

The New York Times: -The Internet's Final Frontier: Remote Amazon Tribes- [C1]

In Brasile, il capo di una tribù dell'Amazzonia ha lottato per portare Internet alla sua comunità. L'introduzione di questa tecnologia in uno degli angoli meno collegati del mondo si è trasformata in un rapido esperimento sui suoi effetti nocivi.

As the speeches [dragged on](#), eyes [drifted](#) to screens. Teenagers scrolled Instagram. One man texted his girlfriend. And men [crowded around](#) a phone streaming a soccer match while the group's first female leader spoke. Just about anywhere, a scene like this would be mundane. But this was happening in a remote indigenous village in one of the most isolated [stretches](#) of the planet. The Marubo people have long lived in communal [hutsscattered](#) hundreds of miles along the Ituí River deep in the Amazon rainforest. They speak their own language, take ayahuasca to connect with forest spirits and trap spider monkeys to make soup or keep as pets. They have preserved this way of life for hundreds of years through isolation — some villages can take a week to reach —, but since September, the Marubo have had high-speed internet thanks to Elon Musk. The two-thousand-member tribe is one of hundreds across Brazil that are suddenly [logging on](#) with Starlink, a satellite-internet service from Space X, Musk's private space company. Since its entry into Brazil in 2022, Starlink [has swept across](#) the world's largest rainforest, bringing the web to one of the last offline places on Earth. The New York Times traveled deep into the Amazon to visit Marubo villages to understand what happens when a tiny, closed civilization suddenly opens to the world. "When it arrived, everyone was happy," said Tsainama Marubo, seventy-three, sitting on the [dirt](#) floor of her village's maloca, a fifty-foot-tall hut where the Marubo sleep, cook and eat [together](#). The internet brought clear benefits, including video chats with faraway loved ones and calls for help in emergencies. "But now, things have gotten worse," she said. The Marubo are struggling with the internet's fundamental problem: It has become essential — [at a cost](#). After only nine months with Starlink, the Marubo are already [grappling with](#) the same challenges that have [racked](#) American households for years: teenagers glued to phones; group chats full of gossip; addictive social networks; online strangers; violent video games; [scams](#); misinformation; and minors watching pornography. Modern society has dealt with these issues over decades as the internet continued its [relentless](#) march. The Marubo and other indigenous tribes, who have resisted modernity for generations, are now confronting the internet's potential and peril

all at once, while debating what it will mean for their identity and culture. That debate has arrived now because of Starlink, which has quickly dominated the satellite-internet market worldwide by providing service once unthinkable in such remote areas. SpaceX has done so by launching six thousand low-orbiting Starlink satellites — [roughly](#) 60 per cent of all active spacecraft — to deliver speeds faster than many home internet connections to just about anywhere on Earth, including the Sahara, the Mongolian [grasslands](#) and tiny Pacific islands. Business [is soaring](#). Musk recently announced that Starlink had surpassed three million customers across ninety-nine countries. Analysts estimate that annual sales are up [roughly](#) 80 per cent from last year, to about \$6.6 billion. Starlink's rise has given Musk control of a technology that has become critical infrastructure in many parts of the globe. It is being used by troops in Ukraine, paramilitary forces in Sudan, Houthi rebels in Yemen, a hospital in the [Gaza Strip](#) and emergency responders across the world. But perhaps Starlink's most transformative effect is in areas once largely out of the internet's reach, including the Amazon. There are now 66,000 active contracts in the Brazilian Amazon, touching 93 per cent of the region's legal municipalities. That has opened new job and education opportunities for those who live in the forest. It has also given illegal [loggers](#) and miners in the Amazon a new tool to communicate and evade authorities. One Marubo leader, Enoque Marubo (all Marubo use the same surname), forty, said he immediately saw Starlink's potential. After spending years outside the forest, he said he believed the internet could give his people new autonomy. With it, they could communicate better, inform themselves and tell their own stories. Last year, he and a Brazilian activist recorded a fifty-second video [seeking help](#) getting Starlink from potential benefactors. He wore his traditional Marubo [headdress](#) and sat in the maloca. A [toddler](#) wearing a necklace of animal teeth sat nearby. They sent it off. Days later, they heard back from a woman in Oklahoma.

THE TRIBE

The Javari Valley Indigenous Territory is one of the most isolated places on Earth, a dense stretch of rainforest the size of Portugal with no roads and a [maze](#) of waterways. Nineteen of the twenty-six tribes in the Javari Valley live in full isolation, the highest concentration in the world. The Marubo were once uncontacted, too, [roaming](#) the forest for hundreds of years, until [rubber tappers](#) arrived near the end of the 19th century. That led to decades of violence and disease — and the arrival of new customs and technology. The Marubo began wearing clothes. Some learned Portuguese. They [swapped bows](#) for firearms to hunt [wild boar](#), and machetes for [chain saws](#) to clear [plots](#) for [cassava](#). One family in particular pushed this change. In the 1960s, Sebastião Marubo was one of the first Marubo to live outside the forest. When he returned, he brought another new technology: the boat motor. It cut trips from weeks to days. His son Enoque emerged as a leader of the next generation, [eager](#) to pull his tribe into the future. Enoque [has split](#) this life between the forest and the city, working at one point as a

graphic designer for Coca-Cola. So when Marubo leaders became interested in getting internet connections, they went to him to ask how. Enoque got his answer when Musk came to Brazil. In 2022, the SpaceX owner and Jair Bolsonaro, Brazil's president at the time, announced Starlink's arrival in front of a screen that said, "Connecting the Amazon." Enoque and Flora Dutra, a Brazilian activist who works with indigenous tribes, sent letters to more than a hundred members of Congress asking for Starlink. None responded. Then early last year, Dutra saw an American woman speak at a space conference. Dutra checked the woman's Facebook page and saw her posing outside SpaceX's headquarters. "I knew she was the one," she said.

THE BENEFACTOR

Allyson Reneau's LinkedIn page describes her as a space consultant, [keynote speaker](#), author, pilot, [equestrian](#), humanitarian, chief executive, board director and mother of eleven biological children. In person, she says she makes most of her money coaching gymnastics and renting houses near Norman, Oklahoma. Reneau said she did not try to help people for fame. "Otherwise, I'd be telling you about all the projects I do all over the world," she said in an interview. "It's the look on the face, it's the hope in the eyes. That's the trophy." She said she had that perspective when she received a video from a stranger last year asking to help connect a remote Amazon tribe. She had never been to Brazil but thought the return on investment was high. Enoque was asking for twenty Starlink antennas, which would cost [roughly](#) \$15,000, to transform life for his tribe. Reneau said she bought the antennas with her own money and donations from her children. Then she booked a flight to go help deliver them.

THE CONNECTION

The internet arrived on the backs of men. They [trudged](#) miles through the forest, [barefoot](#) or in [flip-flops](#), carrying two antennas each. Just behind were Enoque, Dutra, Reneau and a cameraperson documenting her journey. The internet was an immediate sensation. "It changed the routine so much that it was [detrimental](#)," Enoque admitted. "In the village, if you don't hunt, fish and plant, you don't eat." Leaders realized they needed limits. The internet would be [switched on](#) for only two hours in the morning, five hours in the evening and all day Sunday. During those windows, many Marubo are [crouched over](#) or reclined in [hammocks](#) on their phones. They spend lots of time on WhatsApp. There, leaders coordinate between villages and alert authorities to health issues and environmental destruction. Marubo teachers share lessons with students in different villages. And everyone is in much closer contact with faraway family and friends. To Enoque, the biggest benefit has been in emergencies. A venomous snake bite can require [swift](#) rescue by helicopter. Before the internet, the Marubo used amateur

radio,[relaying](#) a message between several villages to reach authorities. The internet made such calls instantaneous. “It’s already saved lives,” he said.

THE DEBATE

Alfredo Marubo, leader of a Marubo association of villages, has emerged as the tribe’s [most vocal critic](#) of the internet. The Marubo [pass down](#) their history and culture orally, and he worries that knowledge will be lost. “Everyone is so connected that sometimes they don’t even talk to their own family,” he said. He is most [unsettled](#) by the pornography. He said young men were sharing explicit videos in group chats, a stunning development for a culture that [frowns on](#) kissing in public. In April, Reneau traveled back to the forest. At Enoque’s request, she bought four more antennas. Two were headed to the Korubo, a tribe of less than one hundred and fifty people that was first contacted in 1996 and still has some members in full isolation. Sitting on a [log](#), eating dried beef and boiled [cassava](#) served on the maloca’s [dirt](#) floor, Reneau said she [recognized](#) the internet was “a [double-edged sword](#).” So when she posts on Facebook about bringing the Marubo internet, she said, she always [stresses](#) that a leader requested it. “I don’t want people to think I’m bringing this in to force it on them,” she said. She added that she hoped they could “preserve the purity of this incredible culture because once it’s gone, it’s gone.” Later at that same meal, Enoque’s father, Sebastião, said the tribe’s journey with the internet had been [foretold](#). Decades ago, the most respected Marubo shaman had visions of a [handheld device](#) that could connect with the entire world. “It would be for the good of the people,” he said. “But in the end, it wouldn’t be.” “In the end,” he added, “there would be war.” His son sat on the [log](#) across from him, listening. “I think the internet will bring us much more benefit than [harm](#),” Enoque said, “at least for now.” [Regardless](#), he added, going back was [no longer](#) an option. “The leaders have been clear,” he said. “We can’t live without the internet.” **Published in The New York Times on June 2, 2024. Reprinted with permission.**

Glossary

- **roaming** = vagare
- **hammocks** = amache
- **relaying** = trasmettere
- **pass down** = tramandare
- **Regardless** = a prescindere
- **at a cost** = con un prezzo
- **loggers** = taglialegna
- **handheld device** = dispositivo portatile
- **has swept across** = estendersi
- **crouched over** = accovacciarsi
- **keynote speaker** = oratrice principale
- **wild boar** = cinghiali
- **swift** = rapido
- **og** = tronco
- **foretold** = predetto
- **harm** = danno
- **no longer** = non più
- **racked** = tormentare
- **seeking help** = chiedere aiuto
- **grasslands** = praterie
- **logging on** = connettersi
- **scams** = truffe
- **most vocal critic** = il più critico
- **flip-flops** = infradito
- **dragged on** = andare per le lunghe
- **swapped** = sostituire
- **relentless** = inarrestabile
- **is soaring** = sollevarsi
- **Gaza Strip** = striscia di Gaza
- **headdress** = copricapo
- **rubber tappers** = coltivatori di gomma
- **chain saws** = motoseghe
- **frowns on** = disapprovare
- **drifted** = andare alla deriva
- **dirt** = terra
- **stresses** = sottolineare
- **maze** = labirinto
- **trudged** = camminare faticosamente
- **switched on** = accendere
- **crowded around** = affollarsi intorno

- **grappling with** = essere alle prese con
- **double-edged sword** = arma a doppio taglio
- **plots** = appezzamenti
- **detrimental** = dannoso
- **has split** = dividere
- **equestrian** = fantina
- **unsettled** = inquieto
- **scattered** = sparso
- **eager** = desideroso
- **toddler** = bambino
- **cassava** = manioca
- **roughly** = grossomodo
- **bows** = archi
- **barefoot** = a piedi nudi
- **stretches** = allargare
- **huts** = capanne