

The Future, Made in China

Beijing is competing with the U.S. for tech supremacy. Who wins will have huge political implications.

By [Evan Osnos](#) August 3, 2026



As Donald Trump has cut research funds, China has pursued what one investor calls an “all-hands-on-deck approach to national innovation.”Illustration by Cleon Peterson

Kai-Fu Lee, the C.E.O. of the artificial-intelligence company 01.AI, lives in a mirrored high-rise in Beijing, near a procession of landmarks that emperors considered the center of the cosmos. Lee takes early meetings at a nearby hotel that could be in any country, except that the room service is delivered by robots painted in the livery of butlers and maids. State propaganda hails these robots as

emblems of China’s ascent; in the hallway, most people sidestep them with the kind of indifference usually reserved for a Roomba.

Over breakfast one recent morning, Lee, wearing a white polo shirt and rimless glasses, spoke about the future with an air of sanguine curiosity. He was born in Taiwan in 1961 and built his career by following the moving frontier of opportunity. He got a degree in computer science from Columbia in the eighties and went on to Carnegie Mellon to study the fledgling field of A.I.—which he described back then as a “most promising science” that would be “men’s final step to understand themselves.” He ran speech recognition at Apple, and in 1992 appeared on “Good Morning America” to show off a prototype computer that used voice commands to record the news on a VCR. (The host, Joan Lunden, marvelled, “It’s almost going to be like a friend.”) During a stint at Microsoft, he recalls, he urged Bill Gates to buy an ambitious startup called Google, but Gates declined. Lee later became the head of Google in China.

Lee moved to investing in 2009, and planned to focus on both China and the United States, but eventually he closed his American office. “It’s two different universes now,” he told me. The countries have diverged not only over such long-standing issues as trade, Taiwan, human rights, and espionage but also, increasingly, over the politics of technology. As Lee has noted, the Obama Administration released the federal government’s first major plan for the A.I. age in 2016, but it barely registered: it came out a few days after the “Access Hollywood” tape detonated in the Presidential campaign. When Donald Trump took office, he scrapped the plan and entrusted A.I. strategy largely to Silicon Valley. When China’s government issued its own A.I. plan, soon afterward, it was dense with turgid Communist Party jargon, but it also laid out a vast industrial policy, covering applications ranging from agriculture to policing, that promised “major breakthroughs” by 2025 and “world leading” status by 2030. Lee called it an “all-hands-on-deck approach to national innovation.”

For a long time, China looked west for visions of the future. These days, it favors its own. The Chinese car company BYD recently surpassed Tesla as the world’s largest maker of electric vehicles. A popular clip shows Tesla’s C.E.O., Elon Musk, being asked in 2011 about competition from BYD, which was then known mainly for a boxy, undersized sedan; Musk laughed and said, “Have you seen their car?” Fifteen years later, China has more than a hundred automakers, competing for customers with such extravagant features as in-car karaoke, mechanical foot massagers, and video headlights that can project drive-in movies.

Lee, whose social-media posts have attracted more than fifty million followers, has a striking forecast for the two countries in which he has prospered. In his book “AI Superpowers,” published in 2018, he predicts a “new world order” with “waves of technology that will soon wash over the global economy and tilt the geopolitical landscape toward China.” That kind of prophecy suits the official mood in Beijing, where Xi Jinping, the President and the General Secretary of the Communist Party, calls technology the “main battlefield of international competition” and bluntly asserts that “the East is rising, and the West is declining.”

In July, the Chinese firm Moonshot released an A.I. model that performed comparably to its American competitors, at a fraction of the cost. Microchip stocks plunged, on fears that China will dominate A.I., much as it now dominates hardware. China produces at least seventy per cent of the world’s drones, electric vehicles, lithium-ion batteries, and solar cells. It deploys more industrial robots than the rest of the world combined, and, in medicine, it has surpassed the United States in the number of registered clinical trials. Its shipbuilding capacity is roughly two hundred times that of the U.S., and some observers in Washington worry that American stockpiles of munitions would not match China’s in a war over Taiwan.

Both countries are uneasily preoccupied with their trajectory these days. While the U.S. worries about whether it can continue a century of dominance, China is eager to restore its historical eminence, after two hundred years of what the Party sees as anomalous poverty. Zhou Bo, a retired senior colonel in the People’s Liberation Army who is now a fellow at Tsinghua University, told me, “Common sense says countries rise and fall in cycles.” But Americans, in his view, have lost that historical awareness. “They have been so strong for so long that every American believes, ‘I’m a member of the strongest nation on earth,’ ” he said. The Chinese are no less convinced of their ascendancy. A European diplomat who has attended meetings with Xi and his advisers told me, “They’re feeling like the champions of the world. They think they can contend with anybody.”

A decade ago, few people in Beijing would have predicted that China would challenge the U.S. anytime soon. China’s decades-long economic boom was slowing, and the government’s choke hold on free thought was sending ambitious people abroad. In those days, an American in China who raised the merits of the two countries was likely to have a catechistic exchange. You’d note that China was growing powerful. Your acquaintance would reply, “Not as powerful as America.”

The Chinese establishment has abandoned that view in stages. When Brexit was approved, in 2016, the West seemed to be turning inward. The fight over *COVID-19* vaccines provided a signal that the U.S. was splintering; the storming of the Capitol offered another. After Trump returned to the White House, his Administration declared, “The days of the United States propping up the entire world order like Atlas are over.” His aide Stephen Miller spoke instead of an international order “governed by force,” adding, “These are the iron laws of the world that have existed since the beginning of time.”

In Beijing, a think tank at Renmin University recently published an assessment titled “Thank Trump,” which wryly hailed his efforts to hasten the “twilight of an empire,” by undermining America’s alliances, civil service, scientific institutions, and democratic credibility. In the past two years, the international approval rating of the U.S. has dropped nearly forty points, according to a worldwide survey by the Alliance of Democracies; in multiple polls, China now rates higher than the U.S.

For China, America’s retreat comes just as decades of state investment, industrial policy, and diplomatic planning are paying off. It would be foolhardy to entirely trust China’s official statistics; as the economist Gao Shanwen once told an audience in D.C., the official growth rate “will always be around five per cent.” But the change is plainly visible. In two decades, China has gone from producing about half as much electricity as the U.S. to generating more than twice as much, at far lower prices; in 2023, it installed more solar power than America has installed in its entire history. Meanwhile, Trump reëmbred fossil fuels, in what the historian Timothy Snyder

called “superpower suicide in perhaps the most basic form.”

Trump has promised for years that he would stop China from “raping our country” through unfair trade practices. On “Liberation Day,” in April, 2025, he unveiled a program of sweeping tariffs. Treasury Secretary Scott Bessent predicted that Beijing would quickly submit, saying that his counterparts were “playing with a pair of twos.” Instead, China retaliated by restricting exports of rare earths and high-powered magnets. Within weeks, Ford was forced to suspend production of Explorers at its plant in Chicago, and automakers were pleading for a deal. Since then, China has not only retained its position as the world’s largest trading nation; it also achieved a record trade surplus of \$1.2 trillion, as it redirected its exports away from the U.S. In 2001, four out of five countries traded more with America than with China. By 2023, the map had reversed: seven in ten trade more with China.

For the moment, China’s rulers have avoided overtly antagonizing America, because they believe that, even in decline, it remains uniquely dangerous. After Trump’s interventions in Venezuela and Iran, and his threats to Canada and Greenland, the Beijing *Daily*, a Communist Party mouthpiece, wrote that the U.S. was “dragging the world back to a dark age of plunder and division through superior military might.” But that bluster obscures a colder calculation: Chinese leaders believe that Trump’s struggle to dominate the world is actually aiding China.

“The cookies are mediocre, but they have the longest line in the city.”

Cartoon by Juan Asturias

Rush Doshi, a professor at Georgetown and a China specialist at the Council on Foreign Relations, sees in Trump’s pursuit of territorial control a recurring historical error. In the eighteenth century, while Russia fixated on conquering Eurasia, Britain developed the steam engine; in the nineteenth and twentieth centuries, while Europeans fought over Africa, Americans mastered the assembly line. Today, while the U.S. tries to govern Venezuela and hobble Iran and Cuba, “China is focussed on winning the technologies of the future,” Doshi said. If the U.S. were to lose the competition over the next wave of industries—including A.I., biotech, and robotics—as it lost the ones over solar panels, batteries, and electric vehicles, “it would irreversibly change the balance of power.”

What kind of world does China imagine? A preview of sorts is provided by its Belt and Road Initiative, which since 2013 has directed about a trillion dollars into scores of countries, building highways, hospitals, mines, ports, and “smart cities” equipped with Chinese technology. To China, Doshi said, “autocracies are considered perfectly legitimate, and technology is used to strengthen them. China increasingly says to autocrats, Would you like to stay in power? I can help you with that.” In Nepal, where newly installed facial-recognition systems have been deployed against activists, a photograph from a security headquarters showed a wall of video feeds above a sign that read “With Compliments of the Ministry of Public Security of China.”

But the clearest indication of Beijing’s global vision may be the current state of China itself. “A country tends to create an external order that looks a lot like its internal order,” Doshi said. “China doesn’t want you to think too hard about what its ascendance will mean for the world. They want to show you the edge of the future. They have two messages they want to sell everybody. One is ‘We are inevitable.’ And the other one is ‘Don’t worry.’ ”

Beijing is quieter than when I lived there, from 2005 to 2013. The vehicles, many of which are electric now, move silently through the streets, and in any case the residents have fewer reasons to go out; China has the world’s busiest e-commerce market, and there isn’t much that can’t be delivered on the back of a scooter. All day long, people scan each other’s QR codes to swap cash on such digital-payment systems as WeChat and Alipay, feeding the algorithms an ever more intricate portrait of their movements and preferences.

There is an awkward serenity to life in the capital of a high-tech, one-party state. “This is one of the safest places in the world, if you’re not a dissident,” the European diplomat told me. More than a decade into Xi Jinping’s campaign to remove unwelcome figures from the Party, the military, and the business elite, the purges have circled back to the highest ranks. (People used to say that the purges evoked an old Chinese saying, “Kill the chickens to scare the monkeys.” Now they say that Xi is just killing the monkeys.) One gets oddly accustomed to vanishing acquaintances. Since charges can stay secret for years, a person may simply “disappear into thin air,” the diplomat said, adding that it is regarded as a by-product of social maintenance. “The big priority here is the Party machine. People come second.”

China’s leaders have long believed that technology can help the state overcome the disorder of human affairs. Xi, who has borrowed Stalin’s image of ideological tools as “engineers of the human soul,” has expanded the government’s reach into private life, in the name of promoting “civilized” behavior. In the southern city of Guangzhou, A.I. is helping discipline residents who fail to separate food waste from regular trash, by posting their photos to the “exposure station,” a digital screen near trash bins. Other cities use similar systems to expose litterers, jaywalkers, and spitters.

Businesses are taking up the effort, too. At an expo of A.I.-enabled products in Beijing, I came upon a tall white kiosk made by Langxin, a company that applies A.I. to psychology. The machine was marked “Emotion Recognition Training Enhancement System.” I stood in front of a camera for an assessment of “micro-gestures” in my face, and the screen produced a pie chart labelled “Positive and Negative Proportions.” It informed me that I possess 76.67 per cent positive emotion and 23.33 per cent negative emotion. My negative feelings, it turned out, included 13.33 per cent fear and 6.67 per cent rage.

Langxin markets similar products for teachers, including the Comprehensive Risk Early Warning system, which scans students for signs of disruptive behavior; by combining data from classes, dormitories, spending, and psychological records, it assigns each pupil an “alert” level of red, yellow, or blue. Police have more powerful options. At a trade fair in Beijing, another company marketed software that scans vital signs from a distance and purports to make a personality assessment in fifteen seconds, including emotional

stability and “behavioral tendencies.”

A.I. has rapidly settled into Chinese work and life. People in China often regard technology with less wariness than Americans do, because living standards have improved so dramatically in the computing era. In the nineteen-seventies, more than seventy per cent of the population worked in agriculture; today, that figure is less than twenty-five per cent. Kai-Fu Lee, the investor, suggested that the Chinese had also been culturally primed for this kind of technology. For Americans, “*always listening* is a scary thing,” he said. In China, cameras already cover just about every square inch of occupied space. Lee touted new software from his company which allows him to record every office meeting and analyze the audio with such prompts as “Of the projects I think are going well, which ones really aren’t?” The software also tracks verbal commitments in a log called the Promise Ledger, so that staff can be held accountable during performance reviews. I asked if his recordings made anyone less willing to take on commitments. “There is perhaps some chilling effect,” he said. “But in China not so much, because people always assume the boss is powerful and has a right to listen.” He added, “It’s a self-selection process. Those who don’t like it won’t join my company.”

On the south side of Beijing, I visited China’s most famous auto plant—the Hyperfactory, a campus the size of a hundred soccer fields that was built in fourteen months. It belongs to Xiaomi, a company that made its name selling smartphones and household goods, such as electric toothbrushes and frying pans, before entering the car business.

In the lobby, I found a delegation of Chinese visitors unfurling a hammer-and-sickle flag for a group portrait. Beyond them was a busy Starbucks counter. Suspended from wires overhead, a sports car was poised as if racing around a Möbius strip, meant to evoke the unending pursuit of improvement.

A guide herded us onto golf carts and drove us into a cavernous site, with so few visible workers that one could be forgiven for thinking that it was a national holiday. The cars are built by some seven hundred robots, packed together in intricate, choreographed formations controlled by thick bundles of wires. Fresh parts arrive aboard a hundred and twenty-seven autonomous carts, which bleat “Make way!” at humans who wander into their path. According to the company, a finished car rolls off the line every seventy-six seconds.

At the end of the tour, I was directed to a track, where a driver waited in a bright-yellow Xiaomi SU7 Ultra. I climbed into the passenger seat. He smiled, said, “Three, two, one,” and jammed the pedal down. I hadn’t focussed on the details of what we were doing, which was probably a mistake. The car burst forward with the kind of acceleration one rarely experiences without jet propulsion. As I learned later, the SU7 Ultra has 1,548 horsepower and goes from zero to sixty in less than two seconds, faster than a Ferrari. I was pressed into my seat, and a wave of queasiness surged in my chest. As we rounded a curve and burst down a straightaway, I kept my eyes on the horizon and wondered if my life-insurance policy was in order. The driver gamely offered another lap, but I waved it off.

It is not an accident that the factory was built within easy reach of Beijing’s luxury-hotel district, rather than in the hinterlands. It is an attraction for foreigners, and for lucky locals who win a lottery to visit. Travel companies have been leading “tech tours” of China’s most impressive industrial sites, offering rides on what they hype as “the world’s fastest train,” access to “A.I. glasses,” and coffee breaks during which you can watch “a drone descend with your latte.” A succession of Western influencers, investors, and commentators have duly posted awestruck images of bridges and train stations, feeding into such genres as “infrastructure porn” and “Chinamaxxing.” Their perceptions are shaped by relentless marketing and propaganda. On the afternoon that I toured the Hyperfactory, the robots were stalled for “adjustments,” but the guide rarely paused for more than a few seconds before pointing out the seven-hundred-ton die-casting machine, or the rapid-fire X-ray system that tests whether a cast is a minute fraction off spec. But there are real strengths along with the hype. Jim Farley, the C.E.O. of Ford, recently visited car factories in China and described its automotive progress as “the most humbling thing I’ve ever seen.”

Chinese leaders seem to be betting that, by speeding toward the future, they can outrun the mistakes of the recent past. Across the country, cities are punctuated by *lanweilou*, or “rotten tail” buildings—concrete shells of unfinished towers and villas, whose developers ran out of money. For years, local officials encouraged excess construction because it financed infrastructure, boosted growth, and earned them promotions. Developers sold homes to the public before they were even built. But the property market started to collapse in 2021—eventually slashing sales of new housing by half—and China was left with an estimated ninety million empty homes, enough to house the population of Russia. After bankrupt developers abandoned the rotten-tail buildings, a few of the scrappiest buyers made do—they moved into the unfinished shells and took to cooking over coal stoves and hauling water up the stairs.

China now contains a series of parallel economies: alongside the wreckage of the property crash and the thriving hive of new technologies, there are legions of university graduates who trained for traditional white-collar jobs but entered a labor market increasingly geared toward high-tech manufacturing. (The official rate of youth unemployment rose above twenty-one per cent before the government changed the way it reports the figure.) A study of Chinese public opinion published last year by researchers at Stanford and Harvard offered a rare in-depth look at local attitudes and found a pronounced swing “from optimism to pessimism.” The share of citizens who expect their standard of living to improve has dropped to about twenty-eight per cent, roughly half of what it was earlier this century. Xu Zhiyuan, an influential writer, has called this “a profoundly confused era,” marked by “an economic downturn, the uncertainty of international geopolitics and the enormous impact of A.I. all at once.” Last fall, government censors launched a campaign against “excessively pessimistic sentiment” online, including comments such as “Hard work is useless.”

One morning, I wandered over to the house where I used to live in Beijing and was surprised to find the front door wide open. The place was vacant, but people were bustling in and out. By chance, I had arrived as rental agents were taking photos, hoping to find a tenant and collect a commission. I was struck by the number of agents competing over a two-bedroom rental—a totem of the hyper-competition that prevails in China’s industries.

A real-estate agent in a gray windbreaker approached me, carrying a scooter helmet. He was sorry to learn that I was not a potential customer, but eager to chat. He spoke English with the earnest formality of someone who has worked hard to learn a language that he rarely has the chance to use. He had adopted the name John, and he peppered his comments with English aphorisms. When I asked how business was going, he said, “Hard, but every coin has two sides.”

He was candid about the strains of his profession. The truth was, he hadn’t earned a commission in four months. A lot of real-estate agents were bankrupt. “Under twenty per cent are earning money,” he said. John was forty-seven and divorced, with a daughter in college. His father and his older sister were helping him pay for food. “It sucks for me at my age,” he said. “I still want to find love, but it’s really difficult.” He had gone on dates, but nothing had worked out. “I think one reason is I don’t have enough money,” he said. “If I’m a tycoon, they would want to communicate with me.” Hoping to reassure him, I said that he seemed to have a good heart. John smiled and straightened up. He had another aphorism at hand: “Life is not easy, but we don’t know what will happen tomorrow.”

China’s desire to engineer the future has long been entwined with its anxiety about the West. In 1872, during the Qing dynasty, Governor-General Li Hongzhang wrote bitterly of a change “not seen in three thousand years”: Westerners, relying on their “advanced guns, cannons, and steamships, have been able to run rampant on Chinese soil.” China had started casting iron a millennium or so before Europe, but it had grown complacent. Now, he declared, it was time to “learn the superior skills of the barbarians in order to control the barbarians.”

But the empire resisted efforts to modernize, and China’s reformers fled into exile. In 1902, one of the leaders of the reform effort, Liang Qichao, published “The Future of New China,” a novel that imagined the country decades later, with a constitution, a parliament, and such technological prestige that students flocked there from abroad. When Mao Zedong came to power in 1949, he had other ideas. “Politics and technology must be unified,” he declared. It was a disastrous union: Mao’s Great Leap Forward, a delusional attempt to vault China past Britain in just fifteen years, produced the worst famine in history, killing an estimated forty-five million people.

Beginning in the late seventies, the illusion of social engineering created another disaster. The Party adopted the goal of reaching annual incomes of eight hundred to a thousand dollars per capita. To get there, it reasoned, it would have to manage the growth of the population. A Chinese rocket scientist named Song Jian helped lead a mission to chart the right path using the nation’s most advanced computers. He and his team concluded that the “key to the entire problem” was to limit each family to one child. It was a radical idea, but Song and the group were persuasive; they presented their findings in printed graphs and figures, when many experts were still working by abacus and pocket calculator.

Susan Greenhalgh, an anthropologist and the author of “Just One Child,” writes that the engineers were “enclosing everything in a black box that got labeled ‘science,’ ” though the policy rested on unexamined political judgments about the role of government, the sanctity of the human body, and the boundaries of private life. It was also wrong. As Greenhalgh wrote, the engineers had stitched together patchy data and extrapolated it to two decimal points with false precision. Most of all, they were accustomed to dealing with inanimate objects, rather than the mess of human society, and they dismissed warnings from social scientists about the consequences: rapid population aging, labor and military shortages, and the brutal necessities of enforcing the law.

In the next thirty-five years, the one-child policy led to the sterilization of nearly two hundred million citizens and to more than three hundred million abortions. By the time China dropped the policy, in 2015, it had also produced an economic fiasco, shrinking the pool of available workers and acculturating the country to single-child families. The number of children born in China has fallen by almost two-thirds since 1987. Last year, there were fewer than eight million births—resulting in the lowest rate since records began, in 1949. Though America’s birth rate has also fallen, to 1.6 births per woman in 2024, China’s problem is much more severe. Its fertility rate is now one birth per woman.

“Dearest, It has now been a fortnight since one of our smoke alarms started intermittently beeping. A battery is low. Tensions are high. I fear we may never figure out which one it is. Patience is wearing thin. . . .”

Cartoon by David Rey

To reverse the decline, China has offered child-care coverage, tax breaks, housing incentives, and fertility-treatment subsidies. None of it has worked. Maternity wards and kindergartens are closing. Emma Zang, a Yale sociologist who studies fertility patterns, visited China last year and was startled that young people often asked why she had decided to have children. She concluded that “the real barrier is not the cost of raising children. Rather, it is the conviction that parenthood no longer makes sense in a future that feels uncertain and unworthy of investment.”

None of these repercussions have shaken the Party’s belief in the transformative power of engineering. In the past decade, Xi has taken to describing the historical moment with a pointed phrase: “great changes unseen in a century.” He is echoing 1872, but with a difference. Back then, the “unseen” changes were the new strengths of the West; today, Xi is calling to exploit the West’s weaknesses.

In 1978, just as Deng Xiaoping was setting China on the course of reforms, an aspiring scientist named Yi Rao started college. Chinese science was severely underfunded in those years; even the disposable plastic tips on the end of pipettes were nearly impossible for lab workers to get. But Rao knew Chinese scientists in the U.S., who agreed to scrounge them from the trash and send them back. “We could use them many more times,” Rao said.

Chinese leaders were determined to “catch up with and surpass” advanced countries in science, and three things mattered above all: talent, money, and infrastructure. To train talent, they sent students abroad; within a decade, the number of Chinese students in the U.S.

had grown tenfold. In 1985, Rao moved to San Francisco to study neuroscience and noted that an ordinary kitchen counter was made of better material “than any research bench in China,” he said. “How could I imagine I’d ever come back?”

But in the mid-two-thousands, when he was a professor at Northwestern, he was offered a job as the dean of Peking University’s School of Life Sciences. China was luring scientists back with patriotic appeals and the promise of transforming the nation’s scientific prospects. Rao agreed, but he had limited expectations. He recalls that nobody at the university had even published a paper in a top international scientific journal. Professors gave jobs to poorly qualified friends and protégés, and academic fraud was common. Chinese biotech produced little more than cheap generic drugs.

Rao took over, and replaced required courses in botany and zoology with genetics and molecular biology. A turning point arrived in 2015, when China began overhauling its drug-safety laws to meet international standards, allowing local biotech companies to get lucrative foreign contracts. Scientific talent had started to return, drawn by generous lab funding and signing bonuses that could exceed a hundred and fifty thousand dollars.

Then tensions with the U.S. exploded. In 2018, Trump started a trade war, and his Department of Justice created the China Initiative, to root out espionage and trade theft, which targeted more than a hundred scientists and others of Chinese descent. In ways that outsiders did not fully appreciate, Trump tipped the balance of an internal Chinese political debate. The private sector was ascendant, and the influential billionaire Jack Ma was arguing that a university education was overrated. “He said, basically, intellectuals don’t produce anything,” Rao told me. “China’s economy has done well by copying from the West, so why should we put more funding into original research? But, once Trump came in, that side completely collapsed.” In 2020, the Party’s Central Committee established “scientific and technological self-reliance” as a paramount goal, and last year funding for exploratory basic research hit a record seven per cent of the nation’s R. & D. budget.

The effects were startling. By 2024, China had outstripped the U.S. in the number of clinical trials. (Recruiting test subjects there can take less than half the time, and trials cost an estimated forty per cent less.) That fall, an experimental cancer drug from the Chinese firm Akeso outperformed Keytruda, a gold-standard therapy made by the American pharma giant Merck.

Early this year, after the Trump Administration slashed funding to American federal and academic scientific studies, the Chinese government announced another ten-per-cent increase in funding for science and technology. China has overtaken both the U.S. and the European Union in publishing influential research papers, measured by how often they are cited by others. Chinese biotech firms now generate nearly a third of the world’s new drug candidates, almost matching the U.S. “People in Washington are worried that biotech is the next E.V.s,” an American executive told me. “We’ve scared all of this fucking talent back to China. If you look at the guys who are doing this, they used to work for Western pharma giants, or they were running a top university department somewhere.”

A report by researchers at Princeton, Harvard, and M.I.T. identified almost twenty thousand scientists of Chinese descent who left America between 2010 and 2021. The Canadian scholar David Zweig, who has studied the exodus, told me that at Westlake University, a new Chinese research institute, “there are approximately a hundred new labs set up by returnees, and probably eighty per cent of them are from the United States.” He said, “First, it was because they felt alienated. Then the money dried up.”

I visited Yi Rao recently, and met him on the top floor of an academic complex, in a corner office overlooking a lake. He showed me a lab filled with world-class equipment available to student researchers. “I have to keep telling them what luxury they are living in,” he said.

I asked Rao about the effects of Trump’s cuts to science. “It’s very stupid,” he said. “Invention doesn’t come out of the blue.” He gave an example: if the U.S. reduces funding for cancer research, “it would now be natural that China might invent a cancer vaccine before the U.S.”

Rao is candid about the enduring problems facing Chinese science and tech. For instance, China has never mastered the ultra-precise manufacturing required for commercial jet engines or the highest-performing microchips. He dismisses thirty per cent of the country’s biology papers as “garbage,” and says that another fifty per cent represent incremental findings, rather than “zero to one” breakthroughs. For now, he says, China excels mostly in the progress from “two to a hundred,” but he thinks that the standard will improve. If China becomes known as the place that develops cancer cures, things will be different in a fundamental way. “The current world order was built by a group of geniuses, mainly in the U.S., who hailed from Europe,” Rao said. “If Trump had maintained the order effectively, China would find it very hard to get through. Trump really helped us.”

Many of Beijing’s tech companies are in the Zhongguancun district, a cluster of office complexes set on land that, during the imperial era, served as a burial ground for palace eunuchs. For a generation, Zhongguancun has evolved with each passing fashion in tech. These days, advertisements for A.I. products are rapidly replacing washed-out ads for the metaverse.

People who have worked in both China and Silicon Valley tend to comment on the similarities: the belief in rapid change, the power of engineers, the odes to humanity that mask impatience with actual humans. At a Peet’s Coffee in Zhongguancun, full of twentysomethings wearing AirPods, it would be easy for a visitor from Palo Alto to feel at home. The big difference between the two countries’ A.I. hubs is in how people talk about their intentions. American engineers tend to focus on the transformative potential of reaching artificial general intelligence, and on the utopian (or dystopian) cascade that could follow. Chinese tech firms have more imminent goals; they have less capital and less computing power, owing partly to American export controls on the most advanced chips, so they focus largely on pushing products into everyday commerce. Last year, the Chinese startup DeepSeek released an A.I. model that stunned Silicon Valley. Critics attributed its success to smuggled chips and opaque financing, and OpenAI accused it of cribbing from better models. Chinese observers noted that DeepSeek worked well, and for far less money.

At AInnovation, a firm that integrates A.I. into traditional factories, I met the chief technology officer, Fan Li, who was plucked out of a coal-mining city by a government program for prodigies. He worked at Microsoft and Amazon before returning to China in 2021 to join its A.I. boom. Li walked me over to a machine marked “AI Screw Inspection Equipment.” Inside, tiny screws whizzed along a production line as high-resolution cameras scanned them for microscopic problems. Those which passed the test slipped down a chute marked “Good Product.” (It called to mind a slogan from the Cultural Revolution which urged each comrade to be a “rustless screw in the revolutionary machine.”) Before A.I., the factory needed humans to check the screws, which, Li said, was “not efficient.” Now those humans could be replaced.

China’s factories still make plenty of cheap toys and shoes, but the country has also made a technological leap. Investments in factory automation and robotics have allowed goods to be produced so cheaply that U.S. tariffs mostly don’t matter; even with the fees piled on top, prices are still low.

On a screen, Li pulled up an intricate diagram of a factory for the Tsingtao Brewery, one of his customers. He typed in a prompt: “Have they achieved their energy-saving goal in the past year? If not, why?” It’s a deceptively simple question. Not only do you need to know past performance and future goals—“you need to dig deeper into each production line, each machine,” he said. After a moment, the system flashed a message: “We have successfully retrieved energy-consumption data, causes of anomalies, and recommended actions for four devices.” It noted that “anomalies” were lurking in a pasteurizer and a malt mill, and told us what to do: Look for wet malt or jams at the mill; investigate steam and pump behavior in the pasteurizer. Li said, “It might have taken a human three hours to do the whole process. Now you can finish it in minutes.”

China is not immune to fears that A.I. will cause sweeping job losses and social upheaval. Kai-Fu Lee warned in his book that “A.I. risks creating a twenty-first-century caste system.” But he predicted that job losses would create more turmoil in the U.S. than in China, because a larger share of American workers hold white-collar jobs. I asked what he made of the news that college graduates in the U.S. were booing commencement speakers who touted A.I. Lee said, “The American way is very understandable. But the Chinese way will cause a proliferation of talent, usage, data—until something horrible happens. Then things might change. But people forget things in the age of social media.”

Li, of AInnovation, hears from people who are more worried about the risk. Over sandwiches in a conference room, he told me that he has a fifteen-year-old son, and fellow-parents often ask, What should our kids study? “I ask myself the same question,” he said. In recent years, China has sharply scaled back undergraduate majors deemed obsolete, including many in the humanities, while introducing programs in fields like embodied intelligence. Many universities have opened A.I. programs. But, Li said, “three years from now, when my son goes to college, artificial intelligence may not even be a major anymore.” Even the people who work on A.I. can’t keep up with technology that is changing “probably ten times faster than ten years ago,” Li said. “The closer you get to the ecosystem, the more you know the details and what’s coming, and you become a little bit concerned.”

Cutting down on the need for humans is one way that the Chinese government can make up for its shrinking workforce. Another way is robots. In 2024, China deployed nine industrial robots for every one installed in the United States. The competition between man and machine has even spread to pop culture. In early 2025, Beijing inaugurated a half-marathon that pitted robots against humans, and the humans won easily, as many of the robots overheated. But, a year later, a bright-red humanoid—swinging a pair of spindly arms for balance—beat all twelve thousand human competitors and broke the world record. There was another sprawling display of robotics expertise at the Spring Festival Gala, the most watched television event of the year. Humanoids marched, backflipped, and twirled nunchucks; robotic pandas gambolled. Some Chinese viewers sensed a loss. As one reportedly wrote online, “We are looking for humans amid all the robots.” But the government’s goal was to build confidence in the onrush of tomorrow. The head of one of the robotics companies told a reporter that he’d felt intense pressure to “deliver a performance that was significantly better than last year’s.”

Choreographed spectacle is easier, in some sense, than contending with the messiness of the workaday world. The humanoids on Chinese television were beautifully synchronized, but if something had gone off script—an errant foot, a human who missed a cue—the machines could have turned into a heap of tangled, waving limbs. In Li’s office, I watched two employees demonstrate preliminary work that they hope will equip robots to retrieve objects from factory supply closets. One shuffled a selection of bottles, cans, and snacks, while the other, wearing a virtual-reality headset and holding a tracking device in each hand, guided a small yellow humanoid as it haltingly picked up everyday objects. The exercise looked bafflingly difficult.

Robots have improved more slowly than expected, Li said. “ChatGPT was successful because it consumed almost every word ever written in the world,” he told me. “There are many tasks people want robots to do, but we don’t have enough data.” At a nearby table, a pair of slender metallic arms was folding and refolding a blue T-shirt. In tech circles, folding laundry is sometimes called the “holy grail of robotics,” because of both the intricacy of the challenge and the public enthusiasm if it works. Li said, “We’re looking at two metrics: how fast the robot can finish the job—thirty seconds, one minute—and the failure rate.” The failures stemmed from randomness. “You can put the clothes on the table in many ways,” Li said. “The shape is different each time.”

“Ninety pounds? Really?”

Cartoon by Drew Dervavich

On my way out, I visited a convenience store off the lobby. The counter was staffed by a humanoid robot with a shiny silver face and powerful arms. To its left, sausages revolved on chrome rollers; to its right, a human attendant in a brightly colored uniform looked patient and quizzical. The robot’s manufacturer, Galbot, had an office in the building, and, like so much that I was seeing, the machine seemed to have been installed for both functionality and P.R. value. It greeted me merrily in Mandarin: “I can help you find products,

grab some sausages or drinks, or tell you a corny joke to lighten the mood.”

As I took a moment to contemplate the scene, the robot urged me along: “What items do you need?” Other customers were filling in behind me, and, before I could reply, the robot added, “You look a little tired.” I was tired, in fact; I had been trooping from one meeting to another. Before I could ask how the robot had acquired such sensitivity, it posed another question: “Would you like me to grab you a bottle of Vitality Water Balance or fragrant pomelo jasmine tea, to help you recover?”

I chose a sausage instead. “I’ll get it for you right away!” the robot said, and maneuvered its left arm into the display case. But the sausage slipped from its grip and plopped back into formation, alongside the others revolving lazily between rollers. The robot hadn’t noticed the mishap; it withdrew its arm, deposited the nonexistent cargo in front of me, and announced, “Remember to check out on the left!” The attendant laughed nervously and waved off the request for payment.

I wandered for a while in Zhongguancun. It was a hot afternoon, and a group of delivery drivers had gathered to smoke in the shade of an overpass. As the economy has slowed, more than two hundred million Chinese people have joined the gig economy. Among them are some twenty million delivery drivers, who have become the most visible symbols of the new era.

In 2018, a young man named Hu Anyan found work in Beijing as a courier, after stints as a convenience-store clerk, a bicycle salesman, and a security guard. A typical day involved eleven hours of deliveries, but the shifts were longer when e-commerce sites ran promotions and order volumes spiked. “We still had to deliver all of the day’s packages before we clocked out, which often meant fifteen or sixteen hours,” he told me. Hu stayed vigilant for obstacles that he could not control—buildings with slow elevators, locked gates where he had to wait for a resident to let him in. To reach his goal of about forty dollars a day, he had to make a delivery every four minutes. Stopping to pee cost him about two minutes, so he drank as little water as possible.

Some employers were better than others, but they shared a culture of the algorithmic era. As one stern boss told Hu, the “platform tells you the deliveries you must make!” and “There’s nothing special about you.” It bothered Hu, but he realized that the boss, too, was “actually just another cog in the machine.” Over time, life in service of the algorithm altered his sense of human affairs. He began to resent colleagues and see their struggles in zero-sum terms. “A few veteran employees will hold on to the easier routes for a long time, while the rookies, who get stuck with the harder ones, often just quit and get replaced,” he told me. He became “more impatient and anxious,” but what unnerved him most was a creeping numbness. After learning one day that an elderly customer had waited nearly three hours at a market for him, Hu felt no sympathy. “Under normal circumstances, I’d feel guilty,” he said. “But at that moment I still had a whole load of packages to deliver, and I couldn’t stop for him, even for five minutes.”

Hu lasted twenty months as a delivery driver. Then he quit and described his experiences in a plainspoken memoir, “I Deliver Parcels in Beijing.” The book became an unlikely best-seller and inspired other recent Chinese memoirs of precarity, including “I Drive a Taxi in Shanghai” and “My Mother Works as a Cleaner.”

But, in China, the precarity is never confined to those at the bottom. In March, authorities abruptly barred the two founders of an A.I. startup called Manus from leaving the country. They had made a deal to sell their company to Meta, the American social-media giant, for two billion dollars, and the Chinese government wasn’t happy. It was a chilling message to other A.I. firms that some humans were too valuable to the nation to be allowed to leave.

For years, China’s rising power has rested on a fragile balance of economic freedom and political control, in what early Party reformers called the “birdcage economy”—airy enough to allow enterprises to thrive, but not capacious enough to sacrifice power. That arrangement has rarely looked more tenuous. Gary Rieschel, an American investor with deep experience in China, told an audience last year that Xi was trying to “tether” the “goose that laid the golden egg of China’s extraordinary rise.” Rieschel added, “In case you don’t know, geese don’t like to be tethered.” He said, “The critical question becomes, Can this Beijing leadership effectively balance the delicate relationship between control and dynamism?”

In Robert Kagan’s book “The World America Made,” he enumerates a succession of global powers, all of which were convinced of their own durability: “There has been an Egyptian order, a Roman order, a Greek order, an Islamic order, a Mogul order, an Ottoman order, and many others.” Each was born of particular, often fragile circumstances. The American order, Kagan wrote in 2012, would endure “until some yet to be determined moment.”

That moment seems to have arrived. Mark Leonard, the director of the European Council on Foreign Relations, told me that the international system the U.S. constructed after the Second World War—and ran, often to its benefit—is “definitely dead and beyond redemption.” He said that Trump’s dismantling of the country’s alliances signalled the end of the “willingness of the American public to play the role America has played for most of the last eight decades.”

But America’s diminished stature does not necessarily clear a path for China. Few people these days are enthusiastic about the prospect of a world dominated by either superpower. In Europe, views of Beijing have hardened since the late twenty-tens, when its envoys experimented with a combative style known as “wolf warrior” diplomacy. After a Swedish prize for persecuted writers was awarded to a Hong Kong dissident, a Chinese ambassador said, “We treat our friends with fine wine, but for our enemies we’ve got shotguns.”

More recently, European anxiety has centered on the economics of trade. As China has devoted itself to dominating global tech manufacturing, it has taken to producing far more than its domestic economy demands—electric vehicles, solar energy, batteries, wind turbines, basic chemicals. In theory, that kind of overcapacity should lead factories to close and the surge to subside. But China’s government has kept pushing firms to produce, partly out of fear that rising unemployment could fuel unrest. The surplus gets exported, often at prices low enough to undercut the industrial economy in other countries. “It’s systemic, not accidental,” Joerg Wuttke, a former head of the European Union Chamber of Commerce in China, told me.

The fear in Europe is increasingly urgent. Volkswagen is considering eliminating as many as a hundred thousand jobs and closing four plants, the biggest cut in the history of the global auto industry. Leonard told me that resentment of China's industrial policy has reached "a fever pitch, particularly in Germany, where there is a sense that China is doubling down on policies leading to the deindustrialization of Europe." He added, "The big fear is that Baden-Württemberg"—the home of Mercedes-Benz—"will turn into Detroit." European politicians, he said, privately describe a feeling of simultaneous assault from Washington, Beijing, and Moscow, and are "waking up to a world where they have to protect themselves from all the big powers."

The responses under discussion have the flavor of emergency improvisation: blocking Chinese firms from building factories or bidding on lucrative contracts, imposing severe tariffs on steel and chemicals, even suspending technology patents—an approach known in aggregate as the "trade bazooka." Some economists argue that Europe could compete more effectively by modernizing. But the feeling of hardening up extends beyond trade. Germany has committed to as much as a trillion dollars in new spending on arms and infrastructure. Wuttke said, "Trump is severing ties, imposing tariffs left and right. The Chinese are not moving. So the decision is not 'Beijing or Washington.' It is building ties with Jakarta and Delhi, and with other countries."

Chinese officials often warn against a lawless world in which "the weak are meat for the strong." But the Party's own tactics are uncompromising, both at home and abroad. Nicholas Burns, a former U.S. Ambassador to China, told me, "China always says, 'The U.S. government is too pugilistic.' That's their rhetorical veneer. The reality is they are competing tooth and nail behind the scenes." Last year, Trump pressured Panama to strip the control of two significant ports from a Hong Kong-based company and give it to an American-led consortium. In the dispute, China reportedly warned foreign executives against "illegal activities that harm the interests of Chinese companies." Such warnings are dangerous to ignore. International businesspeople drawn into geopolitical disputes have been barred from leaving China. The message, the European diplomat told me, is " 'We are a great power, and we will retaliate against anyone who hurts our rights or interests.' Behind this is the undisputed rule of the Chinese Communist Party."

Yet China is not rushing to re-create the international order that has recently frayed. Since 1949, Beijing has signed only two formal alliances—with North Korea and the Soviet Union—and both proved costly. Patricia Kim, an expert at the Brookings Institution, calls Beijing's posture a "China first" strategy. "China is happy to put out statements, but it has no interest in stepping in as a crisis manager," she told me. "It wants greater influence, but it also wants to avoid responsibilities." Chinese leaders view "the burdens of U.S. global leadership as a source of American overextension and decline," she said, "and they have no interest in emulating this model."

Zhou Bo, the retired People's Liberation Army officer, made a similar point from a different perspective. "The Trump Administration has walked away from sixty-six international organizations," he told me. "This is a big gap that China simply cannot close."

The likely successor to the American order, then, is not a Chinese order so much as what Leonard calls a period of "un-order": a jungle in which every country hedges, arms, subsidizes, hoards, and searches for choke points to exploit. In the words of Suisheng Zhao, a China scholar at the University of Denver, it is the makings of a "twenty-first-century Hobbesian struggle of all against all."

During the Cold War, as futurists on both sides of the Iron Curtain plotted to control the direction of history, another group coalesced around a more modest idea. Mankind 2000, as it called itself, was made up of European survivors of fascism who were wary of both Communist determinism and American hubris. They warned that man could be "absorbed by his machine" and declared, "The future belongs to all of us, not only to small oligarchic groups."

Spend enough time in Beijing and Washington these days and the rivalry looks less like a clash of competing systems than like a race between small oligarchic groups—tight circles of men with immense power over everyone else's future. In China, Xi is trying to bend technology toward obedience and growth. In America, Trump and his allies in Silicon Valley have put the development of A.I. ahead of concerns about its risks. "We have to grow that baby and let that baby thrive," Trump said, unveiling an A.I. strategy in 2025. "We can't stop it with foolish rules."

In this view, regulation, safety testing, liability, and labor protections are all indulgences that a superpower can no longer afford. David Sacks, an investor and a former White House A.I. czar, recently warned that creating "an F.D.A. for A.I." could mean losing to China. This is an old political maneuver. In 1988, when Japanese carmakers were ascendant, Ronald Reagan's Transportation Secretary derided stricter fuel-economy standards as a "competitive disadvantage" against "the Asians." A decade later, under pressure from Wall Street, Bill Clinton repealed the separation between commercial and investment banking, saying that it would help America "compete in global financial markets." That decision was later identified as one of the causes of the Great Recession.

China can, indeed, build with a speed that Americans regard with awe and despair. In the 2025 book "Breakneck," Dan Wang, a research fellow at Stanford's Hoover Institution, popularized an image of the rivalry between the two countries as a contest between an engineering state and a lawyerly society. In fact, the book is subtler than this formulation suggests. (Wang had considered calling it "Move Fast and Break People," but his publisher intervened.) Wang explored the macroeconomic effects of the one-child policy—which, he told me, have become even more concerning since the book came out. Though China can produce "strong outcomes in science and technology," its internal problems are profound, he said. "Shanghai is pretty amazing. It may even be one of the top-three great cities of the world. But how can China be a great civilization if almost no one wants to have kids?" He added, "Young Chinese especially are gripped by this serene discontent. People don't have that great a hope about an economic boom that basically will elude everyone outside of a few folks working in A.I. or finance."

The engineering state can churn out an electric car every seventy-six seconds, but that carries you only so far if people are so alienated that they decline to bring children into the future being built for them. The Party wants A.I. entrepreneurs who can dazzle the world, but it also wants the power to decide where they can go and what they can become.

The U.S. has a different weakness. So far, the dystopian uses of technology have come less from government facial-recognition systems than from a handful of ultrapowerful companies that exploit data to increase their control over people’s lives: insurers that use A.I. to decide which treatments to cover; retailers that deploy “surveillance pricing” to raise costs according to a customer’s location, habits, and urgency. But the distinction is eroding, as private defense contractors help merge domestic law enforcement, immigration, and national security into an interlocking apparatus. Even in areas where machines may genuinely make life better, the decisions are being made in secrecy. Waymo reports better safety records than human drivers, but autonomous-vehicle companies have resisted public scrutiny. When Senator Ed Markey asked seven major companies how often remote human operators had to guide vehicles through difficult situations, they refused to answer, with several citing “confidential business information.”

“Remember when everyone was, like, really into bronze?”

Cartoon by Ellis Rosen

The more centralized the system, the further an error can travel. In March, when Baidu, which operates self-driving taxis in more than a dozen Chinese cities, suffered an outage, cars halted on busy highways. We are almost certainly better off without humans at the wheel of cars and trucks, but history warns that we should not let engineers make these decisions alone. The country best equipped to help its people will not be the one that simply races to insinuate A.I. into every aspect of civic life; more likely, it will be the one that shields decisions about deployment from the distortions of ideology and corruption, that finds ways to distribute both the rewards and the losses from A.I., and that makes people feel they have a voice in their future.

America is not functioning well these days, but its political system, by design, gives the public more power to fix problems—if they choose to fix them. As Wuttke put it, “The United States has a knack of going down in flames and then rejuvenating. China does not.” The advantage might go to the side that can face its problems most candidly. “You can live in an alternate reality in China, in Russia, or in the United States,” he said. “That is always a dangerous proposition, because you might miss the signals of history coming your way.”

One afternoon in Beijing, when I found myself with a free hour, I scanned the QR code on a bike share and rode across town, savoring the fresh air. I nearly got creamed by a couple of delivery drivers, but it was a joy to be someplace where I could be free of real-time feedback on my micro-gestures.

For all the assertive calculations and predictions that I’d been served during my interviews, I couldn’t shake the feeling that the future is too opaque to predict, let alone to ordain to multiple decimal places. Young Chinese people, like young Americans, are partaking in a new fad for fortune-telling. People are going out for drinks and astrology readings, or using astrology apps. (In Chinese, the term for “fortune-telling” shares a character with the term for “algorithm.”)

Beijing has had fortune-tellers for centuries, though the Party opposes what it calls “feudal superstitious activities” and periodically cracks down on them. They always filter back, quietly resuming work in neighborhoods near Buddhist and Confucian temples. I was connected to a man in his early seventies whom I’ll call Master Sun. He wasn’t around all the time—fortune-tellers are gig workers—but he agreed to meet, and arrived wearing an old-fashioned blue padded jacket and a jade necklace. He was walking beside his bike, with a basket on the front and plastic wrap still protecting the frame, like a sofa guarded against spillage.

Master Sun’s office was a block away, and as we walked he asked how I knew Mandarin. I used to live in China, but I’m American, I said. “America is a powerful country,” he told me.

“China is also powerful,” I replied.

“Not as good as America,” he said.

We reached his office, tucked behind a convenience store. On his desk, he had a small shrine, with a ceramic Buddha, an incense burner, three gourds, and a chocolate bar. He studied the lines on my palm, gave me some bronze coins to toss, asked for my birth date, and began calculating on a pad of paper. Watching him work felt faintly radical; he had found a way to survive with dignity against both the Communist Party and the age of algorithms. After a while, he looked over the top of his glasses and told me, “Your fortune says you have a noble destiny.”

I liked the sound of that. It reminded me of the jolt of pleasure when ChatGPT applauds your question. I asked, “I want to raise my children well and give them a bright future. What should I do?”

Master Sun thought for a moment and said, “You should give them great wisdom. That’s more important than giving them money. Make sure they study well. With that, wealth will come.”

This was kind, though I wasn’t sure anyone knows the answer anymore. Finally, Master Sun pulled out a stack of folded red cardboard slips and asked me to pick three. He looked at them and announced, “You’re destined for either political power or great wealth!” I decided to wrap it up while I was still feeling at least 76.67 per cent positive.

But then he paused and held up one of my three slips. It was labelled “Joy Knocks at the Door.” He said that it was the luckiest slip in the deck, and he offered advice: “You should spend a little money to protect that good luck.”

Oh? I asked. How much?

“Six hundred and sixty yuan,” he said—about ninety-seven dollars.

I wasn’t going to argue with the fortune-teller. He accepted multiple payment platforms. We took out our phones and I sent him the money. ♦

An earlier version of this article inaccurately referred to the Xiaomi SU7 Ultra’s acceleration and misstated the year that Bill Clinton repealed the separation between commercial and investment banking.