's debt-financed infrastructure projects have transformed the physical landscape of Africa in very visible ways. However, now it is the spectre of unsustainable lending that is giving pause to both creditors and debtors alike. As policy makers weigh the financial burden of more debt to the public purse in the context of the present macroeconomic uncertainties, will they recognise the necessity of integrating greater transparency to achieving sustainability in this vital sector?

Finally, when the long night of COVID fever finally breaks, what kind of world will Africa and China be waking up to? Surely, FOCAC will provide us with the signposts for that future. ■

Can China Pull Back?

A Balance-of-Payments Assessment of the Decline in China's Overseas Investment

Stephen Paduano

- After three decades of China's 'Go Out' policy, Xi Jinping has advanced a new proposal called 'Dual Circulation' which pledges to reduce overseas capital flows and rebalance growth towards domestic consumption.
- The success of 'Dual Circulation' remains highly unlikely: a decline in overseas capital flows necessarily requires a decline in China's trade surplus—which in turn would face a variety of political obstacles and financial risks.
- Yet if 'Dual Circulation' is to succeed, it is important to recognise that African economies and low-income countries worldwide have much to gain from the rise in Chinese consumption and the withdrawal of Chinese export competition.

For the past three decades, China's economic rise has been defined by the simple slogan zōuchūqū: "Go Out." Initiated by President Jiang Zemin in 1991, the policy has driven a dramatic expansion in China's export markets and trade surpluses. The most impactful element of the policy—what has allowed Beijing to spread its financial reach, acquire foreign technology and know-how, and curry favour in foreign capitals—has been zōuchūqū's expansion of overseas investments. Yet this particular element is falling out of favour in Beijing, with officials declaring their intentions to rein in China's foreign financial footprint. As the country's growth has become increasingly unbalanced at home, as a non-negligible proportion of overseas investments fail to perform, and as global political conditions sour against Chinese investors, Beijing has curtailed its policy banks' overseas lending (particularly in sub-Saharan Africa) and unveiled a new economic initiative called 'Dual Circulation' that pledges to turn China's economic horizons inward.

There has been much scholarly, policy, and journalistic attention to whether Beijing will or should pull back from zōuchūqū. This paper covers how it would and whether it can. It explores the balance-of-payments dynamics behind China's presence in Africa, inspects the economic rebalancing required to reduce overseas capital flows, and follows the scholarship of Michael Pettis in arguing that the tricky political and financial components of a rebalancing make the end of 'Go Out' and rise of 'Dual Circulation' unlikely.

Why China Goes Out

Just 4% of China's foreign direct investment, one form of overseas capital flow, was absorbed by African economies prior to the pandemic, but Africa has nonetheless become an important export destination for Chinese goods, capital, and labor. Chinese finance has also emerged as a large and systemically-altering force for the development of many African economies—particularly for those that are resource-rich, such as Angola. There are two basic financial reasons for this. First, African states enjoy some of the largest growth rates in the world, in terms of both economic and population growth: 11 of the 25 fastest growing economies prior to the pandemic were African, and 21 of the 25 fastest growing populations were African. Second, African states offer some of the highest rates of return at a regional average of 6.5%, second only to East & Southeast Asia, which comes in at 9.4%. For three decades, Africa's rapid growth, attractive returns, and clear capital needs have understandably made the continent a critical locus for China's foreign economic policy.

Now, however, the 'Go Out' imperative that brought China to Africa is under review. A key concern for Beijing is that many overseas investments have struggled to find success. While hawkish observers see China's relationship with distressed-debtor countries as evidence of geopolitical sophistication—a conniving 'debt trap' of some sort—the occurrence of non-performing loans reflects little more than China's financial underperformance. The recent decline in overseas lending has seemed to confirm China's retreat from 'Go Out' and suggest that Xi Jinping's 'Dual Circulation' proposal, to rebalance growth towards domestic consumption and re-prioritise the 'internal circulation' of Chinese goods and capital, may be coming into effect.

Why (else) does China invest overseas?

The crux of China's foreign economic policy since the death of Mao has been running trade surpluses. People have referred to China's 'export-oriented industrialisation' and 'export-led growth' as the 'Beijing Consensus' or 'East Asian model'. While many features of this model—subsidies, tariffs, technology transfer—have been common in the economic history of the U.S. and Europe, China's model does have an important distinction from its predecessors': persistence.

A persistent trade surplus may seem uninteresting, but it is a remarkable feat. In classical economic thought and for liberal economies, persistent trade surpluses are impossible to achieve. This is because when a country runs a trade surplus, it automatically faces a rising currency and rising wages which, over time, bring the trade surplus back into balance. This 'adjustment mechanism' is straightforward: as foreigners buy goods that are denominated in the surplus-country's currency, they bid up the value of that currency, which makes the surplus-country's exports more expensive and its imports cheaper. At the same time, as export earnings rise, the wages of those producing the exports should rise, allowing for greater consumption of both foreign and domestic goods, which brings down the trade surplus further.

But this is not what has happened in China. Consumption has not only failed to grow, it has fallen. As a percentage of GDP, China's final consumption expenditure was 61% when Go Out was launched in 1991, 61% when China joined the WTO in 2001, but it is just 56% today. In terms of the ability to buy the goods and services they desire to raise their living standards, Chinese consumers have utterly missed out on China's economic rise. This is because Beijing disrupts the adjustment mechanisms—currency and wages—that otherwise force consumption to rise.

Accusations of ‘currency manipulation’ and ‘wage suppression’, while valid, should not be taken too absolutely. The renminbi has appreciated over time, particularly in the early 2000s and again during the early stages of the US-China trade war. Yet China’s monetary intervention endures, not as much through the accumulation of official reserves by the People’s Bank of China, but through the policy-guided recycling of foreign-currency inflows by Chinese banks. Similarly, although wages have risen over the past three decades, doubling in the decade to 2019, they have failed to keep up with Chinese GDP growth, which tripled over the same period. This has reflected a declining labour share of income.

Interrupting the adjustment mechanisms that smooth out trade surpluses creates a challenge for Beijing. The export earnings that normally force the currency and wages to rise *must be sent overseas*. If they are not—if the renminbi is allowed to strengthen and export earnings are distributed to households—exports will fall, consumption will rise, and the commitment to running trade surpluses will break.

This interrelationship between China’s trade surplus and its overseas investments is the core feature of the balance-of-payments. The *current account* (the trade balance, net foreign earnings, and net transfers such as aid and remittances) is equal and opposite to the *capital account* (how much a country holds overseas in bank loans, foreign direct investments, foreign portfolio investments, and foreign exchange reserves versus how much is held in that country by foreigners). This is to say that a country’s *current account surplus* is always matched by a *capital account deficit*.

China’s trade surplus and foreign investments are thus two sides of the same coin. So long as China intends to run trade surpluses, as it has for much of the past three decades, it must also oversee large capital outflows.

So long as China intends to run trade surpluses, as it has for much of the past three decades, it must also oversee large capital outflows.

Why is rebalancing so difficult?

As a starting point, one can only expect to see a sustained decline in China’s foreign investment if one believes there will also be a sustained decline in Chinese exports. As gung-ho as Beijing has been about reining in its capital account deficit, however, there have been no signs that it intends to rein in its current account surplus. Chinese exports have risen by over 30% in recent months, yielding a *monthly* trade surplus of \$51 billion, which has belied any belief that an economic rebalancing is emerging.

Yet if for some unstated reason China embraces a reversal of its trade surplus (in order to rein in its overseas investments), the process to do this would entail serious political and financial difficulties. In effect, Beijing would have to engineer a rise in domestic consumption, either through an increase in wages or an increase in debt.

Increasing wages may seem straightforward, but it would demand a politically unlikely wealth transfer from the rich to the workers. As there are two 'shares of income', the *labour* share and *capital* share, a rise in the labour share of income necessarily means a fall in the capital share of income. A campaign to drive down the capital share of income would be far more expansive than Xi's public sector-oriented, anti-corruption campaign. It would demand the exertion of unprecedented influence on how the country's entrepreneurs set wages for 44% of China's workers (340 million people), and it would require a further centralisation of power in Beijing to strip local governments of their ability to set minimum wage policies. Urban officials would also balk at long-overdue reforms to the *hukou* system, which allows them to withhold public benefits and fair wages from rural migrant workers. For wage increases to be sustained, labour unions would also be needed to engage in regular contract renegotiations, which Beijing would be unlikely to stomach given the risk of engendering broader civil-society organising.

The other way to boost domestic consumption is to increase household debt, which circumvents tricky wealth transfers and structural reforms, but with considerable financial risk. China's debt-to-GDP stands at 270%, which makes it among the world's most leveraged economies. Financial excess permeates Chinese banking, housing, and infrastructure, and the consequences of bloated balance sheets have been painfully clear throughout the past decade. As China's financial system is currently reckoning with \$540

billion in outstanding non-performing loans, it is difficult to imagine Beijing actively seeking to increase debt levels.

Implications for China and/in Africa

There is understandable trepidation about China's financial withdrawal from Africa. Prior to the pandemic, Chinese FDI in Africa reached \$2.7 billion and Chinese lending topped \$7 billion. No matter the thorny and opaque terms that can come with Chinese capital, or the unsustainable focus on extractive industries, these sums will be sorely missed if 'Dual Circulation' turns Chinese capital inward.

Nevertheless, African economies could find consolation in the declining current account balance that would accompany a rising capital account balance. Put simply: the countries that would suffer from the withdrawal of Chinese capital would benefit from the withdrawal of Chinese export competition. Basic balance-of-payments dynamics demonstrate how reining in overseas investments requires a rise in the low currency and low wages that have helped to make China so competitive for so long. While many African countries' export industries would still face headwinds—priced electricity, faulty infrastructure, high shipping costs, etc.—a world in which China is not pursuing export-led growth but is instead a major global consumer is a world in which low- and middle-income countries can enjoy much more rapid development.

A balance-of-payments analysis can tell us a great deal about the forces pushing and obstructing economic change, but it cannot predict the future. While this paper deems it unlikely that China will see out a difficult domestic rebalancing in order to rein in overseas investments, Xi's inestimable appetite—and capacity—for structural change cannot be overlooked. ■

Africa's Priorities at FOCAC: Economic Recovery and Resilience

Mzukisi Qobo

- The upcoming FOCAC takes place at a critical juncture for African countries to improve trade relationships with China.
- As Africa's largest trading partner since 2009, China is well-positioned to play an important role in Africa's post-COVID economic recovery.
- African leaders must use their agency more effectively at FOCAC to seek more market access in China, while also using the African Continental Free Trade Agreement as a basis for industrial development and engagement with external actors.

FOCAC 2021 will be taking place against the backdrop of an increasingly challenging and complex global environment characterised by strained relations between major powers, the COVID-19 pandemic, and the intensification of global fractures with developing countries left behind in economic recovery. Instruments such as the Forum on China-Africa Cooperation (FOCAC) have a pivotal role in supporting Africa's recovery and resilience under the inclement global environment. It is also important that African countries approach relations with China—as well as other external actors—informed by the continent's own priorities.

China's serious foray into the African continent was initiated by the Chinese President Jiang Zemin when he undertook a state visit to Kenya, Egypt, Ethiopia, Mali, Namibia and Zimbabwe in May 1996. During this visit, the Chinese leader stressed China's solidarity with the African continent and a commitment towards world peace. During this state visit, trade and economic cooperation agreements were signed between China and various African countries. These relations deepened when the Chinese president Hu Jintao toured several African countries in 2006, covering Morocco in North Africa, Nigeria in West Africa, and Kenya in East Africa.

Instruments such as the Forum on China-Africa Cooperation (FOCAC) have a pivotal role in supporting Africa's recovery and resilience under the inclement global environment.

During Hu's presidency, China hosted a summit for 48 African leaders and pledged \$5bn as part of a package of development assistance. This gathering took the shape of the Forum on China-Africa Cooperation held in November that year. As a direct outcome of this partnership, between 2007 and 2010, China spent cumulatively \$20 billion in infrastructure and trade finance, with focus on oil producing countries such as Sudan, Angola and Nigeria. This financial largesse reflected China's strategic priorities in Africa—access to vital natural resources that would power China's own development and ensure security of energy supply.

In countries such as Nigeria, China was interested in the exploration rights to four blocks in exchange for the rights to rehabilitate oil refinery in the northern city of Kaduna. The Chinese government also extended development assistance to Nigeria to the tune of \$5.7m to purchase anti-malaria medicines. This was China's commercial diplomacy in action. FOCAC would continue as a platform for declaration of pledges for development aid and trading opportunities. It has largely been with the Chinese government making pledges to support African countries, and with African leaders relieved to have an alternative source of aid other than the West and its conditionalities.

During an 11-day tour Hu undertook in 2001, visiting more African countries and scouring the continent for natural resources, he announced \$3bn in credit to African countries. The Chinese also extended development aid and interest free loans. China was quick to emphasise that, unlike Western countries, it had no colonial baggage on the African continent, and that its aid came with no policy strings attached. That may be so, but the Chinese missed no opportunity in tying its largesse to access to Africa's valuable mineral or oil resources, an approach that some characterised as recolonisation of Africa.

Expansion of China's Economic Diplomacy

China's commercial diplomacy has since expanded to several other countries including Angola, Ethiopia, Mozambique, Nigeria, Sudan, Zambia, and Zimbabwe, among others, using this loans and infrastructure for resources framework.¹ In the main, the Chinese have focused on platinum, iron ore, copper, cobalt, timber, and petroleum. Since the early years of FOCAC, the Chinese commercial engagement on the African continent has grown, with China overtaking the US in 2009 as Africa's leading trade partner.

By the end of 2013, Chinese foreign direct investment in Africa topped \$26bn, rising to \$36bn in 2017, and directed to 66 projects, compared to Chinese FDI in the US at \$22bn. This financial muscle amply demonstrated the seriousness with which the Chinese regard Africa as a strategic arena for exercising their commercial and trade diplomacy.² At its sixth FOCAC summit held in South Africa in 2015, China made the most far-reaching commitments, which were followed by yet another bout of commitments at the seventh summit in Beijing in 2018.

In South Africa, President Xi Jinping announced a \$60bn package for financing ten significant initiatives. This financing package included \$10bn for a fund dedicated to building industrial capacity and investment in manufacturing, hi-tech, agriculture, energy and infrastructure. In addition, there was \$5bn for aid and interest-free loans and \$35bn for export credits and preferential loans.³ It is often difficult to measure FOCAC's success since it is China that made the pledges and generates the scorecard. This scorecard is not subject to any independent verification.

Benevolent Actor or Aggressive Hegemon?

FOCAC has helped China to solidify a single, favourable perspective on China-Africa relations in the eyes of the African continent. As Breslin has argued, China uses FOCAC to forge alliances with Africa on the basis of a shared developing country identity, the common pain of colonialism, and Africa's historical position at the margins of the global economy. As Breslin further points out, China has also positioned itself as a relatable standard-bearer of an alternative development approach—the so-called “Beijing Consensus” that is contrasted to the “Washington Consensus”—from which African countries can, supposedly, draw lessons.⁴

Despite its pretensions, China is a powerful country that is vying for global leadership and pursuing its national interests, and African countries should not fall into the lull of embracing China as merely a benevolent actor; it is no different from other global powers that are in pursuit of their economic and foreign policy interests.

It is worth pointing out that there are structural asymmetries in the commercial relationship between China and Africa, and these are most pronounced in trade patterns, where China imports from Africa mostly raw material and African countries import from China mainly value-added products. Africa's export dependence on China has not been entirely healthy for the continent's economic well-being. Sectors such as manufacturing, construction and real estate, that have in the past absorbed most of Africa's commodities, have witnessed a slump.

In the past two decades, Africa's business cycle has been tightly aligned to that of major emerging economies, especially China, and this coupling has been a major impediment to Africa's industrial development. According to an

IMF paper which assessed Africa's exposure to China, 1% growth in China's real fixed investment growth is associated with a 0.6% increase in sub-Saharan Africa's exports.⁵ This dependence could have harmful consequences for Africa's long-term prospects. Since China is a global price setter, which is a factor of power, African countries' room for manoeuvre is limited.

For African countries that are dependent on export markets, intensification of US-China rivalries could constitute a significant challenge for their trade and investment strategies. Both the US and China are major export destinations for many African countries, and sources of much needed foreign direct investment and development aid.

Towards FOCAC 2021

FOCAC 2021 will most likely build on previous platforms. To a considerable extent this engagement will be conditioned by the forces that shape the global system today as well as Africa's health and economic vulnerabilities. China believes that the previous FOCAC Summit was a success and that it delivered on its compact of eight initiatives: industrial promotion, infrastructure connectivity, trade facilitation, green development, capacity building, health care, people-to-people exchange, and peace and security. Indeed, China claims that 70 percent of the Summit's outcomes have been achieved. China makes vague generalisations about the precise nature of the outcomes and the specific amounts that were committed to specific areas.

Some of the thematic areas that will likely form part of the FOCAC Summit 2021 include cooperation between these two actors on trade, using the African Continental Free Trade Area (AfCFTA) as the basis for broadening engagement.

[T]here are structural asymmetries in the commercial relationship between China and Africa, and these are most pronounced in trade patterns, where China imports from Africa mostly raw material and African countries import from China mainly value-added products.

Second, China will seek to advance its digital silk road agenda in Africa as part of its competition with the US for global tech supremacy. It will aim to draw Africa to its digital orbit on the back of technology cooperation and possibly development assistance that is tied to the use of Chinese technology. Finally, both China and African countries will have an interest in supporting Africa's economic recovery through ramped up development assistance and sectoral cooperation, encompassing both agriculture and industrial sectors.

Conclusion: African leaders must use their agency

African decision-makers have an opportunity to use their agency more effectively. Africans will need to deepen collaborative relationships through processes such as the African Continental Free Trade Agreement. They will also need to shore up domestic institutional capabilities, improve their production profile, take a leap in innovation, and negotiate with external partners on a sounder institutional and economic basis. African countries should use FOCAC to navigate a pathway to economic recovery and resilience, something that is more urgent as many African countries stare at the precipice of a looming sovereign debt crisis.

Without a doubt, the relationship between Africa and China is as necessary as it is important. The magnitude of development challenges faced by African countries is better served in a climate of diverse financing sources. African countries, however, need to have a clear strategy of engagement that defines priority infrastructure, long-term objectives, and management of their borrowing against macro-economic realities and prospects of future capacity to meet their debt obligations. ■

Notes

- 1 Alden, Chris. 2007. *China in Africa*. London: Zed Books.
- 2 Chen, Wenjie, David Dollar and Heiwei Tang. 2015. "China's Direct Investment in Africa: Myth or Reality". Brookings Institution, 3 September. <https://www.brookings.edu/blog/africa-in-focus/2015/09/03/chinas-direct-investment-in-africa-reality-versus-myth>
- 3 Qobo, Mzukisi and Garth Le Pere. 2019. "China and US Geoeconomics Tussle and Implications for Africa". *International Journal on Belt and Road Initiative*. 2:3. <https://www.worldscientific.com/doi/10.1142/S2591729319500147>
- 4 Breslin, Shaun. 2011. "The 'China Model' and the Global Crisis: From Friedrich List to a Chinese Mode of Governance". *International Affairs*. 87(6):1323-1343.
- 5 Drummond, Paulo and Estelle Xue Liu. 2013. "Africa's Rising Exposure to China: How Large Are Spillovers?" IMF Working Paper, WP/13/250. <https://www.imf.org/external/pubs/ft/wp/2013/wp13250.pdf>

Seeking Stability: China's Security Engagement in Africa

Lukas Fiala

- As we approach the 2021 Forum on China Africa Cooperation (FOCAC), China has supported Africa's Peace and Security Architecture (APSA), UN Peacekeeping, counterpiracy operations and individual African countries through capacity building and military diplomacy.
- The reasons for these engagements include the need to protect Chinese citizens and commercial interests, but also the opportunity for the People's Liberation Army (PLA) to gain operational expertise.
- While the COVID-19 pandemic has heralded an active role for the PLA in the provision of medical equipment and vaccines, China's overall military footprint remains small compared to traditional Western powers such as the US, France and the UK, and should not distract from areas of shared interests, including the mitigation of non-traditional security issues.

China's persistent security concerns in Africa

As the China Mall building in Pietermaritzburg, South Africa, went up in flames last July, looters swiftly abandoned shattered store fronts to scavenge their stolen goods. Although the recent riots in South Africa were not explicitly about China, the massive black plume of smoke billowing from the building cast a figurative shadow on a persistent and important question in the China-Africa relationship: how to ensure the safety of Chinese citizens and entities overseas?

While this question is certainly a product of burgeoning commercial links between China and African counterparts over the last twenty years, China is not a complete newcomer to Africa's security landscape. Soon after the People's Republic of China (PRC) was founded, the PLA began to support Africa's armed struggles for independence. Following on from the 1955 Bandung Conference, which manifested the principles of solidarity between Asia and Africa, China trained African fighters, responded to requests for weaponry and even stationed military instructors on the continent.

This background of South-South cooperation evidently features in all major policy documents between China and African countries, and frames China as a different external actor compared to traditional Western powers. Citing the five principles of peaceful coexistence, especially non-interference in other countries' internal affairs, Beijing has often presented China's security engagement as fundamentally opposed to the liberal interventionism promoted by Europe, the US, and their allies.

Idealism only goes so far, however, and Beijing was soon confronted with the realities of political risk in emerging markets. China's evacuation of over 36,000 citizens from Libya (2011) and the subsequent evacuation from Yemen (2015) represent watershed moments by demonstrating to the PLA the need to update logistics and training to respond more effectively to overseas contingencies. The protection of overseas nationals has become an increasing source of regime legitimacy and intersects with the need to frame China as a responsible great power that is willing to and capable of providing public goods abroad; a demand that has frequently been reiterated by African counterparts.

China's first overseas military logistics base in Djibouti, which was inaugurated in 2017, represents the logical consequence of these growing obligations and reflects a gradual shift towards seeing military diplomacy and security cooperation as diplomatic tools: the flag has followed trade.

What are the main reasons for China's security engagement in Africa?

- 1) To protect Chinese citizens and commercial entities
- 2) To present China as a responsible great power that provides public goods
- 3) To respond to African demands for more security cooperation
- 4) To bolster already existing diplomatic initiatives and diffuse norms through military diplomacy, bilateral capacity building and arms sales
- 5) To gain operational experience for the PLA from UN Peacekeeping and counterpiracy missions

The protection of overseas nationals has become an increasing source of regime legitimacy and intersects with the need to frame China as a responsible great power that is willing to and capable of providing public goods abroad.

Overview: Unilateral, Bilateral and Multilateral Approaches

While China's approach to security in Africa has gradually broadened over the years, FOCAC has remained the main institutional platform to advance the China-Africa security agenda:

Table 1. Important China-Africa Security Initiatives Grounded in FOCAC¹

FOCAC Action Plan	Important Security Initiatives
2013-2015	<ul style="list-style-type: none"> ■ Launched China-Africa Cooperative Partnership for Peace and Security ■ China pledges to support African Union (AU) on peace-support operations, the development of the APSA, capacity building and post-conflict reconstruction
2016-2018	<ul style="list-style-type: none"> ■ China pledges 60 million \$US free military assistance to AU to support the APSA, the African Capacity for the Immediate Response to Crisis, and the African Standby Force
2019-2021	<ul style="list-style-type: none"> ■ Both sides pledge to broaden security agenda to include experience sharing in governance, public security, peacekeeping, cyber security, anti-piracy and counterterrorism ■ China pledges the launch of 50 security assistance programs under the Belt and Road Initiatives (BRI) across law and order, UN Peacekeeping, counterpiracy operations ■ China pledges to establish a China-Africa Peace and Security Forum, and a China-Africa Law Enforcement Forum ■ The BRI is formally integrated into China-Africa security cooperation ■ China pledges to increase defence and security assistance to Africa

UN Peacekeeping and Counterpiracy Operations

China's multilateral engagement centres on UN Peacekeeping and counterpiracy operations. According to the 2020-2021 budget, China remains the second largest financier of UN Peacekeeping missions with a total of 15.21%, outpacing the third-largest donor Japan (8.56%), but remaining behind the US (27.89%).² In 2016, China donated 200 million \$US to establish the UN Peace and Development Trust Fund, which also intends to support the UN Peacekeeping missions in Africa over a ten-year period.³ As of May 2021, China is further the largest troop contributor among permanent members of the UN Security Council and 8th largest overall (2,382).⁴ On the maritime front, the PLA Navy has been contributing task forces to counterpiracy operations in the Gulf of Aden since December 2008. The 38th taskforce was deployed to the region in June 2021.⁵

Emerging Defence and Military Diplomacy

On a bilateral basis, China has stepped up defence and military diplomacy. This reflects Xi Jinping's personal involvement in promoting a "China-Africa community with a shared future that enjoys common security" (Xi 2018c).⁶ This is most clearly seen in fora bringing together African defence and security officials with Chinese counterparts to strengthen mutual capacity to protect Chinese infrastructure and personnel. Between 2003 and 2017, China has loaned 3.56 billion \$US to African countries for military, domestic security and dual-use purposes.⁷

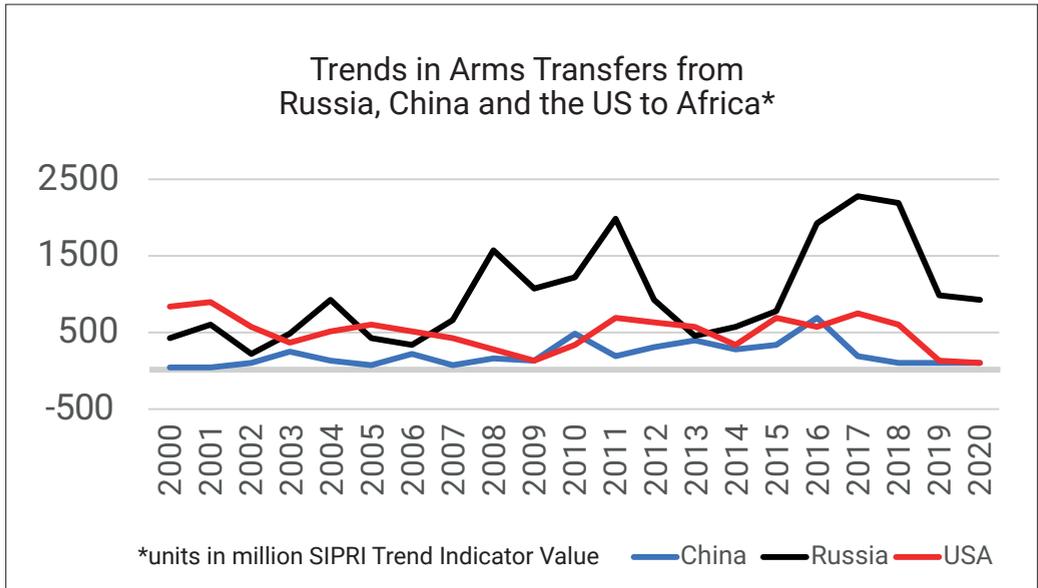
The PLA has further been embedded within the Chinese government's overall health diplomacy during the COVID-19 pandemic. The provision of personal protective equipment (PPE), training and vaccines to African militaries likely aims to consolidate military-to-military relationships, while also presenting the PLA as a partner of choice for the armed forces of African countries.

The provision of personal protective equipment (PPE), training and vaccines to African militaries likely aims to consolidate military-to-military relationships, while also presenting the PLA as a partner of choice for the armed forces of African countries.

Table 2. Overview of the PLA's Health Diplomacy vis-a-vis African Militaries (March 2020–August 2021)

Armed Forces	Vaccines	PPE	Training
Angola		X	
Cameroon		X	
DRC		X	
Egypt		X	
Equatorial Guinea	X	X	
Ethiopia	X	X	X (In Country)
Gabon	X		
Guinea	X		
Mauritania	X		
Morocco		X	
Mozambique	X	X	
Republic of Congo	X	X	
Rwanda		X	
Sierra Leone	X	X	
South Africa			X (Virtual)
Sudan	X		
Tanzania		X	
Tunisia	X	X	
Zambia		X	
Zimbabwe		X	

Source: Author's compilation from open-source research

Figure 1. Overview of Arms Transfers to Africa⁸

Source: Stockholm International Peace Research Institute (SIPRI)

Arms exports are another dimension of China's bilateral engagement. Reflecting China's rise as a technological power, Chinese defence enterprises have moved into emerging markets, thereby competing with traditional players.⁹ China's largest defence SOEs are not specialised in military equipment only, but also produce civilian applications, which has in some cases enabled them to consolidate their standing as trusted partners of African defence establishments. In Zambia, for instance, the Chinese state-owned enterprise AVIC (Aviation Industry Cooperation of China) reportedly moved from selling MA60 and Y-12 aircrafts to Zambia's air force to becoming involved in at least six EXIM-bank financed infrastructure projects. Apart from policy bank lending, the firm also offered its own 50 million \$US supplier credit for purchases of

L-15 supersonic trainers (worth 211 million \$US) between 2011-2014.¹⁰ While catching up with the US, China remains a relatively small player in Africa's arms market in comparison to Russia.

Private Security Companies

As a unilateral measure, Chinese private security companies such as the Haiwei Dui group have been employed to enhance everyday security of oil installations, construction sites and port infrastructure.¹¹ Expanding under an insufficiently rigorous regulatory framework, similar to Western counterparts, Chinese security firms allow Chinese state-owned and private companies to meet security demands, while avoiding a larger and more intrusive military footprint associated with the PLA.¹²

Shared Interests and Responsibilities in an Age of Competition

While public health concerns, vaccine equity and post-COVID economic recovery will likely dominate the agenda of the upcoming FOCAC, security nonetheless made it into Foreign Minister Wang Yi's Seven-Point Proposition to Upgrade China-Africa Cooperation, articulated during his Africa tour in January 2021. The latter speaks to how "China will step up military and security cooperation with Africa", including the promotion of political solutions to "hot spot issues" as well as the enhancement of peacekeeping and counter-terrorism capacity.¹³

In a time of growing rivalry between the West and China, it is therefore paramount for all parties to understand that sustainable and inclusive security on the African continent is a positive-sum game. It is consequently important to work with Beijing when interests align.

One example of how to enable productive exchange on important security issues in times of geopolitical competition is the non-governmental Africa-China-Europe Expert Working Group (EWG) on conventional arms control.¹⁴ Coordinated by Saferworld, the EWG aims to promote three-way dialogue and cooperation on tackling the illicit trade and diversion of arms, in particular small arms and light weapons (SALW) and ammunition in conflict-affected contexts in Africa. The initiative corresponds to a persistent security concern. To give but one example, 99% of documented ammunition and 37% of documented weapons in South Sudan's civil war was reportedly Chinese in origin.¹⁵ As demonstrated by becoming a state party to the Arms Trade Treaty (ATT) in 2020, Beijing is duly aware of the need to regulate SALW exports further, while also understanding the importance of demonstrating international responsibility. The EWG thus exemplifies not only the importance but also the feasibility of working jointly with African and Chinese stakeholders to find farsighted solutions to persistent security issues in Africa. ■

Notes

- 1 See FOCAC Action Plans:
http://www.focac.org/eng/zywx_1/zywj/t954620.htm
https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1323159.shtml
http://www.focac.org/eng/zywx_1/zywj/t1594297.htm
- 2 United Nations Peacekeeping (2021) 'How we are funded'. Available online: <https://peacekeeping.un.org/en/how-we-are-funded> (Accessed 10 August 2021).
- 3 United Nations Peace and Development Trust Fund, available online: <https://www.un.org/en/unpdf/index.shtml> (Accessed 10 August 2021).
- 4 United Nations Peacekeeping (2021) 'Troop and Police Contributors'. Available online: <https://peacekeeping.un.org/en/troop-and-police-contributors> (Accessed 10 August 2021).
- 5 Ministry of National Defense (2021) 'Regular Press Conference of the Ministry of National Defense on June 24'. Available online: http://www.81.cn/jwywpt/2021-06/28/content_10055646.htm (Accessed 10 August 2021).
- 6 Xi J. (2018) 'Chinese President Xi Jinping's speech at opening ceremony of 2018 FOCAC Beijing Summit', Xinhua. Available online: http://www.xinhuanet.com/english/2018-09/03/c_137441987.htm (Accessed 10 August 2020).
- 7 Link, J. (2019) 'Chinese Lending to Africa for Military and Domestic Security Purposes' Available online: <http://www.chinaafricarealstory.com/2019/04/chinese-lending-to-africa-for-military.html> (Accessed 10 August 2021).
- 8 Arms transfers data from 2000 to 2020 was compiled from the Stockholm International Peace Research Institute (SIPRI), using their TIV (Trend Indicator Value). Available online: <https://armstrade.sipri.org/armstrade/page/values.php> (Accessed 10 August 2021).
- 9 Alden et al (2020) 'On the move: the rise of China's global defence industry', CAPX. Available online: <https://capx.co/on-the-move-the-rise-of-chinas-global-defence-industry> (Accessed 10 August 2021).
- 10 Hwang, J. (2020) 'Logics of Arms Deals: Multilevel Evidence from China- Zambia Relations', Working Paper No. 2020/37, China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC, pp. 18-19. Available online: <http://www.sais-cari.org/publications> (Accessed 10 August 2021).
- 11 Legarda H. and Nouwens M. (2018) 'Guardians of the Belt and Road: The internationalization of China's private security companies', MERICS. Available online: <https://merics.org/en/report/guardians-belt-and-road> (Accessed 10 August 2021).
- 12 Arduino, A. (2020) The Footprint of Chinese Private Security Companies in Africa, Working Paper No. 2020/35, China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC, pp. 10. Available online: <http://www.sais-cari.org/publications> (Accessed 10 August 2021).
- 13 Wang, Y. (2021) 'Foreign Minister Wang Yi Articulates a Seven-Point Proposition to Upgrade China-Africa Cooperation'. Available online: https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/wshd_665389/t1845365.shtml (Accessed 10 August 2021).
- 14 See: <https://www.a-c-eoproject.eu>
- 15 Conflict Armament Research (2018) 'Weapon Supplies Into South Sudan's Civil War: Regional Re-Transfers and International Intermediaries', p. 17. Available online: <https://www.conflictarm.com/reports/weapon-supplies-into-south-sudans-civil-war> (accessed 10 August 2021).

Going beyond the stereotypes: China's digital infrastructure in Africa

Iginio Gagliardone

China's engagement with Africa is often described in hyperbolic tones, referring either to neo-colonialism and debt-traps or, less often, to win-win cooperation and investments in 'frontier' markets.¹ When it comes to digital tech, this tendency has been taken even further, evoking images of a Chinese panopticon descending onto African citizens,² powered by companies using Artificial Intelligence (AI) to export repression.³

China-Africa or Africa-China cooperation in digital technology now dates back almost two-decades. The evolution of infrastructures and forms of communications in both locales has been dramatic, sometimes converging (e.g. betting on new standards for broadband cellular networks), sometimes diverging (e.g. accepting vs. resisting the dominance of US-based social networking platforms). And yet, the questions and claims surrounding China's role in Africa have largely remained the same. They may have been adapted to include the technology of the moment, shifting focus from tools used to censor online debates, to AI-powered solutions for facial recognition and crime control, but they have continued to perpetuate similar stereotypes, and, more importantly, they have shown very little sensitivity to empirical evidence.

Media headlines and policy papers on Chinese tech and its global repercussions are becoming even more sensational suggesting that the world is entering a new digital cold war between China and the United States.⁴ The Cold War trope, however, conceals how in most African countries digital infrastructures have evolved—and continue evolving—by combining material artefacts, solutions, and ideas from the West *and* from the East, in stark contrast to the expectation that nations would choose one or the other camp.

- Despite the extensive attention given to China's digital tech engagement in Africa, there has been little sensitivity to empirical evidence and a tendency to perpetuate stereotypes.
- To understand which forces and processes may be making the Internet less open and more vulnerable to the interests of large and powerful actors, the focus must extend well beyond China.
- Questions about digital tech should stop treating complex artefacts and assemblages as ready-to-use gadgets, as "technologies of unfreedom" often falter or fail altogether when inserted in contexts that are very different from those where they originated.

To dispel some of these moral panics and highlight more pressing areas of concern and new windows of opportunity ahead of FOCAC 2021, it can be helpful both to highlight long-term patterns that have characterised China-Africa digital engagement and to take note of some recent transformations, asking whether they confirm or contradict those patterns.

Pointing fingers at China

China's governance of the Internet over the past two decades has caused disillusionment. On the one hand, because of the once widespread assumption that the Internet would democratise China. On the other, because China's resilience represents a vivid reminder of the possibility of a model that defies the ideals of freedom, openness, and user-centeredness that once powered the global information revolution. These sentiments, and the fear that a "corrupted" version of the Internet may be spreading globally, constitute a powerful obstacle to understanding the role China is actually playing in digital tech in Africa and globally. China has become an easy target to explain—often in spurious ways—why the Internet is or may be turning authoritarian in African countries run by leaders who have overstayed their term in office or who have little tolerance for dissenting voices. Pointing fingers at China has become a lazy tactic used by Western politicians, diplomats, pundits, and think-tanks to reclaim the moral high ground. It allows them to display commitment to the free and open Internet, without (1) having to check whether their claims are backed by empirical evidence (based on the assumption of an ingrained authoritarianism in Chinese politics and tech); (2) having to acknowledge how the ideal of the free and open Internet is being corrupted by a significantly more complex combination of forces and actors, many of which are rooted in the "free world".

So, how can China's role in Africa's digital present and future be understood for what it is, rather than for what is expected to be? My suggestion is to first address some of the questions that have been asked all along, and then begin to ask new questions.

[T]he questions and claims surrounding China's role in Africa...have been adapted to include the technology of the moment... but they have continued to perpetuate similar stereotypes, and, more importantly, they have shown very little sensitivity to empirical evidence.

It assumes—and
at the same time
perpetrates the
idea that—
a Chinese
model of the
Internet exists.
It does not.

Is China promoting its model, or an alternative authoritarian version of the Internet?

This question has dominated discussions in policy circles for almost two decades, since China stepped up its presence in Africa's Information and Communication Technology (ICT) sector in 2005. I have offered a (book) long response to this question.⁵ But in short, the answer is: not really.

But even if the answer was a yes, or a partial yes, it is the question itself that is problematic. It assumes—and at the same time perpetrates the idea that—a Chinese model of the Internet exists. It does not.⁶ The question also extends observations derived from how other (mostly Western) donor countries have behaved when providing assistance in the ICT sector. They sought to promote principles and strategies that guided the evolution of their own information societies in China, without considering the possibility that China may operate differently, which, as Deborah Brautigam has illustrated, is often the case.⁷ Finally, and more importantly, this question obliterates African agency, failing to recognise how African stakeholders have developed their own versions of their national information societies.

In Ethiopia, China provided the largest loan in the history of telecommunications in Africa. More than \$3 billion, used by Huawei and ZTE to completely overhaul Ethiopia's digital infrastructure and support the government's determination to expand access in a regime of state monopoly. Ethiopia, already an authoritarian state, allowed unprecedented entrance to Chinese capital, technology and expertise. In theory, this should have made it the perfect site for China to experiment with transplanting its supposed model of the Internet. And yet, very little evidence of that experimentation can be found.

This does not mean the Ethiopian government did not explicitly seek out technologies that would allow it to censor dissent and surveil opponents. Quite the opposite. Ethiopian leaders, rather than being talked into relying exclusively on Chinese tech to achieve their goals, displayed a remarkable ability to shape and retain control of their own surveillance apparatus. Chinese solutions were adopted, for example, to allow lawful interception.⁸ The latter enabled law enforcement agencies—supported in principle by a court order or other legal authorisation—to monitor users on the ethio-telecom network.

The most malicious forms of surveillance, however, were carried out through software or services offered by companies headquartered in Europe, not in China. The Italian company Hacking Team was contracted to target Ethiopian journalists and opposition leaders in the diaspora, using spyware to access their files, passwords, and intercept their communications.⁹ FinSpy, a commercial software developed by UK- and Germany-based Gamma International, was purchased to perform similar operations.¹⁰ In a final ironic twist, thanks to classified information leaked by Edward Snowden in 2013,¹¹ we have evidence that Ethiopian spies acquired some of the skills needed to make use of these tools and plan surveillance operations through training offered not by Chinese, but by American intelligence.¹²

If we turn to Ghana and Kenya, two countries recognised as more democratic and characterised by an open and liberalised digital space, the picture is significantly different. Chinese companies, backed by Chinese export credits, became just one of the many actors engaged in laying down national backbones to provide faster and more widespread connectivity. And if we expand the focus to other countries on the continent, we find similar experiences. The strategy adopted by the Chinese government in the digital sector seems informed not by the ambition to push a specific model onto African governments, but rather by a significant disposition to adapt to what is being asked. In some cases, this can include offering instruments for governments to intercept encrypted communications and track political opponents, as happened in Uganda and Zambia.¹³ But to understand which forces and processes may be making the Internet less open and more vulnerable to the interests of large and powerful actors, the focus must extend well beyond China.

How should we then understand China's role in digital infrastructure in Africa?

New questions are needed, geared towards uncovering what is, rather than what it is likely to be. Researchers need to be asking questions that do not already sound like—often one sided—hypotheses. Questions about digital tech should stop treating complex artefacts and assemblages as gadgets, ready to produce their desired—or undesired—effects once they are deployed. They should allow space, conceptually and empirically, to trace how technologies and projects that emerged in specific socio-technical contexts can morph, stumble or fail, when they are inserted in different settings, interacting with new sets of norms, politics and applications.

For instance, much attention has been placed in the past few years on the deployment of Huawei's Safe City and ZTE's Smart City projects in Africa, and globally. The solutions of urban surveillance developed by the two Chinese companies are layered and relatively distinct, but they both rely in essence on operation centres analysing vast amounts of data in real time, sourced from sensors and cameras deployed across the city. They offer services ranging from mundane smart metering to more worrying emergency assessments aimed at keeping 'social peace' and enabling predictive policing. Their deployment across the globe has been received, once again, with a sense of moral panic, stressing how Huawei and ZTE's solutions represent a threat to civil liberties.¹⁴

While they certainly have the potential to do so, these reactions are based on a paradoxical understanding of what technology does. They seem to presuppose that surveillance technologies, aided somehow by their more

sinister and cunning nature, will succeed in producing their desired effects, where the liberation technologies that we have for many years expected to free the world from abuse and authoritarianism, have failed.

Data emerging from Asia and Africa, however, has begun to reveal how Huawei's own promises of curbing crime and improving centralised city management clash with the—quite predictable—complexity of the socio-political and technological realities of different locales. Reports from Pakistan, one of the main beneficiaries of China's Belt and Road Initiative, indicate that, after a slight reduction in the year following the installation of Huawei's Safe City in the country's major urban centres, violent crime has continued to rise.¹⁵ Kenya, an early African adopter of Huawei's Safe City, experienced a similar trajectory, with crime rates apparently unaffected by the installation of new surveillance technologies in Nairobi and Mombasa.¹⁶

Similar to "liberation technologies", "technologies of unfreedom" also have to relate to the complex techno-political realities of countries that have experienced trajectories in the evolution of their information societies that are dramatically different from China's. They often falter or fail altogether when inserted into contexts that are very different from those where they originated.

In conclusion, while China's role in digital infrastructure in Africa has been significant, its involvement has also offered vast opportunities for oversimplification, reducing complex processes to the influence of one actor and following stereotyped juxtapositions of the open vs the closed Internet. State and corporate surveillance, from the East, from the West, and from within the African continent, are indeed threats to the users that were once supposed to be the ones shaping cyberspace. However, it is not by focusing on only one element of this complex equation, that we can bring some of the power back to African users. ■

Notes

- 1 Hannah Ryder, "Two China-Africa Experts on the Stereotypes They're Surprised to Still Be Unpacking," Quartz, 2021, <https://qz.com/africa/1991048/china-africa-experts-on-the-stereotypes-that-persist>.
- 2 Ross Andersen, "China's Artificial Intelligence Surveillance State Goes Global—The Atlantic," 2020, <https://www.theatlantic.com/magazine/archive/2020/09/china-ai-surveillance/614197>.
- 3 Arthur Gwagwa, "Exporting Repression? China's Artificial Intelligence Push into Africa," Council on Foreign Relations, 2018, <https://www.cfr.org/blog/exporting-repression-chinas-artificial-intelligence-push-africa>.
- 4 Mark Champion, "Digital Cold War," 2019, <https://www.bloomberg.com/quicktake/how-u-s-china-tech-rivalry-looks-like-a-digital-cold-war>.
- 5 Iginio Gagliardone, *China, Africa, and the Future of the Internet* (London: Zed Books, 2019).
- 6 See, for example, Yuezhi Zhao, *Communication in China: Political Economy, Power, and Conflict* (Rowman & Littlefield Publishers, 2008); Guobin Yang, *The Power of the Internet in China: Citizen Activism Online* (Columbia University Press, 2013).
- 7 Deborah Brautigam, *The Dragon's Gift: The Real Story of China in Africa* (Oxford: Oxford University Press, 2009).
- 8 Human Rights Watch, "'They Know Everything We Do'. *Telecom and Internet Surveillance in Ethiopia*" (New York, 2014).
- 9 Bill Marczak et al., "Hacking Team and the Targeting of Ethiopian Journalists," *The Citizen Lab* (blog), February 12, 2014, <https://citizenlab.org/2014/02/hacking-team-targeting-ethiopian-journalists>.
- 10 Morgan Marquis-Boire et al., "You Only Click Twice: FinFisher's Global Proliferation," 2013, <https://citizenlab.org/2013/03/you-only-click-twice-finfishers-global-proliferation-2>.
- 11 The Intercept, "Snowden Archive—LION'S PRIDE—Fighting Terrorism on the Horn of Africa," *The Intercept*, 2005, <https://theintercept.com/snowden-sidtoday/3991127-lion-s-pride-fighting-terrorism-on-the-horn-of>.
- 12 Nick Turse, "How the NSA Built a Secret Surveillance Network for Ethiopia," *The Intercept* (blog), September 13, 2017, <https://theintercept.com/2017/09/13/nsa-ethiopia-surveillance-human-rights>.
- 13 Joe Parkinson, Nicholas Bariyo, and Josh Chin, "Huawei Technicians Helped African Governments Spy on Political Opponents," *Wall Street Journal*, August 15, 2019, sec. Tech, <https://www.wsj.com/articles/huawei-technicians-helped-african-governments-spy-on-political-opponents-11565793017>.
- 14 Samantha Hoffmann, "Double-Edged Sword: China's Sharp Power Exploitation of Emerging Technologies" (National Endowment for Democracy, 2021), <https://www.ned.org/wp-content/uploads/2021/04/Double-Edged-Sword-Chinas-Sharp-Power-Exploitation-of-Emerging-Technologies-Hoffman-April-2021.pdf>.
- 15 Nicole Hao, "Huawei 'Safe City' Systems Are Ineffective, Crime Figures Show," *www.theepochtimes.com*, December 29, 2019, https://www.theepochtimes.com/huawei-safe-cities-are-ineffective-according-to-crime-figures_3187283.html.
- 16 Prasso, "Huawei's Claims That It Makes Cities Safer Mostly Look Like Hype," *Bloomberg.Com*, November 12, 2019, <https://www.bloomberg.com/news/articles/2019-11-12/huawei-s-surveillance-network-claims-face-scrutiny>.

- African students studying in China have increased steadily and this is due to factors such as: affordability, China's promotion as a global education centre as well as the progression of Africa-China ties.
- The FOCAC is a platform for knowledge production in two specific ways, through China's transfer of knowledge and skills to African partners, as well as through the shared learning experienced under people-to-people exchanges.
- Africa-China people-to-people exchanges and opportunities to study in China, have helped develop deeper links. However, challenges remain: the language barrier, the need to develop alumni relations, the need to cultivate further understanding (tacit knowledge) and finally, the impact of the COVID-19 pandemic.

Education and Knowledge Production

Yu-Shan Wu

China becomes a top destination for African students

There is a human aspect to the process of knowledge production,¹ which does not only involve information or the transfer of skills but the exchange of ideas and the implicit knowledge that is embedded in a society. Acquiring information through exchange is important in this day and age, as modern forms of communication cannot replace the emotional and psychological dimensions of physical interaction.² The value of people-to-people exchanges is recognised in Africa-China ties and has gained almost equal importance to business transactions and diplomatic relations. More specifically, China surpassed the US and the UK as a top-destination for Anglophone African students in 2014. Furthermore, it attracted 50,000 African students in 2015, making China the second most popular destination for African students behind France.³

There are three main drivers behind the rise of African students in China.

The first relates to the circumstances of African students themselves, whereby China offers an affordable study option (when compared to other major education centres). This is confirmed by a Development Reimagined study, as China is found to attract African students from predominantly lower income countries, which are dispersed across the continent.⁴ Study opportunities in China correspond to a need, given that only 12% of the entire African population is tertiary educated and yet, for the continent to develop and prosper, human capital investment is necessary.⁵ There are, however, anomalies to this trend. For example, 2017 figures show that South African students—from an upper middle-income country—were largely found in China (2600) and the US (2000), followed by the UK (1495).⁶ This is a major shift as most South African students were found in the US in 2011. Cost may therefore not be the only factor for African students to opt for China.

Second is China's own promotion of exchanges and scholarships, as part of its broader public diplomacy, a key instrument of soft power.⁷ China began to formally take interest in the practical application of soft power (*ruan shili*) in its foreign policy in 2007 under President Hu Jintao.⁸ The emphasis on public diplomacy continues under Xi Jinping, only under his leadership there is greater confidence in projecting China as a great power. There is recognition of the importance of providing China's perspective—and thereby contributing to original knowledge—especially as its global image has historically been crafted by others (such as third-party news). Notably, China's economic capabilities also contribute to its relatively positive image in the developing world.⁹

Overall, international education exchanges are an effective instrument for China's image building, as students carry both the political and cultural values of their home and host countries. African students are also the future policymakers and academics that can contribute to meaningful relations. While Asian international students represented the largest group in China in 2018 (see table), African students were the second largest group of Africans living in China.¹⁰ Even more students could be recruited as part of China's focus on African human resources and education development. Overall, in 2019, twice as many international students studied in mainland China as in 2009.¹¹

The FOCAC is a platform for knowledge production in two specific ways, through China's transfer of knowledge and skills to African partners, as well as through the shared learning experienced under people-to-people exchanges.

Table 1. Percentage and Number of International Students in China by Continent (2018)

Continent	Percent	Number
Asia	59,95%	295,043
Africa	16,57%	81,562
Europe	14,96%	73,618
America	7,26%	35,733
Oceania	1,27%	6,229

Source: [Ministry of Education of the People's Republic of China](#)

This leads to the third driver that is the progression of Africa-China relations, whereby the number of African students in China has increased following the launch of FOCAC in 2000. Government support has facilitated the increase in scholarship

Africa-China people-to-people exchanges and opportunities to study in China, have helped develop deeper links. However, challenges remain: the language barrier, the need to develop alumni relations, the need to cultivate further understanding (tacit knowledge) and finally, the impact of the COVID-19 pandemic.

opportunities for African students in China. Moreover, this assistance (with emphasis on higher education) has progressively grown with each iteration, from about 18,000 in 2012, 32,000 in 2015 and 50,000 in 2018. The same number was also pledged towards training opportunities and workshops for professionals in 2018.¹²

The Role of FOCAC in knowledge production

The FOCAC, a high-level diplomatic platform, provides a conducive environment for people-to-people exchanges and knowledge production. While the platform contributes to knowledge production in different ways, this chapter will focus on: (1) China's sharing of experiences and know-how with African partners (which increases their knowledge base) and (2) the production of new ideas and shared knowledge through Africa-China exchanges, which are not only restricted to education. These elements are summarised as follows: African counterparts have had an active interest in China's sharing of know-how since the 5th FOCAC in 2012, which includes the sharing of knowledge on advanced technologies and the development of science parks.¹³ While the 2015 forum reflected declarations of intent to support Africa's industrialisation, the 2018 meeting added more detail, with China announcing training assistance to support Africa's modernisation. Virtually all the cooperation areas emphasised knowledge transfer from China to Africa in the form of 'training', a phrase mentioned in over 40 occasions in the 2018 action plan.¹⁴ Additionally, China established 10 Luban Workshops that would provide technical skills training.¹⁵ For example, Huawei Technologies has provided young Kenyans with cloud computing skills.

Knowledge transfer tends to emphasise information on hardware and strong government-to-government collaboration. Yet, the sharing of knowledge has a tacit component that leads to the second aspect of knowledge production, and that is through exchanges.

The limited understanding of one another's environments and cultures are one reason why there is interest in cultivating implicit knowledge between Africa and China. Shortly after China became the continent's largest trading partner in 2009, more emphasis was made on people-to-people exchanges and track two engagements. For example, since the 5th FOCAC in 2012, the China-Africa Think Tanks Forum (CATTf)—launched by Zhejiang Normal University in 2011 as a shared platform for dialogue and exchanges between

think tanks on both sides—was formally added to the forum’s framework.¹⁶ Each CATTF meeting emphasises different themes for the sharing of ideas. In 2012, the focus was ‘Upgrading Sino-African Relations and Constructing Chinese and African Soft Power’. Indeed, people-to-people exchanges supplement the formal relationship, which explains why President Xi identified this component as one of eight major initiatives at the 2018 FOCAC that could help build an even closer China-Africa community.

Assessment of China’s investment in scholarships and exchanges

The nature of Africa-China exchanges, supported by the FOCAC, is multifaceted and this affects China’s image in different ways. The offering of scholarships to African students in China also raises a larger question, that is whether the spheres of influence have shifted away from the continent’s traditional partners towards China.

People-to-people exchanges enhance the quality of diplomatic relations and China’s willingness to provide scholarship opportunities to African students contributes to the creation of a positive image. China’s public diplomacy engagements also compliment one another. For example, while Confucius Institutes offer the teaching of Chinese language and culture at the doorstep of selected African universities, they also serve as important gateways for further tertiary studies in and business with China.

Even though Chinese government-funded institutes have been criticised for their subjective content, they remain one of the few accessible and affordable places for Chinese language instruction in Africa. Likewise, the FOCAC itself plays an important public diplomacy role by providing a stage for the world to witness China’s educational pledges.

Looking towards the forthcoming FOCAC and the future of student exchanges, it is necessary to consider the following gaps:

- The issue of language: as Chinese tertiary institutions seek to compete more globally,¹⁷ their requirements for admission could become more stringent. For instance, the criteria of the 2021 Chinese Government Scholarship, as advertised by South Africa’s Department of Higher Education and Training, include: a preference for specialised fields (such as Maritime Studies and Telecommunications) and an HSK level 4 language certificate for undergraduate students as courses are instructed in the Chinese language.¹⁸ Meanwhile, postgraduates have a choice of English or Mandarin. The option of English, however, highlights another complicated aspect in the relationship, as it features as a primary language of translation during people-to-people exchanges despite not always being the first language of participants on both sides.¹⁹
- Alumni relations: while much attention is paid to increasing the number of students recruited to study in China, less emphasis has been made on the preservation of alumni relations.²⁰ Similarly, the African think tanks represented at the respective CATTF meetings have changed somewhat along each meeting, which could impact the learning curve.²¹ Some African students who have completed their studies struggle to find employment in China or their home country and instead seek opportunities in third countries such as North America or Europe.²² Thereby these students are not necessarily driven by particular politics but rather the weighting of opportunity costs.

- Tacit knowledge: vocational and skills training are given much emphasis in Africa-China ties, as they fulfill practical and economic interests. However, opportunities to cultivate tacit understandings should continue. Relations between both sides also need to go beyond government level to include different layers of society in order to counter experiences of social isolation, misunderstandings and, at times, racism.²³ Real learning arises from collectively overcoming shared problems and finding solutions to them; this also requires time.
- COVID-19: the full impact of the pandemic is still unknown and even though there has been much Africa-China cooperation in combatting the effects of COVID-19 (namely China's support to Africa),²⁴ global restrictions on the movement of people, including international students, remain. Many African students have returned home since the hard lockdown in China in early 2020 and are now waiting to return to China.²⁵ Students also face challenges with remote teaching, including time differences and the poor quality of online learning. It is yet to be seen whether COVID-19 will affect the very factors that have attracted African students to study in China: affordability, China's targeted promotion towards African students and wider diplomatic support. ■

Notes

- 1 This refers to the activities of institutions and centres that contribute to the production of new knowledge
- 2 Kissinger H. 2014. *World Order*. Penguin Books, p.351.
- 3 Breeze V and Moore N. 2017. 'China tops US and UK as destination for anglophone African students'. *The Conversation*. <https://theconversation.com/china-tops-us-and-uk-as-destination-for-anglophone-african-students-78967>
- 4 In comparison, France mainly recruited from North Africa (where French is mostly spoken) and the UK remains popular in West Africa. For more see: <https://developmentreimagined.com/2020/09/08/where-africans-study-abroad-post-covid19/>.
- 5 Ibid.
- 6 M&G Data Desk. 2020. Where do Africans study abroad? <https://mg.co.za/education/2020-09-05-where-do-africans-study-abroad>
- 7 The term was coined by Joseph Nye that emphasises attraction over coercion. Notably there is much debate over the term as there remains little agreement over its application and due to the difficulty of measuring influence, it is also prone to political and subjective application.
- 8 d'Hooghe, I. 2008. Into high gear: China's public diplomacy. *The Hague Journal of Diplomacy*, 3(1), p.39.
- 9 Van Staden, C and Wu, Y. 2021. 'Vaccine Diplomacy and Beyond: New Trends in Chinese Image-Building in Africa'. <https://saiia.org.za/research/vaccine-diplomacy-and-beyond-new-trends-in-chinese-image-building-in-africa#>
- 10 Li, A. 2018. African students in China: Research, reality, and reflection. *African Studies Quarterly*, 17(4), p.6.
- 11 The figure stood at 492,185 students from 196 countries in 2019: <https://theconversation.com/how-china-has-been-transforming-international-education-to-become-a-leading-host-of-students-157241>
- 12 For more information on China-Africa education cooperation see: 2018 FOCAC Action Plan https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1593683.shtml
- 13 Gonondo, J. 2017. Africa and China Higher Education Cooperation: Establishing Knowledge Sharing Partnership between Students. *Journal of Education and Practice*, 8(10), p.18.
- 14 <https://www.africaportal.org/features/how-technical-knowledge-flows-between-china-and-africa-its-complicated>
- 15 Luban workshops are named after the father of Chinese architecture, Lu Ban; see example: <http://www.chinadaily.com.cn/a/202105/07/WS609495c6a31024ad0babc647.html>.
- 16 At the 3rd CATTf meeting held on 21-22 October 2012 in Beijing, Yang Jiechi, formerly China's Minister of Foreign Affairs, emphasised the critical importance of strengthening studies in both Africa and China that could provide intellectual support to the bilateral relationship.
- 17 Chinese universities and research centres are increasingly international facing, so much so that as of 2019, one in every nine academic papers produced by the UK involved collaboration between British and Chinese researchers. For more see: <https://theconversation.com/china-uk-new-report-reveals-massive-increase-in-research-collaboration-and-dependence-on-chinese-students-157010>
- 18 <http://www.internationalscholarships.dhet.gov.za/index.php/component/content/article/15-international-scholarships/75-china-chinese-government-scholarship-2021?Itemid=101>

- 19 A 2016 study reflected how an agriculture training for African officials in China was taught in Mandarin and required English translation that at times caused nuance to be lost: Tugendhat H and Alemu D. 2016. Chinese agricultural training courses for African officials: Between power and partnerships. *World Development*, 81, pp.71-81.
- 20 This was identified as a challenge for exchange programs during discussions with a Chinese professor based in Beijing in 2017.
- 21 At the 2013 CATTf meeting, there was a parallel launch of a Think Tank 10+10 Partnership Plan that links think tanks in Africa and China together. Although the progress of this collaboration between partner think tanks is unknown. <https://saiia.org.za/news/saiia-attends-china-africa-think-tanks-10-10-partnership>
- 22 Lefifi, T and Kiala C. 2021. Untapping FOCAC higher education scholarships for Africa's human capital development: lessons from haigui. *China International Strategy Review*, p.4. Although China has since 2019 opened work permit laws to attract foreign talent that could allow African students to remain in the country.
- 23 <https://www.studyinternational.com/news/african-students-china-alienated>
- 24 As outlined by China's Foreign Minister, Wang Yi: https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1879061.shtml
- 25 For example: <https://www.universityworldnews.com/post.php?story=20210419161154322>

Expanding Horizons: China-Africa cooperation on space technology

Gidon Gautel

Special thanks to Ruvimbo Samanga, Space Law & Policy Analyst, for her expert contributions

- Space technology in the form of satellites has emerged as an important technological frontier in development in Africa and beyond.
- As African countries' satellite launches have increased, China has emerged as an important source of capacity and know-how for its African counterparts, enabling increased native capability.
- Important trends which may affect the future of China-Africa space engagement include: Increased intra-continental African space coordination, especially through the AfSA once operational; technological trends in space products and services; the worsening US-China relationship.

Discussing China's engagement in Africa's space sector writ large poses several challenges, particularly given the considerable heterogeneity in space activities on the continent, and the large range of sovereign interests and decisions guiding them.¹ Nevertheless, some space development trends, in which China is playing a part, are occurring on a continental level. Moreover, recent indications of closer integration among African emerging space powers through the African Space Agency (AfSA) could increase the level of coordination among African nations in space and make continental considerations more relevant. This essay seeks to characterise the key elements of China's engagement with African counterparts in space to date, and then points out emerging trends that may affect these dynamics.

A pertinent starting point is the composition of the space economy, given bilateral space activities can be classified according to its segmentation. The global space economy is dominated by the satellite industry, which comprises some 74% of its total. The other 26% include commercial human spaceflight and government budgets covering areas such as human and robotic exploration.² The satellite industry can be further segmented into satellite launch, manufacturing, satellite services and ground segment.

China's engagement in space on the African continent has largely been within the scope of the satellite industry, and for good reason. Space development in African nations has largely been focused on developmental impact and the building of sovereign capability, as well as the production of communications or earth observation capacity for economic development.

Space engagements between African nations and China [are] ... conducted within a broader context of bilateral comprehensive strategic partnerships or strategic partnerships.

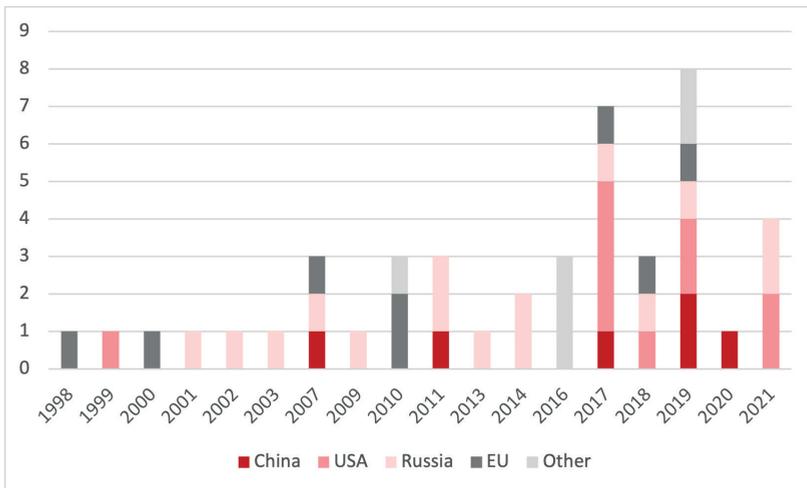
It should be noted that space engagements between African nations and China have been, and are continuously, conducted within a broader context of bilateral comprehensive strategic partnerships or strategic partnerships. Satellite projects often contribute to the broader aims of bilateral engagement with African nations, and, as the BRI continues and shifts away from purely 'hard' infrastructure, connectivity and data availability derived from space is likely to play a supporting role in more multi-faceted cooperation.

China is therefore perhaps unique in conducting space engagement as part of a deliberate strategic economic package of bilateral engagements within Africa, rather than a series of singular projects as may be the case with other space powers' engagements on the continent.

Satellite Manufacturing and Launch

To date, China has launched 6 of 45 African satellites, for which it has also provided Tracking, Telemetry and Control (TT&C) support. Russia has also been a consistent provider of launch services, alongside the EU (through ArianeSpace) and the US, which has, in part, benefited from the wild success of SpaceX in the global launch market. The African continent currently hosts no operational launch sites. However, it did in the 20th century, and may again, with the East coast offering favourable launch conditions, hosting Broglio Space Centre (BSC) in Kenya, which launched rockets into the late 80s. Turkey, for example,

Figure 1. Launch Provider Origin for African Satellites, 1998-2021



has indicated its intentions to establish a launch site in Somalia, subject to sustained funding for its ambitious space programme.³

Chinese companies have manufactured each of the 6 satellites the country’s firms have launched, with CAST (China Association for Science and Technology) the key developer and manufacturer of all. Ethiopia’s ET-SMART-RSS (which was manufactured by Beijing Smart Satellite Technology in collaboration with the Ethiopian Space Science and Technology Institute), and Sudan’s SRSS 1 (manufactured by Shenzhen DFH HIT) are the exceptions.

These figures, of course, belie considerable nuance. The 45 satellites considered above span 10cm 21 U CubeSats to multi-ton GEO communications satellites. Their functions range from Earth Observation (EO) to telecommunication. Satellites with prime manufacturers within “African nations” comprise 6 sovereign countries pursuing their own goals. Many of these were satellites developed by universities for the purposes of training engineers as well as functional use.

Nevertheless, some trends stand out. The first is the general increase in African satellites launched, reflecting both the rising demand across Africa for satellite data, as well as a more general global increase in the number of satellites in orbit. Second, and more important, is the rise in the share of satellites manufactured within Africa. Whilst all of these, for the moment, comprise CubeSats, it reflects a general rise in capacity and capability across these respective nations. The increase in sovereign space capabilities

The increase in sovereign space capabilities of African nations is almost certain to continue as native knowledge bases grow and enabling infrastructure and facilities are expanded and become operational.

Figure 2. Prime Manufacturer Origin for African Satellites, 1998-2021

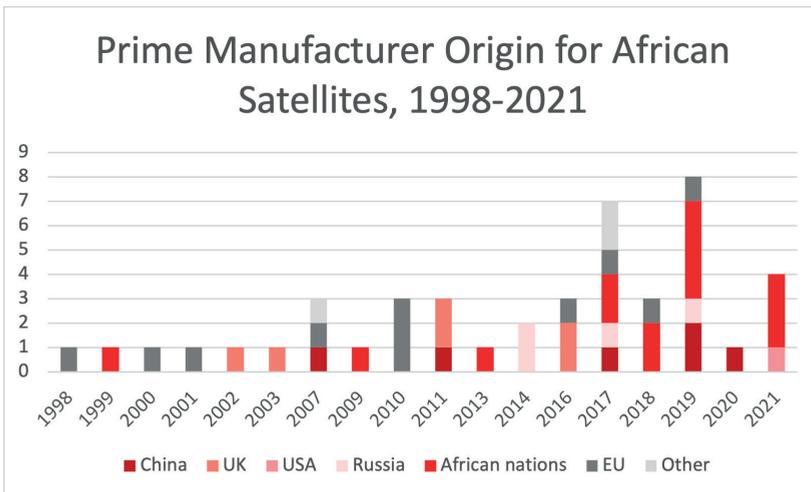


Table 1. Notable cooperative and capacity building elements of Chinese-built African satellites

Satellite	Year Launched	African Partner	Function	Notable Details of Collaboration & Support
NIGCOMSAT 1	2007	Nigeria	Communications	Satellite developed and manufactured by CAST; Training provided to 55 Nigerian engineers
NIGCOMSAT 1R	2011	Nigeria	Communications	Satellite developed and manufactured by CAST as replacement for NIGCOMSAT-1, which became non-operational; Training provided to 60 Nigerian engineers
Alcomsat 1	2017	Algeria	Communications	Satellite developed and manufactured by CAST; Algerian operations team trained in China
ETRSS 1	2019	Ethiopia	Earth Observation	Satellite developed and manufactured by CAST; 21 Ethiopian engineers trained as part of the project, including in operations
SRSS 1	2019	Sudan	Earth Observation	-
ET-SMART-RSS (EthSat6U, Zhixing 1A)	2020	Ethiopia	Earth Observation	Joint development between Ethiopian Space Science & Technology Institute (SSTI) and Beijing Smart Satellite Technology (SMART), with SSTI providing preliminary and critical design, and SMART conducting manufacturing, assembly, integration and testing

of African nations is almost certain to continue as native knowledge bases grow and enabling infrastructure and facilities are expanded and become operational.

In this respect, China has, to date, played a significant role in developing sovereign capability with its partners on the continent. Of the aforementioned 6 Chinese-launched African satellites, most projects included training and support of engineers from each satellite's respective country. More broadly, China has been a significant provider of scholarships to students from Africa, in engineering and other fields, pledging to provide 50,000 government scholarships and 50,000 training opportunities in the 2019-2021 FOCAC Action Plan.

China has also funded a satellite Assembly, Integration and Testing centre in Egypt, which is being built in the country's "Space City" near the new administrative capital. This will initially be used to assemble, integrate and test the two countries' joint MisrSat-II project –an earth observation satellite for the purposes of emissions monitoring. However, Egypt's Minister of Higher Education, Khaled Abdel Ghafar, noted that the centre would also support Egypt's hosting of the ASA, enabling joint programs between it and other agencies.⁴ The facility will be the third AIT centre on the continent alongside existing facilities in South Africa and Algeria. Nigeria is also building a planned AIT facility, though this has been delayed due to funding constraints,⁵ as is Ethiopia, which recently reached an agreement with ArianeSpace to construct a facility in Addis Ababa.

Satellite Services & Ground Segment

While launch and satellite manufacturing are the most visible, and easiest to track, elements of the satellite industry, they comprise only 6.5% of industry revenues. The rest is

dominated by satellite services (comprising telecommunications and remote sensing services) and ground segment (comprising network and consumer equipment).⁶ Whilst comprehensive data on cross-country engagements in these areas is sparse, it also needs to be considered when pondering future developments in China's engagements in space on the African continent, particularly as Africa's demand for satellite services is amongst the fastest growing in the world.⁷

Particularly interesting, and potentially contentious, is satellite communications. China Satcom—China's largest satellite telecommunications SOE—does operate GEO satellites serving regions of Africa. However, in the provision of telecommunications services on the continent, European and US providers have largely been dominant, which was one of the drivers of the establishment of the Regional African Satellite Communication Organization (RASCOM), which seeks to provide African telecommunications services.

It will be interesting to see how industry dynamics in space-based telecommunications services and equipment provision develop over the coming years. China's SOEs have invested heavily in High Throughput Satellite (HTS) and LEO communications technology, in part to stay abreast of their foreign competitors.⁸ Most recently, and to considerable media attention, China established the China SatNet, an SOE of the same status as prominent firms such as CASC and CASIC, to operate China's sovereign LEO broadband mega-constellation, which will provide global broadband connectivity.

While regional providers of GEO communications services could continue to build their presence on the continent, the LEO broadband market is already considered saturated, and it is not clear whether an African constellation would be economically viable. As security and sovereignty

concerns will likely exist regarding the use of foreign constellations, they may yet come into consideration.

For the moment, these satellite services and accompanying ground equipment are too expensive to be broadly available to consumers within Africa. However, as they are rolled out to institutional users, and as prices of ground equipment and fees drop to become more affordable, questions around provider choice may emerge if China SatNet and Western providers such as Starlink or OneWeb are competing for the same markets.⁹

Science, Research and Exploration

In recent years, China-Africa cooperation in the field of orbital science experiments and exploration and experimentation beyond LEO has also shown signs of expansion. South African hardware developed by the Space Advisory Company flew aboard the Queqiao lunar orbiter, which enabled China's Chang'e 4 mission to reach the far side of the moon. More recently, a joint Kenyan-Italian microgravity experiment was confirmed to fly on China's Tiangong space station.

Kenya's close involvement within China's space programme invoked Washington's displeasure in 2020. Such tensions are likely to increase. With the International Space Station to be decommissioned in the late 2020s, and commercial American stations likely taking its place, Tiangong will be a de-facto competitor for LEO experiments and national astronauts. Such tensions could well expand beyond LEO to lunar exploration missions. This may, in fact, not be a negative thing for African nations, because US-China competition in exploration and science may provide more options to African governments and industries to become involved in HRE, space science and R&D.

Conclusion: A more unified continental approach

As pointed out by Julie Michelle Klinger (2020), **"most space-related activity happening in Africa is driven by Africans"**.¹⁰ China's engagement on the continent should always be viewed in this way. This in mind, however, perhaps the most important element of China-Africa space engagements to observe over the coming years is how ongoing initiatives shape the approach of partners and groupings of like-minded nations in intra-continental and multinational fora. This will be important for two reasons. Firstly, the international landscape of space governance allegiances seems to be fracturing between US-aligned and China-aligned nations. Secondly, current efforts within Africa to establish a pan-African approach to space promise to produce a more uniform voice on broad geopolitical and space governance questions.

For instance, Samanga (2020) highlights the potential for a more unified voice to benefit the negotiation of space products and services.¹¹ Onwudiwe and Newton (2021) point out the potential for the African Space Agency to act as a unifying force to champion African interests prior to any potential accession to the US' Artemis Accords.¹² Others have pointed out the potential for AfSA to strengthen Africa's voice in UN COPUOS.¹³

Whether and how China's engagement with its African partners in space to date will play into these dynamics remains to be seen. However, with the global space economy slowly expanding beyond the satellite industry, this interplay between greater intra-continental African coordination, technological trends within the industry, and ongoing Chinese engagement, will prove to be of considerable significance in future. ■

Notes

- 1 Klinger, J.M. 2020. China, Africa, and the Rest: Recent Trends in Space Science, Technology, and Satellite Development (No. 2020/38). Working Paper.
- 2 BryceTech. 2021. State of the Satellite Industry Report 2021.
- 3 Space in Africa. 2021. Turkey to Build a Rocket Launch Site in Somalia to Support its USD 1 billion Moon Mission. Space in Africa. Viewed 19 August 2021. <<https://africanews.space/turkey-to-build-a-rocket-launch-site-in-somalia-to-support-its-usd-1-billion-moon-mission/>>
- 4 Al-Youm, Al-Masry. 2019. Egypt's Minister of Education, Chinese Ambassador inspect Satellite Assembly, Integration and Test Center. Egypt Independent. Viewed 15 August 2021. <<https://www.egyptindependent.com/egypts-minister-of-education-chinese-ambassador-inspect-satellite-assembly-center/>>
- 5 Chiedozie, Ihuoma. 2019. Poor funding threatens satellites' local design, launch. Punch. Viewed 19 August 2021. <<https://punchng.com/poor-funding-threatens-satellites-local-design-launch/>>
- 6 BryceTech. 2021. State of the Satellite Industry Report 2021.
- 7 United Nations General Assembly Fourth Committee. 2019. Meetings Coverage: Outer Space Activities Must Benefit All States, No Matter Their Development Levels, Delegates Tell Fourth Committee as It Begins General Debate. Viewed 16 August 2021. <<https://www.un.org/press/en/2019/gaspd703.doc.htm>>
- 8 Henry, Caleb. 2018. China Satcom's LEO, HTS projects driven by desire not to fall behind foreign counterpart. SpaceNews. Accessed 12 August 2021. <<https://spacenews.com/china-satcoms-leo-hts-projects-driven-by-desire-not-to-fall-behind-foreign-counterparts/>>
- 9 Gautel, Gidon. 2021. Coordination Failure: Risks of US-China Competition in Space.
- 10 Klinger, J.M. 2020. China, Africa, and the Rest: Recent Trends in Space Science, Technology, and Satellite Development (No. 2020/38). Working Paper.
- 11 Space in Africa. 2020 Edition. African Space Industry Report.
- 12 Onwudiwe, M. and Newton, K. 2021. Africa and the Artemis Accords: A Review of Space Regulations and Strategy for African Capacity Building in the New Space Economy. *New Space*, 9(1), pp.38-48.
- 13 Reynhardt, M., 2019. Global Space Governance: Africa's contribution to the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) (Doctoral dissertation, University of Pretoria).

China-Africa Public Health Cooperation and Vaccine Diplomacy

Lina Benabdallah

- China's COVID-19 assistance to Africa is a continuation of a long-dated tradition of public health cooperation.
- African countries were first to show their support and assistance to China during the early stages of the epidemic (and later pandemic).
- China's reciprocation of Africa's assistance has filled a void in the absence of other partners but has yet to reach its full potential and vaccine distribution equity.

China's reputation game in Africa is of strategic and vital importance as Chinese engagements (investments, infrastructure, and other projects) typically receive positive ratings in the continent while they generate controversy and outcry in other parts of the world.¹ Maintaining a positive image and a solid reputation for being a responsible partner and a reliable friend, have been solid drivers of China's pandemic diplomacy in Africa over the last year and a half. However, the lingering impacts of the pandemic both on social and economic wellbeing of African populations as well as the very slow-motion roll-out of vaccines across the continent have proved to be serious challenges for China. So far, China's PPE diplomacy has proved to be more efficient than its vaccine diplomacy but with the eighth edition of the Forum on China Africa Cooperation (FOCAC) around the corner, health cooperation will likely take a centre stage.

Capacity Building at the Heart of a Healthy Cooperation

Health cooperation between China and African states goes back all the way to the early years of the People's Republic of China (PRC) as well as of many African countries. The PRC, under the leadership of Mao, sent medical delegations to African countries in order to help with capacity building of newly independent African countries' health sectors. One such team was sent from Wuhan to Algeria in 1963 to help train local doctors after the country's independence in 1962. The spirit of these delegation visits was to ensure that Chinese doctors helped their African counterparts stand on their feet and build public health institutions that were independent of colonial relationships.² Fast forward to the COVID-19 pandemic, we can find residue of such solidarity discourse with China taking on a leadership role, sharing its expertise and accumulated knowledge on how to fight the virus with African counterparts.

Therefore, placed on a continuum, China's stepping up of its health diplomacy in Africa in light of the COVID-19 pandemic is nothing new. Perhaps what's interesting or different about this particular instance of health diplomacy is that it shows a much more diversified approach than that of the 1960s: the use of media to spread awareness and visibility about China's efforts and the vocal criticisms of the West's quasi-absence and greed in hoarding the vaccines at the expense of Global South patients.

The Chinese state also diversified the actors involved in disseminating its global health diplomacy as well as the actors receiving aid. In terms of actors participating in routing PPE equipment, besides the central government and local authorities, state enterprises, airlines, private companies, foundations, and individual donors, all played a role. In terms of recipients, bilateral relations were not the only vehicle for China's health diplomacy, vaccines were also promised or distributed to the Olympic Committee, to UN Peacekeepers, several soccer clubs across South America, the Arab League and so on.

COVID-19 Solidarity and Reciprocity

One could easily overlook the fact that China was not long ago (in fact a little over a year ago) a recipient of COVID-19 assistance and that African states provided much of that aid. Indeed, in the early weeks of the epidemic, African states stood in solidarity with China at a time when several Western governments enjoyed agonising it. Several African countries (including Algeria and Egypt) sent planes filled with PPE including masks, gloves, thermometers, and other assistance.³

Besides equipment and material donations, Africans showed their solidarity with China and the Chinese people in a variety of other ways. African students in Confucius Institutes all across the continent participated in campaigns of sending positive and hopeful messages addressed to the Chinese people. As the epidemic spread inside China, African students in the country started volunteering to take temperatures outside of buildings and disinfect public spaces.

In addition, we also saw gestures of solidarity not just from individuals but from African governments and business corporates. We recall Egyptian health minister Hala Zayed's visit to China in March 2020 to convey solidarity with the country.⁴ Similarly, Ethiopian airlines decided not to suspend its flights to China in a show of solidarity despite popular criticism at home.⁵ Several African governments were also reluctant to repatriate their nationals from China in a move to avoid embarrassing Chinese authorities. When the epidemic became a pandemic and the scale of propagation of the virus expanded, several African presidents and political elites took to making statements or signing letters endorsing China's state narrative about the way China handled the pandemic and disputing theories about the origin of the virus in a Wuhan Lab.

Evidently in the backdrop of all this, support African governments fronted to China in the early months of the pandemic was bound to be reciprocated when the later stages in the pandemic made their move into the African continent. Indeed, as waves were hitting African countries, China's support was not only seen in efforts to send PPE and material goods but also to share best practices to manage and contain the pandemic, either by sending teams of doctors or by hosting virtual conferences to share expertise.

China's health diplomacy during the COVID-19 pandemic

Despite China's experience with providing medical assistance for various outbreaks in Africa before, the COVID-19 pandemic was just different. This was a time when both lack of experience (or clear understanding of how the virus operates or how to stop it) coupled with the fact that the Chinese government had to walk a very fine line between providing all the resources possible to respond to the health crisis at home, while at the same time not retreating from the global stage and performing solidarity and responsibility.

Much of this management was handled through public messaging and through social media presence. As we know by now, China's vaccine diplomacy has been extremely well-medialised, to say the very least.⁶ This kind of messaging campaign (echoed by Chinese diplomats, missions and embassies, and other venues) was important to get the message across and raise awareness around China's stepping in and showing up to provide assistance and vaccines to African populations.

The optics did not always match the reality on the ground, however, as several challenges stood in the way of unlocking China's vaccine diplomacy potential in Africa.

Data collected and updated by Bridge Beijing, which is a vaccine tracker, indicates that the number of doses donated by China (as of August 22, 2021) was 40 million doses.⁷ The number of doses sold is over a billion with over 620 million doses already delivered. This suggests that vaccine donations by China are less than 4% of the total number, which is a very small amount, much smaller than media narratives suggest. In addition, the Bridge Beijing tracker shows that of the 620 million doses delivered by China

so far, only 52 million doses (which is to say a little over 8%) are finding their way to Africa. Without a surprise, China's closest neighbours are getting a far bigger share (over half of the total amount goes to the Asia Pacific), and then Latin America received close to a third of that amount (191 million doses). If we isolate donations from sales, Africa comes second (after Asia Pacific) with 8 out of 40 million donated doses.

That said, Chinese vaccines (Sinopharm and Sinovac) have made their ways into 37 African countries, and in many cases, they are the only vaccination option for tens of thousands of frontline workers, first responders, and vulnerable populations. In addition to these vaccine deliveries, at least three African countries (Egypt, Morocco, and Algeria) are in the process of acquiring local production capacities that will enable them to produce the Chinese vaccine locally (with Egypt already entering the production phase promising to make 5 million more doses available in September 2021).⁸ These local production capacities have a caveat: they are limited in that host countries will not be able to produce the vaccine as much as they will be able to "fill and finish" (without waiving the vaccines' intellectual property rights).⁹

With FOCAC 8 coming at the heel of a deadly wave of the Delta Variant in Africa, the conditions are open for African government elites to negotiate better delivery deadlines of the Chinese vaccines, more efficient capacity building programs in public health, including the possibility of actually producing the vaccine locally instead of just "mounting" the parts. FOCAC 8, in all likelihood, will be an opportunity yet again for African leaders to not only negotiate with their Chinese counterparts, but also to discuss African public health needs among themselves as they will be gathering for the Dakar Summit.¹⁰ ■

Notes

- 1 Alden, Chris and Yu-Shan Wu. 2014. "South Africa and China: The Making of a Partnership," SAIIA Occasional Paper 199: 1-39.
- 2 Li Anshan. 2011. Chinese Medical Cooperation in Africa: With a Special Emphasis on Medical Team and Anti-Malarial Campaign. Uppsala: Nordic African Institute.
- 3 Zoubir, Yahia. 2020. "China's 'Health Silk Road' Diplomacy in the MENA" a MED dialogue Series paper for Konrad Adenauer Stiftung https://www.kas.de/documents/282499/282548/MDS_China+Health+Silk+Road+Diplomacy.pdf
- 4 Yu Rou. 2020. "Egypt's health minister flies to China to convey solidarity against coronavirus" Xinhua http://www.xinhuanet.com/english/2020-03/02/c_138833203.htm
- 5 Darras, Remy. 2020. "Ethiopian Airlines to China: last international carrier standing" The Africa Report <https://www.theafricareport.com/25202/ethiopian-airlines-to-china-last-international-carrier-standing>
- 6 Benabdallah, Lina. 2021. "Don't believe the hype about China's 'vaccine diplomacy' in Africa" Washington Post <https://www.washingtonpost.com/politics/2021/03/05/dont-believe-hype-about-chinas-vaccine-diplomacy-africa>
- 7 <https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/>
- 8 Egypt Today. 2021. 5M additional Egyptian-made Sinovac doses to be available in September <https://www.egypttoday.com/Article/1/107038/5M-additional-Egyptian-made-Sinovac-doses-to-be-available-in>
- 9 Eric Olander. 2021. China Moves Ahead With Vaccine Distribution While COVAX, U.S. Efforts Falter <https://chinaafricaproject.com/podcasts/china-moves-ahead-with-vaccine-distribution-while-covax-u-s-efforts-falter>
- 10 Benabdallah, Lina. 2020. Shaping the Future of Power: Knowledge Production and Network-Building in China-Africa Relations. Ann Arbor: University of Michigan Press.

The Authors

CHRIS ALDEN

Professor Chris Alden teaches International Relations at the London School of Economics and Political Science (LSE) and is Director of LSE IDEAS. He is a Research Associate with the South African Institute of International Affairs (SAIIA).

STEPHEN PADUANO

Stephen Paduano is the executive director of the LSE Economic Diplomacy Commission and a PhD candidate at the London School of Economics. His research concerns Chinese economic policy and global economic governance.

MZUKISI QOBO

Mzukisi Qobo is Associate Professor and Head of School at the Wits School of Governance, University of the Witwatersrand.

LUKAS FIALA

Lukas Fiala is a PhD International Relations candidate at the London School of Economics and Project Coordinator of China Foresight at LSE IDEAS. Previously, he was a Yenching Scholar at Peking University and holds an MSc in International Relations from the LSE.

IGINIO GAGLIARDONE

Iginio Gagliardone is Associate Professor in Media and Communication at the University of the Witwatersrand, South Africa, and Associate Research Fellow in New Media and Human Rights in the Programme in Comparative Media Law and Policy (PCMLP), University of Oxford.

YU-SHAN WU

Yu-Shan Wu is a National Institute for the Humanities and Social Sciences (NIHSS) Postdoctoral Research Fellow at the University of Pretoria, South Africa. She was previously a Research Associate at the Africa–China Reporting Project, University of the Witwatersrand (2018–2020); and also undertook research on foreign policy issues at the South African Institute of International Affairs (SAIIA) (2010–2017).

GIDON GAUTEL

Gidon Gautel is an Analyst in the space industry, an Associate of LSE IDEAS, and Co-Chair of the Lunar Commerce and Economics Working Group at the Moon Village Association. He was previously the Project Coordinator of China Foresight and Project Manager of the Economic Diplomacy Commission at LSE IDEAS.

LINA BENABDALLAH

Lina Benabdallah is Assistant Professor at Wake Forest University, a Johns Hopkins University China Africa Research Initiative (CARI) Research Associate, a Senior Associate at the Center for Strategic and International Studies' (CSIS) Africa Program, and a contributing editor for Africa is a Country. She is the author of *Shaping the Future of Power: Knowledge Production and Network-Building in China-Africa Relations* (University of Michigan Press, 2020). ■



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

A Unique International Relations Programme for Decision Makers

LSE IDEAS, a centre for the study of international affairs, brings together academics and policy-makers to think strategically about world events.

The **Executive MSc International Strategy and Diplomacy** programme is a one-year degree designed to enhance the strategic vision and negotiation skills of professionals from the public, private or NGO sectors working in an international environment.

The programme has been especially tailored so that you can accelerate your career while holding a demanding position in the public or private sector.

“Right from the first week I was able to apply the lessons I had learnt to our operational and policy work and to coach my teams to look at issues differently.”

- Dame Karen Pierce

UK Ambassador
to the United States

CONTACT US

ideas.strategy@lse.ac.uk
bit.ly/execideas





THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■

LSE IDEAS is the LSE's foreign policy think tank.

Through sustained engagement with policymakers and opinion-formers, IDEAS provides a forum that informs policy debate and connects academic research with the practice of diplomacy and strategy.

LSE IDEAS

Floor 9, Pankhurst House
1 Clement's Inn, London
WC2A 2AZ

+44 (0)20 7107 5619

ideas@lse.ac.uk

lse.ac.uk/ideas



*cover image: Opening ceremony of the FOCAC Summit | Beijing, 3 September 2018.
by Paul Kagame via Creative Commons*