

# Weekly Progress Roundup

New poverty estimates, a decline in sex-selective abortion, beaver recolonization, and more.

MALCOLM COCHRAN  
JUN 15, 2025

♡ 7

💬 1

↻ 2

Share

⋮

## Announcements

This summer, our managing editor [Chelsea Follett](#) will be speaking at [Cato University](#), an educational conference for college and graduate students who want to better understand the ideas and policies that foster free, prosperous societies.

The event will be held twice—July 31 to August 3 and August 13 to 16—at the Cato Institute in Washington, DC. All who attend will receive hotel accommodations, meals throughout the conference, and a travel stipend.

During the conference, Chelsea will join [Erec Smith](#), a Cato Institute scholar and professor of rhetoric, to discuss the drivers of human flourishing and how best to communicate the story of human progress to the public.

Interested students should [apply](#) by June 30.

## Culture & Tolerance

- **Sex-selective abortion**—the infamous practice of aborting fetuses, usually girls, because of their sex—**has become much less common** in recent years. According to *The Economist*:

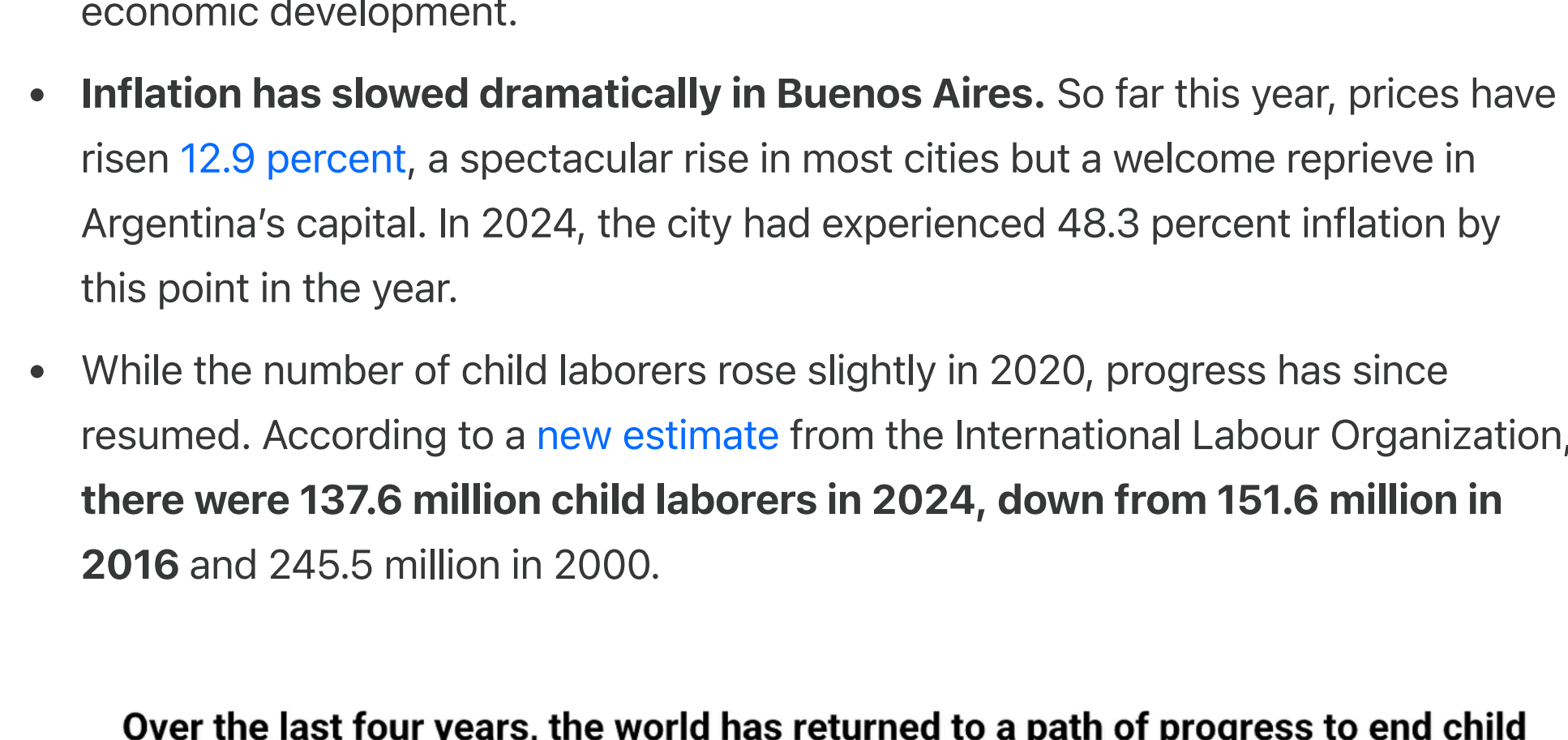
Globally, among babies born in 2000, a staggering 1.6m girls were missing from the number you would expect, given the natural sex ratio at birth. This year that number is likely to be 200,000—and it is still falling.

The fading of boy preference in regions where it was strongest has been astonishingly rapid. The natural ratio is about 105 boy babies for every 100 girls; because boys are slightly more likely to die young, this leads to rough parity at reproductive age. The sex ratio at birth, once wildly skewed across Asia, has become more even. In China it fell from a peak of 117.8 boys per 100 girls in 2006 to 109.8 last year, and in India from 109.6 in 2010 to 106.8. In South Korea it is now completely back to normal, having been a shocking 115.7 in 1990.

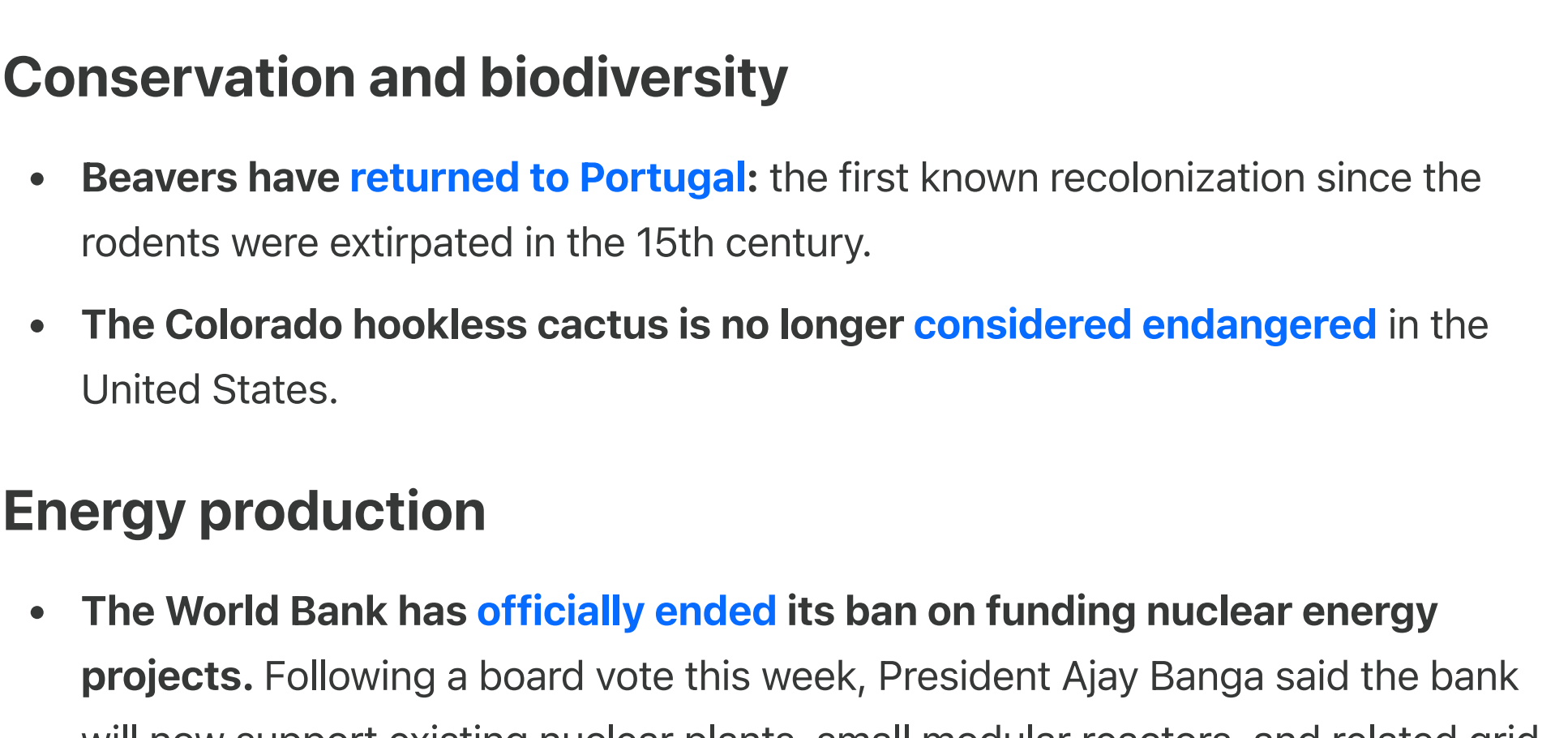
- The latest [Global Gender Gap report](#) from the World Economic Forum found that **the global gender gap narrowed slightly since last year**, from 68.4 percent in 2024 to 68.8 percent in 2025. The index is based on indicators related to education, workforce participation, health, and political empowerment.

## Economics & Development

- The World Bank has [extended its global poverty estimates](#) up to 2025. Part of the revision involved moving to a higher poverty line: \$3.00 per day at 2021 purchasing power parities (PPPs), up from the previous benchmark of \$2.15 per day at 2017 PPPs. This higher threshold has raised the overall poverty level, but the trend remains incredibly optimistic. **In 1990, under the new measurement, around 43.6 percent of humanity lived in extreme poverty. In 2025, that’s expected to fall to 9.9 percent.**



- With financing from the World Bank, **the government of the Ivory Coast has accelerated title deed delivery**, quintupling the number of formal titles granted to landowners since the initiative began in 2018. The effort is intended to reduce land disputes and strengthen property rights—a [prerequisite](#) for sustained economic development.
- **Inflation has slowed dramatically in Buenos Aires**. So far this year, prices have risen [12.9 percent](#), a spectacular rise in most cities but a welcome reprieve in Argentina’s capital. In 2024, the city had experienced 48.3 percent inflation by this point in the year.
- While the number of child laborers rose slightly in 2020, progress has since resumed. According to a [new estimate](#) from the International Labour Organization, **there were 137.6 million child laborers in 2024, down from 151.6 million in 2016** and 245.5 million in 2000.



## Energy & Environment

### Conservation and biodiversity

- **Beavers have returned to Portugal**: the first known recolonization since the rodents were extirpated in the 15th century.
- **The Colorado hookless cactus is no longer considered endangered** in the United States.

### Energy production

- **The World Bank has officially ended its ban on funding nuclear energy projects**. Following a board vote this week, President Ajay Banga said the bank will now support existing nuclear plants, small modular reactors, and related grid infrastructure.

### Natural resources

- Several companies are exploring the possibility of [desalinating water on the ocean floor](#). At those depths, the water is often cleaner, leftover salt can be expelled with less harm to wildlife, and **the high pressure can help push seawater through desalination membranes, making the process less energy-intensive**.

## Food & Hunger

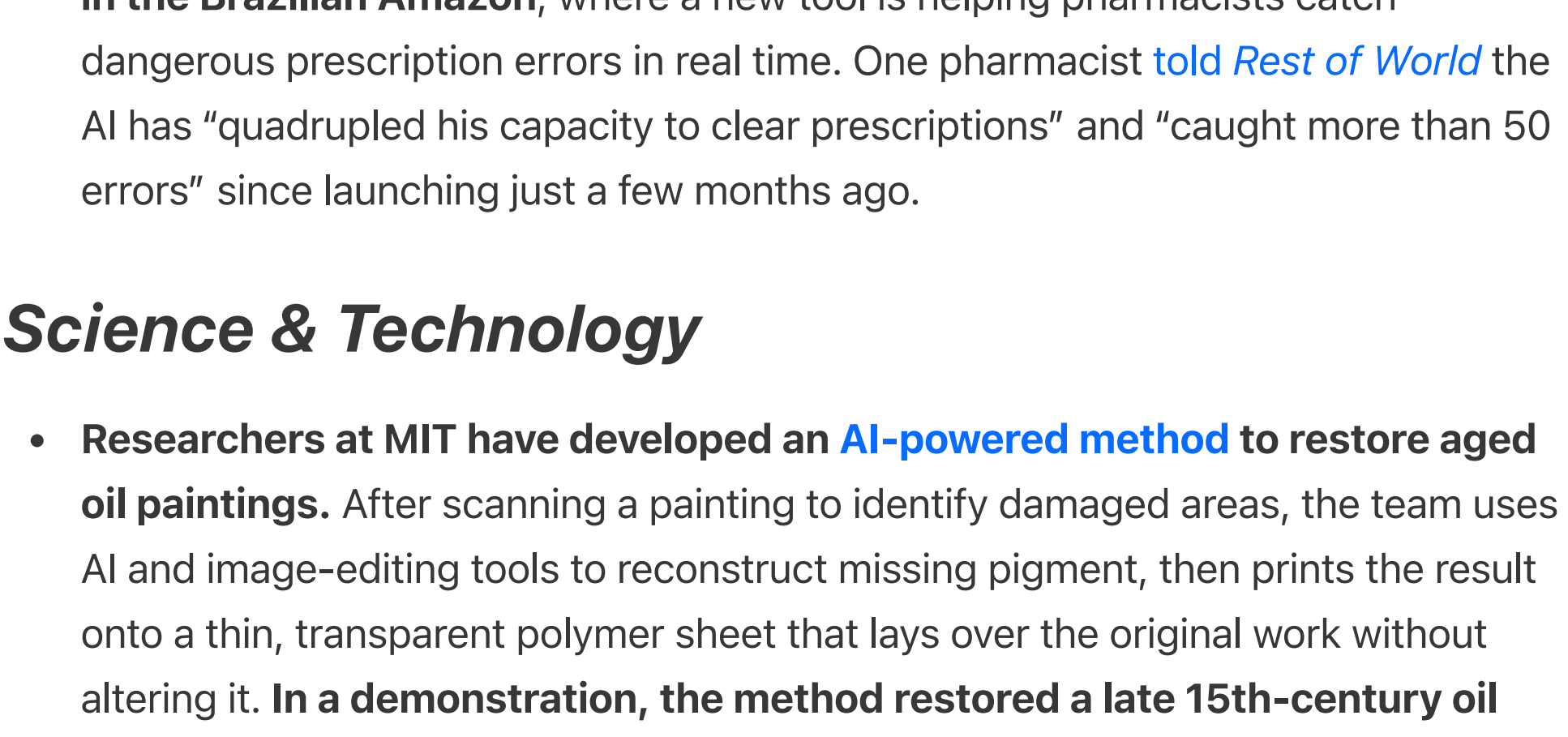
- **Lab-grown salmon** from the startup Wildtype **has received an FDA “no-questions” letter**, meaning **the agency found no safety concerns** with the product. You can try it at Kann, a Haitian restaurant in Portland, Oregon.

Thanks for reading Doomsayer! [Subscribe for free](#) to receive new posts in your inbox.

✓ Subscribed

## Health & Demographics


- In North America and Europe, childhood leukemia once killed over 90 percent of children with the disease within five years of their diagnosis. Today, **around 85 percent survive that long**, a leading example of general progress against childhood cancer.



- **The Swiss pharmaceutical company Roche is developing a new antibiotic, zosurabalin, to combat one of the world’s deadliest drug-resistant infections**. The drug targets *Acinetobacter baumannii*, a hospital-acquired superbug resistant to nearly all existing antibiotics. Roche plans to begin Phase III trials in late 2025—a rare late-stage advance in a field long stalled by limited commercial incentives.
- Australian researchers have developed **a blood test that can identify coeliac disease without requiring patients to consume large amounts of gluten beforehand**. Currently, diagnosis requires eating gluten for weeks to trigger symptoms before testing, an uncomfortable and potentially harmful process for those with gluten intolerance.
- **Botswana has reduced the mother-to-child HIV transmission rate to 1.2 percent**, an exceptionally low rate for a country with such a [large HIV problem](#). In 2023, fewer than 100 Batswana were born with the disease.
- **Artificial intelligence is proving to be a boon to understaffed medical clinics in the Brazilian Amazon**, where a new tool is helping pharmacists catch dangerous prescription errors in real time. One pharmacist [told Rest of World](#) the AI has “quadrupled his capacity to clear prescriptions” and “caught more than 50 errors” since launching just a few months ago.

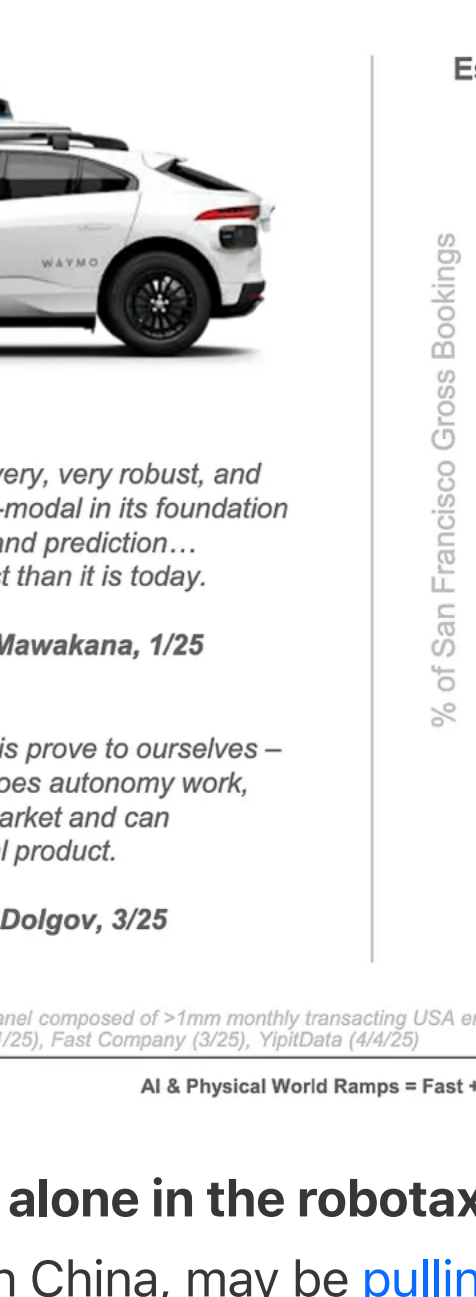
## Science & Technology


- **Researchers at MIT have developed an AI-powered method to restore aged oil paintings**. After scanning a painting to identify damaged areas, the team uses AI and image-editing tools to reconstruct missing pigment, then prints the result onto a thin, transparent polymer sheet that lays over the original work without altering it. **In a demonstration, the method restored a late 15th-century oil painting in just 3.5 hours.**



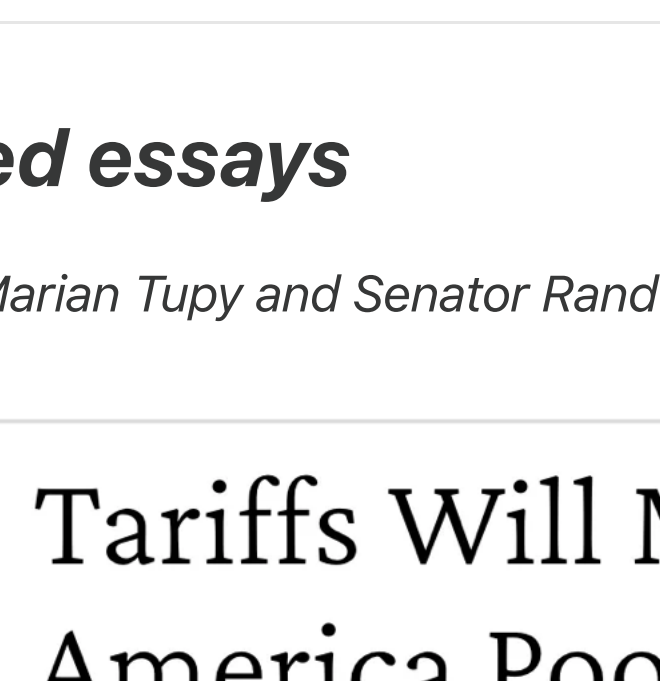
Overview of Physically-Applied Digital Restoration

Copy link



Watch on  YouTube

- **Researchers have developed a brain implant** that enables a man with **speech paralysis to speak expressively in real time**. Electrodes implanted in his motor cortex capture neural signals as he attempts to speak, and an AI-powered decoder converts them into a synthetic voice modeled on his own—all within just 10 milliseconds.
- **UK regulators will allow the autonomous driving startup Wayve to begin testing vehicles in London** as early as spring 2026. The trials, conducted in partnership with Uber, would mark a major step toward beginning commercial robotaxi services in the UK.
- **Waymo is taking over the rideshare market in San Francisco**. In April, its self-driving taxis handled [over a quarter](#) of all rideshare bookings within its operating area—surpassing Lyft and seriously eroding Uber’s local dominance.



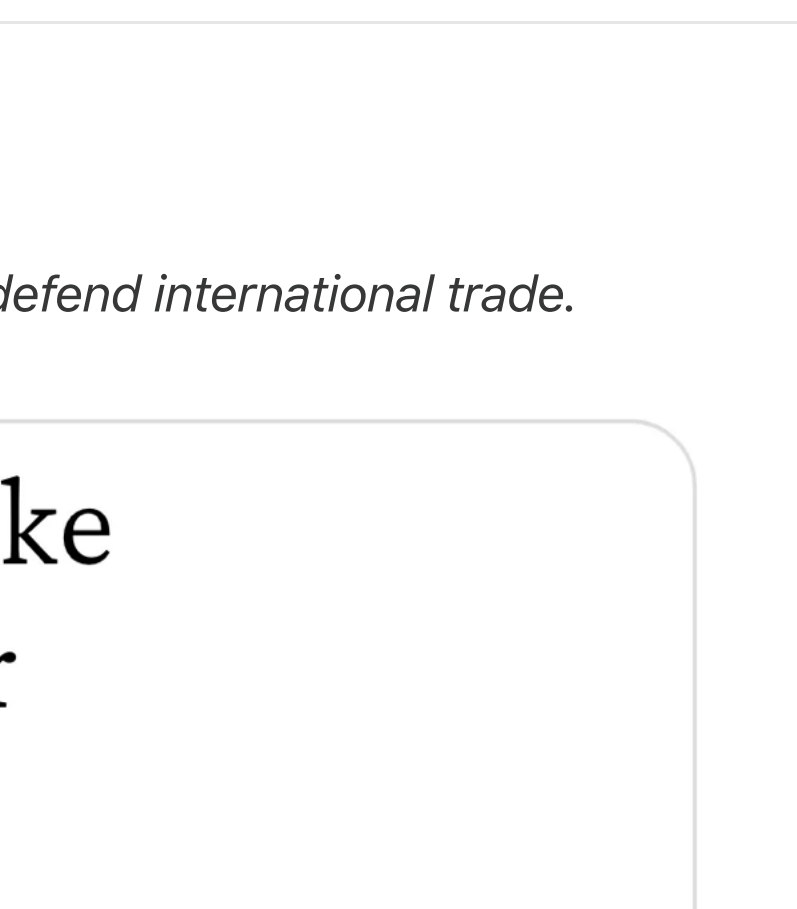
*[We are creating] an end-to-end, very, very robust, and large end-to-end system that’s multi-modal in its foundation so that perception planning and prediction... can become even more robust than it is today.*

- Waymo Co-CEO Tekedra Mawakana, 1/25

*What we’ve done in San Francisco is prove to ourselves – and to the world – that not only does autonomy work, but it works at scale in a market and can be a viable commercial product.*

- Waymo Co-CEO Dmitri Dolgov, 3/25

Estimated Market Share (Gross Bookings) – 8/23-4/25, San Francisco Operating Zone, per YipitData



% of San Francisco Gross Bookings

Waymo Uber Lyft

BOND

AI & Physical World Ramps = Fast + Data-Driven

302

- That said, **Waymo is not alone in the robotaxi race**. Baidu’s Apollo Go, the largest robotaxi service in China, may be [pulling ahead of Waymo](#) both in terms of total ride volume and geographic expansion.

Read more news stories on our website

Selected essays

Our editor *Marian Tupy* and Senator *Rand Paul* defend international trade.


Tariffs Will Make America Poorer

Trade is not only good; it is indispensable.

MAY 30, 2025 • COMMENTARY

By Senator *Rand Paul* (R-KY) and *Marian L. Tupy*

A new *Works in Progress* issue on *brain implants*, *urban planning*, *inflation targeting*, and more.



The Works in Progress Newsletter

Issue 19: American S-Bahn

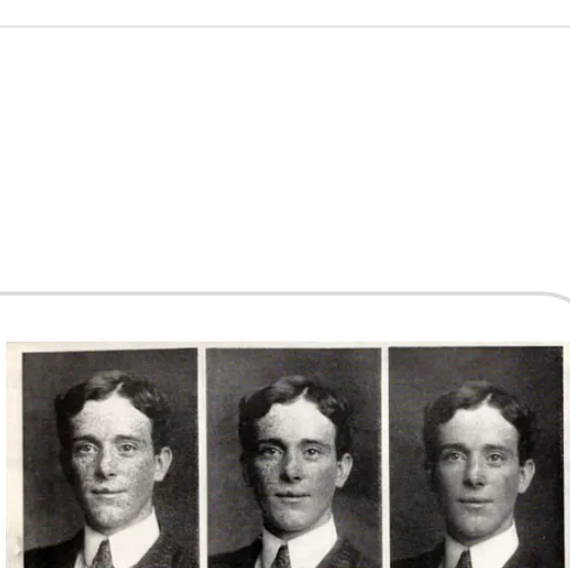
Works in Progress Issue 19 is out today...

Read more

3 days ago · 20 likes · 3 comments · Works in Progress

**America tried to ban fake photos in 1912**

The nation has been wrestling with manipulated images since long before AI.



AP Photo  
AP Photo  
AP Photo  
New-York Tribune



# China’s Rare Earths Aren’t as Rare as You Think

When the country tried to choke off supply of the metals before, the world found ways to adapt.


MARIAN L TUPY  
JUN 13, 2025

 12

 1

 3

Share





China responded to President Trump’s tariff hikes with a series of retaliatory measures. On April 4, among other moves, Beijing suspended the export of some of the 17 rare-earth metals and magnets that are vital to American defense, energy and automotive industries.

The commentary that ensued revealed profound anxieties about alleged Western vulnerabilities. The New York Post accused the Chinese of “kneecapping US industry.” The BBC declared that the communist nation had dealt “a major blow to the US,” while the Economist warned that China’s control of rare earths was a “weapon that could hurt America.”

These commentators have a point. According to the International Energy Agency, China produces about 61% of rare-earth minerals, and it processes 92%. The anguished reaction from the American press, however, revealed a measure of obliviousness. The reality is that America has been here before.


Fifteen years ago, following a dispute with Tokyo over contested waters, China imposed a rare-earth embargo on Japan, while cutting its rare-earth export quotas to the rest of the world by 40%. Beijing’s actions rang alarm bells across the industrialized world. Prices of the rare-earth metals spiked, with cerium soaring from \$4.15 a kilogram in January 2010 to \$150.55 in July 2011. American defense analysts warned that Beijing was exploiting a strategic vulnerability. U.S. manufacturers scrambled for alternatives to the minerals, which play a crucial role in everything from wind turbines to precision-guided missiles.

The panic seemed justified. At the time China controlled 93% of global rare-earth production and more than 99% of the most valuable heavy rare earths. Congress convened a hearing on China’s rare earths monopoly, with Rep. Don Manzullo (R., Ill.) saying that Beijing’s action “threatens tens of thousands of American jobs.”

The narrative was compelling: An authoritarian power was wielding its mineral wealth as a geopolitical weapon, putting a resource-hungry West at its mercy. Yet few people remember this supposed strategic calamity today.

Market mechanisms undermined China’s attempt at resource leverage. In the early 2010s, supply growth outside China accelerated. Projects already in development by Molycorp in California and Lynas in Australia ramped up, adding tens of thousands of metric tons of production capacity. By 2014 China’s market share of rare earths had fallen from more than 90% to about 70%.

Thanks for reading Doomslayer! [Subscribe for free](#) to receive new posts in your inbox.

 **Subscribed**

China’s export quotas also proved surprisingly porous. Producers exploited loopholes by shipping minimally processed alloys exempt from restrictions, while an estimated 15% to 30% of production was smuggled through neighboring countries. Beijing’s inability to police thousands of small miners fatally undercut its embargo.

Manufacturers displayed remarkable adaptability. Refineries temporarily substituted alternative catalysts, and magnet producers optimized alloys to use less rare-earth material, some even switching entirely to new technologies. This “demand destruction” blunted the crisis’ effect even before new supplies could fully come online. Prices that had spiked in 2011 quickly retreated to pre-crisis levels.

The 2010 episode revealed fundamental constraints on attempts to use raw materials as geopolitical weapons. While China retains significant market share, the U.S. defense industry has reduced its reliance on rare earths to a minimum (the equivalent of less than 0.1% of global demand), and weapons programs maintain inventories to buffer temporary supply disruptions.

Despite their name, rare earths are quite abundant. Cerium is the 25th most common element on Earth. At 68 parts per million of Earth’s crust by weight, it is more abundant than copper. Rare earths are “rare” because of geochemical dispersion. They tend to remain evenly mixed rather than found in their pure form. They also pose extraction challenges, since they are usually bound up in a handful of mineral hosts that often contain radioactive thorium or uranium. That is what makes rare-earth deposits relatively scarce.

That can sometimes translate into environmental challenges when it comes to teasing out the needed elements. But such concerns must at times give way to national-security considerations. Similarly, free trade and friendly relations with allies who produce rare earths at scale, such as Canada, should be a higher priority than unrealistic and counterproductive spats over national sovereignty and illegal border crossings.

More broadly, as the U.S. navigates new supply-chain anxieties in semiconductors, critical minerals and pharmaceutical ingredients, we should remember the rare-earth crisis that never was—a testament to the resilience of global markets and human innovation in the face of attempted economic coercion.

*This article was originally published in the [Wall Street Journal](#) on 5/12/2025.*



# Grim Old Days: Virginia Postrel’s Fabric of Civilization

Beneath today’s abundance of clothing lies a long and brutal history.

CHELSEA OLIVIA FOLLETT  
JUN 11, 2025

12

1

Share



Virginia Postrel’s *The Fabric of Civilization: How Textiles Made the World* is the riveting story of how humanity’s quest for thread, cloth, and clothing built modern civilization, by motivating achievements from the Neolithic Revolution to the Industrial Revolution and more. While much of the book contains inspiring tales of innovation, artistry, and entrepreneurship, the parts of the book about the preindustrial era also reveal some dark and disturbing facts about the past.

In the preindustrial era, clothing was often painstakingly produced at home. Postrel estimates that, in Roman times, it took a woman about 909 hours—or 114 days, almost 4 months—to spin enough wool into yarn for a single toga. With the later invention of the spinning wheel, the time needed to produce yarn for a similarly sized garment dropped to around 440 hours, or 50 days. Even in the 18th century, on the eve of industrialization, Yorkshire wool spinners using the most advanced treadle spinning wheels of the time would have needed 14 days to produce enough yarn for a single pair of trousers. Today, by contrast, spinning is almost entirely automated, with a single worker overseeing machines that are able to produce 75,000 pounds of yarn a year—enough to knit 18 million T-shirts.

Most preindustrial women devoted enormous amounts of time to producing thread, which they learned how to make during childhood. It is not an exaggeration to say, as Postrel does, “Most preindustrial women spent their lives spinning.” This was true across much of the world. Consider Mesoamerica:

At only four years old, an Aztec girl was introduced to spinning tools. By age six, she was making her first yarn. If she slacked off or spun poorly, her mother punished her by pricking her wrists with thorns, beating her with a stick, or forcing her to inhale chili smoke.

These girls often multitasked while spinning: “preindustrial spinners could work while minding children or tending flocks, gossiping or shopping, or waiting for a pot to boil.” The near-constant nature of the task meant that prior to the Industrial Revolution, “industry’s visual representation was a woman spinning thread: diligent, productive, and absolutely essential” to the functioning of society, and from antiquity onward cloth-making was viewed as a key feminine virtue. Ancient Greek pottery portrays spinning “as both the signature activity of the good housewife and something prostitutes do between clients,” showing that women of different social classes were bound to spend much of their lives engaged in this task.

Women of every background worked day and night, but still, their efforts were never enough. “Throughout most of human history, producing enough yarn to make cloth was so time-consuming that this essential raw material was always in short supply.”

Having sufficient spun yarn or thread was only the beginning; it still had to be transformed into cloth. “It took three days of steady work to weave a single bolt of silk, about thirteen yards long, enough to outfit two women in blouses and trousers,” although silk-weavers themselves could rarely afford to wear silk. According to Postrel, a Chinese poem from the year 1145, paired with a painting of a modestly dressed, barefoot peasant weaving silk, suggests that “the couple in damask silk . . . should think of the one who wears coarse hemp.”

Thanks for reading Doomslayer! [Subscribe for free](#) to receive new posts in your inbox.

✓ Subscribed

Subdued colors often defined the clothing of the masses. “‘Any weed can be a dye,’ fifteenth-century Florentine dyers used to say. But that’s only if you want yellows, browns, or grays—the colors yielded by the flavonoids and tannins common in shrubs and trees.” Other dye colors were harder to produce.

In antiquity, Tyrian purple was a dye derived from crushed sea snails, and the notoriously laborious and foul-smelling production process made it expensive. As a result, it became a status symbol, despite the repulsive stench that clung to the fabric it colored. In fact, according to Postrel, the poet Martial included “a fleece twice drenched in Tyrian dye” in a list of offensive odors, with a joke that a wealthy woman wore the reeking color to conceal her own body odor. The fetor became a status symbol. “Even the purple’s notorious stench conveyed prestige, because it proved the shade was the real thing, not an imitation fashioned from cheaper plant dyes.” The color itself was not purple, despite the name, but a dark hue similar to the color of dried blood. Later, during the Renaissance, Italian dyers yielded a bright red from crushed cochineal insects imported from the Americas, as well as other colors that were created by using acidic bran water that was said to smell “like vomit.”

Numerous laws strictly regulated what people were allowed to wear. Italian city-states issued more than 300 sumptuary laws between 1300 and 1500, motivated in part by revenue-hungry governments’ appetite for fines. For example, in the early 1320s, Florence forbade women from owning more than four outfits that were considered presentable enough to wear outside. Postrel quotes the Florentine sumptuary law official Franco Sacchetti as writing that women often ignored the rules and argued with officials until the latter gave up on enforcement; he ends his exasperated account with the saying, “What woman wants the Lord wants, and what the Lord wants comes to pass.” But enough fines were collected to motivate officials to enact ever more restrictions.

In Ming Dynasty China, punishment for dressing above one’s station could include corporal punishment or penal servitude. Yet, as in Florence, and seemingly nearly everywhere that sumptuary laws were imposed, such regulations were routinely flouted, with violators willing to risk punishment or fines. In France in 1726, the authorities harshened the penalty for trafficking certain restricted cotton fabrics, which were made illegal in 1686, to include the death penalty. The French law was not a traditional sumptuary law, but an economic protectionist measure intended to insulate the domestic cloth industry from foreign competition. Postrel quotes the French economist André Morellet lamenting the barbarity of this rule, writing in 1758,

Is it not strange that an otherwise respectable order of citizens solicits terrible punishments such as death and the galleys against Frenchmen, and does so for reasons of commercial interest? Will our descendants be able to believe that our nation was truly as enlightened and civilized as we now like to say when they read that in the middle of the eighteenth century a man in France was hanged for buying [banned cloth] to sell in Grenoble for 58 [coins]?

Despite such disproportionate punishments, the textile-smuggling trade continued. Postrel’s book exposes the brutal realities woven into the history of textiles; stories not just of uplifting innovation, but of relentless toil, repression, and suffering. Her book fosters a deeper appreciation for the wide range of fabrics and clothes that we now take for granted, and it underscores the human resilience that made such abundance and choice possible.

Read more about the Grim Old Days