



Fragments of giant teak coffins of the Log Coffin Culture of northern Thailand cover the ground of Ban Rai Rock Shelter.

Mystery of the Log Coffin Culture

Recent investigations raise more questions about an enigmatic people

Thailand's far northwestern corner is rippled with mountains, lush at their bases and craggy on top, where the limestone outcrops graze the sky. This landscape stretches for hundreds of miles through villages of ethnic Shan and animist hill tribes that farm their fields on both sides of the Thailand-Burma border. Clusters of bamboo-and-thatch huts cling to the mountainsides. I've traveled here before—pursuing stories as well as fresh air and lazy vacation days—and the people have welcomed me with sticky rice, tea, and stories of their ancestors. This time, I am visiting Ban Rai Rock Shelter—better known to locals as Tham Pi Maen or a “spirit” cave—500 feet up from the valley below, to see the remains

by **KAREN J. COATES**

of 15 giant teak coffins where a little-known culture left their dead more than a thousand years ago.

Some 600 miles northwest of Bangkok, this undulating terrain, crisscrossed by rivers, has a climate cooler than that of Thailand's flat plains to the south. Known as the “lime hills” in the Shan language, the region has yielded some of Thailand's most important archaeological finds, including the oldest wood carving in the country and the earliest human remains in northern Thailand. American archaeologist Chester Gorman began investigating this area in 1965, and found seeds of domesticated plants dating between 11,000 and 8,000 years ago.

But then, as now, much of the area's archaeology remained unexcavated and poorly understood.

This is clearly evident in the case of the Log Coffin Culture. There are more than 60 coffin sites in the Pang Mapha district of Mae Hong Song province, evidence of a culture that flourished between 2,100 and 1,200 years ago. Many of the sites are high on open-air ledges or tucked inside caves, and often require mountaineering gear and dangerous climbs to reach.

Most of what archaeologists know about the coffins comes from the Highland Archaeology Project supervised by Rasmi Shoocongdej, a short, sprightly, fast-talking scholar with Bangkok's Silpakorn University. Rasmi is one of few



An ancient log coffin still stands high on a cliff in Coffin Cave. There are more than 60 log coffin sites in the Pang Mapha region of northern Thailand.

become more complex over time, and that different styles were employed simultaneously, leading the researchers to suggest the carving styles might reflect the status or ethnic affiliation of the dead.

The Highland Archaeology Project finished excavations at Ban Rai and Tham Lod in 2006. Because she didn't find any Log Coffin Culture habitation sites, Rasmi is still not certain where or how these ancient people lived—she only knows where and how they buried some of their dead. Nor is she certain whether Thailand's modern inhabitants are descended from the Log Coffin Culture people. And now that she is involved in a widespread effort to survey and preserve northern Thailand's many threatened archaeological sites, she has neither time nor money to excavate further in the area.

But Rasmi's dedication to the region has not waned, and she continues to work with locals to preserve the sites. She also wants them to understand the history at stake. Villagers have not viewed the sites as their own, though they have deep-seated beliefs and superstitions about them. Traditionally they avoid the coffins, believing them to be the

archaeologists in Thailand to focus on the country's mountains rather than its fertile lowlands.

Between 2001 and 2006, Rasmi and her team, which also included anthropologists, geologists, dentists, and forest scientists, excavated two coffin sites—Ban Rai and a nearby rock shelter called Tham Lod—and surveyed dozens of others. Dendrochronology, dental analyses, and DNA all were undertaken to study the age of the coffins and their occupants, and further analysis examined the styles in which they were carved. The Highland Archaeology Project began with so little information about these sites that researchers hoped to answer basic questions. Who were these people? Where did they come from? Do they relate to the area's modern-day inhabitants? Who was buried in the coffins? Many answers remain elusive.

Tree-ring studies showed that the teak logs used at Ban Rai were 80 to 100 years old when they were cut down. They were then left to dry for a year, before each log was split in two and hollowed to form a coffin. The team also determined from the wood's growth rings that the trees had come from level land rather than from the slopes around Ban Rai, so the Log Coffin people would have had to lug those massive logs up to the mountainside rock shelter.

Most coffins are between 16 and 23 feet long, with some reaching 30 feet, and most were originally supported several feet off the ground by cross beams. But today, many of the coffins and their supports have fallen. The wood is worn and weathered, resembling the splintered remnants of boats that have suffered too many storms; the supports tilt like broken piers. Human teeth and bone fragments, usually all that's left of the coffins' occupants, are scattered in the dust and dirt around some of the coffins, giving the sites a very eerie feeling.

The ends of the coffins are carved with headlike shapes, some with human facial features and others resembling animals. After years of weathering, many of these carvings are hard to make out and archaeologists are not at all sure what the designs mean. One of the tree-ring studies conducted by Natsuda Pumi-jumnong of Mahidol University as part of the Highland Archaeology Project tested the hypothesis that the carvings became more complex over time, indicating development in style and technique. She examined more than 100 wood samples from dozens of coffins and supporting posts at Ban Rai, and 71 wood samples from coffins and supporting posts at a nearby cave site called Bo Khrai. The dating revealed that the carvings did not



A carving that appears to represent a dog's head adorns the handle of a coffin from Bo Khrai Cave.



Rasmi Shoocongdej is director of the Highland Archaeology Project, which is devoted to studying the Log Coffin Culture.

is exhausting, and a torrent of tropical sweat makes splotches on my notebook. I can't imagine many tourists making this trek to the coffins; it's easier to raft the rivers and ride motorcycles on winding highways before filling up on pad thai and Singha beer while relaxing at bamboo bars and riverfront bungalows. "No, they don't come up here," admits Fon Nittim, a

student of prehistory and employee of Rasmi's working at Ban Rai, who is accompanying me on my hike. "And Thai people don't love to walk a lot," she adds.

domain of Pi Maen, a term that refers to the Log Coffin Culture and the coffin sites themselves. "Everybody is afraid of Pi Maen log coffins," says Jee Kamsuk, an ethnic Shan who lives in the fertile valley at the base of Ban Rai. "When I was young I also was afraid," he adds, "but now I am not afraid anymore."

Rasmi also notes that many prehistoric archaeological sites in this region are especially vulnerable to curious or careless tourists as the area becomes more popular among rock climbers and adventure travelers. But that's changing as her team promotes sustainable tourism to help villagers make money and preserve the sites and artifacts. She hopes if locals learn to appreciate—not fear—their archaeological heritage, they will help protect it. Nowadays, locals can earn 200 baht, about \$5.70, each time they guide a tourist to a coffin site. "We want many people to come and see," says Jee's neighbor, a woman named Da who runs a homestay for tourists and Ban Rai researchers. "It's peaceful and the scenery is very beautiful."

Climbing the mountain, my heart hammers as I cling to a wooden railing recently installed by villagers. The trail winds through the forest, past ferns and smooth bamboo stalks, then suddenly zigzags up and up and up. The ascent

is exhausting, and a torrent of tropical sweat makes splotches on my notebook. I can't imagine many tourists making this trek to the coffins; it's easier to raft the rivers and ride motorcycles on winding highways before filling up on pad thai and Singha beer while relaxing at bamboo bars and riverfront bungalows. "No, they don't come up here," admits Fon Nittim, a

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By the time we reach the rock shelter, my shirt is drenched and I feel slightly dizzy, but I am elated. It's late afternoon. The sun begins to set and a ghostly silence envelops the mountain. Fon says the people must have chosen this site for its height, "near heaven." The horseshoe-shaped cliff gives the appearance of a funnel to the sky, shooting toward the gods.

Bamboo fences and wooden ladders from Rasmi's excavations remain, but the archaeologists are gone. The shelter is littered with rotting and crumbling wood from the coffins. Although some coffins have been taken to the National Museum in Chiang Mai, ("Off the Grid," January/February 2008), Rasmi later tells me that she wonders how much longer the ones left in the rock shelter can last. It's the dry season now, but I can see how monsoons have battered this site.

Fon leads me around the rock shelter—about 345 feet wide, 465 feet long, and 100 feet tall—pointing to Rasmi's excavation pits, which have revealed two distinct stratigraphic layers. Bones, tools, and other artifacts associated with the coffins were found about one foot down. Two feet below that lay the skeleton of a

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Local villager Thi Moo sits in Bo Khrai Cave underneath one of the coffins that still sits on its supporting beams after more than 1,000 years.

like many of the hill tribes living in the region.

But a Highland Archaeology Project study by Supaporn Nakbunlung and Sukhontha Wathanawareekool of 467 human teeth collected from 16 sites determined that the coffin people had dental traits similar to Malaysians, Borneans, and other southeast Asians—not Chinese. Another theory, put forth by Srisak Vallibhodhama, a retired professor of anthropology at Silpakorn University, suggests the people of the Log Coffin Culture are the ancestors of the Lua, an ethnic group that has lived in northern Thailand longer than many others, although this culture's history is also poorly understood.

But there is one man who has no qualms imagining who the Log Coffin Culture people might have been. John Spies is an amateur geologist and paleontologist, and the resident expert on the area's caves. The Australian émigré arrived in northern Thailand in 1977 and never left. Spies has made these mountains his life and the caves his passion. Years ago, he served as an official guide when members of the Thai Royal Family

male dated to about 9,800 years ago, according to analysis of a charcoal sample found nearby. This man clearly belonged to an earlier culture that flourished between 12,500 and 8,000 years ago. We walk to the cave's walls and Fon points upward toward a few faint red depictions of people. The paintings could be 9,000 or 8,000 years old, far pre-dating the Log Coffin Culture, but they are fading. I later learn from Rasmi that Thailand has neither the facilities nor the experts to date and preserve ancient rock art. "I don't know what to do," she sighs.

Two days after our hike, I visit Fon in her office, which also serves as a small museum near the start of the trail to Ban Rai. She is unpacking little plastic bags of potsherds, animal bones, and stone tools. Some of the potsherds, Fon says, were found on Ban Rai's surface and some were found during excavation around the coffins. Several pieces have diagonal and cross-hatched decorative marks, which Rasmi thinks may have been made using bark, but she is unsure what kind. Small mammal bones and those of a gibbon were found associated with the Log Coffin Culture remains, while rhino and deer were unearthed in a layer farther down. But without other excavated sites to compare with Ban Rai and Tham Lod, there is no

larger context in which Rasmi and Fon can place the finds.

A month later, after a series of telephone and e-mail conversations, I visit Rasmi in her Bangkok office on the Silpakorn campus. I squeeze into a cramped little closet of a room brimming with books and papers stacked as high as Rasmi's head. "My home is also like this. It's really messy," she chuckles.

I ask Rasmi what exactly the Log Coffin Culture was. "It's really hard to identify," she tells me. "Boat coffins" similar to those in Pang Mapha have been found in the province of Kanchanaburi, about 150 miles west of Bangkok, as well as in other areas of Southeast Asia and China. But no one really knows if the culture relates to the modern-day residents of Pang Mapha or to other early inhabitants of Southeast Asia.

Rasmi suggests, based of the age of the coffins and discoveries of similar mortuary practices in southern China, that the Log Coffin people came from China,

Guide Sorn Chai points to where archaeologists drilled a hole in a coffin support in Jabo Cave to study the wood, greatly distressing local villagers.





Jee Kamsuk sits in his home near Ban Rai Cave, explaining how the modern world and all its noise have chased away the ancient spirits.

visited the massive cave at Tham Lod. It was there, at a rock shelter near the cave, that Rasmi's team excavated the remains of northern Thailand's two oldest human skeletons—both adults, one female and one of indeterminate sex, each more than 12,000 years old.

Spies remembers that his first encounter with cave archaeology came while exploring the deepest reaches of Tham Lod in 1977. "Go in there," said a Shan woman pointing toward a dark hole in the wall. So he did. "Weathered sections of hollowed and carved logs, up to 21 feet long, lay scattered in piles," he wrote in his memoir, *Wild Times*. "Fragments of coarse pottery and broken bone littered the floor nearby. I found a human molar and guessed we had entered a burial chamber of people who had lived in the area long before the Shan." Back then, scientific information was even scarcer than it is now. "It seemed that foreign and Thai archaeologists were either unaware of or uninterested in the prehistoric cemeteries," Spies wrote.

More than 20 years later, Spies helped Rasmi with her research. In 1998 and 1999 he also worked on a two-year project sponsored by the Thai Research Fund, a government-supported body established to promote research, under the direction

of Sittipong Dilokwanich of Mahidol University. Researchers collected data on the area's limestone topography and mapped and investigated numerous Log Coffin Culture sites. They recorded at least 50 different coffin carving styles and discovered a human tooth bearing drilled holes plugged with metal, evidence of dentistry. Spies's own explorations have located coffins, pottery, bones, stone tools, and possible ancient habitation sites throughout the region. "These days, when I find something somewhere, I start thinking of a pattern," he tells me. He believes he has also found Neolithic cemeteries and more than 100 open-air, stone-tool sites scattered across ridges high above rivers.

Spies admits his brand of archaeology is free from academic constraints—namely degrees and peer-reviewed publications—and is far more open to speculation. He looks around, considers the big picture, and imagines the past. He often informs Rasmi of new sites—most of which will remain undisturbed inside caves or on rocky slopes until somebody comes up with the funding to document them properly.

Meanwhile, the science of archaeology remains elusive to many locals, who regard the caves and coffins with spiritual reverence. Rasmi's

team learned this at Jabo Cave, about 10 miles as the crow flies from Ban Rai, when a colleague drilled small holes into coffins to collect samples for dendrochronology tests. Ethnic Lahu villagers nearby heard noises and were startled to find someone tampering with the sacred site.

"They didn't let anyone know what they were doing," says Jabo village headman Ja Ka Shay. The villagers fined the researchers 15,000 baht, about \$430, for disturbing the coffins and possibly inviting bad spirits into the village. "We used the money to pay for two pigs and rice," says Ja, "for a feast to send all the bad spirits away." Rasmi apologized to the villagers. "We should inform and respect the community," she says. "I think we handled it pretty well and we are good friends of the Jabo communities now." Ja agrees. But in retrospect he says he'd rather there had been no drilling. "Better to leave it alone," he says.

There are many others who can attest to the powers of Pi Maen spirits. Jee Kamsuk, the Ban Rai villager, remembers the days when he could hear Pi Maen voices in the trees. It was a sound "so soft, like floating in the air," he says. But that was a long time ago. The modern world has come to northern Thailand, and with it noise. Electricity, TVs, motorcycles—so much has changed in the last few decades. Jee thinks chaos has disturbed the air and distressed the spirits. "There are so many modern things, I think Pi Maen doesn't exist anymore," he says. All that remain are the giant log coffins along rocky ledges and nestled in corners of serpentine caves. ■

Karen J. Coates is a journalist who splits her time between Asia and the American Southwest.