Pierre Beckouche
Geography professor at Université Paris 1 Panthéon-Sorbonne

ARTIFICIAL INTELLIGENCE IS LEADING US TOWARDS A NEW BIPOLAR GEOPOLITICAL ORDER

The digital revolution is, rightly, seen as a global phenomenon. It has been one of the drivers of globalization and is sometimes even described as a new spirit capable of—finally !—bringing together civilizations that history had long alternated between cooperation and war. But the unexpected development is that digitalization now appears to be undermining globalization. This has become more apparent in recent years, as artificial intelligence (AI) has turned into a core foundation of innovation, business efficiency, and military power. AI is taking on an ever-greater role in international power relations, both globally and regionally : it fuels Russia's domination of its peripheries, bolsters China's strength in East Asia, while in the West, American AI is turning the EU into a dependent ally (Section 1). The pace of change is so fast that the Sino-American bipolarization of AI is already reshaping the way we analyze geoeconomics and geopolitics (Section 2). We even have to wonder whether this bipolarization could trigger a deeper fragmentation of the digital world itself (Section 3).

1. Digitalization is challenging both globalization and regional integration

After World War II, the international order evolved along two paths. The most obvious was globalization, but another powerful trend was regional integration : trade among neighboring countries within large regions expanded even faster, beginning with the European Community in Europe, and later, from the 1980s, in other parts of the world. International treaties consolidated this regionalization. In 1992, the Maastricht Treaty transformed the European Economic Community into the European Union, with a common foreign and security policy, European citizenship, and a shared currency. Similar moves took place elsewhere : in the Americas with Mercosur (1991), NAFTA (1992), and the Free Trade Area of the Americas project (1994) ; in East Asia from the ASEAN+3 agreement in 2000 to China's push that culminated in the Regional Comprehensive Economic Partnership in 2020; in the post-Soviet world with the Collective Security Treaty Organization (CSTO, 1992) and the Eurasian Economic Union (2014). Africa also saw regional integration with ECOWAS in West Africa, the East African Community, the Southern African Development Community, and the signing in 2021 of the African Continental Free Trade Area (AfCFTA).

But this dialectic is now breaking down. Globalization is challenged by climate change, which favors local or national production ("deglobalization") ; by virological and bacteriological risks such as the Covid-19 pandemic (2020-2022) ; by the failure of global regulation ; and by the growing distance from the West openly expressed by formerly colonized countries under the label "Global South." Regional integration, too, is under strain, from the rise of the BRICS, particularly China, to the resurgence of nationalism, exemplified by Donald Trump's return to power. Signs of regional *dis*integration are visible : the China-Taiwan conflict in East Asia ; Brexit (2016) within the EU [Grasland 2021] ; and the breakdown of Europe's partnerships with its neighbors. To the south, the Arab Spring (2011) delivered a fatal blow to the Union for the Mediterranean launched in 2008 ; to the east, the war in Ukraine (since 2014, escalating in 2022) buried the EU-Russia Strategic Partnership once built after the fall of the USSR [Beckouche and Richard 2023].

The AI stage of digitalization raises two questions : will it redraw the world's regions, marginalizing those unable to master AI ? More fundamentally, are both globalization and regionalization becoming secondary compared to the emerging Sino-American duopoly over the digital space ?

Digitalization complicates the globalization-regionalization equation because different powers promote rival visions.

Firstly, the United States sees the internet as a space of global free circulation—under its watchful tutelage. Its dominance is systemic : U.S. standards govern microprocessors and the software that runs on them, and its control over the ocean of data underpins its supremacy in AI. One word captures this : the "silicolonization" of the world [Sadin 2016].
Secondly, Russia and China push for state control, both to counter U.S. influence and to keep a grip on domestic dissent. "Runet" refers to the Russian-language internet. Since 2013, Moscow has used digital tools to bind the Donbass and Crimea closer to Russia. Alongside gas diplomacy and the CSTO, this has been a key instrument of Russian influence over former Soviet peripheries. The 2019 "sovereign Runet law" gives the state the power to filter all data entering or leaving Russia and, if necessary, to isolate the Russian internet—along with its peripheries—from the rest of the world [Limonier 2023].

Russia wants to build its own equivalents of the American GAFAM [1] and plug the missing links in its digital sovereignty. Well ahead of many leaders, Vladimir Putin warned as early as 2017, telling students at Yaroslavl University : "Whoever becomes the leader in AI will become the ruler of the world."

[1] Gafam : Google (now Alphabet), Apple, Facebook (now Meta), Amazon, Microsoft, to which we now add Nvidia.

China follows a similar logic, but with far greater resources : technological (lead in 6G mobile networks, quantum technologies [2], and cryptography), industrial (BATX platforms [3] , development of domestic operating systems), financial, and political (the "Great Firewall" controlling data flows and blocking IP addresses, mass surveillance of online activity).
Chinese firms already account for 15% of global corporate R&D in the digital sector, a share rising fast, compared to 62% for the U.S., and less than 10% for Europe whose share is shrinking [Lhuillery 2021]. Russia lags far behind.

The European Union has a specific approach. Despite hosting the origins of several digital innovations, Europe pays the price of a financial culture less open to risk and of the absence of a unified strategy. Unlike with Airbus in aerospace, the EU has failed to create a regional champion in digital technologies. And when action does occur at EU level, it is more focused on protecting users than on fostering entrepreneurial innovation : the General Data Protection Regulation (GDPR, 2018) ; the Data Act on the data we generate with connected devices (2023) ; the Digital Markets Act to curb Big Tech's monopolistic abuses (2023) ; the Digital Services Act to tackle disinformation and hate speech (2023) ; and the Artificial Intelligence Act (2024), explicitly described as "human-centered, ethical, sustainable, and inclusive." Yet in semiconductors, Europe represents only 8% of global production. Its Gaia-X cloud project, launched in 2020, brings together firms like Amazon, Microsoft, and Google (which together control 69% of the European cloud market), alongside Alibaba and Huawei. In short : Europe has good rules ; China and the U.S. have Big Tech.

Regulation itself is a battlefield. Washington challenges EU rules on two fronts. First, by asserting its own extraterritorial regulation : since 2018, the Cloud Act (Clarifying Lawful Overseas Use of Data) allows the U.S. government to demand emails, documents, and personal data from any American company, even if the servers are in Europe—directly contradicting Article 48 of the GDPR. Hosting foreign-owned data centers on European soil thus undermines what is now called AI compute sovereignty [Hawkins 2025]. Secondly, by denouncing what it sees as regulatory "excess." In early 2025, President Trump, "to free innovation," repealed Executive Order 14110 signed by Joe Biden in 2023 to safeguard privacy in the age of AI.

[2] Compared to current computing, quantum computing goes down to the level of particles (atoms and electrons) to process information infinitely faster and with much lower energy consumption.
[3] BATX : Baidu, Alibaba, Tencent, and Xiaomi, to which Huawei is now added.

2. AI is Driving Us Toward Bipolarization

The realities of AI are redrawing the geopolitical map. Russia's AI program faces deep structural weaknesses, both in semiconductors and in algorithms. The war in Ukraine has channeled Russian AI toward military uses—often with mixed results, except in the field of disinformation. Since 2022, the brain drain of Russian AI talent has accelerated, including toward China [Nocetti 2025].

Europe, despite its abundant electricity supply (vital for the exponential growth of computing), despite its digital networks, and its scientific expertise, still has not launched its own AI strategy [Babinet 2025]. It suffers from a lack of financial integration, weak R&D partnerships, and, more broadly, the absence of a genuine regional strategy, even among the four or five leading European countries. Brexit has proven especially costly, since the UK, far ahead of Germany, is Europe's main AI power alongside France. The EU's AI Act has the virtue of providing a regional regulatory framework, but at a price : it is estimated to cost the European economy €31 billion and reduce AI investment by 20% [Mueller 2021]. By July 2025, some fifty major corporations and leading European tech firms were already calling on the Commission to suspend the Act's rollout—set for summer 2025 for general AI and summer 2026 for strategic sectors—arguing that it is too hostile to innovation. Both large firms and start-ups would be forced to assess the risk level their AI systems might pose to humans [4]. The EU trains more AI engineers than the U.S. and far more than China, but many end up working on the American job market. On a per capita basis, France invests only one-third as much in AI as the U.S. [Aghion 2024].

With Russia falling behind, Japan having partly missed the AI shift, and the EU drifting into U.S. dependency, the United States is now positioned for an open confrontation with China. In 2017, Washington banned the sale of semiconductors and operating systems to Chinese companies by U.S. firms, and in 2020 extended the ban to companies worldwide. Huawei was pushed out of the American smartphone market over fears of data collection risks. Since 2024, U.S. funds have also been barred from investing in Chinese firms active in semiconductors, quantum computing, and other key ingredients of AI.

The regulatory battle around AI illustrates this new geopolitics. China is extending its global influence over rule-setting. U.S. Big Tech and President Trump share the view that loosening public regulation is essential to withstand China's rise. One flashpoint is access to copyright-protected data. Trump's July 2025 AI Action Plan, designed to impose U.S. standards abroad and guarantee American global leadership, secured victory for the notion of *Fair Use* : this flexible interpretation of copyright law ensures AI firms unlimited access to training data.

[4] Open letter "Stop-the-Clock" to Ursula von der Leyen, published online on July 3, 2025, by the EU AI Champions Initiative collective.

"The federal government can both secure Americans' freedom to learn from AI, and avoid forfeiting our AI lead to China" declared OpenAI, the world leader in generative AI, which has been sounding the alarm against state-level initiatives such as California's SB-1047, which would impose strict guardrails on AI. "If the PR China's developers have unfettered access to data and American companies are left without fair use access, the race for AI is effectively over." The California-based firm also warns against EU-style regulation, which it sees as damaging to competitiveness vis-à-vis China : "the U.S. must lead global discussions on copyright and AI, lest less innovative countries impose their legal frameworks on American companies" [5] . Trump's plan directly responds to this demand.

China, whose declared goal is to become the world's leading AI power by 2030, is investing on a massive scale. This ranges from Huawei's development of GPUs [6] since U.S. sanctions cut off access to Nvidia leading chips, to generative AI models such as the spectacular success of DeepSeek in early 2025. Since 2019, China has published more scientific papers on AI than the U.S. Between 2013 and 2023, private AI investment totaled $336 billion in the U.S., $104 billion in China, and only $50 billion in Western Europe [Perrault and Clark 2024]. China is also more credible than Europe in launching a satellite fleet able to rival the U.S., whose importance was underscored on the Ukrainian battlefield when Elon Musk first offered Ukraine free high-speed internet via Starlink satellites, only to later deactivate service within 100 km of the Crimean coast to prevent an attack on a Russian naval base. Only China and the U.S. are capable of orchestrating this winning duo of AI and satellites : satellites equipped with AI to select relevant images and to monitor enemy AI networks ; swarms of drones guided by satellite AI to avoid reliance on human intelligence links ; and the automated processing of the immense flow of climate, agricultural, logistical, or military satellite data.

All this shows how geopolitical realities are outpacing the hopeful vision of a globalized AI for development and inclusion. In 2024, Bill Gates predicted that AI adoption would be widespread across the Global North by 2025 and in the Global South by 2026. He was correct—but Africa, with 17% of the world's population, produces less than 1% of its AI. And the outlook is worsening : African researchers face time and bandwidth restrictions on internet access and must rent supercomputing resources from leading powers. Latin America is only slightly better off.

[5] See Nicolas Gary, "American AI Demands a World Without Limits : It's Us or China," Les Univers du livre, News, March 16, 2025. In 2016, the Fair Use argument prevailed after ten years of legal proceedings against Google Books. OpenAI's stance follows this line : its AI models would not reproduce works but rather extract linguistic and contextual structures, using existing works to create something new. In France, the Société des gens de lettres, the National Union of Authors and Composers, and the National Publishers' Union are suing Meta for "copyright infringement" and "unfair economic advantage" to feed its generative AI model, see Nicole Vulser, "Authors and Publishers Sue Meta for Copyright Violation," Le Monde, March 12, 2025.
[6] Graphics Processing Units (GPUs) are the fastest microprocessors, making them crucial for AI. Processors from the American company Nvidia power the largest AI-focused data centers in the world.

3. Looking ahead : will AI drive a Sino-American digital divergence?

Since 2021, conferences, forums, and summits on the need for global AI regulation have multiplied. But like the European AI Act, they stall because (i) they are too cacophonous to deliver shared norms and decisions, (ii) they barely involve developing countries, (iii) they scarcely touch on military AI, and above all (iv) they remain under the heavy influence of the two leading powers [7] .

Sino-American dominance in the digital sphere could end up recreating a world order reminiscent of the Cold War, with two superpowers controlling the globe, especially the emerging countries ; India might seem a partial exception, but even there AI is largely driven by U.S. Big Tech. The United Nations could once again be sidelined. In July 2023, the UN Secretary-General pledged to ban AI from warfare. Yet at the same moment, the U.S. Air Force was announcing the development of swarms of drones and AI-piloted fighter jets designed to deliver extreme responsiveness on the battlefield. Since 2020, AI pilots have consistently beaten human pilots in simulated dogfights, and since 2022, China's military has reported similar results. The world's largest defense contractors are integrating AI into their weapons systems. With drones and missiles now guided—or even controlled outright—by intelligent systems, the wars in Ukraine [8] and between Iran and Israel have made it clear : AI is becoming the weapon of the powerful.

Europeans are beginning to realize this. At the February 2025 AI Summit in Paris, France pledged €109 billion, while the EU launched InvestAI, a public-private plan worth €50 billion from Brussels, hoping to leverage €150 billion in private funding. But these sums pale in comparison to the several hundreds of billions of dollars that U.S. GAFAM or Chinese BATX are pouring into data centers for generative AI ; this sheer accumulation and combination of resources are creating a skills gap at breakneck speed, an exponential gap unseen in any previous technological shift. The emerging bipolar geopolitics is thus likely to privilege this exponential race for efficiency over any concern for fair regulation.
Mega-projects in the U.S. are increasingly located on American soil to secure data. Hyperscalers such as Amazon Web Services, Microsoft Azure, and Google Cloud argue that the real issue is not regulation versus corporate profits, but rather a clash between an American AI built on individual freedoms and a Chinese AI designed to serve state strategy [Alexandre 2023 ; Beckouche 2025].

[7] For example, in 2022, the Irish and Austrian delegation heads on the ISO Committee for AI standardization were employees of Huawei, while the British and German delegation heads were employees of Microsoft. See the excellent report on global AI governance by Laure de Roucy-Rochegonde [2025].
[8] In 2025, the Russian MS001 drone, an upgraded version of the Iranian Shahed-136 drone, is reported to be equipped with autonomous AI striking capability thanks to the Nvidia "Jetson Orin" kit, originally developed for civilian use. The drone's ability to detect targets, prioritize, and act without human assistance violates the United Nations principle that humans must retain ultimate control over lethal force. See ZDNET, "In Ukraine, Russian Autonomous Drones Equipped with Nvidia AI Raise Fears of the Worst," 07/08/2025.

Beyond this battle for control, it is not impossible that access to data, the content generated, and the societal impact of AI will diverge between the U.S. and China. This goes further than the familiar differences in public security, facial recognition, population control, human rights, or government criticism. It stems first from differences in AI cultures : more exploratory in the U.S., more pragmatic in China with a stronger focus on efficiency and alignment with official goals. But more importantly, the ways AI processes information could generate diverging outcomes. If data pools become increasingly sealed off between the American and Chinese universes, if their AI methods diverge, if their educational AI tools from early childhood differ, then the automated decisions and actions produced could lead to systemic results that push the two giants further apart. Even in a world more interconnected than ever, artificial intelligence could therefore usher in new kinds of geoeconomics and geopolitics dominated by bipolarization. The cultural divide might become as profound as the clash between capitalism and communism in the 20th century. The divergence would not lie in the digitalization of Chinese and American societies, but in how AI itself guides that digitalization.

*

Globalization and regionalization will certainly not disappear, but they will become secondary and transformed. In East Asia, Japan's lag in AI will accelerate Chinese predominance. Emerging economies in the region, trading with the U.S. and the rest of the world while under Chinese influence, have already started finding ways around the U.S. digital embargo against China. In Europe, declarations of digital and military autonomy have multiplied since early 2025, but with little coherence or coordination to show for it.

References :

Aghion, Ph. (ed.), 2024. "IA : notre ambition pour la France", report of the Artificial Intelligence Commission to the Prime Minister, Paris.

Alexandre, O., 2023. La Tech. Quand la Silicon Valley refait le monde. Paris, Le Seuil.

Babinet, G., 2025. Series "L'intelligence artificielle, une arme géopolitique". Paris, France Culture.

Beckouche, P., Richard, Y. (eds.), 2023. Regionalization of the world. Comparing regional integrations. London, ISTE-Wiley.

Beckouche, P., 2025. Homo Externatus, l'homme procédural. La victoire de l'arithmos sur le logos. Paris, Classiques Garnier.

De Roucy-Rochegonde, L., 2025. "Promesses artificielles ou régulation réelle ? Inventer la gouvernance mondiale de l'IA". Paris, Études de l'Ifri.

Grasland, C., Toureille, E., Leconte, R., Severo, M, 2021. "Mapping International Geopolitical Agenda. Continuing National Conceptions of the Emerging European Crisis". Frontiers in Big Data, 2021, 4, ⟨10.3389/fdata.2021.718809⟩. ⟨halshs-03506950⟩

Hawkins, Z., Lehdonvirta, V., Wu, B., 2025. "AI Compute Sovereignty: Infrastructure Control Across Territories, Cloud Providers, and Accelerators", SSRN. Oxford University, https://ssrn.com/abstract=5312977

Lhuillery, S., et al., 2021. "La R&D des groupes français et le CIR", Neoma, Report to the National Commission for the Assessment of Innovation Policies. Paris, France Stratégie.

Limonier, K., 2023. "Le Runet, région du cyberespace ?", in P. Beckouche et Y. Richard, 2023.

Mueller, B., 2021. "How Much Will the Artificial Intelligence Act Cost Europe ?". Washington, Center for Data Innovation.

Nocetti, J., 2025. Series "L'intelligence artificielle, une arme géopolitique". Paris, France Culture.

Perrault, R., Clark, J. (eds.), 2024. "Artificial Intelligence Index Report 2024", Institute for Human-Centered Artificial Intelligence. Stanford University.

Sadin, É., 2016. La silicolonisation du monde. L'irrésistible ascension du libéralisme numérique. Paris, L'Echappée.