

# Laos Plain of Jars in the Wake of American Bombing

Russell Ciochon

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Geoffrey Gunn, Russell Ciochon and Jamie James



**A Lao soldier peers into a mammoth jar at Ban Ang, the principal jar site.** Jeffrey Aaronson



**At Lat Sen, sandstone jars are arrayed on the top of a steep hill.** Network Aspen

### Introduction

Caught up in the vortex of the American war in Vietnam, Laos (known as the Lao People's Democratic Republic since 1975) is reputed to be the most heavily bombed country, per capita, in the world. U.S. Department of Defense records reveal that 520,000 bomb runs were made over Laos, dropping more than 2 million tons of ordnance. Major targets were the Plain of Jars area in northern Xieng Khouang province and the "Ho Chi Minh Trail" coursing through the southern panhandle with routes connecting North to South Vietnam. These were not uninhabited zones but the ancestral homeland of many ethnic minorities. Compared with U.S. bombing in Vietnam and Cambodia, what were the effects on Laos? And, decades after the end of the war, how do the peoples of Laos live with the consequences of the bombing?



**Map of Laos showing Xieng Khouang province**

After long years of self-imposed isolation, Laos has opened its doors to tourists – mostly backpackers and the odd anthropologist – attracted by its landscapes, its cultures, and even its megalithic sites, as contributing significantly to income and employment. The Plain of Jars on the Xieng Khouang Plateau is a major cultural heritage site, now recognized by UNESCO. According to [UNESCO](#), unexploded military ordinance (UXO) still contaminates 25 percent of the area of Xieng Khouang province, producing a “constant threat” to the personal safety of its 200,000 people. Needless to say, the presence of UXO crimps economic development of the province. UNESCO is not only concerned with UXO infestation, but with the safeguarding of the priceless megalithic stone jar heritage, as described and illustrated here by Russell Ciochon and Jamie James. Commencing in 1998, with the cooperation of the LPDR, UNESCO launched a multi-year plan to map the Plain of Jars, currently entering the final phase (2006-2010) of UXO clearance, “pro-poor tourism” and “sustainable resources

management.”



### **Bombing in the Plain of Jars**

Obviously, the clearance of UXO is not a task for an international cultural organization but involves time, money, and considerable risk. Pioneers in this venture in Laos were the American Mennonites, one of the few international NGOs trusted by the LPDR, who began a shoestring program back in the late 1970s. Since then, a number of foreign missions in Laos, joined by the UNDP, have mounted dedicated programs of UXO eradication. At LPDR invitation, U.S. Special Operation Forces also arrived in 1996 to initiate a “training the trainer” program. Even so, there have been up to 20,000 UXO-inflicted casualties since the end of the war, with many more wounded and maimed. As one concerned Western Embassy official told this writer in Vientiane in 2007, it would take possibly “several hundred years” to remove the UXO at the present pace of activities.

*Geoffrey Gunn*

On a windy plateau in northern Laos, hundreds of three- to ten-foot-tall stone urns, some weighing as much as seven tons, lie scattered across a grassy plain. The local inhabitants say

that the jars were made to celebrate a great military victory 1,500 years ago. The plain, so the story goes, was ruled by an evil king, named Chao Angka, who oppressed his people so terribly that they appealed to a good king to the north, named Khun Jeuam, to liberate them. Khun Jeuam and his army came, and after waging a great battle on the plain, defeated Chao Angka. Elated, Khun Jeuam ordered the construction of large jars to be used in making wine for a victory celebration.

The jars are at least as old as the legend claims, but if any were used for making wine, that was not their original function. In the 1930s, French archeologist Madeline Colani documented the jars in a 600-page monograph, *The Megaliths of Upper Laos*, concluding that they were funerary urns carved by a vanished Bronze Age people. The jars nevertheless remain enigmatic, because after Colani's time, Laos fell into an almost continual state of war—fought over successively by the French, the Japanese, and the Americans. With peace restored, and the subsequent period of isolation ended, we visited the Plain of Jars last winter to learn about them and see how they had fared during the decades of fighting.



Unless you have an ox cart, about the only way to get to Xieng Khouang Province, where the plain is located, is to fly. As we took off in a small Chinese prop plane from Vientiane, the capital of Laos, we saw the small city laid out below us along the flat floodplain of the meandering Mekong River. The airplane leveled off at a cruising altitude of about 10,000 feet, but during the one-and-one-half-hour flight, the mountainous ground grew steadily closer. The final mountain ridge was heavily forested on its near, western side, and—in a classic example of a rain shadow—very arid and bare on its eastern side.

As we approached the airstrip at Phomsavan, the provincial capital, we saw thousands of bomb craters pockmarking the barren plain, a grim memento of the American presence in Southeast Asia. American forces dropped more than 2 million tons of bombs on Laos during the war in Indochina. Phomsavan has been built over the past twenty years to replace the



former provincial capital (Xieng Khouang), which was destroyed during the war. This dusty little town became our base of operations.



**The craters that dot the landscape in Xieng Khouang Province are a legacy of intense bombing in the 1960s and 1970s.**

Other vestiges of war are the casings from cluster bombs, now used both as fencing, above, and house stilts, below.



**American forces dropped more than 2 million tons of bombs on Laos during the war in Indochina.**

A little more than a mile northeast of Phomsavan lies the principal jar site, called Ban Ang by Colani: sixty acres of wind-swept prairie containing more than 250 urns. A huge crater on the perimeter of Ban Ang showed that a bomb had narrowly missed hitting some of the urns, but otherwise we found the jars just as Colani described them: "They are disposed without regularity, some of them pressing one against another, others quite isolated. Each one is fashioned from a separate block of stone, and a small number of them are very well executed, as though turned on a lathe, bespeaking the hand of a true artist." Fifty urns, including the largest ones known to exist, are on a ridge on the northeast edge of the site. Colani suggested that they might have held the remains of

chieftains.

A few stone lids are scattered among the jars, some incised with a design of concentric rings. All the jars may have been fitted with lids, most of which were later pilfered. Another theory, however, is that these stone lids served some other function, and that the urns originally had wooden covers. In any case, all the jars appear to have been open to the elements for centuries.

According to Henri Parmentier, a French archeologist who made a brief visit to the Plain of Jars in 1923, the urns were brought to the attention of the Western world in 1909 by a French customs official named Vinet. Parmentier wrote that local villagers had plundered the site in the intervening years: "Adults look at for carnelian beads, which they are able to sell, and children find other baubles they can play with." He added that many of the jars had been broken by such "untimely excavations."

Parmentier identified three types of jars at Ban Ang: squat-shaped ones, slender ones, and others that were "almost sections of squared or rectangular prisms, with well-rounded corners." And he was able to form an idea of what a typical jar contained before it was disturbed: one or two black pots, one or two hand axes, "a bizarre object which we call a lamp," often a spindle weight of iron, glass beads, drilled carnelian beads, earrings of stone or glass, bronze bells, and frequently the debris of human bones.



**In a shop in Phomsavan, right, recycled shells are offered for sale as containers.**

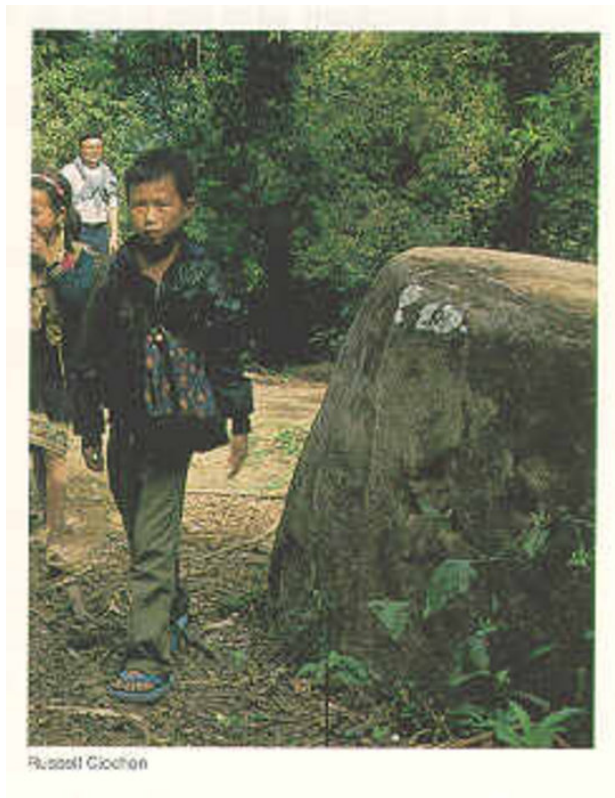
Nik Wheeler

Then came Madeleine Colani, a pioneering fieldworker who combined the roles of geologist, paleobotanist, archeologist, and ethnographer. Born in 1866 in Strasbourg, Colani, the daughter of a Protestant biblical scholar, decided at the age of thirty-three to move to French Indochina, where she secured a post as a natural history teacher with the geological service. She earned her doctorate in Hanoi, at the age of fifty-four, with a thesis about fossil *Fusulinidae*, a family of microscopic marine organisms.

A few years later, Colani began collaborating with Henry Mansuy, whose discoveries of polished stone tools and pottery in northern Vietnam (known at the time as Tonkin) pushed the archeological record in Indochina back to about 5,000 years ago. In 1923, working with Vietnamese guides, Colani discovered an enormous cache of prehistoric human remains and stone tools in a cave in Tonkin. She loaded up four dozen baskets with bones and artifacts and transported them back to Hanoi. When she arrived, Mansuy at first accused her of having raided a modern graveyard. Three years later while excavating twelve cave sites in Hoa binh Province, she made the first discovery of a hunting-foraging culture that we now know dates as far back as 18,000 years ago. She called this ancient stone-tool industry the Hoabinhian, the name still used by



archeologists today.



**A jar, carved out of granite, rests beside a jungle path some distance from the village of Ban Hin. Nik Wheeler**

Colani was accompanied in all her fieldwork by her sister, Eleonore. With their porters and guides, the two intrepid women traveled all over French Indochina, almost until their deaths, a few months apart, in 1943. The gossip among French archeologists is that Madeleine Colani made Eleonore do all the hard work, on occasion lowering her into a cavern on a rope and not letting her come back up until she found something. The human remains and artifacts the Colani sisters amassed were a landmark contribution to the study of prehistory in the region.

By 1931, when Madeleine Colani began exploring at Ban Ang, much of the jar's contents had already been looted. But by excavating around the jars, she uncovered a

great quantity of objects, including bronze and iron tools, which she believed were used to carve the jars. In addition to beads made of glass and carnelian, she also found some she described as "having the appearance of baked earth," painted with bold geometric designs. Other artifacts included cowrie shells and bronze bracelets and bells. Colani interpreted these artifacts, as well as those found by Parmentier, as burial offerings, theorizing that the urns had contained cremated remains.

Adjacent to ban Ang is a limestone hill with a large cave. Colani excavated there and found evidence to bolster her contention that the human remains placed in the urns had been cremated. The cave mouth is at the level of the plain, and the chamber extends straight up to two natural chimneys, which were formed by the water that eroded the cave. Colani observed that the northeast wall was heavily blackened from smoke, and in her excavation of the cave she found what she believed were cinerary vases in which the corpses were burned.



While Ban Ang is the most widely known jar site in Laos, similar stone urns are found

throughout Xieng Khouang Province. Another important site, which Colani named Champ d'Aviation de Lat Sen, after a French-built airstrip that existed there at the time, lies just six miles south of Ban Ang. The road there is so poor that it took us nearly an hour to cover the distance by car. At Lat Sen we observed about eighty jars, some of which had been broken apart by fig trees growing alongside or within them. Others were filled with stagnant water in which ferns and algae were growing.

Pioneering archeologist Madeleine Colani speculated that the Plain of Jars lay on a caravan route stretching from the Vietnamese coast, near Da Nang, to the North Cachar Hills of India.

The Lat Sen jars were situated on the tops of two steep hills, which were separated by a narrow gully just wide enough to accommodate the road. At the foot of one of the hills, we met a woman gathering firewood with her young children. As did other people we encountered, she gave us the popular explanation for the jars: the tale of military victory and celebratory wine. She also said that the jars were molded from a mixture of sand, sugar, and buffalo hide—a traditional view disproved by mineralogical analysis. Luis Gonzalez, a sedimentary geochemist at the University of Iowa, has examined a thin section of a Lat Sen sample under a microscope. He describes the material as a natural sandstone consisting mainly of grains of quartz, potassium feldspar, and muscovite mica, cemented by a clay matrix.



**A woman gathering firewood with her young children gave us the popular explanation for the jars: they were constructed for use in making wine following a great military victory.**

A third, more distant site we visited, which Colani called Ban Soua, lay in the middle of rice fields, at the foot of wooded hills. Several large bomb craters bordered the site, and after consulting Colani's map, we concluded that a few of its 155 jars must have been destroyed by the explosions. Judging from the sites we visited, however, most of the jars cataloged by Colani, survived the war, suggesting that they were spared whenever possible.

Wanting to see some of the jars further off the beaten track, we pored over Colani's monograph at our guest house in Phomsavan, taking advantage of the two hours of electrical light provided before the generators switched off at nine o'clock. We settled on the village of Na Nong, where Colani had found thirty-four jars. The next morning we set off on what proved to be the roughest road yet. When we stopped an old woman to get directions, she explained that the village had been entirely destroyed by American bombs during the war—along with every vestige of the jars.

We drove on through the plain to the edge of the jungle and stopped at a little village called Ban Hin. It was a bustling place, filled with children playing games, and strutting turkeys

fanning their tails. There, a man told us that he knew a place, about a two-hour walk into the jungle, where there were some large jars different from the ones at Ban Ang. Our curiosity aroused, we immediately asked him to lead us there.

The path from Ban Hin was well-worn, and we saw many people on it as we climbed through steep, rocky ravines. The shady canopy of towering teak trees was filled with colorful birds that flapped and shrieked high overhead. At the top of a heavily wooded ridge a group of girls were carrying huge bundles of firewood on their backs. They had also gathered a sackful of grubs for their lunch. Farther along, a hunter appeared with a brace of birds shot with a rifle he had made. These chance encounters brought home to us the importance of hunting and gathering for the people of Laos.

The inhabitants of Xieng Khouang Province represent a number of Laos's ethnic groups, including the dominant Lao and such hill tribes as the Thai Dam, Hmong, and Yao. Like the overwhelming majority of the country's 4.3 million inhabitants, they rely upon subsistence farming for their livelihood. In contrast to other Southeast Asian nations, Laos is sparsely populated, with a density comparable to the state of Maine.

We stopped for a rest next to a fruit-bearing bush our guide called a mak kok. Its small, green fruit tasted bitterly astringent at first, but with a swallow of water from the canteen, the taste became refreshingly sweet.

The forest was filled with defused American bombs, some still sticking nose down in the earth. Among them was the device favored by U.S. forces in Laos: the "daisy cutter," a cluster bomb with a long casing designed to scatter tennis-ball-size bomblets over a 3,000 square-yard area. The bomblets (which either exploded on impact or remained on the ground like mines) were not usually big enough to kill a man, but quite adequate for maiming adults

and killing children. The woods around the Plain of Jars are still full of these hideous devices, which the people of Laos call bombis. As many as ten people die every month from stepping on them. But the inhabitants of Xieng Khouang put the bomb casings to good use. Most of the houses in the vicinity of Ban Hin are built on top of bomb-casing stilts, and fences made from the casings enclose many pigsties.

We finally reached the site where the jars were located, clustered around a small clearing next to a mossy ravine. Our guide was right: unlike the sandstone jars, these were carved from a hard, dark red granite. At the site were two intact urns, one very well crafted and another that had fallen into the ravine. We also examined several broken jars off the path, but we didn't stray too far into the jungle, lest we add to the bombi statistics.

Colani's monograph does not seem to include this site, although it does identify two sites near what we think was the same village, whose name she transcribed as "Ban Him." Colani described the jars at these two sites as being made of sandstone, a point about which she was not likely to have been mistaken, especially since she did encounter some granite jars at other locations. We may have been the first trained observers to record these particular jars. That would not be so surprising, for there has been very little fieldwork in Laos since Colani's time.

A two-week excavation carried out by Japanese archeologist Eiji Nitta is a recent exception. In 1994, Nitta dug four test trenches around one of the stone jars at Ban Ang, exposing a carving of a human figure on the side of the jar, the first anthropomorphic image recorded at the site. Nearby he also discovered, eight to twelve inches below the soil surface, seven flat stones, each covering a pit. Six of the pits contained human bones and the seventh contained a two-foot-tall burial jar with small pieces of bone and



teeth inside. The jar's brown lacquer surface was incised with decorative designs. None of the human remains Nitta discovered had been burned, and he found no charcoal in the trenches.

In his correspondence with us, Nitta states that the seven pits were secondary burials, a practice in which the bones of the deceased are dug up and ritually reburied. He concludes that the entire Plain of Jars was a cemetery of secondary burials. He also contends that the burial pits are as old as the jars or even older, while the jars themselves may not be as old as Colani suggested. Still, it may be premature to question Colani's interpretations. After all, she did find charcoal and burned bones in her excavations. Perhaps people placed stone urns with cremated remains in hallowed ground they knew had previously been used for secondary burials.

Then who created the Plain of Jars? Colani, who was more willing to speculate than most modern archeologists, suggested that the sites in Laos were part of a far-ranging Bronze Age culture. She pointed out that some stone jars discovered in the North Cachar Hills of northeastern India, more than 600 miles to the northwest, had roughly the same design and dimensions as the urns in Laos. J.P. Mills and J.H. Hutton, the English scholars who discovered the Indian urns in 1928, found fragments of human bones in them, which they concluded were human remains. They noted that cremation was still being practiced by some of the Kuki, a people who had lived in the North Cachar Hills for centuries.



**The main road near Phomsavan, on the Plain of Jars. Most Lao are subsistence farmers.** Nik Wheeler

Some stone jars discovered in northeastern India, more than 600 miles away, resemble the urns in Laos.

Colani also called attention to Sa Huynh, a site south of the city of Da Nang, Vietnam. There, urns of baked earth containing some human remains were found buried in the sand dunes along the shores of the South China Sea. Although these remains had not been cremated, the objects interred with them—including ceramic vases, small bronze bells, and beads—resembled those discovered on the Plain of Jars.

"If our interpretation is correct," Colani proposed, "we are in the presence of three links from the same chain: the ancient monoliths of Cachar, the stone jars of Tran Ninh [Xiang Khouang], and the necropolis of Sa Huynh." According to Colani, prehistoric salt traders had followed a caravan route from Sa huynh to Luang Prabang, located near the northwest edge of the Plain of Jars. Perhaps, she concluded, that route once extended all the way to the North Cachar Hills, and the people who lived along it shared a similar culture, burying their dead (cremated or not, depending upon local custom) in megalithic jars. Colani

even drew a map with a line connecting the three sites, and suggested that explorers venturing along this line would find yet more jar sites.

Most scholars, including Thongsasayavongkhamdy, the Laotian government's director general of the Department of Museums and Archeology and the country's only trained archeologist, assign a tentative age of 2,000 years to the stone urns of Xieng Khouang, with outside dates of 500 B.C. to A.D. 300. By the latter date, complex societies based on Indian models were already prospering in the coastal regions and along the major rivers of peninsular Southeast Asia. The rise of the great kingdoms of Angkor (in Cambodia), Champa (in Vietnam), and Pagan (in Myanmar), which reached their zenith by A.D. 1000, long

prevented Laos from becoming an independent power. The first kingdom of Laos was established in 1353, with its capital in the uplands at Luang Prabang. By then, the stone jars scattered over the nearby plain belonged to a forgotten past.

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