



# The JAMESTOWN FOUNDATION

### VOLUME 25 • ISSUE 2• JANUARY 31, 2025

### IN THIS ISSUE:

Beijing Woos Washington While Advancing New International Order  By Arran Hope	op.2–6
Star Hostage: TSMC, China's Drive to Conquer Taiwan, and the Race to Win Al Super By Matthew Brazil and Matthew Gabriel Cazel Brazil	•
Roiling in the Deep: PRC Pushes New Deep-Sea Order	
By Sunny Cheung and Owen Aup	p.17–23
Harnessing Hydropower, Sparking Tensions: PRC Mega-Dam and India's Water Securit  By Genevieve Donnellon-May	=
New Year's Gala Celebrates Tech and International Outlook	
By Linda Zhang	pp.31–35

### **Beijing Woos Washington While Advancing New International Order**





Vice President Han Zheng meets with representatives of the U.S. business community in Washington, D.C. (Source: <u>PRC Embassy to the United States</u>)

### **Executive Summary:**

- The PRC is tempering its criticisms of the United States and other powerful countries in the early part of the Trump administration in a seeming attempt to foster a stable external environment while it continues to enhance its national power.
- Official PRC media have mostly refused to criticize President Trump's rhetoric regarding territorial expansion, in contrast to non-official media and other global coverage of the new president's inaugural address.
- Beijing's support of Russia's invasion of Ukraine, as well as its frequently coercive and expansionist
  activities along its continental and maritime borders belie rhetoric that it is a contributor to world peace.

Buried on page 16 of the January 21 edition of the *People's Daily* under a story about an international textiles trade fair in Frankfurt, is the report on the inauguration of U.S. President Donald Trump (*People's Daily*, January 21). While page 16 in that day's edition is the first of two pages covering international news, it is not unusual for international events to appear closer to the front of the paper—not least when officials of the caliber of former politburo standing committee member and current vice president of the People's Republic of China (PRC) Han Zheng (韩正) are in attendance (MFA, January 21). For instance, page three of the same edition features an interview with Børge Brende, president and CEO of the World Economic Forum (WEF) (*People's Daily*, January 21). By comparison, page two of the *People's Daily* (overseas edition) on January 21, 2021, featured a column by the Ministry of Foreign Affairs about the incoming Biden Administration (*People's Daily*, January 21, 2021).

The message seems clear, even if we cannot know the precise rationale behind it. Eschewing a story that led newspapers around the world that morning is a political signal that the CCP Central Committee no longer feels the need to accord the United States the same respect with which it has done so in the past. This follows from the themes that came out of the Central Foreign Affairs Work Conference back in December 2023, which included a rising diplomatic focus on leadership of the Global South, Beijing's enhanced conviction about its need to shape world events, and Xi's turn away from the aggressive "wolf warrior" diplomacy that had characterized much of his first decade in power (Xinhua, December 28, 2023; China Brief, April 12, 2024). These themes are a useful lens through which to interpret the PRC's approach to the new Trump administration. Underlying them all is an assessment that the United States will feature less prominently in the emerging multipolar and economically globalized world for which Beijing actively advocates. This assessment currently may be more aspirational than material, but the Party nevertheless sees it as the general trend of the times.

The PRC's apparent confidence in both the decline of the United States and its own ability to shape the international environment has been on full display in recent weeks. In the People's Daily coverage of Trump's speech, the article's main point emphasizes that the United States faces a "crisis of confidence (信任危机)" and quotes the President as saying that U.S. society is "almost beyond redemption (几乎无可救药)" (People's Daily, January 21). According to the Ministry of Foreign Affairs readout of his call with U.S. Secretary of State Marco Rubio, Wang Yi (王毅) used unusually assertive language, telling his counterpart that he hopes Rubio will behave himself ("好自为之"), using an idiomatic phrase that is both a warning and an exhortation. Meanwhile, the interview with WEF president Brende published the same day has the former Norwegian politician repeat propaganda lines about the PRC's ideas and actions "helping to rebuild trust in the world ... [and] contribute to the promotion of world peace (帮助世界重建信任 ··· 有助于促进世界和 平) (People's Daily, January 21). More recently, the paper published a discussion by four prominent experts on international relations under the title "China has Always Been a Staunch Defender of the International Order (中国始终是国际秩序的坚定维护者)." In it, the experts talk about the ways in which the PRC approaches multilateral institutions and how the country can lead in issues of global governance. As one of the scholars concludes, "China maintains the current international order and also shapes the future international order (中国维护现行国际秩序,也是塑造未来国际秩序)" (*People's Daily*, January 27).

### **Beijing Tones Down Criticism of United States**

PRC framings of the international order invariably center on the principles set out in the United Nations Charter. The most prominent of these, which the PRC vociferously defends, is the provision in Article Two that the UN is based on the principle of the sovereign equality of all its members. Indeed, in the discussion published in the *People's Daily*, the scholar Wu Hao (吴浩) notes that this is "the most basic and core principle of contemporary international relations (是基于主权平等这一当代国际关系最基本、最核心的原则)" (*People's Daily*, January 27). Officials are frequently quick to decry Western powers who seemingly abuse this principle (Xinhua, May 31, 2020; PRC Embassy to the United States, September 12, 2024).

It is therefore strange that the PRC's official media apparatus has been unusually quiet on Trump's remarks in his inaugural address that the United States "will once again consider itself a growing nation—one that ... expands our territory" (White House, January 20). The Xinhua coverage gives full play to other themes in the speech, and relegates discussion of Trump's expansionist rhetoric to the article's shortest paragraph buried in the middle (Xinhua, January 21). Meanwhile, a short summary of the speech provided by the Global Times bears no mention at all of this rhetoric, and a separate Xinhua piece simply adds a sentence at the bottom of the article quoting Trump as saying, "Greenland is a beautiful place. We need it for international security (格陵兰岛是个美丽的地方。我们需要它来维护国际安全)" (Global Times, January 21; Xinhua, January 21). The topic was given similarly short shrift by Ministry of Foreign Affairs spokesperson Mao Ning, who only addressed it in the last question of a press conference held on January 22, noting only that the PRC had always respected Panama's sovereignty over the Panama Canal and refusing to respond directly to a question about Trump's comments (MFA, January 22).

This contrasts with non-official media channels (and with much of the coverage both within the United States and across the rest of the world). One online essay published by a think tank describes Trump's intentions as "radical (激进)" and "unapologetic (毫不避讳)" (Kunlunce, January 21). Other articles carry headlines that are variations on "Trump's Inaugural Address: Expand U.S. Territory (特朗普发表就职演讲: 将扩张美国 领土)" (Sina News, January 21; 163, January 21). Trump's rhetoric even seems to have emboldened some commentators. One account that posts military-related media, called "Crazy-Warfare Show (军武次位面)," had an article published on nationalist media website Guancha, which concludes by suggesting that if the United States can take over North America, perhaps China should "return to the 'Three Xuan and Six Wei' (凭什么中国不能重回三宣六慰)." This is a reference to a period during the Ming Dynasty when senior officials were sent to southeast Asian countries to set up administrative systems there (Guancha, January This non-official coverage is more reflective of official coverage in the runup to the inauguration. In late December and early January, both the *People's Daily* and Xinhua carried articles criticizing Trump's expansionist plans (*People's Daily*, December 27, 2024; Xinhua, January 9). The one exception found by this author following the inauguration is a piece published on January 21 in Xinhua's weekly Globe (全球) magazine. This article discusses Trump's claims directly, describing them as "shocking statements (雷人言 论)" that constituted his "his first time raising the possibility of using military means to implement territorial

aims (这是他第一次提到动用军事手段以实现领土目标的可能性)," and could "upend modern thinking on international relations (颠覆现代国际关系思想)" (Xinhua, January 21).

### **PRC Sovereignty Insouciance**

The muted official reaction to Trump's rhetoric in his inaugural address has two implications. One conforms with the dialing down of "wolf warrior" rhetoric signaled at the Central Foreign Affairs Work Conference and a desire to reduce friction with powerful and potentially hostile governments since the latter half of 2024. This latter development recently has been seen in the smoothing of relations with India, as evidenced in the recent six-point border consensus and the resumption of international flights (FMPRC, December 18, 2024; MFA, January 27; Zaobao, January 27). It is also evidenced in relations with Japan, with moves toward relaxing seafood imports and walking back concerns about contaminated sea water, and a new agreement on people-to-people exchanges (AP News, September 20, 2024; CGTN, December 25, 2024; MFA, January 23). This softer tone may stem from a desire to stabilize the PRC's international environment amid economic challenges at home, by signaling openness to foreign investment and ensuring market access to PRC exports. A separate reason could be a desire to be seen as a responsible and engaged international player that has the capacity to shape the international order.

The second implication is that there is a growing discomfort in Beijing with its traditional stance on issues of territorial sovereignty. While the concept of sovereignty has provided a useful tool in the past, its interpretation has always had a degree of flexibility since it was adopted from the West in the Qing dynasty.

[1] This flexibility is being pushed to breaking point, most visibly in Beijing's ongoing support for Russia's war in Ukraine, which clearly violates the principles of the UN Charter that the PRC claims to cherish (Eurasia Daily Monitor, September 10, 2024). A closer look at the PRC's own borders suggests that its desire to avoid discussion of Trump's rhetoric on territorial expansion may also stem from a preference to avoid acknowledging its own recent history of expansionism.

A cursory look at the PRC's borders suggests that it has, whether through coercion or other means, acquired territory from the majority of its neighbors. In terms of its land borders—which it shares with 14 other countries—the PRC in recent years has had border disputes with neighbors including at least India, Bhutan, Kyrgyzstan, and Nepal (The Hindu, August 30, 2023; China Brief, February 2, 2024; Jamestown, April 12, 2024; The New York Times, October 12, 2024; USIP, October 31, 2024). It has also heavily built up infrastructure on its side of the border with most of these countries, as well as with Russia and Tajikistan (Wall Street Journal), July 3, 2024; Eurasia Daily Monitor, July 18, 2024). In the maritime domain, Beijing continues to press its aggressive claims throughout the South and East China Seas. All of its territorial assertions are supported by Party-state-sponsored historical research, which do not reflect international law (U.S. State Department, December 5, 2014). These assertions have expanded over the years, as Beijing has become better able to enforce its claims. A high point came last summer in Beijing's approach to the Philippines, with actions that were interpreted by some as an act of war and nearly triggered the Philippines' mutual defense treaty with the United States (China Brief, June 21, 2024). Though tensions in the South China Seas have reduced somewhat in the last several months, Beijing continues to perform coercive actions in the region (Reuters, January 25).

### Conclusion

In the scholarly discussion by published by the *People's Daily* this week, one international relations expert concluded by saying that "it is essential to continuously enhance comprehensive national power, consolidate capabilities and foundations, continuously reap the dividends of Chinese-style modernization, and provide a solid material foundation for playing a greater role in global governance (陈东晓: ··· 要持续增强综合国力,夯实能力和基础,不断释放中国式现代化的红利,为在全球治理中发挥更大作用提供坚实的物质基础)" (*People's Daily*, January 27). What this entails in practice may require different approaches with different actors at different times. Nevertheless, this overriding ambition is a useful framework in which to analyze Beijing's actions and can explain apparent inconsistencies in its overtures to "global south" countries, the West, Russia, or its immediate neighbors. In this way, Beijing is adhering to the priorities set out at the Central Foreign Affairs Work Conference; and this is unlikely to change soon.

Arran Hope is the editor of China Brief.

#### **Notes**

[1] For more on this history, see Carrai, Maria Adele. Sovereignty in China: A Genealogy of a Concept since 1840. Cambridge University Press; 2019.

Star Hostage: TSMC, China's Drive to Conquer Taiwan, and the Race to Win Al Superiority

By Matthew Brazil and Matthew Gabriel Cazel Brazil [1]



TSMC's Fab 21 under construction in Phoenix, Arizona in November 2023. (Source: Wikipedia)

### **Executive Summary:**

- Talent flows uncovered between Taiwan Semiconductor Manufacturing Company's (TSMC) operations in the People's Republic of China (PRC) and several sanctioned PRC firms constitute risks to the company's position at the leading edge of the global chip industry.
- TSMC's transition to encompass other parts of the value chain, ostensibly to avoid monopoly concerns, exacerbates these risks.
- If TSMC cedes its dominance, the deterrent effect of Taiwan's "silicon shield" would be greatly reduced. It could also affect Washington's support for Taiwan.
- The company has begun to diversify by setting up fabrication plants in the United States, in an effort that has been encouraged by its main customers, including Western tech giants such as Apple and Nvidia.

Taiwan Semiconductor Manufacturing Company (TSMC), one of the most important firms globally, is evolving. In a quarterly earnings call last summer, the company announced a shift to a new "Foundry 2.0" model. This will see the company expand from its traditional wheelhouse of fabricating semiconductors to encompass packaging, testing, mask-making, and other parts of the value chain (TSMC, July 18, 2024). This shift comes with risks, as it is not guaranteed to be executed successfully.

The need to evolve was made clear on January 27, when U.S. President Donald Trump suggested imposing tariffs on imported chips to force manufacturing to return to the United States (<u>C-SPAN</u>, January 27). In response, Taiwan's government stated that the current situation was "a win-win business model for Taiwan and U.S. industries" (<u>Reuters</u>, January 28; <u>CNA</u>, January 28).

TSMC has already begun diversifying, setting up plants in the United States and elsewhere. Much of this has less to do with the United States than with the People's Republic of China (PRC). Under the leadership of Xi Jinping, the PRC has insisted on a path of potentially violent unification with Taiwan, which could jeopardize the company's ability to operate. Therefore, TSMC has pursued diversification as a hedging strategy, a course of action that is also encouraged by its primary customers.

TSMC is a key target for the PRC. Xi Jinping has, in recent years, begun to pivot the country toward an economic model that focuses on achieving dominance in several key technologies that he sees as crucial for achieving "Chinese-style modernization (中国式现代化)" and the country's "great rejuvenation (伟大复兴)." Advanced semiconductor manufacturing is one such technology, and Beijing has a long history of engaging in various means—both licit and illicit—to acquire the technologies it wants (China Brief, December 6).

### TSMC's Revolving Door With Sanctioned PRC Firms

TSMC has a little-explored vulnerability that could reduce its current lead over PRC competitors. A flow of talent exists between the several fabrication plants ("fabs") the company maintains in the PRC and those of leading PRC firms, as a database compiled by the authors shows (see Appendix below). Some of the PRC firms are sanctioned by the U.S. Department of the Treasury for violating export controls or providing technology to the People's Liberation Army (PLA), while others are on the U.S. Department of Commerce Entity List.

Several foreign and Taiwanese semiconductor manufacturers have established a presence in the PRC to gain access to its growing market. Starting with Motorola in the 1990s, On Semiconductor, Intel, Samsung, SK Hynix, and UMC have built fabs in cities such as Leshan, Shenzhen, Suzhou, Xi'an, Dalian, Chengdu, and Xiamen (Semiconductor Industry Overview, May 13, 2023).

Among these, TSMC's fabs appear to be the most resilient and advanced. The company's Fab 10 in Shanghai is its older front-end plant, producing 200mm wafers. In Nanjing, Fab 16 began producing 300mm wafers at the 16nm node in mid-2018. The latter is one of the most advanced lines in the PRC. Though TSMC does not release figures regarding its "success rate" (the percentage of usable chips per wafer), Fab

16's rapid startup and steep ramping up of production indicate excellent commercial viability (<u>EE Focus</u>, May 31, 2018; <u>EETimes Taiwan</u>, November 1, 2018).

Perhaps because of TSMC's high-quality advanced manufacturing, there appears to be a significant movement of engineers and support personnel between TSMC's PRC fabs and those owned by PRC firms, including ones serving sanctioned entities. Such talent traffic between tech companies is not unusual, but TSMC's status as one of the two most sophisticated chip manufacturers in the PRC makes it significant to the the country's advances in semiconductor technology.

A limited examination of profiles on MaiMai.cn (脉脉), a PRC-based platform similar in structure and purpose to LinkedIn, shows significant personnel turnover between TSMC and Huawei (Maimai, accessed January 28). Even without a MaiMai paid account, which requires a PRC phone number and credit card, we could observe dozens of former TSMC specialists and experts employed at Huawei in technical roles like R&D engineering, etching, photolithography, and yield engineering. The Appendix attached to this article displays some of the findings. Also apparent in the talent marketplace is that former Huawei HR recruiters, such as Sun Yichao (孙艺超), are working at TSMC China and possibly orchestrating a pipeline of talented engineers and specialists between the two firms.

Former TSMC engineers and technical experts can also be found at several other leading PRC firms under U.S. government sanctions. These include Changxin Memory Technologies Inc. (CXMT; 长鑫存储技术), Yangtze Memory Technology Co. (YMTC; 长江存储科技), Advanced Micro-Fabrication Equipment (AMEC; 中微半导体设备), and SiEn Integrated Circuit (芯恩(青岛)集成电路). (Although AMEC was removed from the list of "Entities Identified as Chinese Military Companies Operating in the United States," in late December 2024, it remains on the Department of Commerce's Entity List.)

Some former TSMC China employees on LinkedIn and Maimai list their current location as Hangzhou, Zhejiang Province, but leave their current employer unlisted or private. Hangzhou is home to the PRC-funded Hangzhou's Chengxi Science and Technology Innovation Corridor (城西科创大走廊), a special development zone in Zhejiang Province funded and endorsed by the Ministry of Science and Technology, where dozens of defense-linked technology companies are nurtured and subsidized (Hangzhou CCP Municipal Committee, undated).

State-operated umbrella organizations in Hangzhou, like Zhijiang Laboratory (之江实验室), host recruiting events with the explicitly stated goal of bringing "High-Level Talent (高层次人才)" (that is, ethnic Chinese who worked in or completed advanced degrees in sensitive STEM-related fields) back to the mainland. In a typical event to recruit such talent, Zhijiang Labs hosted the 2024 Al Computing Postdoctoral Academic Exchange Summit (2024年"智能计算"博士后学术交流活动) at its headquarters in Hangzhou over three days in late August. The event, organized jointly by the PRC Ministry of Human Resources, the Zhejiang Provincial Department of Human Resources and Social Security, and Zhijiang Laboratory, had the theme "Intelligent Computing Driving Tech Innovation (智能计算推动科技创新)." Many such events are held

each year within the PRC specifically targeting ethnic Chinese students and ethnic Chinese employees working and studying abroad for recruitment into special development zones (Zhijiang Labs, <u>July 10, 2024</u>; <u>October 13, 2024</u>; <u>Hangzhou Human Resources Bureau</u>, undated).

Besides rank-and-file engineers from TSMC migrating to sanctioned PRC entities, there are multiple cases where former high-level TSMC employees left positions in Taiwan to work or do business in the PRC. Notably, Lin Zhengxun (林政勋), a photolithography and etching expert with over 25 years of experience at TSMC and California-based Lam Research, became CEO of Anhui Xinquan Semiconductor (安徽芯泉半导体) in June 2024. The company is an industrial manufacturer in Anhui province that appears to specialize in semiconductor refrigeration applications and etching chemicals for semiconductor manufacture (LinkedIn, accessed January 28). Another prominent example is Zhang Rujing (张汝京), the engineer who founded SMIC (中芯国际), the PRC's answer to TSMC. Zhang was a former senior TSMC employee who left Taiwan for the mainland in 2000, bringing know-how that led to successful lawsuits by TSMC in 2003, 2006, and 2009 for patent infringement and theft of trade secrets (Jiemian News, May 8, 2019; Ts'aihsun Magazine, February 5, 2020).

### Additional Risks Restructuring, PRC Threats

Beyond ceding crucial information and skills to competitors in the PRC via personnel movements, TSMC faces two additional risks. First, if TSMC were to stumble in its attempt to expand into other parts of the value chain, detailed below, a slowdown in technology advancement worldwide could ensue, caused by a dwindling chip supply and steep price increases on their products. This would negatively impact the company's fortunes as well as those of its customers. Second, in the event of a war over Taiwan, TSMC's fabs would be damaged, perhaps irreparably, which would also severely affect the global supply of leading-edge chips.

### 'Foundry 2.0': An Ambitious Gamble

TSMC operates in a competitive semiconductor foundry market with many other players. However, some have posited that the firm acts like a monopoly because it dominates the fabrication of the most advanced chips, the 3nm premier versions of which were all booked in advance by Apple in 2023 (<a href="PCGamer.com">PCGamer.com</a>, August 10, 2023; <a href="Sina Finance">Sina Finance</a>, September 19, 2024) Chris Miller, author of the 2022 book <a href="Chip War, the Fight for the World's Most Critical Technology">Critical Technology</a>, has said that the company is "right to be concerned about antitrust issues" (American Economic Liberties Project, <a href="February 6">February 6</a>, 2024; <a href="April 8">April 8</a>, 2024; <a href="Washington Times">Washington Times</a>, January 12). TSMC currently holds 62 percent of the revenue in the global semiconductor foundry market, a share that is expected to grow to 66 percent by 2025 (<a href="IDC">IDC</a>, December 12, 2024; <a href="FTC">FTC</a>, undated). Its closest competitor, Samsung, commands only about 11.5 percent of market revenue. Intel Foundry Services did not make the top ten in revenue for 2024 (<a href="EE News Europe">EE News Europe</a>, December 9, 2024).

Life at the cutting edge is a different story. TSMC is dominant, with a market share of 70–80 percent in 5nm technology, expected to exceed 90 percent for 3nm, covering as customers nearly all major players such as Apple and Nvidia (<u>Trendforce</u>, April 8, 2024). As a whole, Taiwan accounts for 18 percent of global semiconductor manufacturing capacity and 92 percent of the world's most advanced semiconductors. [2]

Artificial intelligence (AI) drives growth in this market as demand soars to fabricate the component chips within each advanced GPU, including the device core and the high bandwidth memory chips needed to support it (Nvidia H100 Datasheet, undated).

Figure 1: Top Ten Foundries by Revenue and Market Share in Third Quarter 2024 (\$ millions)

Ranking	Company	Revenue			Market Share	
		3Q24	2024	QoQ	3Q24	2Q24
1	TSMC	23,527	20,819	13.0%	64.9%	62.3%
2	Samsung	3,357	3,833	-12.4%	9.3%	11.5%
3	SMIC	2,171	1,901	14.2%	6.0%	5.7%
4	UMC	1,873	1,756	6.7%	5.2%	5.3%
5	GlobalFoundries	1,739	1,632	6.6%	4.8%	4.9%
6	Huahong Group	799	708	12.8%	2.2%	2.1%
7	Tower	371	351	5.6%	1.0%	1.1%
8	VIS	366	342	6.9%	1.0%	1.0%
9	PSMC	336	320	4.9%	0.9%	1.0%
10	Nexchip	332	300	10.7%	0.9%	0.9%
	Total of Top 10	34,869	31,962	9.1%	96%	96%

(Source: TrendForce, December 5, 2024) [2]

Taiwan's dominance, and that of TSMC, has attracted much attention. If TSMC suddenly became unavailable, all its customers would be stuck in limbo and unable to ship products to customers. If high-end production were a separate market, more observers might be uttering "monopoly" than hitherto.

TSMC's position nevertheless continues to strengthen as the semiconductor business undergoes significant changes. Its competitors remain wedded to the traditional "Foundry 1.0" model pioneered by TSMC in the 1980s. This model limits operations to a fab (aka the "front end") producing semiconductor wafers and shipping them to other firms for "back-end" assembly and testing. TSMC's recent shift to pioneering the "Foundry 2.0" model seems aimed at mitigating criticism that it is a monopoly. It has only a small footprint outside of its fabs, so its market share as a more diversified chip maker is forecast to drop from around 60 percent to about 28 percent in the next few years. Ironically, this could in fact strengthen its market position as a one-stop shop for customers (Tom's Hardware, July 19, 2024; Business Korea, July 31, 2024).

### A Taiwan Invasion Would be Disastrous

On January 2, 2019, Xi Jinping made his first and only speech on PRC policy toward Taiwan at an event commemorating the 40th anniversary of the "Message to Compatriots in Taiwan (告合湾同胞书)." He delivered messages echoing CCP leaders reaching as far back as Jiang Zemin: "The motherland must be,

and will inevitably be unified" and "the Taiwan question arose due to the weakness and disorder of the nation, and it will end with the revival of the nation." Xi also called for exploring a "'Two Systems' Taiwan Plan ('两制' 台湾方案)," indicating that the formula for absorbing Hong Kong and Macau was unsuitable for Taiwan (Xinhua, January 2, 2019; China Brief, February 15, 2019).

Resulting studies by CCP-approved scholars stressed so-called "peaceful reunification (和平统一)," albeit not ruling out military action. They also offered a revamped scheme to avoid popular resistance, such as the 2014 Umbrella Movement and the 2019 protests in Hong Kong. However, the controlled debate between conservative and less conservative contributors and the lack of a timeline for final conquest indicated an escalating campaign of intimidation aimed at making Taiwan's population give up hope, though perhaps with nothing more serious in the next several years (GMF, August 2024).

While the rhetoric of the CCP regarding Taiwan has not greatly changed, Beijing's ability to project power beyond its shores has grown, especially since 2022 (China Brief, November 1, 2024; January 17). Of specific concern is the growth of PLA missile brigades along the coast that could threaten U.S. Navy vessels and civilian shipping well beyond Taiwan. [3]

TSMC's market dominance at the high end of semiconductor manufacturing and its physical exposure to the hostile political-military force of the PRC seems to have prompted the company to hedge its bets on the future viability of a free Taiwan, Washington's support for Taipei, and Beijing's wrathful power projection. Taking precautions to minimize risk and playing to both sides is not dissimilar from business decisions made by other multinationals that have sought to simultaneously maintain footholds in the large markets of China, North America, and Europe.

### Diversification Versus the 'Silicon Shield'

After encouragement from Washington and the passage of the CHIPS Act, TSMC is expanding its semiconductor manufacturing presence in the United States beyond its existing facility in Camas, Washington. It has three projects in Phoenix, Arizona that the company says brings its total investment in the country to \$65 billion (Govinfo, August 9, 2022; TSMC, accessed January 28).

The adjustment to operating overseas has not been smooth. In the United States, TSMC has encountered cultural and legal problems as they hire non-Asian staff and face local regulations. Their highest-profile problem may be a class action lawsuit filed in Arizona by former and current employees alleging "anti-American bias" (Arizona Family, November 13, 2024).

The company's first Arizona fab nevertheless is near completion and will manufacture wafers at 4nm. A second one slated to open in 2028 will achieve 2–3nm. Both will be approximately two or three years behind TSMC's most advanced facilities in Taiwan. This indicates that TSMC is reserving its premier technology for its home facilities. While not in itself an unusual business decision, it also helps preserve Taiwan's "silicon shield"—the idea that the PRC would not want to destroy a leading technology source that benefits its economy. Of course, the "silicon shield" only remains effective so long as the PRC is unable to close the

technology gap and if the CCP's leaders actually care about PRC access to these high-end chips. If that changes, the "shield" could become a magnet, tempting Beijing to cripple the West by destroying TSMC (IEEE Spectrum, December 27, 2024).

#### Conclusion

Beijing will continue to pursue all avenues to shrink the technology gap between TSMC and its indigenous firms. It has likely already increased funding for its technology diversion efforts, and there is evidence of freelance smuggling via India, Malaysia, Singapore, and elsewhere (<a href="China Brief">China Brief</a>, December 6). The rise of formidable AI startups in the PRC are reminders that official technology diversion and unofficial smuggling are challenges that require a stronger and more dynamic effort than the United States currently pursues. For instance, DeepSeek, whose open source model has shaken Western tech giants in recent weeks, has 50,000 Nvidia H-100 chips, according to Scale AI CEO Alexandr Wang (<a href="QQ">QQ</a>, March 14, 2024; <a href="PC Magazine">PC Magazine</a>, July 3, 2024; <a href="163">163</a>, December 20, 2024; <a href="Geopolitechs">Geopolitechs</a>, January 20; <a href="WCCFTech">WCCFTech</a>, January 25; <a href="Wired">Wired</a>, January 25). Though DeepSeek's V-3 AI model has been independently tested, to date the startup's claim that it achieved this feat for only \$6 million in investment remains unsubstantiated.

Export controls are having an effect, as Beijing's complaints indicate (<u>People's Daily</u>, November 1, 2023; <u>Journal of Finance and Economics</u>, December 2023). But they are likely to be insufficient on their own to prevent the PRC acquiring the most advanced semiconductor technology. Reducing the flow of talent between TSMC and PRC competitors would be one way of maintaining the resiliency of the "silicon shield" and mitigating the risk that TSMC punctures that very shield by ceding its advantage. As the company goes down its current path of expansion and transition, reducing such risks may be key to retaining its dominance.

Matt Brazil is a Senior Analyst at BluePath Labs and a Senior Fellow at The Jamestown Foundation.

Matthew Gabriel Cazel Brazil is an independent China analyst interested in technology exchange and evolving global trade between the US, China, and Latin America.

### **Notes**

- [1] One of the authors was previously employed by two American technology firms manufacturing in the PRC. This article is informed in part by his experience working in the sector.
- [2] Lin Jones, Sarah Krulikowshi, Nathan Lotze, Samantha Schreiber, "U.S. Exposure to the Taiwanese Semiconductor Industry." Working Paper 2023-11-A, U.S. International Trade Administration, November 2023.
- [3] 龔龍峰中校, "中共火箭軍發展對陸軍化學兵戰力防護作為之研究", Taiwan Ministry of National Defense, https://www.mnd.gov.tw/opendata.aspx?f=陸軍化生放核半年刊, p.12.

Appendix 1: Maimai Data on Employees Moving Between TSMC and PRC Firms

Name	Prior Company	Prior Role	Current Company
孙艺超 Sun Yichao	Huawei	HR Recruiter	TSMC China (Nanjing)
Name Hidden	Possibly TSMC, comes up in TSMC Search but is a "High Value Connection" that can't be viewed in free service	"High Value Connection" obscured in free version of maimai.cn and on company website	Ningbo Lianfang Electronic Technology
肖伟 Xiao Wei	Shanghai Hengshuo Optoelectronics 上海恒烁光电科技有限公司	Software Engineer, Systems Security	TSMC China
长大了 Zhang Da'le (possible pseudonym)	SMIC Shanghai	R&D Engineer	TSMC China
范良巧 Fan Liangqiao	SMIC, Possibly TSMC	Production Manager	Microelectronics Co., Ltd 微电子有限公司
陈予 Chen Yu	TSMC (likely Taiwan, uses trad. characters)	Client Managing Director, Account Manager	AnQing GuJie Optical 安庆固捷光学有限公司
潘孝仪 Pan Xiaoyi	TSMC (likely Taiwan, uses trad. characters)	Background in Cheical Energy Photoetching	Sun Photovoltaic Energy 太阳光电能源科技股份有限公司
亚布格鲁 Ya Bulugu (ethnic minority name?)	TSMC China	R&D Engineer	SMIC Shanghai
何旭栋 He   Xudong	TSMC China	Senior Engineer	SMIC
金正 Jin Zheng	TSMC China	PIE Engineer	SMIC
Gerry Wang	TSMC China	Engineer in Manufacturing Dept	Yangtze Memory 长江存储科技有限责任 公司
马超 Ma Chao	TSMC China	Process Integration Engineer	Yangtze Memory 长江存储科技有限责任 公司
Emmy (no Chinese name given)	TSMC China	Senior Customs Communications	Anhui Changfei Semi Conductor Co. 安徽长飞先进半导体有限公司
任雪琪 Ren Xueqi	TSMC China	Team Leader (?)	Hefei Jinghe Integrated Circuit Co. 合肥晶合集成电路有限公司
仰余芬 Yang Yufen	TSMC China	HR	iFlytek 科大讯飞
桃生风筝 Taosheng Fengzheng	TSMC China	R&D Engineer	Changxin Memory Technologies 长鑫存储技术有限公司
赵原 Zhao Yuan	TSMC China	Etching Equipment Engineer	Changxin Memory Technologies 长鑫存储 技术有限公司
王继桢 Wang Jizhen	TSMC China	EEC ETE (unsure likely etching related)	Changxin Memory Technologies 长鑫存储技术有限公司
郭为强 Guo Weiqiang	TSMC China	Construction & Installation	Anhui Tianchuan Mechanical and Electrical Installation Co., Ltd. 安徽天川机电安装有限公司
张晨 Zhang Chen	TSMC China	Semiconductor Equipment Maintenence Engineer	Huawei
陈尘 Chen Chen	TSMC China	Process Engineer Intern (Communication Electronics)	Huawei

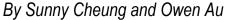
陈布布 Chen			
Bubu	TSMC China	Senior Product Engineer	Huawei
郝永亮 Hao Yongliang	TSMC China (Nanjing)	Equipment Engineer	AMEC Advanced Micro-Fabrication Equipment 中微半导体设备
韩书强 Han Shuqiang	TSMC China (Nanjing)	Quality & Reliability Engineer	DunTai Technology Shenzhen 敦泰科技 (深圳)有限公司
高鹏 Gao Peng	TSMC China (Nanjing)	Process Engineer	Hefei Jinghe Integrated Circuit Co. 合肥晶合集成电路有限公司
李鑫 Li Xin	TSMC China (Nanjing)	Senior Engineer	Changxin Memory Technologies 长鑫存储 技术有限公司
孙自旺 Sun Ziwang	TSMC China (Nanjing)	Yield Engineer	Hangzhou Guangli Microelectronics Co. 杭州广立微电子有限公
郑巍 Zheng Wei	TSMC China (Nanjing)	Equipment Engineer	Huawei
姚 Yao (no other name info visible)	TSMC China (Shanghai)	Senior Process Engineer	Huawei HiSilicon Semiconductor 华为海思半导体
Ying Zhu	TSMC Shanghai, Intel	Memory Product Team Leader (TSMC), Senior Process Integration Engineer (TSMC)	Huawei
张頠 Zhang Wei	TSMC Singapore	PVD Group Leader	Yangtze Memory 长江存储科技有限责任公司
张汝京 Zhang Rujing (Richard Chang Ru-gin)	TSMC Taiwan	TSMC Senior VP of Operations	CEO of SMIC, 2000–2009
楊定凱 Yang Dingkai	TSMC, SMIC	Senior Engineer	Apparently Retired
喻祝祥 Yu Zhuxiang	TSMC, SMIC, Huahong Semiconductor (华虹)	Job details obscured	Shanghai Shanli Electromechanical Installation Co., Ltd. 上海擅利机电安装有限公司工艺管道工程师
吴风筝 Wu Fengzheng	TSMC, SMIC, Hynix	HR Recruiter	Shenzhen Yunbo 深圳云泊
No Name Given ("Night Shift Engineer" Pseudonym)	TSMC	Senior Engineer	Si'En Integrated Circuit Co., Ltd. 芯恩(青岛)集成电路

Appendix 2: Maimai Data on Employees Moving Between TSMC and PRC Firms (Continued)

Name	Current Role	Sanctioned?	Notes	Source:
孙艺超 Sun Yichao	HR Recruiting Manager	Yes	Huawei Recruiter placed at TSMC	MaiMai
Name Hidden	Founder	No	Develops Electronic Design Automation (EDA) tools for semicon circuit design	MaiMai; Pitchbook
肖伟 Xiao Wei	CIM/Cybersec. Specialist	No	Semiconductors	MaiMai
长大了 Zhang Da'le (possible pseudonym)	Engineer, R&D Engineering	Yes	Semiconductors	MaiMai
范良巧 Fan Liangqiao	Production Manager	No	Semiconductors	MaiMai
陈予 Chen Yu	Operational Manager	No	Precision Instrument Manufacture	MaiMai
潘孝仪 Pan Xiaoyi	Manager, Chairman's Office	No	Manufactures multi-wafer solar cells	MaiMai

亚布格鲁 Ya Bulugu (ethnic minority name?)	R&D Engineer	Yes	Semiconductors	MaiMai
何旭栋 He Xudong	Chief Engineer (?!) "中芯国际集成电路制造有限公司主任工程师"	Yes	Semiconductors	MaiMai
金正 Jin Zheng	R&D Engineer	Yes	Semiconductors	MaiMai
Gerry Wang	Engineer	Yes	Semiconductors (3D NAND Memory)	MaiMai
马超 Ma Chao	Product Manager (Possibly former TSMC, details obscured)	Yes	Semiconductors (3D NAND Memory)	MaiMai
Emmy (no Chinese name given)	Senior Logistics Manager	No	Semiconductors	MaiMai
任雪琪 Ren Xueqi	R&D Engineer	No	Semiconductors	MaiMai
仰余芬 Yang Yufen	HRBP (Recruiter)	Yes	UAV/mass surveillance	MaiMai
桃生风筝 Taosheng Fengzheng	R&D Engineer	Yes	12-inch wafer fab, memory chips for computers, servers, and cellphones	MaiMai
赵原 Zhao Yuan	Etching Equipment Engineer	Yes	12-inch wafer fab, memory chips for computers, servers, and cellphones	MaiMai
王继桢 Wang Jizhen	Section Manager	Yes	12-inch wafer fab, memory chips for computers, servers, and cellphones	MaiMai
郭为强 Guo Weiqiang	General Manager	No	Industrial Construction and Utilties	MaiMai
张晨 Zhang Chen	Power consumption test engineer	Yes	Huawei technical role	MaiMai
陈尘 Chen Chen	R&D Engineer	Yes	Huawei technical role	MaiMai
陈布布 Chen Bubu	Chief Engineer 主任工程师	Yes	Huawei technical role	MaiMai
郝永亮 Hao Yongliang	System Staff Engineer	Yes	CMC	MaiMai
韩书强 Han Shuqiang	Digital Chip Verification Engineer	No		MaiMai
高鹏 Gao Peng	Process Integration R&D Engineer	Yes	Semiconductor	MaiMai
李鑫 Li Xin	Process Manager	Yes	12-inch wafer fab, memory chips for computers, servers, and cellphones	MaiMai
孙自旺 Sun Ziwang	AE (Unsure)	No	Semiconductors	MaiMai
郑巍 Zheng Wei	R&D Engineer	Yes	Huawei technical role	MaiMai
姚 Yao (no other name info visible)	QA Engineer	Yes	Huawei technical role	MaiMai
Ying Zhu		Yes	Huawei technical role	LinkedIn
张頠 Zhang Wei	PVD Process Manager	Yes	Semiconductor (3D NAND Memory)	MaiMai
张汝京 Zhang Rujing (Richard Chang Ru-gin)	CEO	Yes	Resigned from SMIC after lawsuits in favor of TSMC	EE Times
楊定凱 Yang Dingkai	Unsure whether TSMC or SMIC came first	Yes	Retired ex-TSMC, ex-SMIC	MaiMai
喻祝祥 Yu Zhuxiang	Pipeline Process Engineer	No	Semiconductors	MaiMai
吴风筝 Wu Fengzheng	HRBP (Recruiter)	No		MaiMai
No Name Given ("Night Shift Engineer" Pseudonym)	Process Integration Engineer	Yes	Semiconductor Design & Manufacture	MaiMai

### Roiling in the Deep: PRC Pushes New Deep-Sea Order





The PRC's Jiaolong deep-sea station (Source: Sohu)

### **Executive Summary:**

- New deep-sea technologies, growing influence in the International Seabed Authority, and domestic legislation are part of the People's Republic of China's (PRC) ambitions to become a strong maritime power.
- The PRC is the world's largest net importer of critical minerals, a potential vulnerability that could be alleviated through exploiting the ocean floor. This would help reinforce its already dominant position in the critical minerals supply chain and in the manufacture of the key technologies of the energy transition.
- The International Seabed Authority is currently negotiating a mining code. The PRC has been among the
  most vocal advocates for opening international waters to mining and in 2023 opposed the creation of an
  inspection body to enforce a future code, while last year it unilaterally blocked a motion to pause mining
  activities for environmental concerns.
- Deep-sea activity conducted by the PRC, including scientific research, is closely linked to the country's
  military. Key institutions are subject to U.S. government sanctions and export controls, and research
  vessels have been caught conducting exploration activities within the exclusive economic zones of other
  nations or planting the PRC flag in contested areas.

In December 2024, the People's Republic of China (PRC) announced the commissioning of *Tansuo* 3 (探索 三号), a state of the art deep-sea research vessel designed to facilitate surveys across most of the world's oceans, including the Arctic (*People's Daily*, December 27, 2024). A month prior, the government also unveiled the first domestically designed deep-sea drilling vessel, *Mengxiang* (梦想号) (State Council, November 17, 2024).

These technological developments are the result of ambitions to become a "strong sea power (海洋强国)," which entail a growing focus on the ocean floor (<u>State Council</u>, April, 2013). Beijing seeks to dominate the development and manufacture of the technologies of the future, including those crucial to the energy transition. These technologies often rely in part on minerals and metals that can be extracted from the seabed.

Access to the seabed is currently restricted by physical and regulatory barriers. Technological advances (and state-led investment) are making headway on the first, while Beijing's influence within of the International Seabed Authority (ISA) and willingness to ignore other states' maritime claims have led to progress on the second. The degree to which PRC activity is conducted by the People Liberation Army (PLA) and entities affiliated with it suggests that Beijing's interests in the ocean floor are not limited to the scientific or the commercial, but rather to its wider maritime strategy and conception of its own comprehensive national power.

### **Decades of Work Underpins Deep-sea Dominance**

The deep sea, typically defined as water located 200 meters or more below the surface, is one of the least explored parts of the planet. However, recent developments in technology have begun to make it more accessible. As the global energy transition accelerates, the demand for critical minerals has surged. Cobalt, nickel, and rare earth elements have become indispensable to achieving a low-carbon future, as they are essential for renewable energy technologies such as electric vehicles (EVs), wind turbines, and solar panels.

The PRC has emerged as the key player in the deep sea domain under President Xi Jinping. In 2013, shortly after assuming power, Xi unveiled plans for the PRC to become a strong sea power as part of his "China Dream (中国梦)" vision, emphasizing the need for "exploration, exploitation, and protection of the sea (开发, 利用和保护海洋)" in the country's broader developmental strategy (State Council, April, 2013). Two years later, a revision to the national security law included the protection of the country's activities and assets in the international seabed as a critical component of national security (State Council, July, 2015). This was followed in 2016 by legislation that created a legal framework for regulating deep-sea exploration (NPC, March 2016).

The PRC has also made substantial investments in the research and development of deep-sea technology. The 13th Five-Year Plan on Scientific and Technological Innovation ("十三五"国家科技创新计划), issued in 2016, identified deep-sea technology as one of 13 strategic and forward-looking scientific priorities, and outlined six major technological projects to be achieved by 2030 (State Council, July 28, 2016).

These investments have built on decades of state-led efforts that have enabled the PRC to dominate the critical minerals supply chain. As early as 1987, Deng Xiaoping signaled an interest in the sector, stating that "the Middle East has oil, China has rare earths (中东有石油,中国有稀土)" (CNR, August 16, 2007). As a result, the PRC now accounts for approximately 60 percent of global critical mineral extraction and an even larger share—85 percent—of the refining process (China Brief, October 8, 2010; March 15, 2021).

These days, the PRC relies for the most part on raw minerals from outside the country, to the extent that it is the world's largest net importer. Over the years, it has built up its dominant position through extensive overseas investments, advanced mineral processing capabilities, and its role in manufacturing high-value components, such as batteries (<u>The Brookings Institution</u>, July, 2022). For instance, while the PRC holds only 2 percent of global nickel reserves and 5 percent of nickel mining, PRC companies control two-fifths of raw nickel mining and over four-fifths of the refining (ISS, April 12, 2023).

This dependency makes the PRC vulnerable to external supply shocks. For example, in 2020, Indonesia—the largest global producer of nickel—banned nickel ore exports to stimulate the development of its domestic mineral processing industry, disrupting PRC access (<u>IEA</u>, March 19, 2024). Although the PRC was able to substitute with imports from the Philippines, that country is now also considering an export ban or tax on nickel ore (<u>SP Global</u>, February 7, 2023; <u>Business Mirror</u>, January 29). Deep-sea mining could therefore provide an opportunity to reduce dependence on imports and increase its self-reliance.

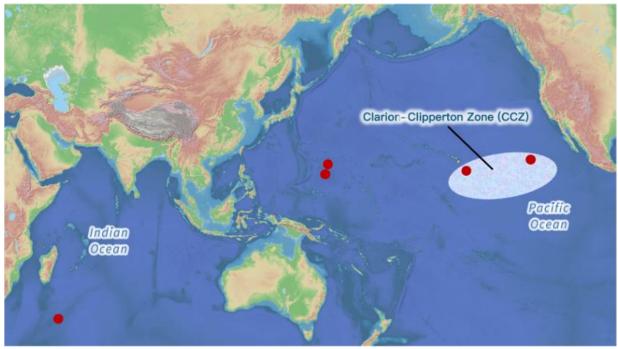
### PRC Preferences Shape the ISA

Most deep sea mineral reserves are in international waters beyond countries' exclusive economic zones. where deep-sea mining is currently prohibited under international law. Exploration can only be carried out under a contract with the ISA, and is subject to its rules, regulations, and procedures. (The ISA is a body established under the United Nations Convention on the Law of the Sea (UNCLOS) in 1994 that grants exploration rights for the purpose of research and prospecting.

The PRC is prominent within the ISA (<u>USNI News</u>, November 29, 2023). It is the organization's largest financial contributor and holds more active exploration contracts than any other nation (five out of 30). These grant the PRC access to nearly 235,000 square kilometers of mineral-rich regions in the Western Pacific Ocean, the Southwest Indian Ridge, and the Clarion-Clipperton Zone in the Eastern Pacific.

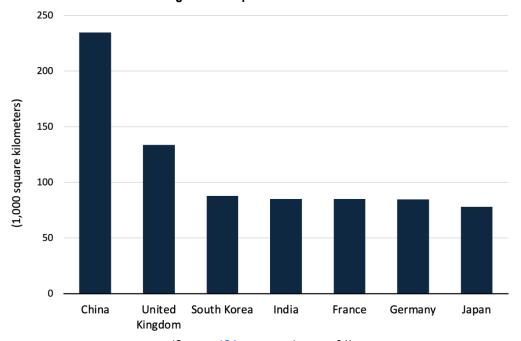
Viewing the ISA as an avenue to reshape the international maritime order, which it perceives as dominated by U.S. hegemony, the PRC has positioned itself as a champion of multilateralism and equality. During a UNCLOS event in 2022, a PRC delegate called for replacing the "outdated maritime order (落后时代的旧海洋规则)" with a new one based on these principles (MFA, September 2, 2022). In contrast, the United States has not ratified UNCLOS and holds no ISA contracts, though it has observer status at negotiations and the ISA has approved the extension of mining contracts issued by the U.S. government before the ISA's creation (CRS, November 26, 2024).

Figure 1: Designated areas for the PRC to conduct deep sea exploration



(Source: ISA, access: January 21, 2025)

Figure 2: Area of the Sea Floor Assigned for Exploration to Countries With at Least two ISA Contracts



(Source: ISA, access: January 21)

Further solidifying its dominance, the PRC partnered with the ISA in 2020 to establish the ISA-China Joint Training and Research Centre in Qingdao (<u>ISA</u>, accessed: January 21). This initiative focuses on capacity-building and the transfer of marine technology to developing countries through training workshops, enhancing PRC leadership.

At the regulatory level within the ISA, the PRC has been keen to ensure that its ambitions are not restricted. It has been among the most vocal advocates for opening international waters to mining. In 2023, it opposed the creation of an inspection body to enforce a future mining code negotiated by ISA members, and at the organization's annual meeting unilaterally blocked a motion that advocated for a precautionary pause on deep-sea mining activities due to concerns over potential environmental consequences (ISA, February, 2023; The Guardian, July 29, 2023). [1]

Later this year, two PRC state-owned enterprises, China Minmetals (中国五矿) and Beijing Pioneer Hi-Tech Development Corporation (北京先驱高技术开发), will test their deep-sea mining equipment in ISA-designated regions (ISA, <u>April 23, 2024</u>; <u>May 1, 2024</u>). These tests are nominally for the collection of environmental data collection but the company also hopes that the results will inform future regulations (<u>Beijing Pioneer Hi-Tech Development Corporation</u>, May 1, 2024).

The ISA is set to finalize a mining code this year (<u>Mongabay</u>, July 4, 2024). This may be delayed due to unresolved disputes, but the PRC will continue to play a leading role in negotiations. As such, the opening of international waters for deep-sea mining appears increasingly likely.

### Military Facet of Scientific Research

Deep-sea activity conducted by the PRC, including scientific research, is closely linked to the country's military. A 2017 State Council Opinion called for integrating civilian and military efforts in the maritime domain, including deep-sea exploration, intentionally blurring the lines between scientific research and military objectives (State Council, November 23, 2017). As a result, the country's main players have deep ties to the People's Liberation Army (PLA). This includes the China State Shipbuilding Corporation (中国船舶集团) and Harbin Engineering University (哈尔滨工程大学), which are the subject of sanctions and export controls, respectively, from the U.S. government (OFAC, accessed January 29; Federal Register, accessed January 29). China State Shipbuilding Corporation oversees the production of nearly all PRC naval vessels and has contributed to the development of platforms that include the deep-sea drilling vessel Mengxiang. Harbin Engineering University remains closely affiliated with the navy and supports its deep-sea operations. [2]

Advances in deep sea technology are enabling much greater understanding of this little-explored part of the planet, but they also enhance the PLA's maritime military capabilities. For example, unmanned underwater vehicles such as the *Haidou 1* (海斗一号) have demonstrated the ability to patrol the seabed for over 10 hours at depths exceeding 10,000 meters, and to conduct various mapping and communications activities. Similarly, the *Kaituo 2* (开拓二号), another unmanned vehicle, can perform seabed mining at depths over

4,000 meters (<u>SJTU</u>, July 11, 2024). These technologies could easily be repurposed to map the ocean floor in adversaries' jurisdictions, monitor harbor activities, or deploy anti-surface and anti-submarine weapons.

The bottom of the ocean is increasingly becoming a contested space, with a number of ships—often alleged to have ties to the PRC or Russia—apparently responsible for severing undersea cables that facilitate global information and data flows (China Brief Notes, January 16). Harbin Marine Equipment (哈尔滨船舶设备), a subsidiary of Harbin Engineering University, has developed unmanned underwater vehicles to conduct engineering surveys and maintenance (Perma, August 2, 2017). Such technologies could also be repurposed to target or compromise cable infrastructure in the event of a conflict.

The military dimension of PRC deep-sea exploration intersects with international regulatory and legal regimes in disputed waters (The Jamestown Foundation, accessed January 29). Institutions like the National Deep Sea Centre (国家深海基地) under the Ministry of Natural Resources (自然资源部) frequently conduct activities under the guise of scientific research to advance territorial claims. Research vessels have been caught conducting deep-sea exploration within the exclusive economic zones of nations such as the Philippines, Malaysia, Japan, Taiwan, Palau, and even the United States (*Washington Post*, October 19, 2023). Submersibles have also planted the PRC flag on the seabed in contested areas, asserting Beijing's sovereignty in violation of international law.

### Conclusion

In the PRC's pursuit to become a strong maritime nation, it engages in efforts to reshape approaches to the deep sea. Using technologies mainly developed by entities linked to the country's military, it seeks to expand deep-sea mining in order to acquire the necessary minerals to support its economic objectives. The deployment of vessels like *Tansuo 3* and *Mengxiang* reflects these ambitions. Beijing has also made substantial progress influencing global regulatory bodies to better express its preferences. While some activities, including scientific research and international workshops, contribute tangible public goods, the dual-use character of its approach threatens many other countries, particularly those in the South China Sea.

The deep sea is just one of several "new frontiers (新边界)" that the PRC sees itself at the forefront of, along with the polar regions, space, and cyberspace, as an article in the overseas edition of the *People's Daily* from last summer makes clear (*People's Daily*, April 6, 2024). Many of the approaches Beijing uses to advance its interests at the bottom of the ocean are analogous to those used in other domains and are underpinned by the same principles. As such, implications of the PRC's strategy to become a strong sea power are also relevant in other domains (*China Brief*, November 5, 2024).

The authors would like to thank an anonymous reviewer for their feedback on an earlier draft of this article.

Sunny Cheung is a Fellow for China Studies and deputy editor of China Brief at The Jamestown Foundation.

Owen Au is an independent researcher, with focus on China's foreign policy, Indo-Pacific geopolitics and maritime security.

### **Notes**

[1] The PRC later climbed down from this position and agreed to include the issue on the following year's agenda, where it was discussed but no action was taken.

[2] Harbin Engineering University was originally called the Chinese People's Liberation Army Military Engineering College (中国人民解放军军事工程学院).

# Harnessing Hydropower, Sparking Tensions: PRC Mega-Dam and India's Water Security Fears





The Yarlung Zangbo River Grand Canyon (Source: DJI)

### **Executive Summary:**

- The People's Republic of China (PRC) has officially approved a 60-gigawatt hydropower dam on the Yarlung Zangbo river in Tibet, estimated to cost over 1 trillion renminbi (\$137 billion) and surpass the capacity of the Three Gorges Dam.
- The project aligns with national goals to provide clean energy, ensure energy security, and develop Tibet's regional economy.
- India and Bangladesh, through which the river also flows, fear the impact on their own water security. The
  absence of a formal water-sharing agreement have exacerbated tensions in a region already heightened by
  the PRC's territorial claims to parts of Arunachal Pradesh (South Tibet)
- More than four years after the project was initially announced, details remain limited, obscuring information on its environmental and social impact.

At the end of December 2024, the government of the People's Republic of China (PRC) approved for construction of a 60-gigawatt (GW) hydropower dam. The project is planned for the lower reaches of the Yarlung Zangbo river (雅鲁藏布; known as upper Brahmaputra in India) in the Tibet Autonomous Region (Tibet) (Xinhua, December 25, 2024). An ambitious project, it reflects the PRC's broader efforts to bolster infrastructure capabilities and harness the immense hydropower potential of the Yarlung Zangbo (The Paper, November 28, 2020).

The hydropower dam is described in the Xinhua report as a "security project that adheres to ecology as the priority (坚持生态优先的安全工程)." Beyond enhancing the PRC's energy security and commitment to addressing climate change, it is also aimed at the "high-quality development (高质量发展)" of the region, with the intention of driving the growth of local industries such as logistics (Xinhua, December 25, 2024).

Recent estimates suggest that the cost of the new hydropower dam could exceed renminbi (RMB) 1 trillion (\$137 billion), with an anticipated annual production of nearly 300 billion kilowatt-hours of electricity (The Paper, November 28, 2020; South China Morning Post, December 26, 2024). This would far surpass the country's renowned Three Gorges Dam, which cost over RMB 250 billion (\$35 billion) and generates over 88 billion kilowatt-hours annually (State Council, July 11, 2023; Zaobao, December 26, 2024).

### **Details Lacking Despite Official Sanction**

First announced in November 2020, the project was later incorporated into the Chinese Communist Party (CCP) Central Committee's 14th Five-Year Plan (State Council, March 13, 2021). The exact location of the project remains uncertain, but media reports from 2020 and 2021 suggest it will be constructed near the river's "Great Bend" in Medog County, Nyingchi Prefecture (林芝地区墨脱县) (China Sand and Gravel Association, November 29, 2020; Zaobao, November 28, 2020). Medog, the final county before the Line of Actual Control on the PRC's border with India, is strategically positioned for hydropower generation. Sandwiched between the mountains, the river descends two kilometers over the course of 50, accumulating nearly 70 million kilowatts of exploitable energy—more than triple the capacity of the Three Gorges Dam (The Paper, November 28, 2020).

The Power Construction Corporation of China (PowerChina; 中国电力建设集团), a state-owned enterprise administered by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC; 国务院国资委), is expected to oversee the project in collaboration with the government of the Tibet Autonomous Region (西藏自治区). When the proposal was unveiled in late 2020, PowerChina's chairman Yan Zhiyong (晏志勇) described it as an "historic opportunity for the Chinese hydropower industry (对于水电行业来讲,这是一次历史性机遇)" (The Paper, November 28, 2020). [1]

While limited information about the project has been released since its announcement, PRC media have reported on various official visits and site inspections. For instance, in November 2020, then-deputy secretary of the Party Committee and Chairman of the government of the Tibet Autonomous Region Qi Zhala (齐扎拉)

visited Medog County to inspect the proposed site for the hydropower development project on the lower reaches of the Yarlung Zangbo. During his visit, he was briefed on the progress of the planning (<u>Tibet Autonomous Region [TAR] Government</u>, November 9, 2020). Subsequently, in July 2021, PRC president Xi Jinping made an unannounced visit, where he inspected the ecological preservation efforts in the river basin. He emphasized the need for continued efforts to protect the region's ecological balance while highlighting its strategic importance as a foundation for building national clean energy bases (<u>State Council</u>, July 23, 2021; <u>People's Daily</u>, July 23, 2021; see also <u>State Council</u>, April 22, 2024).

As of January, 2025, authorities have yet to release comprehensive hydrological data or detailed plans for the proposed hydropower dam. Critical information, including the number of residents potentially displaced and environmental impact assessments, remains undisclosed. Additionally, no official acknowledgment has been made regarding the region's vulnerability to natural disasters, including landslides, earthquakes, and floods, which could pose significant risks to the dam's safety and stability.

### **Tibet's Untapped Hydo Potential**

The PRC's growing focus on hydropower development in Tibet stems from the region's vast renewable energy potential, which aligns with the country's ambitious domestic energy targets and commitment to "green, low-carbon circular development (绿色低碳循环发展)" (TAR Government, March 29, 2021; Xinhua, December 25, 2024). Xi has committed the PRC to achieving peak carbon emissions by 2030 and carbon neutrality by 2060, as articulated in the central priorities outlined in 14th Five-Year Plan (The Paper, November 28, 2020).

Increased focus on hydropower also stems from concerns related to energy security. In response to recent shortages, the PRC has adopted a dual approach to its low-carbon transition by simultaneously expanding renewable energy sources and, counterintuitively, constructing hundreds of new coal-fired power plants to prevent power blackouts. [2] This strategy aims to ensure a stable energy supply while advancing toward a greener energy mix. For now, however, coal still provides more than 55 percent of the PRC's total energy consumption (State Council, September 19, 2024). As the PRC gradually shifts away from coal, Tibet is set to play a pivotal role. The region's 14th Five-Year Plan specifically highlights the development of clean energy resources, including hydropower, solar, and wind (TAR Government, January 14, 2021).

The idea of harnessing the hydropower potential of the Yarlung Zangbo River and its tributaries has been considered for decades (<u>The Paper</u>, December 22, 2014; TAR Government, <u>November 26, 2018</u>; <u>March 29, 2021</u>). However, its official inclusion in the national 14th Five-Year Plan underscores the project's elevated importance.

Unlike other regions where the government has successfully exploited accessible resources, Tibet is one of the few areas in which the PRC is yet to invest heavily for this purpose. But with its unique geography and massive water reserves, Tibet holds the highest untapped hydropower potential in the country. [3] Currently, the country's hydropower resources total over 676 million kilowatts, the largest in the world, of which Tibet accounts for approximately 30 percent (Guancha, November 28, 2020). Despite this significant potential, only

1 percent of the region's technically exploitable capacity has been developed. Among the region's rivers, which include the Nu, Lancang, and Jinsha, the Yarlung Zangbo stands out as the key resource, with its steep gradient and high flow rate giving it the capacity to generate nearly 80 million kilowatts of energy (The Paper, November 28, 2020).

### **Local Interests Drive Hydropower Development in Tibet**

The PRC's national interests drive the construction of dams on transboundary rivers in Tibet, including those on the upstream of the Yarlung Zangbo, but the strong influence of local governments and hydropower companies also plays a part in advancing these projects (<u>TAR Government</u>, March 29, 2021). The local government in Tibet, along with hydropower interests, has consistently promoted hydropower development as a strategy to address regional economic disparities and stimulate growth in one of the PRC's most economically underdeveloped areas (TAR Government, <u>March 29, 2021; November 26, 2018</u>).

The government of the Tibet Autonomous Region outlined a three-step plan for the development of its electricity and hydropower sectors in the early 2010s. These included addressing power shortages by 2012, ensuring electricity access throughout the region in 2013–2015, and accelerating hydropower development over 2016–2020. The long-term vision articulated around the time that Xi Jinping came to power aimed to transform hydropower into a strategic industry for "outward transmission (藏电外送)" of electricity, positioning it as a major economic pillar for Tibet and generating substantial economic benefits to the region (China News, January 4, 2013).

The latter part of this vision has been supported by the regional government's 13th and 14th five-year plans. Local leaders have entered into cooperation agreements with major state-owned power companies, like China Huaneng Group (中国华能集团公司), PowerChina, and the China Three Gorges Corporation (中国长江三峡集团公司), to expedite hydropower development on the region's major rivers, including the Yarlung Zangbo (TAR Government, March 29, 2021; November 26, 2018; January 8, 2024; November 22, 2024; CPNN, September 23, 2021). One aim is to export hydroelectricity to other provinces, such as those in central PRC that have faced power shortages in recent years. The Yarlung Zangbo project alone will generate an annual revenue of RMB 20 billion, according to government estimates (The Paper, November 28, 2020).

### **Delays Expected Despite Announcement**

The reason for the timing of the approval, over four years after its initial announcement, is unclear, but there are several reasons to be cautious about any developments soon. First, although an official construction date has not yet been made public, four years is not necessarily an unusual timeframe for such a project. The 510-megawatt Zangmu Hydropower Station project, finally declared fully operational in 2015, was first signaled as far back as the early 1970s, and was first incorporated into a regional five-year plan in 2006 (State Council, November 23, 2014; SASAC, October 14, 2015). Other mega hydroengineering project proposals have floated around for years, if not decades, like the Shuotian Canal (朔天运河) and the Red Flag River Water

Diversion Project (红旗河西部调水工程). **[4]** Scholars have questioned their feasibility, however, and to date neither has received approval from Beijing. **[5]** 

Second, geographic realities make the Yarlung Zangbo project unusually difficult to execute, as the site is located in one of the most remote and seismically active parts of the world. [6] Third, and relatedly, technological and infrastructural barriers remain. Medog County lacks adequate infrastructure for transporting electricity. The complexity of the topography will make it difficult to build the infrastructure, and it is unclear how it will be achieved, according to engineers, hydrologists, and geographers (Author interviews, January 2025). It remains unclear how this energy would be transported outside of Tibet to various other provinces (TAR Government, January 14, 2021).

Fourth, the broader economic situation in the PRC, characterized by high levels of debt and dwindling revenues for local government, is not conducive to the construction of massive infrastructure projects with expensive up-front costs and long lead times. Particularly in less affluent regions such as Tibet, any funds available to governments are more likely to be prioritized for more immediate demands.

Finally, political considerations always loom large for such projects. Domestically, a faster timeline could be affected by a desire to promote economic development in Tibet, while recent corruption scandals in the region could have the opposite effect. In late January, Qi Zhala was put under investigation by the Central Commission for Discipline Inspection for "being suspected of having committed serious disciplinary violations (涉嫌严重违纪违法) (The Paper, January 23). Internationally, an attempted thaw in Sino-Indian relations could lead the PRC to slow-walk work on the project, as could backlash from other lower riparian-basin countries. Indeed, the proposed project initially sparked concern in India and Bangladesh, where there are acute geopolitical and hydrological implications for downstream regions (China Brief, June 7, 2021). The river is a lifeline for millions in these countries, where it is critical for agriculture, livelihoods, and regional stability. It supplies 30 percent of India's freshwater and approximately 40 percent of its hydropower potential (CNA, May 2016; The Hindu, January 31, 2021). While the PRC has previously pledged to consider the interests of downstream nations, its previous engagement with India on hydrological issues has been characterized by a lack of clarity and communication. The absence of a formal water-sharing agreement exacerbates mistrust, and contributes an additional point of tension in the bilateral relationship (MFA, December 3, 2020; China Brief, June 7, 2021). [7]

As a result, the PRC recently has sought to downplay concerns over the potential impact of the project. In December 2024, Foreign Ministry spokesperson Mao Ning (毛宁) reiterated the PRC's "responsible attitude (负责任的态度)" to managing transboundary rivers, claiming the planned dam would not harm downstream regions. However, she provided no substantive evidence in support of this claim. She also highlighted Beijing's commitment to dialogue and cooperation with neighboring countries on disaster prevention efforts (MFA, December 27, 2024). India is not convinced, and has spent the years since the initial announcement of the Yarlung Zangbo project planning to build a 10–12 gigawatt hydroelectric dam in Arunachal Pradesh in response (Business Standard, October 21, 2024).

### Conclusion

The proposed hydropower project on the Yarlung Zangbo is primarily motivated by domestic priorities, including Tibet's economic development, the PRC's clean energy goals, and national security concerns. While the project is expected to boost regional industries and contribute to national energy security, its potential hydrological impacts on downstream regions introduce uncertainties, underscoring the risk tied to its ambitious scope. For this reason, and for several other factors, observers should not hold their breath in anticipation—the project is unlikely to be operational any time soon, if indeed it is ever completed.

Genevieve Donnellon-May is a geopolitical and global strategy advisor interested in regional resource conflict and environmental governance in Asia. Currently, she is the Asia-Pacific analyst at The Red Line podcast, a non-resident researcher at the Oxford Global Society, and a research associate at the Asia Society Policy Institute.

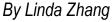
### **Notes**

- [1] This Yan Zhiyong should not be confused with the Yan Zhiyong sanctioned by the U.S. government for transporting goods from the PRC to North Korea on behalf of the latter's principal intelligence agency (OFAC, accessed January 27).
- [2] During the winter of 2020, provinces including Hunan, Jiangxi, Inner Mongolia, and Zhejiang encountered significant power supply constraints. This situation recurred in September and October 2021, affecting 18 out of the PRC's 30 provinces, with shortfalls in the range of 1–16 percent. Consequently, several provincial governments decided to approve and build large amounts of new coal capacity to address power shortages. See Shen, Bo, et al. "Coping with power crises under decarbonization: The case of China." *Renewable and Sustainable Energy Reviews* 193 (2024): 114294. According to the Global Energy Monitor, the PRC accounted for 95 percent of the world's new coal power construction activity in 2023.
- [3] See also <a href="Physics.org">Physics.org</a>, June 26, 2017.
- [4] The proposal aims to annually divert 60 billion cubic meters of water from the major rivers of the ecologically fragile Qinghai-Tibet Plateau, including three transnational rivers (Mekong, Salween, and Brahmaputra), to arid Xinjiang and other parts of northwest China.
- **[5]** Yang, Qin-ye, Jing Ke, Xu Jian-hui. The Query: The Feasibility of the Water Diversion Function of "Hongqi River". JOURNAL OF NATURAL RESOURCES, 2018, 33(5): 893–898 https://doi.org/10.11849/zrzyxb.20180429. https://www.jnr.ac.cn/EN/10.11849/zrzyxb.20180429.

**[6]** Shortly after the announcement in late December, a 6.8-magnitude earthquake struck Tingri county in the Shigatse prefecture-level city in TAR on January 7, resulting in the deaths of at least 126 people (<a href="CCTV">CCTV</a>, January 8). See also 1950 Medog Earthquake (also known as Assam-Tibet Earthquake).

[7] India's concerns are exacerbated by the PRC's unilateral territorial claims to parts of Arunachal Pradesh. (The United States does not recognize the PRC's claims.) In a PRC Ministry of Foreign Affairs conference in early 2024, spokesperson Lin Jian asserted that "The Sino-Indian border has never been demarcated … [but] the area of southern Tibet has always been China's territory … Chinese has always exercised effective governance [of this territory] (中印边界从未划定 … 藏南地区一直是中国领土 … 中国一直对藏南地区行使有效行政管辖)" (MFA, March 25, 2024). Beijing uses these claims to justify its right to develop the Yarlung Zangbo.

### New Year's Gala Celebrates Tech and International Outlook





A joint performance by a Peruvian and a Chinese singer during the 2025 CMG Spring Festival Gala. (Source: YouTubte/CCTV 春晚 screenshot)

### **Executive Summary:**

- The Spring Festival Gala, which had 16.8 billion views across all media platforms this year, is the
  Chinese Communist Party's (CCP) annual message to the Chinese people and is used to celebrate the
  last year's achievements and list priorities for the new year.
- This year's edition heavily featured advancements in technology, including dancing robots in traditional
  dress and references to recent successful space missions. This fits with President Xi Jinping's priorities,
  which center on "seizing the commanding heights in the new round of global scientific and technological
  revolution and industrial transformation."
- The Gala sought to enhance international appeal, featuring a performance by an American band for the
  first time, as well as a duet between Peruvian and Chinese singers that celebrated the construction of a
  new megaport in Chancay.
- Ethnic minorities were notably absent compared to previous years. This could indicate that the CCP is deprioritizing ethnic issues, or that it feels more secure in its control over the country.
- Military themes were also relatively light, a possible indicator that the CCP is not preparing the Chinese people for a forceful retaking of Taiwan in the next year.

Billions of people rang in the Lunar New Year this week, and for Chinese and Chinese diaspora communities around the world, the China Media Group's New Year's Gala (CMG New Year's Gala, formerly known as the CCTV New Year's Gala) was a part of their celebrations. The Gala was originally started as entertainment for New Year's Eve. With an audience of over a billion people, mostly in the People's Republic of China (PRC), the show is the Chinese Communist Party's (CCP) annual message to the Chinese people, a celebration of last year's achievements, and a list of goals and priorities for the new year.

The cultural significance of the CMG New Year's Gala in the PRC is hard to overstate. Since its creation in the early 1980s, the show has become integrated into the country's New Year traditions. This year, it racked up a barely believable 16.8 billion views across all media platforms, according to the host, CMG (CGTN, January 31). The show features a mix of roughly thirty to forty musical numbers, comedy skits, dances, and other short performances. Prominent celebrities grace the stage, and a performance at the Gala can make a newcomer a household name, as was most notably the case in 1982 for Peng Liyuan (彭丽媛), the former People's Liberation Army singer and current First Lady of the People's Republic of China (Guancha, December 1, 2012). A New Year's celebration is incomplete without singing along to "Can't Forget Tonight (难忘今宵)," the catchy closing number that is perhaps as well known as the country's national anthem (Xinhua, January 29).

The New Year's Galas of the 1980s were relatively open as organizers experimented with the format and tested audience interest. As the show evolved, the CCP inevitably recognized its propaganda value. With most of the country tuning in, it became more political, and performances were commonly tied in to current events that the Party wanted to amplify. Some years are more Party-heavy than others, with prominent officials, including former Party Secretary Jiang Zemin, making appearances (Sohu, December 16, 2022).

### Less Humor, Higher Quality in the Xi Era

Since Xi Jinping's accession to power in 2012, the Gala has become a strict forum for promoting his values and vision for the PRC, even while it continues to serve its entertainment purpose. The present version of the Gala strives to balance the two objectives within the scope of the skits and performances. Most of the show celebrates Chinese culture and history, with displays of martial arts, poetry, and Chinese calligraphy, which are burnished as demonstrations of Chinese soft power. The show highlights different cultures and foods from different provinces and regions, though this year came without a heavy-handed message of national unity. One trend in the Xi era is the decline in the number of xiaopin (小品, Chinese sketch comedy) and xiangsheng (相声, Chinese "crosstalk," a form of comic dialogue), which can at times be provocative and controversial, in favor of less risky dance and musical performances. Some viewers felt that the comedy skits were not as funny as before, as writers become more and more unwilling to touch upon sensitive political topics (Baijiahao, January 28). However, the object of certain jokes is revealing of the shifting contours of acceptable discourse. For example, this year's xiaopin made fun of local-level officials and influencers—rare areas where the CCP and the West see eye-to-eye.

Other elements of the gala include a magic show, a segment which usually delights audiences. This year's was no different, and exemplified the high production quality that has characterized the show in recent years—a significant improvement on earlier iterations.

The Party keeps a strict eye on the performance and its contents, but past shows have not been without controversy, despite strict rehearsal and coordination with the PRC government. Most notoriously, the 2018 and 2021 New Year's galas featured cases of Chinese performers in blackface in a segment that attempted to highlight Chinese development in Africa (<u>rfi</u>, February 16, 2018; <u>South China Morning Post</u>, February 12, 2021). This year's Gala required five rehearsals beginning in early January, and the rehearsals are heavily scrutinized to ensure a flawless and politically correct performance (<u>Guangming Daily</u>, January 27). The results seem to be effective, with no content leading to similar scandal or outrage.

### **Internationally Oriented Gala Highlights Tech**

The Gala performances are a key opportunity for the CCP to showcase what they see as significant achievements from the past year. This year's edition heavily featured advancements in technology. This accords closely with Xi's national priorities, which center on "seizing the commanding heights in the new round of global scientific and technological revolution and industrial transformation (抢占新一轮全球科技 革命和产业变革制高点)" (China Brief, May 10, 2024; July 26, 2024). Following on from the first use of Artificial Intelligence (AI) in the New Year's Gala in 2024, the tech theme continued this year with a dance number involving robots dressed in traditional clothing with human partners, showcasing the dexterity and coordination of the dancing robots. (The dance itself was an errenzhuan (二人转), a Northeastern Chinese dance where dancers twirl around red handkerchiefs.) In another segment, a member of the Chinese Academy of Scientists presented two adorable children with a model of Chang'e 6 (嫦娥六号), the spacecraft that successfully collected the first moon rock samples from the far side of the moon in 2024 (China National Space Administration, June 25, 2024). This presentation was followed by a song "Jade Plate (玉盘)" sung by children from Sichuan's Daliang Shan, where the first four Chang'e crafts were launched. The PRC's space industry has made enormous progress in the last few years. Beyond the successful moon mission, 2024 also saw the launch of satellite constellations and the release of a multi-decadal national plan for space, among other developments (China Brief, September 6, 2024; November 5, 2024).

Planners have also increasingly recognized the New Years Gala's growing international reach. Recent Galas have been broadcast in English, Spanish, French, Arabic, and other languages, including sign language, and seems to have become more cognizant of international sensibilities. Gala hosts highlighted the country's new opening of travel visas and debated what an itinerary for a trip to the PRC might include before introducing a pop song number titled "China Fun Together" The lyrics of this song intersperse references to tourist destinations around the country and exhortations to visit ("see how happy we are. Let's have fun together") with nods to the country's technological advances ("the high speed trains can take you anywhere ... goods are delivered by drones") (YouTube/CGTN, January 28). Another dance and music segment celebrated the construction of the megaport of Chancay and featured musicians from Peru. The port, unveiled in 2024 and visited by Xi, is the largest deepwater port on the western coast of South America (China Brief, March 15,

2024; Xinhua, December 18, 2024). Nevertheless, this year's gala lacked official government messages on these international efforts and did not mention the One Belt One Road (一带一路) initiative by name. This is in contrast to earlier galas, such as the 2018 edition, which unveiled a historic "Landscape Map of the Silk Road (丝路山水地图)." A scroll painting offered to "prove that we Chinese already had a clear understanding of the path of the Silk Road as early as the middle of the 16th century," many online commentators quickly pointed out that it was most likely a much later work (Banned Book, February 17, 2018; China Media Project, February 20, 2018).



Figure 1: Robots Dancing the Errenzhuan

(Source: YouTube/CGTN, January 28).

Most significantly, the 2025 New Year's Gala featured its first ever American guests. The band OneRepublic performed their hit song "Counting Stars" to a throng of clearly delighted audience members, joining a list of Canadian, French, and Russian performers that have appeared in past shows. Sardonic online commentators sought to interpret this programming decision, suggesting that the name OneRepublic implied that the band supported the "One-China Principle (一个中国原则)" and that "Counting Stars" was a reference to the PRC flag (Weibo/呆瓜映画).

Another American, Evan Kail (who was born in the Year of the Snake), was interviewed. Evan is a TikTok influencer who donated to the PRC a photo album from World War II that documented atrocities committed by the Japanese (*Global Times*, November 22, 2023). This is also timely, as one of the PRC's major propaganda themes for 2025 is commemorating the 80th anniversary of its victory in what the Party currently refers to as

the "Chinese People's War Against Japan (中国人民抗日战)" (<u>People's Daily</u>, January 3). One of the hosts spoke English with Evan and presented him with a porcelain tea jar on behalf of 1.4 billion Chinese friends. Evan then introduced a dance segment based on the artistic symbols on the tea jar (<u>YouTube/z y (Sharebeauty)</u>, January 29). This indicates that the CCP is once again celebrating the United States' former alliance with China as a means to temper anti-American sentiment, and reflects the more positive diplomatic approach that the government is attempting to strike with the new Trump administration.

### **Notably Absent: Ethnic Minorities, Military Fanfare**

Omissions in the gala are always notable. For instance, the 2019 edition had minimal pig imagery, despite it being the Year of the Pig, perhaps due to crackdowns on Muslim populations at the time (BBC, February 6, 2019). More recently, last year's gala caused an uproar when it did not acknowledge the COVID-19 shutdowns and subsequent reopening the previous year, which was a milestone experience for the Chinese people (CCTV, February 9, 2024). The pandemic was also not mentioned this year, despite having a segment featuring the local culture of Wuhan. This continued silence may be a tacit acknowledgement that the CCP mishandled its management of the COVID-19 pandemic and that the Party wants PRC citizens to move on from the experience.

This year's gala was also light on themes of ethnic unity. A Tibetan dance number was included, highlighting a recent 6.8-magnitude earthquake that hit the region, but the show barely mentioned Xinjiang and generally downplayed calls for ethnic unity. This contrasts with past years, which featured Xinjiang and often had composite dances of all fifty-five officially recognized ethnic minority groups. The gala this year also prominently featured different dialects of Chinese, including segments in Cantonese, Sichuanese, and Wuxi dialect. While this could indicate that the CCP is deprioritizing ethnic issues, it might also suggest that the CCP feels more secure in its unification and control over the country at the start of the Year of the Snake.

Finally, the Gala had a reduced military presence over previous iterations, and had almost no mention of Hong Kong, Taiwan, or national unification. The People's Liberation Army had one song segment, but unlike past years, military achievements abroad were not emphasized as much as technological and cultural breakthroughs. This could signal that the CCP is not preparing the Chinese people for a forceful retaking of Taiwan in the next year.

### Conclusion

The CMG New Year's Gala is more than an entertaining New Year's Eve tradition; it is the most-watched messaging tool of the CCP, and party officials carefully design the programming to tell the story of the last year and set priorities for the year ahead. This year's show contained the familiar programming of celebrating Chinese culture and history but also presented the PRC as a technology leader, a willing partner for "global south" countries, and a responsible peacemaker with the West.

Linda Zhang is a DC based China practitioner. She graduated from Johns Hopkins SAIS.