

BY EUGENE YIGA

The New Geography of Power

Technology is redrawing the world map.



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For Gregory C. Allen, director of the Center for Strategic & International Studies AI Governance Project, there are two dates in geopolitical history that are going to echo even a century from now. The first was 24 February 2022, when Russia invaded Ukraine. The second was 7 October 2022, when the United States imposed new export controls on AI chips, semiconductors, and semiconductor manufacturing equipment.

“That policy, which had at its core AI competition, was a reversal of 25 years of trade and technology precedent,” Allen explains. “The Biden administration took that step because they thought that strategic competition in AI was worth it.”

For African businesses, the stakes are existential. The Democratic Republic of Congo produces 70% of the world’s cobalt. Africa holds over 50% of global cobalt reserves and 40% of manganese. Yet China refines 75% of that cobalt and processes 87% of strategic rare earths. As supply chains fragment, African countries face a choice: leverage mineral wealth to build domestic capabilities or remain locked in extractive relationships while others capture value.

The rise of ‘anywhere but China’

The transformation began with Chinese companies themselves. As trade tensions escalated, Beijing’s most dynamic firms didn’t wait for Washington’s next move. Instead, they started moving first.

“It is fair to say that China has been long preparing for more trade restrictions and protectionist measures from the US,” says Keyu Jin, global economist at Harvard University and author of *The New China Playbook*. “If you look at the surveys of small and medium companies, 80% of them have implemented or are in the midst of implementing a globalisation strategy, whether it’s moving factories and supply chains to Southeast Asia, but also, more broadly, opening new markets.”

African manufacturers are caught in the middle. Lagos hosts 2 000 tech start-ups in a \$9.8 billion ecosystem. Nairobi secured \$638 million in start-up funding in 2024. Cape Town houses more than 450 tech companies. These hubs depend on Chinese components for electronics assembly, yet face growing Western client demands: prove your components aren’t Chinese-sourced. The cost is real. African businesses serving both markets now run dual supply chain audits, duplicate inventory, and navigate incompatible compliance regimes.

“Global trade actually increased after Trump 1.0 rather than declined,” Jin notes. “And lots of countries, because they trade more with the US than China, actually use it as an additional platform to export more to the world. So, in fact, it is only the US share of exports in global trade that has been declining. China has been rising. And the rest of the world is increasing trade.”

Keyu Jin



‘Stopping China is not really possible.’

Africa produced 124 230 tonnes of lithium carbonate equivalent in 2024, primarily from hard-rock spodumene deposits in Zimbabwe and Namibia. The DRC’s three largest cobalt mines account for over 50% of global output. Yet when Zimbabwe mandated local lithium refining in 2024, companies simply crushed rocks into liquid concentrate. The infrastructure doesn’t exist to move up the value chain.

The new Silk Road of semiconductors

Nowhere is this geographic reshuffling more dramatic than in semiconductors, where decades of concentrated production in East Asia are giving way to a more distributed global architecture.

“What we’ve been doing at the Organisation for Economic Co-operation and Development (OECD), in a multilateral, coordinated way, is taking a few steps to try to look at how we can diversify supply chains and value chains in a way to make them more resilient to any kind of disruption,” explains Jerry Sheehan, director for science, technology and innovation at the OECD. “We’ve started to bring together policymakers from OECD countries, plus others that have a critical role in the value chain, to discuss the policies and the plans that are put in place.”

The DRC demonstrated what’s possible. By processing cobalt locally rather than exporting raw ore, export value jumped from \$167 million to \$6 billion in 2022. Morocco is building that playbook at scale: Gotion High Tech’s gigafactory in Kenitra will start with 20GWh capacity in 2026, expanding to 100GWh. BTR New Material Group’s 25 000-tonne cathode plant in Tangier Tech City launches September 2026. Management partnered with Renault to supply 5 000 tonnes of low-carbon cobalt sulphate annually, which is enough for 15GWh of batteries.

“We had very visceral experiences during the Covid pandemic, when there were shutdowns in particular locations that squeezed manufacturing capabilities and semiconductors, which had incredible downstream implications for our economies,” Sheehan recalls. “They were under quite a bit of stress at the time.”

Gregory C. Allen



AI’s geography of power

While semiconductor manufacturing requires massive physical infrastructure, AI development is proving more geographically fluid but no less geopolitically significant.

“As the United States looks towards a future where the AI systems are not just two, four, or eight times better than today but ten thousand times better than today, they’re looking at a future that they don’t want to invite China to,” Allen observes.

Yet China’s DeepSeek breakthrough in January 2025 (developing a cutting-edge AI model for just \$6 million versus the billions spent by US competitors) demonstrated that innovation doesn’t always correlate with spending. The development sent shockwaves through Silicon Valley and forced a fundamental reassessment of competitive advantages in AI development.

“DeepSeek has been transformative for the morale of the Chinese tech ecosystem,” Allen notes. “That’s unambiguous. You’re starting to see a lot of excitement again about Chinese tech companies. Whether or not that’s warranted, it is real. And so entrepreneurs are moving and feeling like they have momentum again.”

The human cost of tech competition

Behind the billions in investment and grand strategic moves lie communities whose lives are being fundamentally reshaped by these technological and geopolitical forces.

“I think countries also recognise the importance that [they] will play in these new technologies, in their economic future, [and] in their national security future,” Sheehan says. And yet the human impact varies dramatically depending on geography and industry position.

Trump’s April 2025 “Liberation Day” tariffs hit 145% before Geneva talks produced a temporary 90-day truce. For African policymakers watching this chaos, the lesson is clear: diversify dependencies now.

“Washington DC says we need to stop China, but the question we ask in China is: when will the US finally come to terms with the fact that stopping China is not really possible?” Jin poses.

‘DeepSeek has been transformative.’

For researchers and engineers, the new geography of technology has created both opportunities and constraints. European tech workers are finding new opportunities as EU investments in digital sovereignty create demand for local talent. But the fragmentation of global research networks, particularly in AI and semiconductors, means that collaborations that once spanned continents are becoming more difficult to maintain.

“I don’t agree that it’s simply ‘anywhere but China,’” Jin explains. “I think what countries want is to avoid being at the mercy of any single country. There’s a huge undercurrent of diversification in payment systems and currencies happening outside the core Western countries. They don’t want to be at the mercy of the US either.”

In the DRC’s cobalt mines, local processing created thousands of jobs but working conditions remain exploitative. African software developers find remote work opportunities in the global AI economy but can’t access cutting-edge training or computing power. Morocco’s battery plants will employ skilled technicians, but Zimbabwe’s lithium-crushing operations employ manual labourers. In other words, the geography of tech power determines which jobs Africa gets.

‘What countries want is to avoid being at the mercy of any single country.’

“For the first time, science and technology have been listed as an absolute national priority,” Jin notes. “Just imagine all the money that’s spent on importing chips. All that demand is now redirected to domestic companies and domestic industries where they feel an existential crisis.”

Nairobi’s electronics manufacturers face the same interrogation. Some position themselves as neutral assemblers serving both ecosystems. Others worry they’ll fail both sides’ requirements and lose all business. The African Continental Free Trade Area, creating a \$3.4 trillion economic bloc, could provide negotiating leverage but only if African countries coordinate rather than compete for scraps from either superpower.

A world in transition

Africa’s history warns against optimism. During the Cold War, both superpowers courted African allies with investment promises and infrastructure projects. When tensions eased, those commitments evaporated.

“I want to say that, at least in the high-tech field, decoupling has been China’s policy for quite some time,” Allen observes, pointing to how Chinese companies systematically pushed out foreign competitors in industries such as solar panels and



electric vehicles after initially welcoming foreign investment and technology transfer. “It’s just on their terms and at their convenience.”

The African Continental Free Trade Area creates potential leverage but implementation lags. Infrastructure bottlenecks remain severe and power reliability is inconsistent. The \$300 billion in global semiconductor investments flowing into Asia, Europe, and North America largely bypasses Africa. The question is whether the continent can translate mineral leverage into industrial partnership before that window closes.

“We’re seeing global fragmentation, regionalism, and so forth,” Jin notes. “But if we look at this throughout history, whether it’s the Napoleonic blockades or the Spanish blockades of the Portuguese, they’ve accelerated innovation because it’s out of a necessity.”

As supply chains reorganise and new technological hubs emerge, millions of workers worldwide are finding their professional lives shaped by decisions made in Washington, Beijing, and Brussels. In this way, the new geography of power goes beyond trade flows and investment patterns to impact the human communities that will rise and fall with the shifting technological landscape.

The transformation is far from complete. As Allen warns, “this geopolitical situation that we’re in is really tough for entities that can’t create their own stability and predictability”. For the communities caught in the middle of this great reshuffling, the challenge will be adapting to a world where technology and geopolitics have become inseparably intertwined, redrawing not just the map of global power but the daily lives of millions of people around the world. **GIBS**

Jerry Sheehan

