PROFILE: FRÉDÉRIQUE DARRAGON

Unraveling a Riddle in Plain Sight

Amateur archaeologist Frédérique Darragon has spent 12 years documenting hundreds of mysterious towers in Southwest China—and winning over skeptical academics

CHENGZI, CHINA—The jeep grinds over a rise on a rutted dirt road in the foothills of the Himalayan Mountains. "Stop here!" exclaims Martine Françoise Darragon. The svelte socialite-turned-explorer leaps out and holds up an old photo showing snowcapped peaks towering over gentle valley slopes, with a rock-strewn river in the foreground. The black-and-white landscape of western Sichuan Province, captured in the 1930s by the intrepid botanist Joseph Rock, matches the view from where Darragon, who goes by the name Frédérique, is standing. "This is where he took the picture," she says in her French-New York City accent. But something from the photo is missing from the land today: two eve-catching stone towers whose beveled walls, viewed from above, would form eight-pointed stars.

In the 70 years since Rock's travels through the Tribal Corridor of Tibet and western Sichuan, a small village inhabited by Minyag people has sprung up here on the banks of the Chengzi River, some 3750 meters above sea level. Defying the thin air, Darragon, 60, bounds across a stone bridge over the Chengzi and makes a beeline to where the nearest tower in the postcard once stood. All that's left now of a structure that had been at least 25 meters tall is a dilapidated first-floor section: interior stonework and fill, and a doorway framing blue sky. Over more than a decade, Dar-

ragon has identified nearly 1000 such ancient structures in Sichuan and neighboring Tibet, from total wrecks like this one to largely intact towers exceeding 50 meters in height. Many more have been lost through the ages.

Why these Himalayan towers were built is an enduring mystery. Other structures squat, square towers erected against northern invaders—once were widespread and are of scant scientific interest. But the much taller star-shaped towers and other arresting buildings suggest that the medieval kingdoms of these lands were more ingenious and sophisticated than many scholars have presumed. Clusters of towers on mountain slopes may have been status symbols in a game of oneupmanship among wealthy merchants, Darragon says, while lone towers in river valleys likely served as lookouts or way stations on the southwestern Silk Road. Some towers may have held religious meaning. And a star-shaped design may help withstand shaking in a region prone to strong earthquakes.

Over the past decade, Darragon has had fragments of wood beams from several dozen towers radiocarbondated, yielding approximate ages ranging from 300 to 1700 years old. Most presumably were built during this period, although any single tower's age is hard to pin down: Some beams could have been replaced after a tower was built, yielding a more recent carbon-14 date, while others could have been built using beams from older trees that predated the towers. Darragon may be

an amateur, but her sleuthing and derring-do have earned the respect of Chinese scientists. "Some experts did not know what to think of her at first," says Zhong Xiao-Hou, director of the National Architecture Institute of China in Beijing. "But we have come to admire her spirit and enthusiasm for our heritage."

Drawing on Darragon's work, the State Administration of Cultural Heritage of China (SACH) is expected to soon nominate dozens of the more imposing structures to UNESCO's World Heritage list as the Diaolou Buildings and Villages of Tibetan and Oiang Ethnic Groups Cultural Landscapes. The towers "represent an extraordinary heritage and tradition, and deserve to be fully preserved," says Francesco Bandarin, assistant directorgeneral for culture at UNESCO.

But a UNESCO listing may not come in time for a clutch of towers near Danba, in western Sichuan, that are imperiled by the construction of a hydropower dam. The rGyalrong towers have become Darragon's latest cause célèbre.



Star attraction. Western Sichuan's star-shaped Bamei tower, restoration of which was completed last year, likely was built in the 13th or 14th century.

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Unlikely savior

Darragon's wanderings in the highlands of Sichuan and Tibet, a forbidding swath of land she has come to know better than most Westerners-and Chinese-are a far cry from the racy days of her youth. As a teenager from a wealthy Parisian family, Darragon spent summers riding horses in England and winter breaks skiing in the Swiss Alps. All the while, she nurtured a counterculture side: "I was a communist at heart," says Darragon, who worked one summer on a kibbutz in Israel.

She was also a playgirl at heart. When Darragon was 18, she inherited a small fortune from her father, an inventor and machinemaker. In early 1971, she sailed across the Atlantic as a bikini-clad deckhand in the first Cape Town-to-Rio de Janeiro race, then from Brazil to the West Indies before returning to Paris just in time to take final exams and graduate from the Universite Paris X de Sciences Economiques.

Darragon spent a few years managing her real estate and modeling. Then in the summer of 1978, she took up polo and was the first woman to play at the Bagatelle Polo Club in Paris before moving to Buenos Aires and becoming a record-setting player in Argentina. If those pursuits were not enough, Darragon has also raced as a jockey on thoroughbred horses, won renown as a samba dancer in Rio, and has had a lifelong passion for oil painting.

Along the way, Darragon collected prominent boyfriends and near-death experiences. The former include cable TV mogul Ted Turner, whom she has known since 1969 and lived with from 2000 to 2003. The latter include wiping out during a high-speed motorcycle chase in which she smashed her Suzuki into a car, flew over the hood, and landed 10 meters away without a scratch, and taking a polo ball in the mouth that crushed her jaw and knocked out several teeth. (She wrapped a scarf around her head and finished the game.) "At times I do regret my happy-go-lucky life," says Darragon, who has no children and never married. But then she found a higher purpose in China.

Darragon visited China for the first time in the early 1990s and afterward spent months each year backpacking across the country. In 1993, her interest in the endangered snow leopard brought her to Tibet, where she would have her most serious brush with death. On a solo trek in the Himalayas near the border with Bhutan in 1996, Darragon decided to shelter overnight in a tiny cave. It was freezing, so she lit a fire inside. "Terrible idea," says Darragon, whose Chinese name, Bing





A higher purpose. Frédérique Darragon samples wood for radiocarbon analysis. World Heritage status would be a boost for Minyag and other minorities who tend the towers.

Yan, means "ice flame." The fire sucked the scant oxygen from the thin air and, Darragon says, "I felt a snap inside my head." She had suffered a stroke and couldn't control her left side, but managed to drag herself outside the cave before blacking out. Three days after she recovered consciousness, Tibetan shepherds came across her and carried her to a village, where she caught a ride to Lhasa, Tibet's capital. Enfeebled, Darragon holed up in the Holiday Inn-at the time, the only hotel in Lhasa with room service. "I could only crawl and didn't want my mother to see me in such a state," she jokes. Four months later, she felt well enough to fly back to France.

Darragon was soon back in Tibet and venturing where few foreigners had ever gone, such as the remote valleys of Gongbu Jiangda, which once belonged to the ancient Nyangpo Kingdom. It was in places like that, off the beaten track, where Darragon encountered the stone towers, including ones with the astonishing starshaped walls. Locals did not know who had built the towers, how old they were, or why they were built.

Archaeologists knew about some of the more accessible towers, and Taoping, a Qiang village with several towers a few hours from Chengdu, Sichuan's capital, has long been a tourist draw. Darragon has spent a total of 5 years roaming the hinterlands of Sichuan and Tibet, analyzing more than 250 standing towers, including a few dozen star-shaped ones and 750 or so other ruins. "The sheer amount of data she has collected about these architectural curiosities will be welcomed by a variety of specialists," says John Vincent Bellezza, senior research fellow at the Tibet Center of the University of Virginia in Charlottesville.

Under the auspices of the Unicorn Foundation, a U.S. nonprofit that Darragon founded in 2001 with seed money from Turner, wood samples from 77 towers—54 in Sichuan and 23 in Tibet—have been radiocarbon-dated by Beta Analytic in Miami, Florida. With Darragon's help, over the past 6 years Achim Bräuning, a dendrochronologist at the University of Erlangen-Nürnberg in Germany, has been building a tree-ring database from the region. He has radiocarbon-dated wood from 16 towers; preliminary results, he says, corroborate Darragon's data. The earliest date—318 C.E., with a margin of error of 40 years—is from a star-shaped tower in Nyangpo. "It's probably the oldest one still standing in the world," Darragon says.

Search for meaning

Solving the riddle of the towers is a daunting challenge. When Darragon queried locals, she often just got shrugs. Sometimes it was lack of knowledge; sometimes it was a communication barrier. The region is a Tower of Babel of mutually unintelligible languages, and Mandarin Chinese won't get you far. Chinese annals from the Han Dynasty, which lasted from 206 B.C.E. to 220 C.E., refer to tall towers, according to Chen Zongxiang, a retired historian in Chengdu. Some old towers along the Min River in Sichuan are spaced several kilometers apart on a clear line of sight and \(\frac{1}{2} \) must have served as watchtowers or beacons, says Yasuhiko Nagano, an expert on S the Tibetan rGyalrong languages at the National Museum of Ethnology in Osaka, Japan. Untold numbers of smaller tow- 5

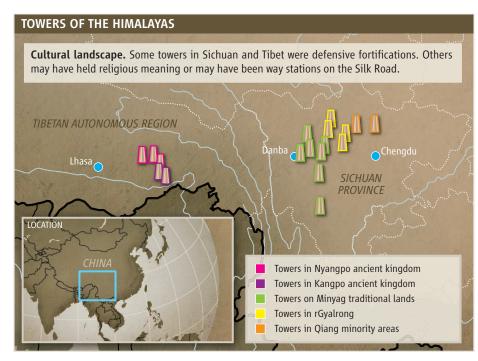
ers were built during the Jinchuan Wars of the 18th century, when the Manchurian emperor Qian Long sought to pacify the region. But many of the star-shaped towers lack classic features—arrow slits, for example—of defensive fortifications.

Scholars believe that the towers served various purposes. A majestic, hill-hugging assemblage in Danba may have arisen as merchants vied to outdo each other with taller and taller structures, similar to the origin of the San Gimignano towers in Italy, says Darragon. Other towers may have symbolized the *dmu* cord that in Tibetan lore connects heaven and Earth. In rGyalrong lands, now part of western Sichuan, "it appears that some towers were built to propitiate the deities" by ceremonially projecting ritual participants into a sky realm, says Bellezza.

One idea of Darragon's gaining support is that towers were way stations along the southern Silk Road, which passed through Tibet and Sichuan. "The more fabulous towers all lie along the trade routes," she says. Many are located in strategic spots in river valleys along routes traveled by medieval caravans. According to Zhong, these towers "may have embodied the economic strength of each village." Major commodities in the region then were silk, salt, tea, and musk of the forest musk deer. "Beyond the fact that we know that this area was exporting valuable musk in medieval times, we don't know very much about the mechanics of the musk trade," says Anya King, a historian at the University of Southern Indiana in Evansville. Chinese scholars have postulated a "Musk Road" linking with the Silk Road in the Ngari region of western Tibet. "It is entirely possible that the towers served as regional depots of the trade routes, but at this point it won't be easy to prove," King says. To test the idea, Darragon is attempting to organize a dig to sample soil for silk, tea, and musk remains at one undisturbed medieval tower.

The star-shaped construction, with its distinctive five to 13 points, is found almost nowhere else. Only a handful of such towers exist outside the region, in India, Iran, Tajikistan, and Afghanistan—including the Bahram Shah Minaret in Ghazni. The shape may help resist earthquakes. "That's what local people tell us," says Li Chunxia, an anthropologist at Sichuan University in Chengdu who has collaborated with Darragon.

Earthquakes are not the main threat, however. Impoverished villagers have blown up or dismantled towers for building materials, Li says. An especially grievous loss was two ancient Nyangpo towers destroyed in 2006



and 2008, Darragon says. She has come across three villages named Bajiaodiao, or "eight-angle fortress," only to find nothing but scattered stones. "The remaining towers desperately need protection," she says. Tourism could help. The Unicorn Foundation has assisted some communities to restore towers and convert farmhouses into guesthouses. "If rightly harnessed, some of the proceeds could go to scientific pursuits in the region," says Bellezza.

Another big boost for the preservation effort, Darragon says, would be to include the towers on UNESCO's World Heritage List. Over the years, Darragon and Unicorn have submitted maps, radiocarbon data, and oral history to SACH in support of a nomination. "She is so diligent. Even though she is not a professional, her work is hard to refute," Li says. "Frédérique is a force," adds Bandarin. "She has identified the value of this heritage, she has promoted the necessary research and scientific investigation, and she has attracted the interest of the local and national governments and of UNESCO," he says. SACH is expected to decide soon on whether to nominate several groups of towers as Cultural Landscape sites. "The cultural self-esteem of about 50,000 minority people living in these regions is riding on it," Darragon says.

If the nomination comes through, Darragon says she can rest easy—and move on. "I've never spent such a long time on any one thing in my life," she says. But Darragon has set herself one last tower-related task: saving several rGyalrong tow-

ers near Danba, which have special significance to her. She glimpsed towers in China for the first time on a trip to Danba, when in 1997, she recalls, "in the pouring rain I caught sight of tall structures clinging to faraway mountain slopes."

Several of these towers, including the tallest in Sichuan that is about 700 years old, are in jeopardy. "They will be under water," Darragon says, if a second dam planned for the area is built. Chinese colleagues and other experts have joined with her to lobby authorities to revise the hydropower plans.

A recent trip to Danba allowed Darragon to reinforce that message. In Badi village high in the Danba hills, three young girls dash out of their home, smiling and giggling, as Darragon's jeep pulls up. She and her entourage are invited into the rGyalrong home for bowls of homemade cottage cheese and butter tea. They've known Darragon for years and treat her like family.

After a chat, Darragon takes her leave and gets back to work. As the afternoon shadows lengthen, she climbs into a ruined section of a fortress with an attached tower and uses a penknife to gouge a chunk from a wooden beam that she'll send for radiocarbon analysis. "That's it for today," she says. Tomorrow she has more survey work and a meeting with Danba officials. "I will do my best to persuade them that a World Heritage nomination would benefit Danba more than a second dam would," she says. Given her tenacity, it would be a wonder if her latest quest were to fail.

-RICHARD STONE