WENHUA ZONGHENG

Quarterly Journal of Chinese Thought

October 2023 | Vol. 1, No. 3

China-Africa Relations in the Belt and Road Era

The artworks in this issue depict aspects of the China-Africa relationship over the last half century. Three images that appear in the publication are paintings from the 2017 exhibition, 'From "Tazara Railway" to the "Addis Ababa-Djibouti Railway"', organised by the China National Arts Fund.

A train symbolises connection between two places and their peoples, across long distances and time. Wu Fang (吴方) depicts Africa's ongoing development through the passing train and passengers, Zhao Jianqiu (赵溅球) draws the train produced by Qiqihar Railway Factory in China and shipped across the ocean to Tanzania in 1971, and Pan Jianglong (潘江龙) paints a dynamic and changing landscape that the railroads and people pass through. Meanwhile, Guo Hongwu's (郭宏武) poster reminds us of the long history of solidarity between Chinese and African peoples, in which national development has been central to national sovereignty.

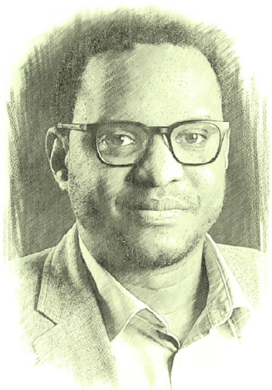
Cover image: Wu Fang (吴方), *Journey* (行走), 2017. Watercolor on paper, 35 x 47 cm. Credit: China National Arts Fund.

WENHUA ZONGHENG | TABLE OF CONTENTS

革命友谊深如海

Editorial: China and Africa's Attempts at Industrialisation

Guo Hongwu (郭宏武), *Revolutionary Friendship Is as Deep as the Ocean* (革命友谊深如海), 1975. Poster, 54 x 77 cm. Credit: chineseposters.net.



Grieve Chelwa is an associate professor of political economy at The Africa Institute and a non-resident senior fellow at Tricontinental: Institute for Social Research. His research focuses on political economy and the prospects for African economic development. He previously worked as the director of research at the Institute on Race, Power, and Political Economy at The New School and as a senior lecturer in economics at the University of Cape Town's Graduate School of Business.

The call to industrialise has been a rallying cry of African countries ever since their attainment of political independence. During the twentieth century, the modal decade of the continent's national liberation struggles was the 1960s. Many within the first generation of post-colonial African leaders, from Kwame Nkrumah (Ghana) to Julius Nyerere (Tanzania) to Kenneth Kaunda (Zambia), had a deep appreciation for the role that industrialisation would play in the total emancipation of the African continent. These leaders grasped that Africa's economic dependence was borne out of the original sins of imperialism and colonialism that consigned the continent to the position of perpetually supplying inexpensive raw materials to wealthy countries in exchange for expensive manufactures. Disrupting this colonial and imperial logic – that is, cutting the yoke of dependence – would require a structural re-orientation of African economies away from raw material production to industrial production. Additionally, industrialisation was viewed as the vehicle that would deliver a high level of employment and decent wages to a great mass of the population whose lives had been upended by colonialism and imperialism.

With this impetus in mind, African countries formulated plans at local and regional levels that placed industrialisation at the center of development. For example, the Organisation of African Unity (the precursor to the African Union), developed a landmark strategy in 1980 called *The Lagos Plan of Action for the Economic Development of Africa* which gave a pride of place to industry. The *Lagos Plan of Action* encouraged African states to 'accord, in their development plans, a major role to industrialisation, in view of its impact on meeting the basic needs of the population, ensuring the integration of the economy and the modernisation of society'.[1] Further, the *Lagos Plan of Action* emphatically declared: 'in order for Africa to achieve a greater share of world industrial production as well as to attain an adequate degree of collective self-reliance rapidly, Member States [of the Organisation of African Unity] proclaim the years 1980 to 1990 [as the] *Industrial Development Decade in Africa*'.[2]

Unfortunately, despite all this fervor, the African continent as a whole has not industrialised in any meaningful way over the last 60 years or so. The industrial level of many countries on the continent remains where it was at the time of political independence in the 1960s. Many have, in fact, deindustrialised. That is, the share of industry in their economic output is lower today than it was at the time of independence.

This inability to industrialise has had wide-ranging implications for the economic life of the African continent and its people. For example, real wages, which are often buttressed by industrial production, have declined and are lower today than they were in the 1970s.[3] Additionally, over the last three decades the number of people living in poverty has declined in every region of the world except for Africa, where the opposite has taken place. In 1990, close to 300 million people lived in poverty in Africa. By 2020, that number

[1] Organisation of African Unity, *Lagos Plan of Action for the Economic Development of Africa, 1980–2000* (Addis Ababa: Organisation of African Unity, 1980), 15, https://www.nepad.org/publication/lagos-plan-of-action.

[2] Organisation of African Unity, *Lagos Plan of Action,* 15.

[3] Dani Rodrik, 'An African Growth Miracle?', *Journal of African Economies* 27, no. 1 (2018).

had grown to 400 million and is likely to grow further in the current decade.[4] Finally, the African continent is today more dependent on the rest of the world, especially the West, as a market for its primary commodities than at independence.

While industrialisation has eluded the African continent over the past six decades, during the same time period, China has registered unparalleled achievements in this regard. Ever since the reforms of the late 1970s heralded by Deng Xiaoping (邓小平), China has consistently grown its industrial base which, in turn, has led to one of the fastest reductions in poverty in human history.[5] In 1981, about 90 percent of the Chinese population lived in poverty. By 2018, China's poverty rate had declined to a mere third of a percent.[6] Additionally, the country's growth in industrial production has undergirded its rise as a serious economic and political player on the world stage with an unquestioned ability to determine its destiny.

Given China's success at industrialisation and Africa's struggles with it, there has curiously been a paucity of comparative scholarly work that seeks to draw out China's lessons for Africa's industrialisation. Even less has been work that considers whether China can be an effective ally in Africa's hitherto elusive quest to industrialise.

It is this gap that the current issue of *Wenhua Zongheng* (文化纵横) seeks to fill. The two essays in this issue are written by leading Chinese scholars of comparative economic development. The first essay, by Professor Zhou Jinyan (周瑾艳) of Shanghai International Studies University, is titled 'Africa's Path to Industrialisation: How Can China Contribute to the Continent's Economic Development?'. As the title suggests, the essay seeks to describe and analyse Africa's historical experience with industrialisation while considering the role that China can play in the continent's quest to develop. The essay starts out by acknowledging the facts presented earlier, namely

---

[4] The statistics presented on poverty in Africa are from the World Bank's Poverty and Inequality Platform, available here: https://pip.worldbank.org/home.

[5] Tricontinental: Institute for Social Research, *Serve the People: The Eradication of Extreme Poverty in China, Studies in Socialist Construction no. 1*, July 2021, https://thetricontinental.org/studies-1-socialist-construction/.

[6] World Bank and Development Research Centre of the State Council, People's Republic of China, *Four Decades of Poverty Reduction in China: Drivers, Insights for the World, and the Way Ahead* (Washington, DC: World Bank, 2022), 1, https://thedocs.worldbank.org/en/doc/bdadc16a4f5c1c88a839c0f905cde802-0070012022/original/Poverty-Synthesis-Report-final.pdf.

that Africa has had a disastrous record with industrialisation. Rather than place the blame at the feet of Africans, as many, especially Western scholars, are wont to do, Professor Zhou sees this history of lacklustre industrial performance as largely the result of the 'failure of Western development prescriptions'. For instance, she writes emphatically that 'Western aid has promoted economic dependence in Africa, while the political, economic, and ideological hegemony of the West has reduced Africa's policy space and autonomy. From neoliberal structural adjustment programmes to reform strategies aimed at improving the business and investment environment, Western prescriptions have not assisted African economic development'. In line with some of my own work, Professor Zhou decries the total dominance of Western intellectuals and experts in the policy process in Africa.[7]

The last section of Professor Zhou's essay considers three ways in which China can contribute to Africa's industrial development. First, she argues that China's remarkable drive to build infrastructure across the African continent over the last three decades or so will greatly aid the continent's aspirations at industrialisation. The building of modern ports, highways, and power stations should reduce the costs of production and thereby promote industrialisation. Second, China can aid Africa's industrialisation through the realm of ideation by providing an alternative, state-led development model as opposed to the private sector-led, market-centric approach that is the staple of the World Bank and International Monetary Fund. The final way in which China can aid Africa's industrialisation is by enhancing Africa's autonomy in the global geopolitical arena by providing the continent with an alternative way to interact with the rest of the world along mutually reinforcing and respectful lines.

The second essay in this issue is titled 'China's Belt and Road Initiative and African Industrialisation', written by Professor Tang Xiaoyang (唐晓阳) of Tsinghua University. The author is interested in understanding the impact that China's Belt and Road Initiative (BRI) has had on the prospects of industrialisation in Africa. Professor Tang starts off his essay by arguing that 'the biggest challenge to industrialisation in Africa lies in the difficulty of integrating various [production] elements into a system'. In other words, à la Adam Smith, Africa has failed to industrialise partly because of an absence

[7] See Grieve Chelwa, 'Does Economics Have an "Africa Problem"?', *Economy and Society* 50, no. 1 (2021)

of a division of labour in its industrial sector. Seen this way, entities within the continent's industrial sector operate in a segmented and isolated fashion with very few linkages. Professor Tang further argues that the absence of a division of labour is itself a product of an absence of large-scale infrastructure on the continent that can enable intra- and inter-sectoral linkages. It is this constraint that the BRI is meant to alleviate through the promotion of 'infrastructure connectivity'. Therefore, Professor Tang is emphatic in seeing the BRI as a pro-industrialisation strategy for Africa.

In closing, the current edition of *Wenhua Zongheng* with its focus on Africa's industrialisation is a welcome intervention as we continue to debate the prospects of emancipatory development in Africa. As the essays in this edition demonstrate, there is much for Africa to learn from China's experience with industrialisation. Further, there is much that China can do in advancing the continent's aspirations for industrialisation in a just, humane, and comradely way.

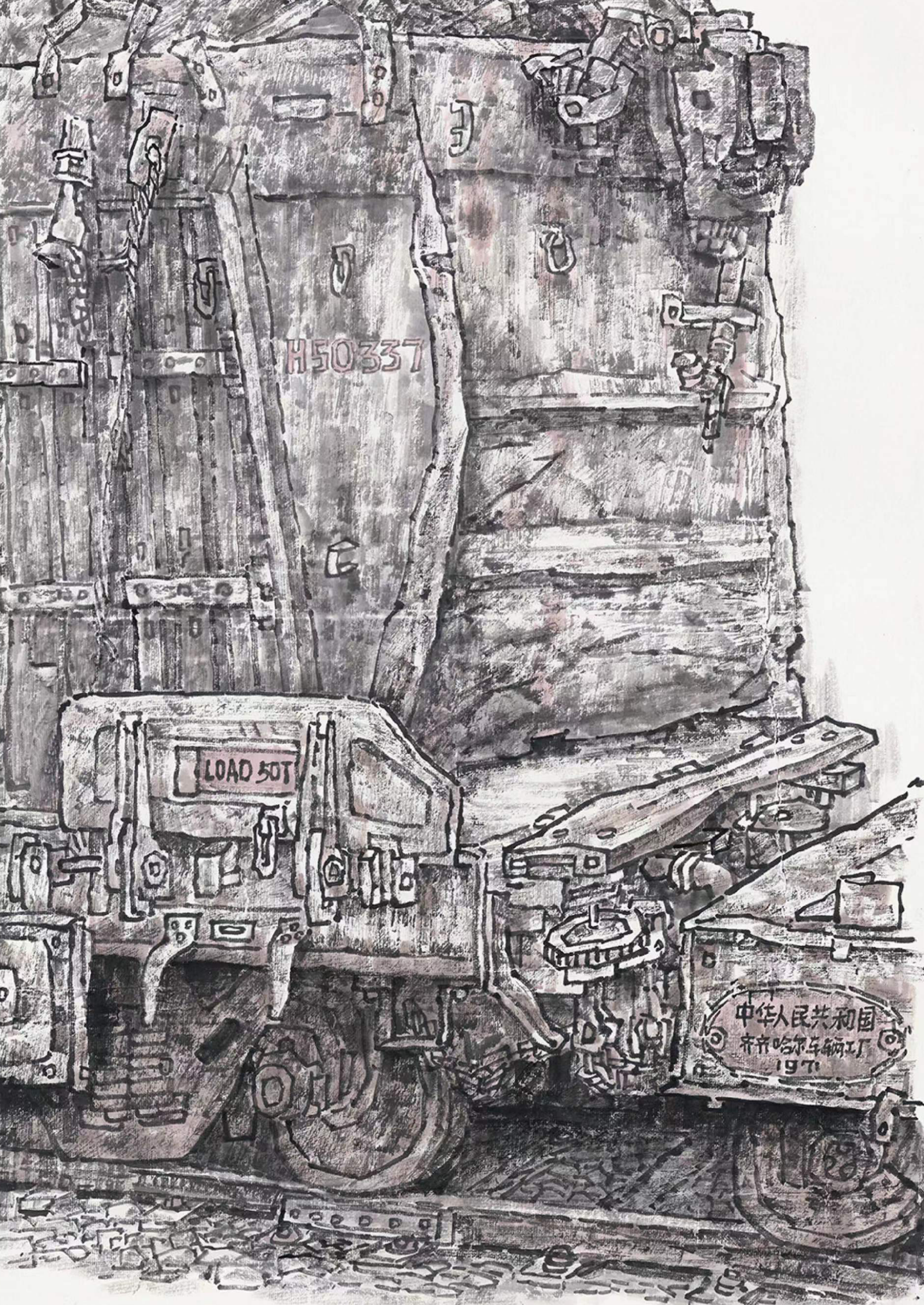
Bibliography

Chelwa, Grieve. 'Does Economics Have an "Africa Problem"?'. *Economy and Society* 50, no. 1 (2021): 78–99.

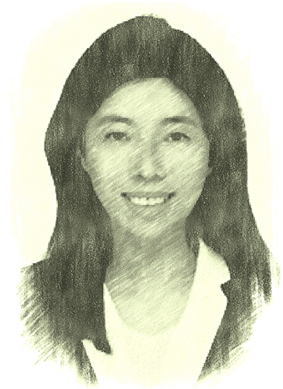
Organisation of African Unity. *Lagos Plan of Action for the Economic Development of Africa*, 1980–2000. Addis Ababa: Organisation of African Unity, 1980. https://www.nepad.org/publication/lagos-plan-of-action.

Rodrik, Dani. 'An African Growth Miracle?'. *Journal of African Economies* 27, no. 1 (2018): 10–27.

World Bank and Development Research Centre of the State Council, People's Republic of China. *Four Decades of Poverty Reduction in China: Drivers, Insights for the World, and the Way Ahead*. Washington, DC: World Bank, 2022. https://thedocs.worldbank.org/en/doc/bdadc16a4f5c1c88a839c0f905cde802-0070012022/original/Poverty-Synthesis-Report-final.pdf.


H50337
LOAD 50T
中华人民共和国
齐齐哈尔车辆工厂
197

Africa's Path to Industrialisation: How Can China Contribute to the Continent's Economic Development?



'Africa's Path to Industrialisation: How Can China Contribute to the Continent's Economic Development?' (中国方案与非洲自主工业化的新可能) was originally published in Wenhua Zongheng *(文化纵横), issue no. 1 (February 2019).*

Zhou Jinyan (周瑾艳) is an Assistant Professor at Shanghai Academy of Global Governance & Area Studies (SAGGAS), Shanghai International Studies University (SISU). Her recent research has focused primarily on African paths of development and comparing Chinese and Western development cooperation with Africa. She has conducted field trips in Angola, Ethiopia, Tanzania, and Rwanda.

Since attaining their independence, African countries have tirelessly pursued industrialisation, seeking to overcome their dependent status in the global economic order. In 1989, the Organisation of African Unity (the precursor to the African Union) and, subsequently, the United Nations General Assembly declared 20 November to be Africa Industrialisation Day to encourage international awareness and cooperation on African industrialisation. Regrettably, these aspirations have not yet been realised.

In the twenty-first century, there have been important developments in the

Zhao Jianqiu (赵溅球), *Longing for Home* (回望故乡), n.d.. Chinese ink painting, 60 x 90 cm. Credit: China National Arts Fund.

continent's economic development. The relationships between Africa and emerging economies, including China, have developed rapidly, altering the continent's strategic position within globalisation. A period of high growth rates between 2000 and 2014 led to the emergence of an 'Africa Rising' narrative in Western media, as Africa's image transformed from a 'continent of despair' to a 'continent full of hope'.[1] However, behind the portrayals of the 'rise of Africa', the underlying figures remain disheartening. In 1970, Africa's share of global manufacturing was about 3 percent, by 2014 that share had fallen to less than 2 percent. Meanwhile, in 2017, across sub-Saharan Africa the average share of manufacturing in Gross Domestic Product (GDP) hovered around 10 percent, roughly on par with the levels of the 1970s. Apart from a few countries such as South Africa, Egypt, Nigeria, and Morocco, the growth rate of manufacturing in most African countries has consistently lagged behind the overall economic growth rate. In short, Africa has experienced growth without industrialisation, with its high economic growth rates stemming from rising demand and prices for natural resources, making it unsustainable.

Through an analysis of Africa's experiences on the path to industrialisation, this paper attempts to answer three questions. Why have decades of Western aid failed to promote African industrialisation? What explorations have African countries made in their paths to industrialisation? And finally, as a fellow participant and student on the path to industrialisation, what can China contribute to Africa's industrialisation?

The Failure of Western Developmental Prescriptions

In the 1960s, newly independent African states began to embark on the path of industrial development. However, six decades later they have not yet been able to realise industrialisation. Popular explanations for the continent's low level of development have often blamed internal factors such as climate, geography, ethnic diversity, and culture. However, these explanations fail to account for the fact that such issues have existed in one form or another in

[1] See, for example, the following cover stories published by *The Economist* roughly a decade apart, The Economist, 'The Hopeless Continent', *The Economist*, 13 May 2000, https://www.economist.com/weeklyedition/2000-05-13; The Economist, 'Africa Rising', *The Economist*, 3 December 2011, https://www.economist.com/leaders/2011/12/03/africa-rising.

all of today's developed countries.[2] In addition, they often minimise or ignore the historic and ongoing impact of Western intervention on the continent. Colonialism transformed Africa into a source of raw materials for imperial powers and a dumping ground for goods, producing underdevelopment in various aspects. For instance, early colonial rulers created education systems that were focused on training clerks to assist in the management of the colonies, rather than training engineers and scientists. In recent decades, the failed prescriptions and models imposed by the West on Africa have also negatively impacted the continent's development.

There have been many disputes in the West over the appropriate roles of the state and the market in economic development. During the first half of the twentieth century, prominent Western economists, such as John Maynard Keynes, proposed theories that called for governments to strengthen their intervention and regulation over the economy. These policies were broadly implemented in Western Europe and the United States until the late 1970s and early 1980s, when state intervention became discredited in favour of economic liberalism. Western countries came to view state-led economic models as no longer being sustainable and began to implement neoliberal policies, including privatisation of state-owned enterprises and public institutions, trade liberalisation, relaxation of domestic industrial regulations, and tightening of government spending.[3] The West also forcibly imposed neoliberal policies on much of the world and often tested its neoliberal ideas on countries of the Global South, including in Africa, impeding their pursuit of industrialisation. The imposition of Western economic ideology and theories has hampered African countries in formulating developmental strategies suited to their national conditions.[4]

In the 1960s and 1970s, newly independent African countries implemented a variety of state-led development strategies. However, the continent's economic performance lagged behind other developing regions and state-led models of development were blamed as the culprit of not only slow

[2] United Nations Economic Commission for Africa (UNECA), *Transformative Industrial Policy for Africa* (Addis Ababa: UNECA, 2016) https://repository.uneca.org/handle/10855/23015.

[3] Chen Zhiwu, *陈志武说经济* [Chen Zhiwu Speaks about China's Economy] (Taiyuan: Shanxi Economic Press, 2010), 44.

[4] Zhou Jinyan, '非洲智库对新时代中国方案的认知及其对中非治国理政经验交流的启示' [African Think Tanks' Perceptions of China's Solutions in the New Era and Their Implications for the Exchange of Experiences on Governance in China and Africa], *阿拉伯世界研究* [Arab World Studies], no. 4 (2021).

economic growth, but governmental inefficiencies and corruption. Coupled with the ongoing foreign exchange crises that afflicted most African countries during the 1980s, they had no choice but to turn to the Bretton Woods institutions and accept structural adjustment programmes imposed by the International Monetary Fund and the World Bank. For the next several decades, the Western-led global wave of economic liberalisation, deregulation, and privatisation swept across Africa. Under the guidance of neoliberal prescriptions, African countries were essentially de-industrialised, undoing much of the progress that had been made in the previous decades. Laissez-faire policies did not bring development and prosperity to Africa. In the 1960s and 1970s, per capita income in sub-Saharan Africa grew at a rate of 1.6 percent per year; between 1980 and 2004, per capita income decreased by 0.3 percent per year.[5]

In the first decade of the twenty-first century, most African countries experienced rapid economic growth due to the commodities boom. However, due to the absence of industrialisation strategies under neoliberalism, few African countries could achieve structural economic transformations and technological upgrading. During this time, the World Bank and Western donor countries shifted the focus of their aid to Africa towards 'improving the business environment', that is, promoting reforms that were favourable to the private sector which, they claimed, would lead to industrial development.[6]

According to research conducted by the Brookings Institution on eight sub-Saharan economies, this aid agenda was 'poorly implemented and insufficient'.[7] Indeed, reforms to improve the business environment are inadequate to address the challenges faced by African economies in global industrial competition. Furthermore, even in low-income African countries with extremely poor business environments, rapid growth can be achieved

---

[5] Ha-Joon Chang, 'Economic History of the Developed World: Lessons for Africa' (lecture delivered in the Eminent Speakers Program of the African Development Bank, Tunis, Tunisia, 26 February 2009), https://www.afdb.org/fileadmin/uploads/afdb/News/Chang%20AfDB%20lecture%20text.pdf.

[6] See Jacques Morriset, 'Foreign Direct Investment in Africa: Policies Also Matter', Policy Research Working Paper 2481, World Bank, Washington, DC, November 2000, https://documents1.worldbank.org/curated/en/245851468767965780/pdf/multi-page.pdf.

[7] John Page, 'Africa's Failure to Industrialize: Bad Luck or Bad Policy?', *The Brookings Institution*, 20 November 2014, https://www.brookings.edu/blog/africa-in-focus/2014/11/20/africas-failure-to-industrialize-bad-luck-or-bad-policy/.

in specific industries and areas.[8] Policies oriented towards improving the business environment reflect the creed of the Western aid community: industrialisation can only be built on neoliberal foundations. Chinese economist Wen Yi (文一) summed up the problem with the Western development prescription as, 'taking the roof as the foundation, taking the result as the cause [...] taking the results of Western industrialisation as the prerequisite for economic development'.[9]

Western aid has promoted economic dependence in Africa, while the political, economic, and ideological hegemony of the West has reduced Africa's policy space and autonomy. From neoliberal structural adjustment programmes to reform strategies aimed at improving the business and investment environment, Western prescriptions have not assisted African development. Under this model, a significant amount of African developmental policies have been formulated outside of the continent, without the input and leadership of indigenous African developmental thought. On matters of economic development and industrialisation, the dominant positions in the intellectual landscape are held by politicians and scholars based in Washington and Paris. Independent African thinking and analysis has been marginalised, and African countries have been discouraged from formulating industrialisation strategies based on their national conditions.

Finally, two additional factors have prevented Western aid from promoting industrialisation in Africa. First, Western donor countries are concerned that if Africa achieves industrialisation, the continent will compete with them; thus they curb Africa's advancement up the industrial ladder. Second, Western industrialised countries have moved their labour-intensive industries and high-polluting, low-end manufacturing to East Asia, and have entered a post-industrial stage of development. Under this global division of industry, the West does not need to transfer industries to Africa and, hence, is not motivated to promote African industrialisation.

---

[8] Justin Yifu Lin and Célestin Monga, *Beating the Odds: Jump-Starting Developing Countries* (Princeton: Princeton University Press, 2017), 12–14.

[9] Wen Yi, *伟大的中国工业革命* [The Great Chinese Industrial Revolution] (Beijing: Tsinghua University Press, 2016), 15.

Africa's Pursuit of an Independent Path to Industrialisation

In recent years, there has been a renewed emphasis placed on industrialisation within Africa. The African Union (AU), various regional organisations, and most African countries have published various industrialisation strategies. The AU's *Agenda 2063* puts forward a clear proposal for economic transformation on the continent through industrial development, especially manufacturing, to increase the value added of Africa's resources, improve levels of employment, and raise people's income.

Across the continent, a consensus is gradually forming around the belief that industrialisation is essential to Africa's economic transformation, sustainable development, and modernisation. The key next step is to determine how to effectively promote industrialisation. Today, African explorations of a sovereign path to industrialisation are focused on four main areas.

1. The role of the state and the market in industrialisation. Unlike the 1980s and 1990s, when market fundamentalism was in its heyday in Africa, in the current period few government's completely deny the state's role in industrialisation. However, there remain disagreements as to the nature and scope of this role; namely, whether the state should focus on providing public goods such as education, research and development, and infrastructure where market supply is insufficient, or whether the state should directly intervene in the economy and influence resource allocation, such as by supporting certain industries or companies, thereby reshaping the process of economic development. In 2016, the United Nations Economic Commission for Africa (UNECA) published *Transformative Industrial Policy for Africa*, which emphasised the importance of industrial policy in advancing national economic development and structural transformation, arguing that 'the manufacturing sector has been the engine of economic development' and that 'the manufacturing sector in an economically backward country cannot develop without an intelligent and coherent industrial policy'. The principal author of *Transformative Industrial Policy for Africa*, Korean economist Ha-Joon Chang, is a prominent advocate of industrial policy, having long contended that state intervention in industrialisation has been essential to the development of all of today's rich countries. Contrary to the market fundamentalist narrative, Chang argues that these countries adopted significant degrees of protectionism in the early stages of their economic development and have continued to do so for much of the post-Second World War period. Consequently, Chang argues that developing countries should reject Western neoliberal prescriptions and should implement industrial policies in their paths to industrialisation, and has become an influential voice in the industrialisation debates taking place on the African continent. Although most African countries have shifted away from the post-war models of import substitution industrialisation and now tend to adopt export-oriented policies geared towards foreign markets, Chang points to Ethiopia and Rwanda as African countries that have had successful industrial policy experiences in the current era and calls on policy makers to study a wide range of countries, industries, and measures to develop a broad 'policy imagination'.

2. The interaction between regional integration and industrialisation.
In 2009, the chosen theme for Africa Industrialisation Day was 'industrialisation for integration' and, in 2017, the theme emphasised that 'African industrial development' was 'a precondition for an effective and sustainable continental free trade area'. In fact, since winning their independence, African countries have established regional integration and industrialisation as the 'two wings' to transform Africa's marginal position in the global political and economic system. Industrialisation advances Africa's economic development and helps to increase Africa's share in global production and trade, while regional integration fosters intra-African trade and benefits industrial development. In March 2018, 44 African countries signed the African Continental Free Trade Area (AfCFTA) agreement in Kigali, Rwanda, marking a milestone in establishing a unified African market.

Currently, 86 percent of Africa's total trade is still conducted with other regions of the world, not within the continent.[10] However, in stark contrast to the composition of Africa's exports to other regions of the world, which largely consists of unprocessed primary commodities, two-thirds of intra-

[10] UN Economic Commission for Africa, 'Momentum Builds for Free Movement under AfCFTA', 29 January 2023, https://www.uneca.org/stories/momentum-builds-for-free-movement-under-afcfta.

African trade is in manufactured goods.[11] It is hoped that the AfCFTA agreement will increase intra-African trade opportunities, create a larger continental market, act as a springboard for African industrialisation, and further enhance the continent's independence and autonomy. Although a number of African countries enjoy preferential duty-free treatment for entry of their goods into the US and European markets through the US African Growth and Opportunity Act (AGOA) and the European Union's Everything but Arms (EBA) scheme, the continent is subject to other impediments and inevitably suffers unfair treatment. For example, in 2016, the member countries of the East African Community (EAC) agreed to phase out the import of second-hand clothing towards a complete ban in 2019, to support the local textile industry. That same year, EAC members Tanzania, Rwanda, and Uganda raised their tariff rates on imported second-hand clothing. These moves sparked a trade dispute with the United States, with the Trump administration threatening to cancel AGOA-related trade benefits for the three countries.

3. The coordinated development of urbanisation and industrialisation. In its 2017 Economic Report on Africa, *Urbanisation and Industrialisation for Africa's Transformation*, UNECA wrote that the rapid urbanisation in Africa must be harnessed as a driving force for industrial development on the continent.[12] In other parts of the world, urbanisation has been closely linked with industrialisation, with urbanisation having been realised through improving agricultural productivity and increasing industrial output. However, the report notes that Africa's urbanisation has been disconnected from its industrial development and broader structural economic transformation. Africa has not achieved coordinated development of industrialisation and urbanisation, resulting in the creation of 'consumption cities', featuring high levels of imports, low levels of formal job creation, and

[11] UN Economic Commission for Africa and World Bank, 'Promoting Connectivity in Africa: The Role of Aid for Trade in Boosting Intra-African Trade', UN Economic Commission for Africa, Addis Ababa, October 2017, https://www.wto.org/english/tratop_e/devel_e/a4t_e/promotingconnect17_e.pdf.

[12] UN Economic Commission for Africa, *Economic Report on Africa 2017: Urbanisation and Industrialisation for Africa's Transformation* (Addis Ababa: UN Economic Commission for Africa, 2017), https://www.uneca.org/economic-report-africa-2017.

mainly low-productivity services, rather than 'productive cities'.[13] Bridging the gap between urbanisation and industrialisation and reconnecting these two developments in a mutually beneficial manner is a major challenge for Africa.

4. The dominant role of manufacturing in economic development. The history of development of the wealthy countries of today reveals that manufacturing has always been the engine of economic development. Few countries have managed to develop their economies without a robust manufacturing base. Nonetheless, some in the West argue that the importance of the service sector is increasingly surpassing that of manufacturing, and that Africa can 'leapfrog' industrialisation. For example, in 2017, Joseph E. Stiglitz, former chief economist at the World Bank and Nobel laureate in economics, contended that Africa cannot replicate East Asia's manufacturing-led model and that the modern service industry will be the engine of Africa's economic development.[14] Similarly, in 2018, the Brookings Institution and the United Nations University World Institute for Development Economics Research (UNU-WIDER) jointly published *Industry without Smokestacks: Industrialisation in Africa Reconsidered*, which proposed that tradable services (for example, information and communications-based services, tourism, and transport and logistics), agro-industry, and horticulture can drive Africa's economic growth and structural transformation.[15]

However, on the role of manufacturing in the continent's industrialisation strategy and Western developmental prescriptions, Africa has a sober understanding. In the AU's Agenda 2063 and the industrial policies

---

[13] UN Economic Commission for Africa, *Urbanisation and Industrialisation*, 138. See also, Tom Goodfellow, 'Urban Fortunes and Skeleton Cityscapes: Real Estate and Late Urbanisation in Kigali and Addis Ababa', *International Journal of Urban and Regional Research* 41, no. 5 (September 2017); Bai Lulu, Zhao Shengbo, Wang Xingping and Zheng Jieling, '撒哈拉以南非洲城镇化与制造业发展关系研究' [Research on the Relationship Between Urbanisation and Manufacturing Industry in Sub-Saharan Africa], *国际城市规划* [Urban Planning International], no. 5 (2015).

[14] Joseph E. Stiglitz, 'From Manufacturing Led Export Growth to a 21st Century Inclusive Growth Strategy for Africa (Africa Cannot Repeat East Asian Miracle)' (lecture delivered at Inclusive Growth Summit hosted by the Bureau for Economic Research, Economic Research Southern Africa, and the Research Project on Employment, Income Distribution and Inclusive Growth, Cape Town, South Africa, 15 November 2017), https://www.youtube.com/watch?v=Q-OikAtwkig&ab_channel=ACET.

[15] Richard Newfarmer, John Page, and Finn Tarp, eds., *Industries without Smokestacks: Industrialisation in Africa Reconsidered*, UNU-WIDER Studies in Development Economics (New York: Oxford University Press, 2018), https://www.wider.unu.edu/publication/industries-without-smokestacks-2.

formulated by UNECA, manufacturing is clearly understood to be the foundation and key to the region's job creation, economic transformation, and development. In 2016, Kingsley Moghalu, former deputy governor of the Central Bank of Nigeria, urged African countries to 'reject the misleading notion that they can join the West by becoming post-industrial societies without having first been industrial ones'.[16]

Still, Western technology experts, such as Alec Ross, have continued to claim that African countries can use technology to 'leapfrog economically', pointing to Rwanda as an example.[17] In his 2016 book, *The Industries of the Future*, Ross wrote that 'the idea is for Rwanda to move straight from an agricultural economy to a knowledge-based economy, bypassing the industrial phase altogether'.[18] However, such claims overlook the fact that manufacturing remains the primary driver of the knowledge economy; even Rwanda, which has already rapidly developed this sector, continues to vigorously boost its manufacturing.

Africa has formulated a range of strategies for industrialisation, including improving infrastructure, attracting foreign investment, promoting regional integration, coordinating the development of agriculture and industry, establishing special economic zones and industrial parks, and integrating into global industrial chains. As Africa actively promotes its industrialisation, the continent's most important strategic partner, China, is undergoing its own domestic economic transformation and industrial upgrading. In China, there are overcapacities in steel and cement, labour costs are rising, and labour-intensive industries face difficulties. Meanwhile, Africa, with a young labour force and large market, is in need of industrialisation. In this period, there are significant opportunities for Africa and China to complement each other's goals. What role China will play in Africa's path to industrialisation and whether the Chinese approach can provide Africa with insights distinct from Western prescriptions, are important questions for the China-Africa relationship going forward.

---

16 Kingsley Moghalu, 'Africa Has to Go through Its Own Industrial Revolution', *Financial Times,* 16 May 2016, https://www.ft.com/content/d68f27fe-1aad-11e6-b286-cddde55ca122.

17 Alec Ross, *The Industries of the Future* (New York: Simon & Schuster, 2016), 237.

18 Ross, *The Industries of the Future*, 238.

How China Can Contribute to Africa's Industrial Development

Under the framework of the Forum on China-Africa Cooperation (FOCAC), established in 2000, China has committed to working with Africa to break through the developmental bottlenecks, such as the infrastructure gap, training skilled workers, and funding shortfalls. FOCAC initiatives have consistently focused on cooperation related to industrial capacity, including the 'ten major China-Africa cooperation plans' proposed at the Johannesburg Summit of 2015 and the 'eight major initiatives in collaboration with Africa' proposed at the Beijing Summit of 2018. China's contributions to African industrialisation can be organised into three main areas: infrastructure construction; offering new developmental options by sharing its own experiences; and changing the paradigm of international cooperation and improving Africa's global position through China-Africa cooperation.

1. China supports African industrialisation through infrastructure construction. Africa has a severe infrastructure gap: in the energy sector, this leads to frequent power outages and expensive electricity; the fragile transportation network hinders regional economic integration; and with a population of roughly 1.4 billion people, the continent has only 64 seaports. Here, China has been an important partner, building a large number of railways, roads, airports, seaports, and other transport infrastructure, as well as energy and water infrastructure in Africa. China is also committed to supporting the construction and expansion of African high-speed rail, highway, and aviation networks. In the 1950s and 1960s, Chinese foreign assistance followed a turnkey model that, in some instances, encountered operational difficulties after handover. Following these experiences, China now pays a high level of attention to the subsequent maintenance and operation of foreign infrastructure projects and increasingly strives to combine infrastructure construction in Africa with industrial capacity cooperation. For example, Ethiopia's Chinese-built industrial parks have synergised with the Chinese-built Addis Ababa-Djibouti Railway, helping the country establish an economic corridor and promote industrial development.

2. China's developmental experiences demonstrate alternative paths to industrialisation for African countries. As the Western powers imposed their neoliberal model on the Global South, leading to deindustrialisation in many developing countries, China followed a different path. As Liu He (刘鹤), Chinese economist and former vice premier, put it, 'China adhered to its own characteristics and did not blindly copy the Western model [...] In contrast to the either-or and black-and-white approaches of Western economists towards matters such as property rights and competition, China found a middle ground based on its concrete conditions and walked a winding and unique path regarding the issue of marketisation'.[19] China's experiences in industrialisation offer lessons on numerous aspects of development that African countries can learn from, such as: the dialectical unity of reform, development, stability, and innovation; the management of relations between the government, market, and society; the importance of leadership that is capable and has a strong political will; the need to define clear strategies; and various infrastructure, industrial, and other developmental projects. In addition, China has accumulated years of experience in engaging with developed countries in a constructive manner to upgrade its own productive capacity. While cooperating with Africa in developing its industrial capacity and facilitating technology transfer, China can draw upon and share its own similar experiences in the development of productive capacity, urbanisation, and industrialisation.

By sharing its experience, China can offer insights to African countries, and this contribution and role are no less important than building roads and bridges. Although China has not pushed its own development model on others, African countries have expressed their own desire to learn from China's experience. Three important tenets of China's developmental experience include transcending dogmatic frameworks, paradigms, and models, starting from one's own concrete conditions, and fine-tuning one's actions based on experiences and lessons. For example, in 2017, the CEO Roundtable of Tanzania, which brings together chief executives from 200 of the country's largest firms, published a book on industrialisation, in which China's experience is studied in depth. Citing the establishment of the

[19] Liu He, '没有画上句号的增长奇迹:于改革开放三十周年' [The Ongoing Miracle of Growth: On the 30th Anniversary of Reform and Opening Up], in *中国经济50人看三十年* [Thirty Years of China's Economy as Seen by 50 Chinese Economists], ed. Wu Jinglian (Beijing: China Economic Publishing House, 2008).

Shenzhen Special Economic Zone in 1980 by Deng Xiaoping (邓小平), the authors write that 'starting small and experimenting would enable us to fail fast, learn quickly, and change things around rapidly and as necessary. After fine-tuning the model over a period of time, we can then scale with higher quality across the nation instead of instantly scaling across the nation, perhaps at a lower quality, given limited implementation and financial capabilities, being unable to fine-tune and manage efficiently when facing challenges, and thereby ending up with a mess of a national industrialisation programme'.[20] It is important to note that there is no 'Chinese consensus' or 'Chinese model' with respect to economic development; the relationship between China and Africa is one of mutual learning, rather than one-way instruction.

In this vein, what is useful for African and other developing countries is not merely a summary of China's successful experiences but, as importantly, an understanding of China's failures. Arkebe Oqubay, Senior Minister and Special Adviser to the Prime Minister of Ethiopia as well as the chief designer of Ethiopia's industrial parks, spoke to this point, in an interview that I conducted with him in early 2018: 'We know that not all of China's industrial parks have been successful, some have failed. But during my research in China, I could not find any documents or reports that summarised these lessons from failures'. Determining how to comprehensively summarise and communicate China's industrialisation experiences is an important aspect of China-Africa cooperation today.

3. China-Africa relations can develop a new paradigm for international cooperation and improve the continent's strategic position, policy space, and autonomy. At the 2016 Group of Twenty (G20) summit, China, for the first time, put forward a proposal to support industrialisation in Africa and the UN-designated group of Least Developed Countries. Western discussions related to Africa often revolve around using aid to resolve poverty, however aid alone cannot resolve poverty or promote industrialisation. In contrast, China-Africa cooperation is focused on development, combining aid, trade, investment, and other means to assist the continent's independent development.

---

[20] Ali A. Mufuruki, Rahim Mawji, Gilman Kasiga, and Moremi Marwa, *Tanzania's Industrialisation Journey*, 2016–2056: *From an Agrarian to a Modern Industrialised State in Forty Years* (Nairobi: Moran Publishers, 2017), 11.

One of the most significant aspects of China-Africa cooperation is its indirect influence on how Western countries engage with the African continent. Due to their anxiety over the growing China-Africa partnership, Western countries have, to an extent, been pressured to not merely treat African countries as aid recipients but as business and investment partners. The nature of the relationship has gradually changed, and Africa has been able to improve its global position, becoming a hotbed for investment. In recent years, for example, Germany's Volkswagen has invested and built factories in South Africa, Nigeria, and Kenya, while the US-based logistics firm, Zipline, has launched a drone assembly factory in Rwanda. These developments could be promising for Africa's industrialisation.

Ultimately, the real engine for African industrialisation lies in the hands of African countries themselves. Capital, technology, and experience from China, or other countries, can only support these efforts. For instance, similar projects or forms of cooperation can have very different outcomes in different countries. In the case of the construction of industrial parks, Ethiopia's Chinese-built Eastern Industrial Zone not only successfully created tens of thousands of jobs locally but also led to the introduction of the country's first industrial park regulations; however, in Angola, an oil-rich country, the Viana Industrial Park Zone failed to achieve even the basic 'three connections and one levelling' (三通一平, sāntōng yīpíng) – that is, ensuring that a construction site is connected to water, electricity, and roads, and that the ground is levelled before a project is begun – because the local party that received the land failed to set up or operate successful commercial activities in the industrial park. To successfully support African industrialisation, China must align its approach with the specific national development strategies of African countries, which are the key to success or failure on the path to industrialisation.

Bibliography

Bai Lulu, Zhao Shengbo, Wang Xingping and Zheng Jieling. '撒哈拉以南非洲城镇化与制造业发展关系研究' [Research on the Relationship Between Urbanisation and Manufacturing Industry in Sub-Saharan Africa]. *国际城市规划* [Urban Planning International], no. 5 (2015): 39–45.

Chang, Ha-Joon. 'Economic History of the Developed World: Lessons for Africa'. Lecture delivered in the Eminent Speakers Program of the African Development Bank, Tunis, Tunisia, 26 February 2009. https://www.afdb.org/fileadmin/uploads/afdb/News/Chang%20AfDB%20lecture%20text.pdf.

Chen Zhiwu. *陈志武说经济* [Chen Zhiwu Speaks about China's Economy]. Taiyuan: Shanxi Economic Press, 2010.

Goodfellow, Tom. 'Urban Fortunes and Skeleton Cityscapes: Real Estate and Late Urbanisation in Kigali and Addis Ababa'. *International Journal of Urban and Regional Research* 41, no. 5 (September 2017): 786–803. https://doi.org/10.1111/1468-2427.12550.

Lin, Justin Yifu and Célestin Monga. *Beating the Odds: Jump-Starting Developing Countries*. Princeton: Princeton University Press, 2017.

Liu He. '没有画上句号的增长奇迹:于改革开放三十周年' [The Ongoing Miracle of Growth: On the 30th Anniversary of Reform and Opening Up]. In *中国经济50人看三十年* [Thirty Years of China's Economy as Seen by 50 Chinese Economists], edited by Wu Jinglian. Beijing: China Economic Publishing House, 2008.

Moghalu, Kingsley. 'Africa Has to Go through Its Own Industrial Revolution'. *Financial Times,* 16 May 2016. https://www.ft.com/content/d68f27fe-1aad-11e6-b286-cddde55ca122.

Morriset, Jacques. 'Foreign Direct Investment in Africa: Policies Also Matter'. Policy Research Working Paper 2481, World Bank, Washington, DC, November 2000. https://documents1.worldbank.org/curated/en/245851468767965780/pdf/multi-page.pdf.

Mufuruki, Ali A., Rahim Mawji, Gilman Kasiga, and Moremi Marwa. *Tanzania's Industrialisation Journey, 2016–2056: From an Agrarian to a Modern Industrialised State in Forty Years.* Nairobi: Moran Publishers, 2017.

Newfarmer, Richard, John Page, and Finn Tarp, eds. *Industries without Smokestacks: Industrialisation in Africa Reconsidered*. UNU-WIDER Studies in Development Economics. New York: Oxford University Press, 2018. https://www.wider.unu.edu/publication/industries-without-smokestacks-2.

Page, John. 'Africa's Failure to Industrialize: Bad Luck or Bad Policy?'. *The Brookings Institution*, 20 November 2014. https://www.brookings.edu/blog/africa-in-focus/2014/11/20/africas-failure-to-industrialize-bad-luck-or-bad-policy/.

Ross, Alec. *The Industries of the Future*. New York: Simon & Schuster, 2016.

Stiglitz, Joseph E. 'From Manufacturing Led Export Growth to a 21st Century Inclusive Growth Strategy for Africa (Africa Cannot Repeat East Asian Miracle)'. Lecture delivered at Inclusive Growth Summit hosted by the Bureau for Economic Research, Economic Research Southern Africa, and the Research Project on Employment, Income Distribution and Inclusive Growth, Cape Town, South Africa, 15 November 2017. https://www.youtube.com/watch?v=Q-OikAtwkig&ab_channel=ACET.

The Economist. 'Africa Rising'. *The Economist*, 3 December 2011. https://www.economist.com/leaders/2011/12/03/africa-rising.

The Economist. 'The Hopeless Continent'. *The Economist*, 13 May 2000. https://www.economist.com/weeklyedition/2000-05-13.

UN Economic Commission for Africa. *Economic Report on Africa 2017: Urbanisation and Industrialisation for Africa's Transformation.* Addis Ababa: UN Economic Commission for Africa, 2017. https://www.uneca.org/economic-report-africa-2017.

UN Economic Commission for Africa. 'Momentum Builds for Free Movement under AfCFTA'. 29 January 2023. https://www.uneca.org/stories/momentum-builds-for-free-movement-under-afcfta.

UN Economic Commission for Africa and World Bank. 'Promoting Connectivity in Africa: The Role of Aid for Trade in Boosting Intra-African Trade'. UN Economic Commission for Africa, Addis Ababa, October 2017. https://www.wto.org/english/tratop_e/devel_e/a4t_e/promotingconnect17_e.pdf.

UN Economic Commission for Africa. *Transformative Industrial Policy for Africa.* Addis Ababa: UN Economic Commission for Africa, 2016. https://repository.uneca.org/handle/10855/23015.

Wen Yi. *伟大的中国工业革命* [The Great Chinese Industrial Revolution]. Beijing: Tsinghua University Press, 2016.

Zhou Jinyan. '非洲智库对新时代中国方案的认知及其对中非治国理政经验交流的启示' [African Think Tanks' Perceptions of China's Solutions in the New Era and Their Implications for the Exchange of Experiences on Governance in China and Africa]. *阿拉伯世界研究* [Arab World Studies], no. 4 (2021): 119–138.

Pan Jianglong (潘江龙), *To the East of the Sahara* (撒哈拉以东), 2017. Mixed media on canvas, 120 x 120 cm. Credit: China National Arts Fund.

China's Belt and Road Initiative and African Industrialisation

Tang Xiaoyang (唐晓阳) is the chair and a professor in the Department of International Relations at Tsinghua University. His research interests include political philosophy, the global modernisation process, and China's engagement with developing countries. He is the author of *Coevolutionary Pragmatism: Approaches and Impacts of China-Africa Economic Cooperation* (Cambridge University Press, 2020) and has published extensively on the Belt and Road Initiative. He has previously worked as a consultant for the World Bank, the United Nations Development Programme, and the United States Agency for International Development.

"China's Belt and Road Initiative and African Industrialisation' (激活非洲工业化："一带一路"能带来什么) was originally published in Wenhua Zongheng *(文化纵横), issue no. 4 (August 2022).*

Governments across Africa have long reached a consensus: 'industrialisation is the essence of development'.[1] Over the past half-century, African nations continuously pursued industrialisation, embarking on various paths to develop their own industrial sectors. However, neither the industrial policies of the 1960s and 1970s that emphasised self-reliance and import substitution, nor the structural adjustment programmes adopted in subsequent decades, characterised by market liberalisation and pushed by Western countries, have been able to help

[1] African Union, *Action Plan for the Accelerated Industrial Development of Africa* (Addis Ababa: African Union, 2007), https://au.int/web/sites/default/files/documents/30985-doc-plan_of_action_of_aida.pdf.

Africa achieve sustainable industrial growth and transformation. In the twenty-first century, African countries have redesigned their paths to industrialisation and development. Across the continent, governments have become more unified in their thinking, formulating the ambitious *New Partnership for Africa's Development* (2001) and the *Action Plan for the Accelerated Industrial Development of Africa* (2007). However, the aims of these initiatives have yet to be realised. Although the absolute output value of manufacturing across sub-Saharan Africa has generally grown each year for the past two decades, the rate of growth has been slow, and consequently, the share of manufacturing in gross domestic product (GDP) has decreased (Figure 1).

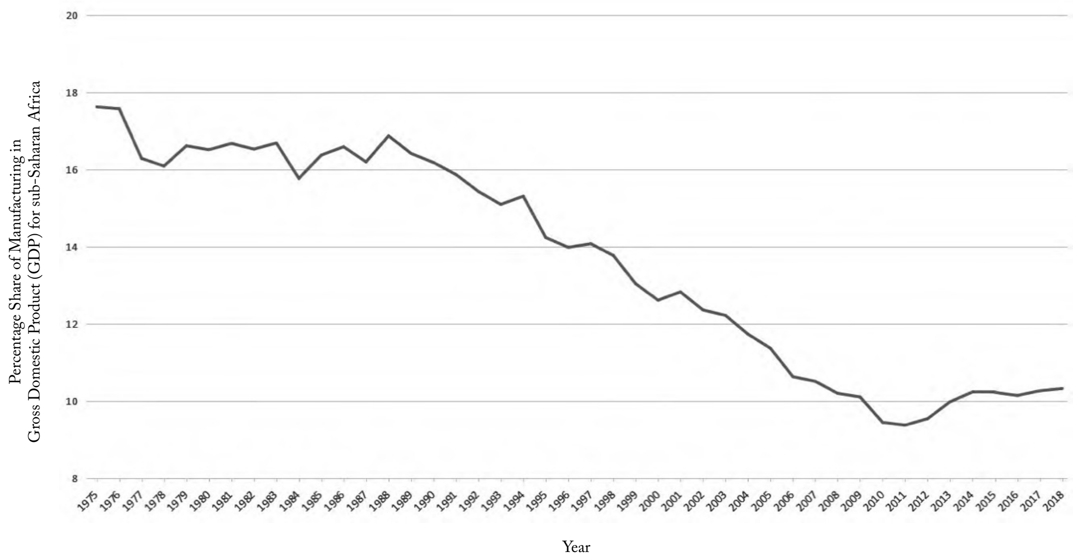


Figure 1: The share of manufacturing value added as a percentage of sub-Saharan Africa's GDP from 1971 to 2018. Source: World Bank.

The biggest challenge to industrialisation in Africa lies in the difficulty of integrating various elements into a system. Early on in the industrial revolution of the eighteenth century, the economist Adam Smith observed that the high productivity of industrialisation was mainly derived from the division of labour and collaboration, and the use of machinery in multi-step production processes to perform extremely simple actions in a highly efficient manner.[2] This basic pattern is still applicable to manufacturing today, except that the depth and breadth of the division of labour and collaboration far exceeds that of the past. Today, the manufacture of any product – whether it is pins, shoes, hats, computers, or cars – requires a range of businesses and factories to cooperate with each other. The industrial chain contains many links related to the raw materials, tools and machinery, design, parts and accessories, approval of finished products, packaging, and sales; an individual enterprise may only be responsible for one or a few of these links, specialising to win market competition in a narrow area. Within each enterprise, the production process is also highly segmented: a production line often has hundreds of component processes, in which hundreds or thousands of workers operate simultaneously and a large number of machines and equipment are used. The closely interconnected system of modern industry requires every related party to complete their respective tasks in a precise and timely manner. Any absence or delay caused by any entity, individual, or even machine part in the production chain may disrupt the smooth operation of the entire manufacturing system. On top of this, the massive exchange and flow of materials requires large amounts of infrastructure and integrated management capabilities. Therefore, the development of modern industry cannot rely solely on individual enterprises or sectors, but depends on a country's comprehensive production and circulation capabilities.

Historically, African countries have long been marginalised in the global economy, serving as a source of raw materials for Europe and North America. Most countries on the continent do not have a complete industrial sector and existing factories often have to import a large amount of machinery and parts from abroad. Local power and water supplies and infrastructure are often limited and unable to meet the needs of large-scale production. Meanwhile, poor and dilapidated transportation facilities, administrative inefficiencies, and political and geographical complexities often result in poor material exchange and circulation both within Africa and between the continent and other regions. Finally, due to a lack of practical experience and systematic training, there are deficiencies in the professional and technical skills of workers as well as the coordination and organisational capabilities of managers. These factors have constrained the deepening of

[2] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Edinburgh: Thomas Nelson Press, 1843), 3–5.

the interconnected division of labour on the continent at multiple levels, and over time, the gap between African industrial development and that of other regions of the world has grown increasingly large.

How Has the Belt and Road Initiative Promoted Industrialisation in Africa

Most African economies still primarily depend upon traditional small-scale agriculture, relying on subsistence production. Only by advancing highly specialised and professionalised industrial production, coupled with appropriate market reforms, can productivity be significantly and sustainably improved. For a long time, China's economy was also largely agricultural and experienced many hardships on the path to national industrial development. Since the launch of reform and opening up in the late 1970s, China has achieved explosive industrial growth, becoming the 'world's factory'. China's successful experience in industrialisation has aroused great interest around the world, including among African countries. For China, this continuous industrial growth has further boosted the country's demand for resources, labour, and markets. In the context of saturated European and North American markets as well as intense domestic competition, it is urgent for China to find new partners for cooperation and new opportunities for growth. Given the common interests and aspirations of China and other developing countries in pursuing industrial development, the Belt and Road Initiative (BRI) identifies industrial capacity as an important area for mutually beneficial cooperation. In this vein, the Forum on China-Africa Cooperation (FOCAC) has always emphasised industrialisation and industrial cooperation in its action plans. China's industrial capacity cooperation with African countries has focused on three main aspects.

1. The construction of industrial parks. Given the generally low industrial level of African countries, there is an overall shortage of factors of production. To ensure that large-scale industrial production operates in a rapid and smooth manner, in some countries Chinese companies have invested in the construction of local industrial parks, introducing firms both upstream and downstream in the industrial chain for vertical collaboration, constructing basic infrastructure, and providing basic services to promote the formation of regional industrial clusters of interconnected firms, suppliers, and institutions. For example, in 2007, China Nonferrous Metal Mining Group (CNMC), a state-owned enterprise (SOE), established the Zambia-China Economic and Trade Cooperation Zone (ZCCZ) in Chambishi, Zambia, for deep processing of natural resources mined locally. The companies operating in the economic zone are mostly CNMC subsidiaries, covering various steps along the industrial chain of copper and cobalt resources, including mining, smelting, and processing. There are also several Chinese private enterprises and local Zambian private enterprises that have provided supporting services such as machine repair and logistics.[3] This industrial park project has contributed to Zambia's efforts to progress from simple resource mining and gradually ascend to higher value-added processing activities. In 2009, the ZCCZ launched a sub-zone on the outskirts of Zambia's capital, Lusaka, clustering light industrial enterprises in food processing, brewing, and plastic products, among other sectors, based on the character of the urban economy. While there is no direct commercial connection between the companies in the sub-zone, the services provided by the zone (such as water, electricity, transport, and security) have decreased the cost of building a factory and greatly shortened the investment cycle (for example, without the services provided by the sub-zone, the application process for the industrial use of electricity alone could take several years). Small and medium-sized enterprises lacking international experience and large amounts of capital can also exchange information, saving a great deal in costs they would have incurred due to their inexperience and benefiting from strength in numbers.

2. The synergy of infrastructure construction and industrial investment. China is a global leader in both manufacturing and construction industries, and Chinese enterprises accounted for 61.9 percent of the entire African construction market in 2019.[4] Chinese infrastructure construction provides necessary facilities in various sectors in Africa, such as energy and transportation, aiding industrial development. To play a sustainable role on the continent, these infrastructure projects must be combined with

[3] Tang Xiaoyang and Tang Xiyuan, '从政府推动走向市场主导:海外产业园区的可持续发展路径' [From Government Initiative to Market Orientation: The Path of Sustainable Development of Overseas Industrial Zones], 外交评论 [Foreign Affairs Review], no. 6 (2019).

[4] 'ENR's 2018 Top 250 International Contractors', Engineering News-Record, August 2018, https://www.enr.com/toplists/2018-Top-250-International-Contractors-1.

industrialisation. The main challenges for infrastructure construction in Africa are the large-scale investments required and the long-term horizons for repayment. In developing countries, sometimes the revenues generated by infrastructure projects are insufficient to maintain the operation of the facilities. In view of this, China and African countries have jointly planned industrial projects interconnected with infrastructure projects to improve the utility and return on these endeavours. Taking the Addis Ababa-Djibouti Railway as an example, in 2016, the Chinese government guided its enterprises to 'combine large-scale infrastructure construction with industrial park and special economic zone development, striving to build an industrial belt along the railway for a harmonious interaction between large-scale infrastructure and industrial development'.[5] Chinese private enterprises had already built two industrial parks near the Ethiopian capital of Addis Ababa but in recent years SOEs have played an important role. China Civil Engineering Construction Corporation has signed agreements with Ethiopia to build a series of industrial parks along the Addis Ababa-Djibouti Railway in Hawassa, Dire Dawa, Kombolcha, and Adama to make full use of the railway's capacity. In addition, the state-owned China Merchants Group has participated in the construction of the Port of Doraleh, aiming to significantly enhance the port's throughput capacity to cope with the increased cargo volume of the new railway. Similarly, to support the long-term development along the Mombasa-Nairobi Railway, China and Kenya have signed an agreement to upgrade the Mombasa port and establish a special economic zone near the port.

3. China's industrial investment in Africa focuses on production that is suitable for local markets, and thus better synergised with local development and generating sustained momentum for industrialisation. Some economists have predicted that Africa will follow Asian countries in attracting global labour-intensive manufacturing, due to its lower labour costs, and embark on an export-led path to industrial development.[6] However, in practice, African industries rely on imports for many inputs,

[5] Lin Songtian, '外交部非洲司司长林松添在中非智库论坛第五届会议全体会上的发言' [Remarks by Lin Songtian, Director-General of the Department of African Affairs of the Foreign Ministry, at the Plenary Session of the Fifth Meeting of the China-Africa Think Tanks Forum], Ministry of Foreign Affairs of the People's Republic of China, 18 April 2016.

[6] Justin Yifu Lin, 'From Flying Geese to Leading Dragons: New Opportunities and Strategies for Structural Transformation in Developing Countries', Policy Research Working Paper 5702, World Bank, Washington, DC, June 2011, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1871599.

such as raw materials, components, and spare parts. Without a developed ecosystem of suppliers and service providers, African factories face chronic issues, including administrative delays, traffic congestion, poor logistics, and unstable currency exchange rates, making the quality and timeliness of orders difficult to guarantee.[7] In contrast, in Asia, there is a comprehensive and mature industrial network centred on Japan and China. Other countries in the region can find their own comparative advantages in this system and leverage their low labour costs to undertake industrial transfers. Due to the geographical distance, it is difficult for African countries to become integrated into Asia's industrial network. Merely reducing production costs cannot compensate for the lack of support in other aspects, and foreign firms aiming to transfer production to the continent have only been able to maintain smaller scale operations in Eastern and Southern Africa that are difficult to expand.[8]

Rather than pursuing export-led models, the industrial enterprises that have established a foothold for long-term operations in Africa and that are driving local enterprises to grow together, are mainly focusing on the domestic markets of African countries. Their production, supply, marketing, and sales are all rooted in the African continent. For example, Sun Jian (孙坚), a businessman from Wenzhou, China, toured Nigeria in 2010 and found that a large number of ceramic products in the country were imported from abroad. Sun saw a commercial opportunity. Because ceramics are heavy and fragile, they are not conducive to transportation; if they could be produced locally, the manufacturer would have a great advantage in the market. Sun quickly set up the Wangkang Ceramic Factory in Nigeria with $40 million, and the tiles produced were immediately popular among local consumers and quickly became short in supply.[9] Over the past decade, the company has set up five large tile factories in Nigeria, Ghana, Tanzania, and Uganda, accounting for 25 percent of Africa's ceramic tile production capacity. This example shows how industrial development can take place by closely examining the African market and identifying niche areas. Multinational companies often overlook the African market and rarely pay attention to the specific needs

[7] Tang Xiaoyang, 'The Impact of Asian Investment on Africa's Textile Industries', Carnegie-Tsinghua Center for Global Policy, Beijing, August 2014, https://carnegieendowment.org/files/china_textile_investment.pdf.

[8] Tang Xiaoyang, *Coevolutionary Pragmatism: Approaches and Impacts of China-Africa Economic Cooperation* (Cambridge: Cambridge University Press, 2020).

[9] Sun Jian (founder of Wangkang Group), interview by author, Ogun State, Nigeria, July 2014.

and interests of local consumers, with products exported to Africa often overpriced and outdated. Through closer economic and trade relations with African countries, Chinese companies have developed a keener awareness of the African market and spotted new trends. Chinese firms have set up factories locally to manufacture everyday products such as building materials, furniture, plastics, food, medicine, clothing, and footwear. Local production not only significantly reduces transport costs but also ensures that products are targeted and responsive to changing consumer preferences and market trends. These locally manufactured products have not replaced existing imports but filled gaps in the market.

Chinese enterprises can better understand African markets and seize industrial opportunities for two reasons: first, the many years of economic cooperation between China and Africa and, second, China's strong industrial system. The founder of Wangkang did not originally engage in the ceramics industry, but when he spotted the business opportunity he quickly contacted suppliers of ceramic production equipment in China and was able to assemble production lines in Africa within a few months. Wangkang was able to rely on Chinese firms for installation, debugging, training, and maintenance services. China is the only country in the world that is home to all of the categories listed in the United Nations' International Standard Industrial Classification of All Economic Activities, covering both high-precision technologies and traditional low-end industries.[10] Due to the unstable power supplies and maintenance difficulties on the African continent, many newer types of precision machinery from Europe and the United States are not the best suited for use in African manufacturing. In contrast, some basic equipment made in China functions well in this environment, as well as being economical and durable. Industrial investments in the African market can use China's comprehensive industrial system to provide strong support services for production activities in Africa. These factories obtain the main raw materials locally and sell their products on the local market, gradually forming an initial system of industrial production and circulation. Although these industries start small, they can drive the comprehensive cyclical development and are a more sustainable pathway to industrialisation.

[10] Yang Yang, 'China Becomes World Leader in Industrial Economy Scale', *China Daily*, 23 September 2019, https://global.chinadaily.com.cn/a/201909/23/WS5d888ad6a310cf3e3556cf80.html.

This is exemplified by the rise of the local plastic recycling industry in Ghana. Initially, a company from China's Fujian province began collecting the packaging discarded by locals after drinking bagged water, which could be processed and sold as plastic shopping bags. Although the work was difficult and tiring, the company was quite profitable because there was almost no competition. This news soon attracted many followers. Initially, more than ten Chinese companies followed suit, followed by local companies. Through their Chinese partners, these firms found machine and equipment suppliers and also entered this field. In the first six or seven years, the new entrants did not engage in fierce competition, but instead, worked together to increase the size of the industry 'cake' (把行业蛋糕做大, bǎ hángyè dàngāo zuòdà). The geographic range for recycling gradually expanded from the capital of Accra to the whole country and divisions developed in the industrial chain. Local companies are more familiar with the social environment, can better locate the dumping sites of discarded packaging, and have focused more on upstream recycling and primary processing, employing hundreds of waste collectors. Chinese companies have a better understanding of the machinery and production, and have increasingly invested in high-tech, back-end processing. In addition, many Chinese and Ghanaian companies have set their sights on other types of plastic recycling and processing. By identifying market opportunities, Chinese and Ghanaian firms have driven the development of an entire plastic recycling and processing chain and industrial cluster in Ghana.[11]

Challenges and Solutions in Sino-African Industrial Cooperation

Relying on a unique model of collaboration and complementary economic structures, Sino-African industrial cooperation has made important achievements in the first two decades of the twenty-first century. Across the African continent, thousands of Chinese enterprises have invested in or co-built dozens of industrial parks, employing large numbers of local workers and driving the growth of related suppliers, service providers, and

[11] Tang Xiaoyang, '8 Geese Flying to Ghana? A Case Study of the Impact of Chinese Investments on Africa's Manufacturing Sector', *Journal of Contemporary China* 27, no. 114 (2018).

downstream businesses.[12] China has established six national-level economic and trade cooperation zones in countries such as Egypt, Zambia, Nigeria, Mauritius, and Ethiopia, attracting over 300 enterprises and employing more than 30,000 local workers.[13] However, long-term challenges remain in Africa's pursuit of industrialisation, which pose a serious challenge to the sustainable growth of Sino-African industrial cooperation.

As discussed earlier, the key challenge in African industrialisation relates to the lack of systematic cooperation. Sino-African cooperation has made progress in resolving some coordination problems through the construction of infrastructure and industrial parks, the setting up of supply chains, and the connecting of markets. However, further industrial development will require far more than the supply of equipment or building of factories. To industrialise, developing countries must undergo a sea change in social structures and ideology. In each country or region, this process will be different, depending on local histories, cultures, and customs. For its part, when partnering with African countries, China must proceed with an understanding of local conditions and complexities. Chinese enterprises must appropriately navigate contradictions and conflicts that arise with local workers, indigenous communities, business partners, and governmental bodies. This will be particularly important as international tensions rise and foreign political forces attempt to inflame disputes and weaponise them for their own agendas.

Swedish economist and Nobel laureate Gunnar Myrdal pointed out, as early as the 1970s, that socio-economic systems have self-reinforcing characteristics. Due to social inertia, non-industrialised countries face a much greater difficulty in transitioning to industrial societies than developed countries face in continuing industrial development. A number of political, economic, social, and cultural factors work to keep these countries in a low-level equilibrium state.[14] Singaporean-American economist Yuen Yuen Ang

---

[12] Irene Yuan Sun, Kartik Jayaram, and Omid Kassiri, 'Dance of the Lions and Dragons: How Are Africa and China Engaging, and How Will the Partnership Evolve?', McKinsey & Company, June 2017, https://www.mckinsey.com/~/media/mckinsey/featured%20insights/middle%20east%20and%20africa/the%20closest%20look%20yet%20at%20chinese%20economic%20engagement%20in%20africa/dance-of-the-lions-and-dragons.ashx.

[13] Tang, *Coevolutionary Pragmatism.*

[14] Gunnar Myrdal, *The Challenge of World Poverty: A World Anti-Poverty Program in Outline* (London: Allen Lane, 1970), 268.

has argued that there is a 'fundamental problem' in development, in that a country's economic prosperity often requires strong institutional support, 'yet attaining these preconditions also appears to depend on the level of economic wealth'.[15] This creates a 'chicken-or-egg' dilemma: many developing countries lack the resources to improve their institutional environment and, consequently, are unable to realise long-term, sustainable industrial development; in turn, the economy further declines and the institutional environment further deteriorates.

Overcoming this cyclical dilemma is essential to African industrialisation as well as the long-term success of Sino-African cooperation. To reverse this vicious cycle, it is necessary to simultaneously improve both the 'chicken' and 'egg' – that is, economic growth and institutional development – and promote a mutually reinforcing cycle. Only when all parties in the process of industrialisation are striving towards the same goal of promoting the sustainable growth of productivity can synergies form. However, this type of cooperation is difficult to achieve in practice. In the pursuit of industrialisation, most members of society are not oriented towards the long-term growth in productivity, but can only see local activities and pursue short-term benefits, and thus deviate from the overall goal. Determining how to promote widespread recognition of and commitment to industrialisation by all parties in society is an important issue for African countries to resolve to break past limitations and achieve continuous progress.

One of the major challenges in Sino-African economic and trade cooperation concerns the differences in perspectives and goals of various parties.[16] The Tanzania-China Friendship Textile Company jointly operated by China and Tanzania is an illustrative example. The primary goals of the Chinese managers, on the one hand, are to improve enterprise productivity and profits; the Tanzanian managers appointed by the local government, on the other hand, are not only concerned with operational efficiency, but also with generating employment and tax revenue, as well as increasing

---

15 Yuen Yuen Ang, *How China Escaped the Poverty Trap* (Ithaca: Cornell University Press, 2016), 1.

16 Kuang Lulin, '文化差异对中非经贸合作的影响及其应对' [The Influence of Cultural Differences on Sino-African Economic and Trade Cooperation and Response Measures], *产业与科技论坛* [Industrial & Science Tribune], no. 3, 2019.

purchases of locally-produced cotton.[17] Similarly, in the construction of infrastructure and industrial parks, there are often differences in the goals of all the parties involved: for instance, Chinese companies aim to increase their profits, Chinese government officials seek to improve bilateral political relations, African government officials are concerned with fiscal revenues and employment opportunities, while local populations hope that projects are beneficial to their livelihoods and communities. Although these various goals are interrelated and compatible in many ways, differing priorities can lead to disagreements and conflicts. To reach consensus and synergise efforts, all parties must make appropriate adjustments to prioritise the larger goal of industrialisation over their respective individual goals, to find common ground while respecting differences, and to achieve mutually beneficial, 'win-win' results for all.

A similar process of adaptation to and integration of different perspectives has also occurred during the course of China's reforms. At various times over the past four decades, the state has had to manage different tendencies in society, including conservatism, protectionism, and liberalism, through theoretical guidance and administrative management, and ultimately unify various sectors to strive for industrial development. The challenge in Sino-African international cooperation is that it includes multiple states, each with their own system of governance, and matters cannot be resolved through centralised leadership. The only path for cooperation is through equal-footed exchanges. In this regard, Sino-African partners should adhere to the progressive spirit of 'crossing the river by feeling the stones' (摸着石头过河, mōzhe shítou guòhé), in which they emphasise robust communication, a willingness to adjust and compromise, mutual understanding, and consensus. In the aforementioned example of the Tanzania-China Friendship Textile Company, the Chinese side respects Tanzanian interests and traditions, retains a large number of long-tenured employees, and actively dialogues with union organisations, while highlighting the market nature of the enterprise, introducing the piece-rate bonus system, and identifying areas to improve productivity.[18] Similarly, in industrial park and infrastructure projects, Sino-African cooperation learns from China's own rapid economic

[17] Wu Bin (general manager of the Tanzania-China Friendship Textile Company), interviews with author, Dar es Salaam, Tanzania, September 2011 and August 2014.

[18] Wu Bin, interviews.

development in the past forty years but is not confined to a fixed mold, and is guided by a 'win-win' principle in the pursuit of long-term, sustainable economic growth, considering the needs of broader numbers of parties and willing to sacrifice some short-term commercial profits for broader political and social interests.[19]

Of course, the exchange of ideas will not always lead cooperating parties to reach a mutual understanding. But in the long run, such exchanges are essential and are the most effective method to ensure the continuous and in-depth development of Sino-African cooperation. Ultimately, African industrialisation will only be realised by internal driving forces. This is a point emphasised by China in its partnership with African countries, based on its own development experience, and is an approach that differs greatly from Western countries.

The Character and Significance of the Sino-African Relationship

The West tends to take a condescending posture towards African development and industrialisation. Whether in its role as colonial ruler, suzerain, or donor, Western developed countries have often judged African countries according to their own political and economic systems, criticised Africa as 'backwards', and imposed their own models on the continent. For instance, in the era of the Washington Consensus, the United States and European countries often used coercive methods such as withholding aid and enacting sanctions to force African countries to implement Western free-market economic policies. Consequently, the Western approach not only has failed to integrate organically into African societies but has also promoted division and unrest, setting back African efforts to achieve comprehensive and sustainable industrial transformation.

In its own history and development, China has experienced similar external pressures and setbacks as African countries. Through its own exploration, China has found an effective path to industrialisation. Therefore, China has a different perspective and understanding than the West when it comes to the

[19] Tang, *Coevolutionary Pragmatism.*

contradictions, challenges, and complexities faced by developing countries in the pursuit of industrialisation. In its relations with African countries, China emphasises the importance of economic development and the continuous growth of productivity. While constantly pursuing its own industrial upgrading and growth, China also hopes to promote common development with Africa, to escape poverty and underdevelopment, and no longer be controlled and oppressed by the West. To this end, China cooperates with African countries around the goal of improving productivity. It holds an open-minded and pragmatic attitude towards how African countries pursue economic transformation in their various, unique national conditions. Instead of imposing any policy on the African continent, China encourages each country to follow its own path of development and to not blindly follow any model. The BRI, which promotes infrastructure connectivity, trade, financial integration, complementary policies, and people-to-people exchanges, is guided by the principles of collaborative development and national sovereignty.

The unique approach of Sino-African industrial cooperation is not only necessary for economic growth, it is also guided by profound political thinking. In its cooperation with African countries, China, while emphasising economic development and market efficiency, does not ignore the political domain. China's emphasis on productivity comes from its own practical experience in struggling against the domination of Western powers: only with a market economy and industrial development has the country been able to resist foreign influence and interference. This orientation is also consistent with China's longstanding policy of supporting the independence and sovereignty of African countries and opposing Western hegemonism. In the contemporary period, international political support is more effective and sustainable through economic means. At the same time, the emphasis on equal exchange in Sino-African cooperation is not purely a political posture, but is guided by the fact that long-term cooperation and communication is necessary for the establishment of a new global market and industrial system that breaks free of the historic 'chicken-or-egg' vicious cycle.

As African countries advance on their paths to industrialisation, different social strata will be affected in drastically different ways and will have starkly different feelings and views about economic reforms. This is both a severe challenge and historic opportunity for Sino-African industrial cooperation. As Chinese infrastructure, industrial facilities, and other projects continue to develop in Africa, both sides will deepen their mutual understanding and integration through practice. From both an economic and political perspective, China and Africa share the same overall goal of promoting industrialisation and, therefore, can overcome temporary barriers and setbacks through communication and adjustment. In this gradual process, rich and extensive cooperation at multiple levels can help China and Africa build a closer and deeper connection and consensus.

Bibliography

African Union. *Action Plan for the Accelerated Industrial Development of Africa*. Addis Ababa: African Union, 2007. https://au.int/web/sites/default/files/documents/30985-doc-plan_of_action_of_aida.pdf.

Ang, Yuen Yuen. *How China Escaped the Poverty Trap*. Ithaca: Cornell University Press, 2016.

'ENR's 2018 Top 250 International Contractors'. *Engineering News-Record*, August 2018. https://www.enr.com/toplists/2018-Top-250-International-Contractors-1.

Kuang Lulin. '文化差异对中非经贸合作的影响及其应对' [The Influence of Cultural Differences on Sino-African Economic and Trade Cooperation and Response Measures]. *产业与科技论坛* [Industrial & Science Tribune], no. 3 (2019): 103–104.

Lin, Justin Yifu. 'From Flying Geese to Leading Dragons: New Opportunities and Strategies for Structural Transformation in Developing Countries', Policy Research Working Paper 5702, World Bank, Washington, DC, June 2011. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1871599.

Lin Songtian. '外交部非洲司司长林松添在中非智库论坛第五届会议全体会上的发言' [Remarks by Lin Songtian, Director-General of the Department of African Affairs of the Foreign Ministry, at the Plenary Session of the Fifth Meeting of the China-Africa Think Tanks Forum]. Ministry of Foreign Affairs of the People's Republic of China, 18 April 2016.

Myrdal, Gunnar. *The Challenge of World Poverty: A World Anti-Poverty Program in Outline*. London: Allen Lane, 1970.

Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Edinburgh: Thomas Nelson Press, 1843.

Sun, Irene Yuan, Kartik Jayaram, and Omid Kassiri. 'Dance of the Lions and Dragons: How Are Africa and China Engaging, and How Will the Partnership Evolve?'. McKinsey & Company, June

2017. https://www.mckinsey.com/~/media/mckinsey/featured%20insights/middle%20east%20and%20africa/the%20closest%20look%20yet%20at%20chinese%20economic%20engagement%20in%20africa/dance-of-the-lions-and-dragons.ashx.

Tang Xiaoyang. '8 Geese Flying to Ghana? A Case Study of the Impact of Chinese Investments on Africa's Manufacturing Sector'. *Journal of Contemporary China* 27, no. 114 (2018): 924–941.

Tang Xiaoyang. *Coevolutionary Pragmatism: Approaches and Impacts of China-Africa Economic Cooperation*. Cambridge: Cambridge University Press, 2020.

Tang Xiaoyang. 'The Impact of Asian Investment on Africa's Textile Industries'. Carnegie-Tsinghua Center for Global Policy, Beijing, August 2014. https://carnegieendowment.org/files/china_textile_investment.pdf.

Tang Xiaoyang and Tang Xiyuan. '从政府推动走向市场主导:海外产业园区的可持续发展路径' [From Government Initiative to Market Orientation: The Path of Sustainable Development of Overseas Industrial Zones]. *外交评论* [Foreign Affairs Review], no. 6 (2019): 39–61.

Yang Yang. 'China Becomes World Leader in Industrial Economy Scale'. *China Daily*, 23 September 2019. https://global.chinadaily.com.cn/a/201909/23/WS5d888ad6a310cf3e3556cf80.html.

WENHUA ZONGHENG (文化纵横) is a leading journal of contemporary political and cultural thought in China. Founded in 2008, the journal publishes issues every two months, featuring articles by a wide array of intellectuals across the country and building a platform for discussion of different ideological positions and values in China's intellectual community. The publication is an important reference for debates and developments in Chinese thought, on matters ranging from China's ancient history and traditional culture to its current socialist practices and innovations, from the important cultural trends in contemporary Chinese social life to Chinese views and analyses of the world today. Tricontinental: Institute for Social Research and Dongsheng News have partnered with *Wenhua Zongheng* to publish an international edition of the journal, releasing four issues per year featuring a selection of articles that hold particular relevance for the Global South.

In Chinese, the word 'Wenhua' (文化) means 'culture' as well as 'civilization', while 'Zongheng' (纵横) literally means 'verticals and horizontals', but also alludes to the strategists who helped to first unify of China, roughly 2,000 years ago through diplomacy and alliances. It is impossible to translate the journal's title into English while retaining its historical meaning and significance, therefore, we have chosen to keep the pinyin romanisation of the title to remind our readers: China has a complex history and culture that is challenging to translate and navigate, and this project seeks to bridge this understanding.

文化纵横 Dongsheng tricontinental