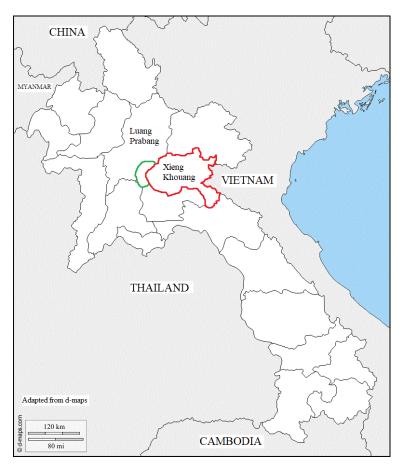
Widening the Geographical Reach of the Plain of Jars, Laos

Lia Genovese

Abstract

This research report summarises ongoing fieldwork at the Plain of Jars in Laos and details megalithic artefacts in newly-discovered sites populated with jars fashioned from a variety of rocks. With two exceptions, the jars at these remote sites are in single digits and are not accompanied by plain or decorated stone discs, used as burial markers or for commemorative purposes. The sites' isolated location bears implications for the geographical reach of the Plain of Jars by widening our understanding of this megalithic tradition in Mainland Southeast Asia.

Introduction



Map 1. Contoured in red: Xieng Khouang province. The contour in dark green delineates Phou Khoun district in Luang Prabang province (adapted from d-maps).

The Plain of Jars is spread over the provinces of Xieng Khouang and Luang Prabang (Map 1).

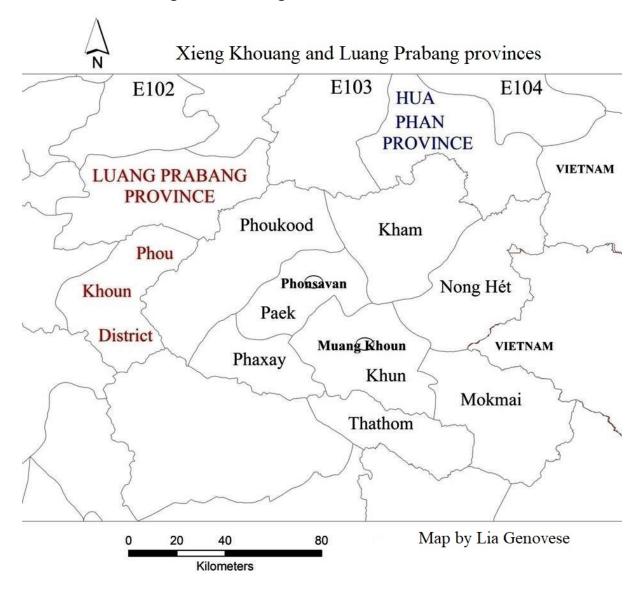
All the sites are located at latitude 19°N, while the longitude starts at 102°E for sites in Luang Prabang and progresses to 103°E for locations in Xieng Khouang.

As the leader of the first large-scale survey in 1931-1933, the French archaeologist Madeleine Colani (1866-1943) 26 sites documented 2015a: (Genovese 58-59). Sites can include a group of iars, a quarry, a stone outcrop rock formation protruding through the soil level, or a manufacturing site, and can hold from one single jar to several hundred units.1

Dozens of new sites have since been discovered, taking the total to just over 100, with the quantity of documented stone artefacts now exceeding 2,100 jars and

200 discs. Frequently, only villagers know the directions to small and undocumented sites and may have omitted to mention their existence in the belief that only conspicuous jar quantities warrant attention. Villagers have been acquainted with the stone jars from an early age, walking past them on the way to school or to tend the family's rice field after class.

Jars have been documented in seven of Xieng Khouang's eight districts (Map 2), with Mokmai the only district where surveys have yet to be conducted. Approximately ninety percent of the known sites are located in Xieng Khouang, where jars are carved in five main rock types, most commonly from sandstone and granite, but also from limestone, conglomerate and breccia, the latter being a coarse-grained rock featuring minerals cemented together in a fine-grained matrix.



Map 2: The eight districts of Xieng Khouang and Luang Prabang's Phou Khoun district. Shown also are the modern provincial capital of Phonsavan, in Paek district, and the former capital of Muang Khun in Khun district (map by Lia Genovese).

The ten sites in Luang Prabang province are located in Phou Khoun district, where sandstone alone was used for both jars and discs. The remoteness of these sites has helped to preserve their integrity, if not from the elements but at least from the effects of urbanisation and farming. Quarries have vet to be identified in Luang Prabang province and there may remain undocumented stone artefacts in particularly remote districts of the province like Pak Ou.

Other than at a few sites on well-trodden paths radiating from Xieng Khouang's modern provincial capital of Phonsavan, surveys on the Plain of Jars require time, money and patience. While some surveys go largely according to plan, others result in abject disappointment. Colani (1935, vol. 1: 10), the doyenne of Laotian megaliths, warned that surveys on the Plain of Jars rarely turn out as planned and that researchers should prepare for "the unexpected".

In July 2019, 11 sites consisting of 15 components in Xieng Khouang province were inscribed on UNESCO's World Heritage List (http://whc.unesco.org/en/list/1587). These sites fulfilled the test of "Outstanding Universal Value" and met the selection criteria of "Authenticity and Integrity" as "exceptional testimony to a cultural tradition or civilization which living which disappeared" to is or has (https://whc.unesco.org/en/criteria). The inscription was the culmination of a journey that began 28 years ago, in March 1992, when Laos submitted a tentative listing to signal its intention to nominate the Plain of Jars for World Heritage (WH) status.

Four of the Plain of Jars sites feature large numbers of jars. In Paek district, Site 52-Ban Phakeo hosts 404 units in sandstone, while Site 1-Ban Nao, the most visited of the sites, holds 334 jars, mostly of sandstone. Site 3-Ban Xiengdi, in Phaxay district, has 242 jars and the same district is home to the 93 jars at Site 2-Ban Na Kho and Site 8-Huay Luang, the sandstone quarry for the jars at both Sites 2 and 3. The fourth largest is Site 42-Phou Xang, a quarry and manufacturing site hosting 113 sandstone jars, located in Kham district. These four locations – Sites 1, 3, 42 and 52 – were declared World Heritage Monuments in July 2019 and are open to tourists.

In 2016, an international team commenced a new research programme at the Plain of Jars, conducting excavations, mapping, drone photography and documentation of the megaliths. This project recorded a range of interment styles and, "for the first time, a primary burial of two individuals" (O'Reilly 2019a: 982-983) in one of the excavation units, in addition to further exploration of previously documented secondary burials. The same international team conducted excavations at Site 52-Ban Phakeo. Although the archaeological evidence found was modest, burial features like the use of limestone slabs pointed to "a similar mortuary ritual to that undertaken at Site 1" (O'Reilly 2019b).

The extant discs in both provinces are of sandstone, with the exception of two granite discs documented by Baldock (2008: 6) at Site 51-Ban Sanlouang in Khun district.

The stone discs are increasingly being viewed as commemorative artefacts or "grave markers" (UNESCO 2009: 22), placed in the vicinity of a jar to cover or mark a burial pit. The folk theory that they were made to serve as lids for the jars has been largely discredited, including in the WH dossier submitted by the Lao government in February 2018 for the 11 sites: "It is presumed that the stone jars also had lids when they were being actively used for mortuary purposes, although little evidence of this has been found [...] No disc has ever been found in place on a jar in circumstances where the placement appears original" (Nomination Text 2018: 35).

Doubts about discs as lids for the jars were first voiced by Colani (1935, vol. 1: 123): "The heavy discs found on the ground? But were they *really* covers? [emphasis added]". These reservations were expressed in her two-volume monograph that synthesised her surveys of the Plain of Jars as well as the standing stones of Hua Phan province and the fields of funerary stones along Highway 7, respectively to the east and west of Xieng Khouang.

Subsequently, Bellwood (1978: 196) echoed Colani's misgivings that discs do not seal tombs "and neither are they lids for the jars, as Colani has convincingly demonstrated". Bellwood was referring to the experiment where Colani placed a disc atop a jar at Site 22-Ban Hin, in Kham district, to demonstrate that the ill-fitting stone could not have been a lid for the jar (Colani 1935, vol. 1: plate 33/3).

This author's recent comparative study proposed a theory that the jars were supply-driven and therefore "created as stock" (Genovese 2019: 59), to allow for the long carving process and transportation to a final destination. This notion is corroborated by the presence of jars at quarries or manufacturing sites, at every stage of the carving process.

The iconography found on the jars and discs consists of a dozen instances of mostly spread-eagled human or animal figures, with straight or bent knees, carved into the stone. The anthropomorphic carving discovered in 1994 by the Japanese archaeologist Eiji Nitta at Site 1-Ban Nao, on Jar no. 217, is described as a full-frontal human bas relief holding up "both hands" (Nitta 1996: 16).

While the human images carved on the jars and discs show a degree of uniformity – spread-eagled body and either straight or bent knees – the animal figures display variety. For instance, the carving discovered by the author in August 2009 At Site 2-Ban Na Kho depicts a feline with round orbits and a three-branched, crown-like headdress (Genovese 2015a: 127-128).

The felines carved on the sandstone discs at Phu Da Phor, in Phou Khoun district, convey a degree of animation, particularly the representation on the large domes, the ample surface area of which has allowed for greater artistic expression. Another feline carving on a sandstone disc in the Ban Phakeo group of sites displays a clear decorative style, while still remaining within the general Plain of Jars narrative of a supine figure with arms aloft. There have been no specific studies aimed at interpreting the iconography at the Plain of Jars.

Human or animal figures at the Plain of Jars had only been documented in single representations until 1994, when an exceptional discovery at Site 1-Ban Nao was announced by Thongsa Sayavongkhamdy, who unearthed a stone slab engraved with two human beings, naked and locked in an amorous embrace. This was, and remains, the only instance of figures in pairs discovered on the Plain of Jars. Photographs of this unusual carving have never been published.²

The Newly Documented Sites

The newly documented sites are listed in Table 1 and are discussed below.

Table 1: New Plain of Jars sites							
		Jars					
Site ¹	District	Whole	Fragmented ²	Discs	Rock type	Iconography	Date inspected
Houay							
Tinxang	Nong Hét	1	1		Conglomerate		Dec. 2016
"Soviet Farm"	Phaxay	2			Sandstone		Jan. 2017
Ban Pha Tai	Phaxay	1	1		Sandstone	On a jar	Mar. 2019
Na Som-Site 18	Paek	1	1		Sandstone		Jan. 2017
Near Ban Thoum	Khun	1			Granite		Jan. 2017
Near Site 15 ³	Khun	1			Granite		Jan. 2017
San Kéo Hen	Khun	1			Granite		Jan. 2017
Muang Phan	Khun	1	19		Granite		Feb. 2019
Ban Namlam	Khun	2		1	Sandstone		Mar. 2019
Ban Nam Ting ⁴	Phou Khoun	4		2	Sandstone	On discs	Jan. 2017
Totals		15	22	3			

¹All sites are in Xieng Khouang province except for Ban Nam Ting, located in Luang Prabang province.

Xieng Khouang Province

Xieng Khouang province shares an international border with Vietnam and domestic borders with the provinces of Hua Phan, Luang Prabang, Vientiane and Bolikhamxai. Unlike the southern province of Champasak, Xieng Khouang was almost certainly "never under Khmer domination" (Stuart-Fox 1993: 107). The province has experienced a turbulent recent past, including invasion in the nineteenth century by the Yunnanese flag gangs commonly known as the "Haw". The French naval surgeon Paul-Marie Neïs (1852-1907), who explored Upper Laos and the border areas between British Burma, China, Vietnam and Siam in 1882-1883, documented his escape from the approaching "Haw", but not before bandaging "two young women who arrived at night from Muong Phan", their right hands pierced by a bullet "discharged at them at point-blank range" as they attempted to push away the Chinese aggressors' revolvers (Neïs 1997: 52).

An even more dramatic account concerns the Xieng Khouang villager with a silver chin. In a skirmish with the "Haw", an unfortunate villager had lost his jaw, cheeks and lower lip when the contents of two revolvers were emptied in his face. The silversmith of the vice-king built for him "some sort of chin or rather a silver floor for his mouth, kept in place by two attachments passing round his ears", a simple but ingenious device which allowed him to smoke cigarettes but not the chewing of betel, "which made him unhappy" (Neïs 1997: 42-44).

²Fragmented jars given as 1 unit except for Muang Phan, where a level of precision is possible.

³The buried jar Near Site 15 quarry was not inspected, hence not counted.

⁴First documented by Madeleine Colani in the mid-1930s.

In the Second Indochina War (1964-1973), the Plain of Jars became the battleground between Pathet Lao (communist) soldiers, backed by the North Vietnamese Army (NVA), and the Royal Lao Army (RLA) allied to US-backed forces and Hmong troops. The conflict concluded with the creation of the current one-party system, inaugurated on 2 December 1975.

The author's latest survey in Xieng Khouang province revealed undocumented sites and new jar groups close to documented locations. Even by the province's geologically-rich standards, Xieng Khouang's eastern reaches offer extraordinary diversity, particularly in Nong Hét and Kham districts. Shortly after most of modern Laos was annexed as the fifth province of French Indochina in October 1893, when "Siam renounced all claims to territories on the left bank and to islands in the river [Mekong]" (Benson 2018: 65), French geologists set out to explore the province's rich soil. Léon Dussault (1866-1934), Colani's contemporary at the Geological Survey of Indochina in Hanoi (Genovese 2018: 98), wrote: "This region is of varied appearance due to the very diverse nature of the many terrains encountered" (Dussault 1915: 539).

In Kham district, whose eastern edge borders Nong Hét, jars are carved in four different rock types: sandstone, conglomerate, limestone and breccia. Kham's Site 23-Ban Namhon, located close to some hot springs, is the only site on the Plain hosting breccia jars. All known sites with limestone jars are in Kham but the number of jars that have survived is thought to be far fewer than were erected due to exposure to the elements and other factors (Genovese 2016: 87-88).

Nong Hét district

Nong Hét is an under-researched district home to several ethnic groups, including Hmong, Tai Dam and Kmhmu, the latter an ethnic group that linguistically belongs to the



Figure 1: Conglomerate jar at Houay Tinxang (Lia Genovese).

Mon-Khmer speaking shares family. It international border with Vietnam. The district was the birthplace of Gen. Vang Pao (1929-2011), the Hmong leader that fought the rise communism alongside USbacked troops in the War: Vietnam September 12, 1969, he [Vang Pao] did what the experts had said was impossible: he retook Xieng Khouang town and the airfield at Lima Lima, which had been held by the communists since the

early 1960s" (Hamilton-Merritt 1993: 222).4

The easternmost location where jars have been found is in Nong Hét district at Houay Tinxang, a combined Hmong and Kmhmu village set on a gentle hill 60 km east of Phonsavan, past Site 23-Ban Namhon and barely 40 km from the Lao-Vietnamese border.

The author visited Houay Tinxang in December 2016. The site hosts one whole conglomerate jar, with a few others nearby in various states of fragmentation. The extant jar (Figure 1) is 160 cm high, with a girth of 423 cm. Erosion has set in and some deep cracks have developed at the front and back of the jar. A groove, or recessed inner rim, has been sculpted just below the jar's lip. No discs have been found at the site but numerous lumps of sandstone are scattered in the vicinity of the surviving jar. The site is close to a maize-processing facility which appears not to have affected the jar. Elsewhere in the province, units close to farmsteads are known to function as containers for debris, with the rims often permanently scarred when used as whetstones to "sharpen knives and farming implements" (Genovese 2019: 64).

Phaxay district

For French colonial families, the breezy hills near Site 2-Ban Na Kho provided a recreational respite and were known as Phu Sala Tò ('resthouse on mountain top'). The now disused landing strip near Site 2 gave the area the historical name of "Champ d'Aviation de Lat Sen" (Colani 1935, vol. 1: 107). The jars at Site 2 are located on two adjoining hills, dissected by a pre-colonial path which was widened by the French, resulting in erosion and

jar displacement.

In the early 1980s, the Soviet-financed Lat Sen Commune Cattle Farm was built in an area where rice cultivation had failed. Eight Russian families lived at the farm and were the first households to be connected to the electricity grid in the Lat Sen area. The Soviet personnel worked on the farm and trained farmers in cattle husbandry. The complex. which included offices and a movie theatre, is still known as the "Soviet Farm", despite subsequent Mongolian,



Figure 2. One of two sandstone jars at the "Soviet Farm" (Lia Genovese).

Korean and Japanese investments.

To mark completion of the farm building, in early 1985 two jars were moved by fork-lift and a Soviet-made truck from Site 2-Ban Na Kho, 5 km to the northwest, and brought to the farm. The author surveyed these jars in January 2017. Both units (Figure 2) are carved with a flat rim and are undecorated, like the vast majority of the Plain's jars. Fashioned in

sandstone from a large quarry 7 km to the south, they range in height from 140-160 cm, with a common circumference of around 400 cm. Both jars are in good condition, save for three deep dents on one of the units and the weathering caused by centuries of exposure to the elements. Wind-borne matter has taken root inside the jars.

The installation of the two jars at the "Soviet Farm" connects with a similar event in nearby Paek district. At the entrance to the village near Site 17-Ban Boua Tai, two sandstone jars are located in a fenced compound housing a few huts and the local monastery. To the villagers, the large, bell-shaped unit, carved with an elaborate rim, is known as the 'male' jar, while the more modest jar located on the opposite side of the gate, simply carved with a flat rim, is the 'female' jar.

In around 1999, the two jars were in turn chained to an elephant and dragged over 400 metres of uneven terrain from Site 17 to Boua Tai village. The intention was to 'gift' the two jars to the newly-completed monastery during the inauguration ceremony. In transport, the 'male' jar split in half widthwise, while the 'female' unit fractured around the rim. The villagers roughly patched up both jars with cement.

These two sets of jars – at the entrance to Boua Tai village and at the "Soviet Farm" – are still in their new locations. In recent years, the Lao Heritage Department has recovered various stone jars from urban settings in Xieng Khouang to return them to their original location, mostly at Site 1-Ban Nao. Some of these returned jars can be identified by the soil and flowers now filling them, in a touching gesture which unfortunately lacks due consideration for the possibility of vegetation taking root in the jars.

If restoration to their original location is planned, care should be taken that the method employed does not damage the jars. A little-known instance of damage caused by modern-day relocation can be observed at Ho Phra Kéo temple museum in Vientiane Capital city. A sandstone jar weighing approximately two tons was taken from Site 1-Ban Nao in the spring of 1970 and installed at Sam Thong, a village south of the Plain of Jars which functioned as the Air America airbase during the Vietnam War. From Sam Thong, the jar was flown to Vientiane and lodged in the grounds of the USAID Requirements Office, from where it was later moved to Ho Phra Kéo. An image from 1991 shows the jar intact and in good condition, but it is now held together by cement and metal brackets due to damage sustained during relocation to a purpose-built pavilion within the temple grounds. Even in its fragmented and patched-up state, visitors to the temple are fond of dropping coins into the jar.

A solitary jar in the south of Xieng Khouang offers one of the most intriguing animal representations documented to date. In early 2017, a social media posting briefly detailed an unusual animal carving at Ban Pha Tai, a site with two jars in a village populated by Tai Dam communities, 60 km south of Phonsavan. An outcrop of 12 boulders, the largest over 5 m in length, is found 700 m from the jars. To date, no publication has ensued from this discovery and the site has not been archaeologically excavated.

The author visited Ban Pha Tai in March 2019. Both jars are in sandstone and only one is decorated. The smaller jar has lost its upper portion, with some recent fractures exposing quartz-rich sandstone. Its extant wall is 94 cm high, with a girth of 350 cm at its widest.

The larger jar is 132 cm tall, has a girth of 360 cm and is carved with a high neck and a recessed inner rim. At the time of the brief survey, this jar was surrounded by debris and assorted construction material, including a large oil drum propped against its side. It is



Figure 3. Zoomorphic carving on sandstone jar, Ban Pha Tai (Lia Genovese).

nevertheless in good condition, though with a section missing from the rim down to the midpoint. The decoration consists of a zoomorphic depiction of a frog (Figure 3). Unlike most carvings of figures at the Plain of Jars, which are presented in a supine position with indistinguishable features like eyes, nose or mouth, the frog on the Ban Pha Tai jar is in a prone position, with visible eyes and an enlarged stomach.

In rock-art, the anthropomorphic figures with upraised arms and often bent legs are known as "praying figures" (Scott 2018: 103).

The frog image on the sandstone jar at Ban Pha Tai is unusual for several reasons. It may be the first aquatic figure to be discovered at the Plain of Jars. The representation is animated to convey a swimming motion, quite unlike the static human and animal carvings usually found on jars and discs. The frog was carved immediately below the jar's lip, leaving a large area of the surface undecorated. This contrasts with other documented human or animal figures, which usually occupy a central

and substantial portion of the surface on a jar or disc. Moreover, the smoothest area on this jar wall is to the right of the frog image, where considerable surface preparation appears to have been undertaken. There may have been an intention to carve other figures on the large amount of blank space immediately beneath and to the right of the swollen-bellied frog.

Regionally, frog representations are associated with females but also with stone, as in the Tibetan folk tale of a beautiful girl weeping every day at dusk at the grave of her dead frog-husband, on a cliff halfway up the mountain. On the day she is petrified, from a distance, the stone resembles a girl praying: "She prays for ever at her husband's grave" (The Frog Rider 1980: 23).

In the rock-art tradition of Western Thailand, including Khao Plara in Uthai Thani, gender-specific roles are identified by the presence of frogs and turtles and "are associated with a pregnant woman" (Shoocongdej 2002: 205). This is reiterated by Scott (2018: 118), who states that at Khao Plara a pregnant woman is depicted "with a turtle beneath and a frog beside it", in what Srisuchat (1990: 84) has interpreted as a "fertility ritual" in an agricultural context. Among the Zhuang of southern China today, frogs are sacrificed in rainmaking ceremonies to the sound of bronze drums, "in order to warrant sufficient rainfall and fertility" (Shoocongdej 2002: 202).

Paek district

The author has been visiting Site 17-Ban Boua Tai at regular intervals since 2011. Its associated quarry, Site 18-Phou Hin Ngon, consists of a number of sections set several

hundred metres apart and contains finished and partially carved jars. Local villagers recount that there are more jar sites in the area, which are difficult to locate due to vegetation. Clearance or seasonal burning of the vegetation may expose new sites at a future date.

According to villagers, Pho Tsa Ngem is situated on a steep slope around 3 km north of Na Som, a section of Site 18-Phou Hin Ngon quarry. The path from Na Som to Pho Tsa Ngem is covered in thick vegetation which must be cleared over its entire length in order to reach the jars. The slope of this hill has not been cleared for decades and villagers' recollections would be required to locate the jars. For a number of years the author has attempted to reach Pho Tsa Ngem.



Figure 4: Miniature sandstone jar on a steep slope, Na Som-Site 18 quarry (Lia Genovese).

However. during unsuccessful attempt to find these jars in January 2017, the author managed to locate some previously undocumented jars at the Na Som section of the quarry. One partiallycarved jar and another fragmented unit were found close to a previously documented jar, large and partially buried, carved with an exceptionally flat rim. Close by lay a new jar, a miniature unit, perfectly formed and with a neat aperture (Figure 4), one of the smallest units documented at the Plain of Jars. Further up the slope. on fairly steep terrain, a small trimmed boulder with a flat base suggests an intention to carve this block into a jar.

Khun district

The jars of Khun, a district south of Paek and Kham populated by ethnic minorities, remain under-researched. This is an overwhelmingly granitic area, where the uniformity in rock type is offset by variety in the jars' size. Most of the surviving granite units measure 140-160 cm in height, but there are also dwarf units a little over 1 m tall, and a unique instance of a jar measuring 1.9 m, at the isolated location of Ban Naho (Genovese 2015: 157). Other peculiarities in Khun are found at Site 48-Ban Namnay, where the jars are buried up to the rim (Genovese 2015b: 85), an arrangement also documented at nearby Site 49-Ban Phiang.

In addition to Sites 48 and 49 and Ban Naho, Khun district is also home to Site 13-Ban Thoum, Site 16-Ban Phai and Site 51-Ban Sanlouang, all populated with granite jars. There are no granite jars in the 11 WH sites inscribed in July 2019, but Site 16-Ban Phai, a few kilometres from the former provincial capital of Muang Khun, hosts 35 granite jars, as well as a single sandstone jar, and is open to tourists.

Unlike sandstone sites, which can host hundreds of jars, the inventory at granite sites is relatively modest, rarely greater than a few dozen units. Site 49-Ban Phiang hosts around

60 jars and is the largest granite site documented to date. The jar stock at some granite sites has decreased due to rapid urbanisation, farming and the passage of time.

Sandstone discs are relatively common at larger sites such as 1, 3 and 52. However, discs in granite are extremely rare and they captivated Colani's scholarly attention during her surveys of Khun district in 1933 and 1940. Archaeological explorations in the district revealed some subsurface burials with modest grave goods like iron knives, pots, potsherds, glass beads, engraved rings and charcoal (Colani 1935, vol. 2: 34, figure 157).

Known as Na Nong in the 1930s, present-day Ban Thoum was home to a rare granite disc weighing an estimated 200 kg and decorated with an anthropomorphic figure. Colani (1935, vol. 1: 164, figure 76, plate 56) declared the artefact "sculpted by an incompetent hand" and instructed her Hmong porters to transport the disc to the French provincial governor's mansion in Muang Khun (Colani 1935, vol. 1: 184). The disc's whereabouts are unknown but the replica made from her "sketch, wax cast and photographs" (Colani 1935, vol. 1: 184) was lodged at the present-day National Museum of Vietnamese History in Hanoi.

During this period, Colani also authorised the removal of other granite discs from Song Méng, present-day Site 48-Ban Namnay, 20 km to the south of Ban Thoum. Some of the discs were decorated with human or animal figures (CEFEO 1940: 11), the latter consisting of tigers, monkeys or ruminants. Colani reported that the side bearing the animal carving had been overturned, exposing the flat and undecorated side, an arrangement documented at other sites populated with ethnic minorities, in both Xieng Khouang and Luang Prabang provinces. No photographic records of the animal-decorated granite discs have come to light but in her monograph, Colani (1935, vol. 1: plate 23) illustrated a granite disc from Song Méng, plainly carved save for a raised central section covering most of the surface.

In January 2017, this author inspected a single granite jar some distance from Ban Thoum village. Mines Advisory Group (MAG) operatives were at the time clearing the area of unexploded ordnance and the sound of war remnants being detonated could be heard all around. The jar is located at the bottom of a gentle slope, around 800 m from the village. After the removal of mud and vegetation, the jar appeared in a good state of preservation (Figure 5). A sliver of granite missing from the exposed side gave the jar an unusually large aperture.



Figure 5: Granite jar near Ban Thoum village (Lia Genovese).

To date, identifying granite quarries has proved a challenge. Baldock (2008: 6), a British geologist who surveyed most of the Xieng Khouang sites early in 2008, reported that "All of the granite jars are located where granite was available in the immediate vicinity".

Site 14-Ban Natad has been proposed as a potential source of stone for the numerous sites in the area, including Site 16-Ban Phai, located a short distance away. Equally for Site 15-Houay Fa Pha, which hosts two six-metre high granite slabs from where blocks of a

suitable size could have been extracted to manufacture jars. The blocks are separated by a two-metre gap, hence the 'Fa Pha' ('bolt of lightning') appellation. To date, no jars have been found at Site 14 or Site 15. The more manageable boulders at Site 14 could have been employed to carve jars for the sites nearby but no direct evidence of quarrying has been found to date.



Figure 6: Granite jar close to Site 15 quarry (Lia Genovese).

An undocumented jar located 300 m from Site 15-Houay Fa Pha quarry was inspected in January 2017. In keeping with the relatively modest size of granite jars, the new unit (Figure 6) measures 120 cm in length, with an aperture 30 cm wide and an estimated circumference of 280 cm. The thick layer of vegetation and mud could not mask the mason's skill in the execution of this finely carved jar. According to a villager, a jar of similar size is buried deep in the soil, less than 1 m from this exposed unit. Thus, the

immediate vicinity of Site 15-Houay Fa Pha quarry holds one exposed granite jar and, according to villagers' reports, one buried unit.

On a subsequent visit to Khun district, also in January 2017, villagers escorted the author to an undocumented group of jars in San Kéo Hen, set on a hill 1.3 km from Ban Thoum. The thick vegetation enveloping the hill complicated the task of locating the jars eventually the surviving granite unit (Figure 7) was identified in a small clearing surrounded by heavy growth. The unit is thick-walled and in good condition, measuring 135 cm in length and carved medium-size with



Figure 7: Granite jar at San Kéo Hen (Lia Genovese).

aperture. According to the villagers, a second jar of comparable size was pulverised during bombardments in 1970, as testified by five large craters surrounding this extant jar.

The visit to Muang Phan the culmination of was conversation that began during fieldwork in Xieng Khouang in 2016, when a Lao archaeologist mentioned a site excluded from inventories on account of all the jars being fragmented. February 2019, the author reached Muang Phan, set in a wooded area on a dirt road from Muang Khun, 60 km from Phonsavan.

Muang Phan hosts granite jars, all fragmented except one whole unit located deep into the site. The jars are thick-walled and with shallow cavities. The mason's skill was evident in the expertly fashioned walls, smooth despite the passage of time. It has been suggested that villagers' superstition has contributed to the fragmentation of these jars. Fragments of iar walls, and small slabs of sandstone on occasion, had been stacked on the bases of several units (Figure 8), in the manner of a stone cairn. Modernday stone cairns often accompany contemporary burials documented at the Plain of Jars: "Both Hmong and Phuan burials have been recorded at jar sites,

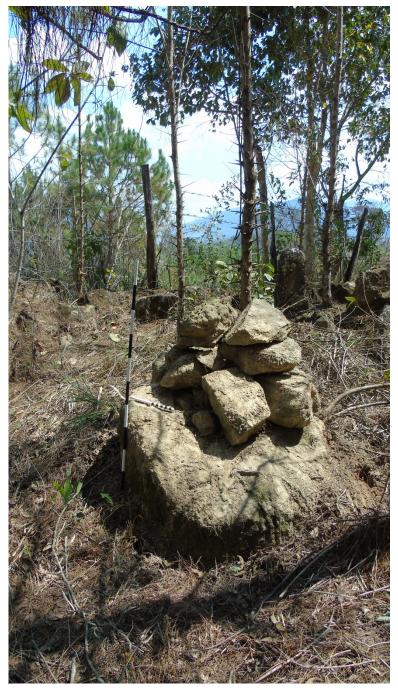


Figure 8: Jar fragments and sandstone slabs stacked inside a granite jar, Muang Phan (Lia Genovese).

and while the Phuan burials use lower foothills and spurs to place jedis, Hmong prefer the mountain ridge" (UNESCO 2009: 27).

Although Colani did not specifically document cairns built with jar or disc fragments, her accounts reported other types of damage, which she attributed to superstition and fear of the ancient stones' residual powers. Surveying sites in Phou Khoun district in the spring of 1933, she blamed villagers for the overnight damage to sandstone discs she planned to

document the day after her arrival: "The next morning, we saw with indignation that pieces [of the discs] had been thrown to the ground and smashed. It goes without saying that the natives pretended to ignore the perpetrator" (Colani 1939: 98).

Another undocumented site in the district is located 20 km east of Muang Khun. Ban Namlam, visited in March 2019, is set in jungle and a visit requires a moderate trek as well as a sturdy vehicle. Access to the site is severely restricted, controlled by armed guards supervising gold mining activities for a foreign-owned concession that employs both Lao and overseas workers.

The two sandstone jars at Ban Namlam are thick-walled and located on hills set 400 m apart. In the immediate vicinity of the jars are sandstone boulders of modest size. One jar is 82 cm high and in very good condition. Food wrappers, plastic bottles and other debris had been dropped into the jar, as has been documented at other sites. The jar was covered by a tarpaulin held in place by sticks, an improvised shelter to trap birds during their dust baths, for the Lao delicacy of fermented swallows. Another such shelter is found 100 m from this jar.

From this position, the author walked west to the second jar, which was covered in growth but in good condition except for a fracture. This is a more imposing unit, 110 cm high, carved with a recessed inner rim and with a girth of at least 360 cm. A short distance away, the remnants of another unit, too fragmented to document. This larger jar is accompanied by an undecorated 10-cm thick disc with a diameter of 93 cm (Figure 9). In contrast with medium- to large-size sites, discs are rarely, if ever, found at small sites with jars in single digits. Discs in large quantities are found only at major locations like Site 52-Ban Phakeo, where 404 jars are accompanied by 106 discs, around 50 percent of the entire disc inventory on the Plain of Jars.



Figure 9: Sandstone jar and disc at Ban Namlam (Lia Genovese).

LUANG PRABANG PROVINCE

The ten sites in Luang Prabang province are populated with jars and discs fashioned from sandstone. Their remote setting entails logistical challenges, with visits often requiring a four-wheel drive vehicle, a moderate-to-challenging trek and navigation in a narrow boat. It is an under-studied area currently outside the Lao government's research focus. Researchers require permits from the relevant authorities and armed escort is frequently a condition of the survey. None of the sites in Luang Prabang are open to the public and travelling to them involves traversing hazardous and narrow dirt roads and stony paths. Access is further curtailed by seasonal conditions, which render the dirt roads precarious even after a light rainfall.

The first and only large-scale survey and documentation of the Luang Prabang sites was conducted by Madeleine Colani over a number of months between May 1932 and May 1933. In recent years, the Lao government has conducted limited archaeological research in the area, connected to the construction of the Nam Ngum 5 hydropower project.

In 2011, a few jars and discs in low-lying areas close to the dam were relocated to higher ground, to prevent damage from flooding. Reports were compiled detailing the relocation methods, complete with images of the stone artefacts as well as names of the personnel involved and geographical coordinates, but their circulation was limited to Lao officials. In a few instances, the relocation has involved jars documented by Colani but whose state of conservation has not been updated.

Phou Khoun district

All the Luang Prabang sites documented to date are located in Phou Khoun, a district which saw much fighting during the Vietnam War. The Phu Da Pho area, which contains the jar site known as San Hin Oume in Colani's times, corresponded to the Lima Site 103 airfield during the conflict. A disused airfield is shown in maps from the 1960s (Texas University 1965), with smaller airfields in nearby Xieng Dàt.

Phou Khoun is situated 80 km west of Phonsavan, directly south of Phoukoot, a district in the northwest of Xieng Khouang. In modern times, Phou Khoun and Phoukoot fall under separate provincial jurisdictions but dozens of jars in both districts share common features like shallow cavities, thick walls and narrow apertures. Phou Khoun hosts stone artefacts not found in Xieng Khouang, like zoomorphic discs (Colani 1935, vol. 1: plates 49-53) and mushroom-shaped discs (Colani 1935, vol. 1: plates 45-47). The bases of some of the mushroom-shaped discs are 40 cm thick and skilled masonry is evident in their remarkably smooth contours.

Phou Khoun has revealed one of the most astonishing artefacts to emerge from the Plain of Jars. In 2011, six sandstone fragments were found at Nam Phat by Viengkéo Souksavatdy during a mission led by Thongsa Sayavongkhamdy, respectively Deputy Director-General and former Director-General of the Lao Heritage Department. The fragments from this location of just two jars did not at first seem unusual, but when assembled off-site, they revealed an anthropomorphic image with well-defined features such as eyes and a nose. A straight line runs from the base of the nose to what would have been the mouth, which can no longer be discerned. The figure's left cheek rests on its left hand, in

a reflective pose aptly nicknamed 'The Philosopher'. This extraordinary find will be the subject of a separate paper.

Although a few human carvings have been documented on jars and discs, the Nam Phat discovery is only the second anthropomorphic object, or statue, to emerge from the Plain of Jars. In May 1932, Colani (1935, vol. 1: 191-192) found the first human figure, at Thao Kham, a cemetery of funerary stones in Luang Prabang province, on the western-bound section of Highway 7. The 8.8-cm tall bronze figurine depicted a naked human being with child-like features and decorated with spirals on arms and legs.

Also in Phou Khoun is the assembly known as Kéo Tane in Colani's times, a circuit of several kilometres punctuated by small clusters of jars and discs (Colani 1935, vol. 1: 217, map 9). The name Kéo Tane was still in use in the mid-1960s, when eight families with a total of 36 ethnic Lao people lived in the area (University of Wisconsin 1970: 374).

Ban Nam Ting is a section of the Kéo Tane circuit. The village, populated with Hmong and Kmhmu families, is set in dramatic scenery, flanked by a mountain and a sheer drop of several hundred metres. A visit in the rainy season is hazardous. Despite visiting the site in the dry season in an all-terrain vehicle driven by a skilled off-road driver, a light shower the previous day made the narrow and stony road arduous to negotiate. Slash and burn was already under way but it did not directly threaten the megaliths.

Ban Nam Ting hosts four jars, two zoomorphic discs (Figure 10) and one unworked sandstone block. Unusually, all four jars feature a recessed inner rim, when ordinarily only one such rimmed type is found among the dozens of flatrimmed units at most sites documented to date.

In keeping with jars elsewhere in the district, their height is relatively modest, at around 160 cm, with one unit barely reaching 90



Figure 10: Sandstone jars and animal-decorated domes at Ban Nam Ting (Lia Genovese).

cm. The girth varies from 460 cm for the large units, to 200 cm for the more modest jars. The jars' interior is shaped to depths of 43-55 cm, typical of the shallow cavities in the area. Two of the jars display signs of deliberate damage. One unit has been splashed with red paint, while the rim of another jar has been used as a whetstone.

Both animal-decorated domes have suffered considerable erosion since Colani's surveys in the mid-1930s. The base is 43 cm thick for the smaller dome and 50 cm for the larger one. The circumference is broadly comparable, respectively 410 cm and 415 cm.

Colani documented other animal-decorated discs at cemeteries of funerary stones west of Phou Khoun, but these sites, which do not host any megalithic jars, are not currently being studied.

Conclusions

With the exception of Ban Nam Ting, the new jar groups detailed in this paper are not recorded in current site inventories managed by the Lao Heritage Department. Their discovery validates the ongoing process of comprehensively documenting the Plain of Jars, which is revealing new sites at regular intervals.

Consistent with the process of participatory mapping, local inhabitants are indispensable contributors in efforts to secure information on undocumented sites. This is confirmed by the numerous jars discovered with villagers' help.

Houay Tinxang is the easternmost location hosting jars. Although the site is small, its location on the eastern edge of Xieng Khouang province bears implications for the geographical reach of the Plain of Jars, which now extends for 120 km, from Luang Prabang province's Phou Khoun to Xieng Khouang's Nong Hét, close to the Vietnamese border.

Small sites can reveal astonishing details, like the unusual frog carving at Ban Pha Tai, a minor site at considerable distance from the 242 jars at Site 3-Ban Xiengdi. The frog carving at Ban Pha Tai is materially different from other animal representations and is unique for being the first aquatic representation documented at the Plain of Jars.

The small units at Na Som, Site 18 quarry, reveal adaptation of carving techniques to working with small blocks, resulting in a recognisable, fully-formed jar after the considerable waste generated by the carving process. At this stage in our knowledge, we cannot explore whether there was a special purpose for these miniature jars or whether they were created for a particular class of people.

Historically, the jars have been admired for their antiquity. At Site 17-Ban Boua Tai, the removal of two jars to the village compound recalls the two jars moved from Site 2-Ban Na Kho to the "Soviet Farm". The Site 17 and "Soviet Farm" cases exemplify impoverished communities' desire to celebrate important village events by offering artefacts of value, a gesture which can result in damage to the jars, as documented at Site 17.

Current assumptions for Site 15 need reviewing following the documentation of new jars a short distance from the quarry. Although the physical space around Site 15 is restricted, the area adjacent to the quarry, where the new jars are located, may have functioned as a workshop.

The presence of fragmented jars at several sites points to a higher jar count previously. Any assumptions on the size of these isolated sites need to take this factor into account.

For Muang Phan, it cannot be stated with any degree of certainty whether the jars were broken deliberately or damaged by weathering. However, 19 out of 20 granite jars suffering the same fate at the hands of the elements would be unlikely, particularly since the jars are dispersed in four groups around the site.

Ban Namlam is the first instance of a disc found at a site with fewer than ten jars. Its distance from the larger sites in Paek district, populated with hundreds of jars and dozens of discs, invites us to revisit notions of hierarchy, which maintain that discs are found only at large sites.

The sites in Luang Prabang's Phou Khoun are excluded from official tourist visits, with their remote setting affording a degree of protection denied to some of the more popular sites in Xieng Khouang. However, the integrity of some Phou Khoun sites has been disrupted by the relocation of jars and discs from their original archaeological position to new ground, to avert potential damage from economic development in the area. In some instances, the stone artefacts were relocated before it could be established whether they constituted locations documented by Colani in the mid-1930s or whether they were previously unknown sites.

Finally, it is hoped that future studies will explore the possible relationship between small sites and the large assemblies in Paek and Phaxay, to understand random groups of jars found in remote locations, often at some distance from a major site. The large sites are almost exclusively populated with jars fashioned from sandstone (a total of 1,093 jars at Sites 1, 3, 42 and 52) but three different rock types (sandstone, conglomerate and granite) are found at the small sites detailed in this research report (Table 1), with a total count of 37 jars, including at least 22 fragmented units. Rather than presenting an area of contrast, it suggests a commonality in ancient communities' desire to create monuments in stone from locally-available raw materials, from granite boulders strewn in river beds to blocks from a rich sandstone quarry. Moreover, employing different rock types must have entailed adaptation of carving skills as there are major differences in working with relatively soft sandstone or limestone as against hard granite or conglomerate.

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References

- Baldock, J. 2008. *Geological Investigation of Jar and Quarry Sites in the Xieng Khouang Province, Lao PDR*. For UNESCO Safeguarding the Plain of Jars Phase IV. Charlbury, Oxfordshire, UK: GWP Consultants, February 2008.
- Bellwood, P. 1978. Man's Conquest of the Pacific: The Prehistory of Southeast Asia and Oceania. Auckland, New Zealand: William Collins Publisher.
- Benson, F.C. 2018. European Explorers in Northeastern Laos, 1882-1893. *The Journal of Lao Studies*, Vol. 6/1, pp. 56-74.
- CEFEO (Cahiers de l'École Française d'Extrême-Orient). 1940, third quarter no. 24.
- Colani, M. 1935. *Mégalithes du Haut-Laos (Hua Pan, Tran Ninh)*, XXV. Paris: École Française d'Extrême-Orient, 2 volumes.
- Colani, M. 1939. Les jarres du Tran Ninh. *Bulletin des "Amis du Laos"*, 3/3 (August 1939), pp. 89-103.
- Dussault, L. 1915. Extraits du Rapport de la Mission Géologique et Topographique du Laos. *Bulletin économique de l'Indo-Chine*, 18/114, July-August 1915, pp. 535-568.
- Genovese, L. 2015a. *The Plain of Jars of Laos Beyond Madeleine Colani*. PhD thesis, SOAS University of London (accessed 1 September 2019), http://eprints.soas.ac.uk/id/eprint/20397.
- Genovese, L. 2015b. The Stone Jars of North Laos Different by Design. In *Advancing Southeast Asian Archaeology 2013* (N.H. Tan ed). Proceedings of The First SEAMEO-SPAFA International Conference on Southeast Asian Archaeology, Burapha University, Chonburi, Thailand, 7-10 May 2013, pp. 83-108.
- Genovese, L. 2016. The Plain of Jars in the Context of South and Southeast Asian Archaeology. In *Interpretative Studies on Southeast Asian Culture* (W. Sucharithanarugse ed). Bangkok: Institute of Thai Studies, Chulalongkorn University, pp. 83-134.
- Genovese, L. 2018. The Birth of French Research into the Prehistory of Laos. In *Engaging Asia Essays on Laos and Beyond in Honour of Martin Stuart-Fox* (D. Goldston ed). Copenhagen, Denmark: NIAS, pp. 91-122.
- Genovese, L. 2019. Spirits of the Stone, from Landlocked Laos to Sabah, Insular Malaysia. . *Jurnal Arkeologi Malaysia*, April 2019, 32/1, pp. 53-76.
- Gerdner, L.A. et al. 2019. A Hmong Story Cloth Featuring Mak Phout (Lima Site 137) in Northern Laos: Rare in Content and Artistic Detail. *Hmong Studies Journal*, vol. 20, pp. 1-44.
- Hamilton-Merritt, J. 1993. *Tragic Mountains: The Hmong, the Americans, and the Secret Wars for Laos, 1942-1992*. Bloomington and Indianapolis: Indiana University Press.
- Neïs, P-M. 1997. Travels in Upper Laos and Siam, with an Account of the Chinese Haw Invasion and Puan Resistance (Walter E.J. Tips tr). Bangkok: White Lotus (originally published in Paris in 1884 as 'Voyage dans le Haut Laos' in Le Tour du Monde, vol. 50, No. 1278-1282, pp. 1-80).
- Nitta, E. 1996. Comparative Study on the Jar Burial Traditions in Vietnam, Thailand and Laos. *Historical Science Reports*, vol. 43, July 1996. Japan: Kagoshima University, pp. 1-19.
- Nomination Text. 2018. *Megalithic Jar Sites in Xiengkhuang Plain of Jars World Heritage Nomination*. Vol. 1. https://whc.unesco.org/en/list/1587/documents/ (accessed 1 December 2019).

- O'Reilly, D. et al. 2019a. Excavating among the megaliths: recent research at the 'Plain of Jars' site 1 in Laos. *Antiquity* 93/370, pp. 970–989. https://doi.org/10.15184/aqy.2019.102.
- O'Reilly, D. et al. 2019b. Research at megalithic jar site 52 and the discovery of new jar sites in Xiang Khouang Province, Laos. *Asian Archaeology*. Published online 25 June 2019. https://doi.org/10.1007/s41826-019-00023-0.
- Scott, V.N. 2018. Ritual in the rock-art of Kanchanaburi and Uthai Thani province, western Thailand? *Rian Thai*, International Journal of Thai Studies, 11/1, pp. 101-134.
- Shoocongdej, R. 2002. Gender Roles Depicted in Rock Art: A Case from Western Thailand. In *In Pursuit of Gender: Worldwide Archaeological Approaches* (S. Milledge-Nelson and M. Rosen-Ayalon eds). Walnut Creek, USA: AltaMira Press, pp. 187-206.
- Srisuchat, A. 1990. *Rock Art at Khao Plara, Uthai Thani*. Bangkok: Chumnum Sahakon Kankaset (in Thai).
- Stuart-Fox, M. 1993. On the Writing of Lao History: Continuities and Discontinuities'. *Journal of Southeast Asian Studies*, 24/1 (March 1993), pp. 106–121.

 Texas University. 1965. Laos 1:50,000. Xiangdèt. Sheet 5547 IV, Series L7015, Edition 1-AMS.
- The Frog Rider: Folk Tales from China. 1980. Beijing, People's Republic of China: Foreign Language Press.
- UNESCO. 2009. A training manual for UNESCO-LNTA DoIC Guide Training Workshop at the Plain of Jars Archaeological Landscape, Lao PDR. Bangkok: UNESCO (draft, May 2009).
- University of Wisconsin. 1970. MR 2 field reports (1960-1977), pp. 290-414.

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¹ For sites already documented, this paper uses the denomination employed by the Lao Heritage Department, consisting of a numerical label followed by the site's geographical location (e.g. Site 1-Ban Nao).

² During his doctoral fieldwork in 1994, a malfunction prevented Thongsa Sayavongkhamdy from photographing this important discovery. Personal communication of 23 April 2014 from Thongsa Sayavongkhamdy.

³ In 1874, the Plain of Jars fell to the "Haw", which consisted of bands of defeated rebels fleeing southern China in the wake of a suppressed rebellion which first surfaced in Yunnan in 1857 and put down by Qing imperial forces in 1873.

⁴ Lima Sites were clandestine U.S. military installations for "covert paramilitary and combat operations" (Gerdner et al. 2019: 3) as well as humanitarian efforts for Lao and Hmong allies.

⁵ Personal communication of 27 March 2011 from Mr. Sida, a village elder at Boua Tai village.

⁶ Personal communication of 21 June 2016 from Thongsa Sayavongkhamdy.