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Selected Papers from the First SEAMEO SPAFA International Conference on Southeast Asian Archaeology

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Editor: Noel Hidalgo Tan

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Chapter 9

A Buried Jar Site and Its Destruction: Tham An Mah Cave, Luang Prabang Province, Lao PDR

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The Middle Mekong Archaeological Project conducted excavations at Tham An Mah cave, Luang Prabang, Lao PDR, as part of a larger study exploring the prehistoric archaeology of the region. Buried under surface layers were pits containing ceramic jars associated with human remains, in a complex sequence of deposits. Rare for cave sites here, the preservation of the site was excellent. The finds included a worked stone disc, overlying a crushed pot and human remains, and a constellation of types of remains resembling others from iron age sites in the region, including the Plain of Jars. Soon after we completed our field season in 2010, the National Museum learned that the site had been disturbed. In 2013 we returned to assess the impact of this and devise a plan for rescue archaeology at the site. This paper discusses the preliminary findings from Tham An Mah and its potential regional significance.

Keywords: jar burial, Luang Prabang, Laos, looting, Plain of Jars

Introduction

The Middle Mekong Archaeological Project (MMAP) with the Department of Heritage of Lao PDR have been carrying out a series of investigations into the archaeology of the Middle Mekong region, including surveys and small test excavations in the Luang Prabang area of Laos (White and Bouasisengpaseuth 2008; White et al. 2009; White 2007; Given and Hyla 2006; Marwick 2006; Marwick et al. 2009). Four cave sites were targeted initially for test excavations from four different valleys tributary to the Mekong, on the basis of survey results showing the surface presence of prehistoric pottery as well as Hoabinhian lithics, and based on the site locations in the landscape. Three of these sites have been discussed briefly in preliminary publications and reports, or are currently in preparation: Phou Phaa Khao rockshelter (White et al. 2009; Lewis 2007), Tham Vang Ta Leow cave (Lewis 2008; White et al. 2009), and Tham Sua rockshelter (Marwick et al. in prep.). In this paper we present a summary of the field findings from the fourth site, Tham An Mah cave (TAM), near Ban Xieng Muok village, along the Nam Dong, a tributary of the Mekong River (Figure 9.1) (Hamilton 2010). Selected preliminary material from the excavations has also been presented online on the University of Pennsylvania MMAP website (http://penn.museum/sites/mmap/), the University College Dublin Facebook page (www.facebook.com/media/set/?set=a.505110336178754.110409.138793279477130&type=1), and in UCD Today magazine (UCD Today 2010, 21). Post-excavation analyses are ongoing, and only initial discussions are presented here.

The TAM site is located at roughly E196,498 / N2,193,495 and 585 m asl, and is one of six known cave sites with archaeological potential in the immediate vicinity of Ban Xieng Muok village (MMAP records; White 2010 pers. comm.). It is *c*. 40 m above the modern ground level (and a nearby stream) in a limestone hill, in a small cave mouth that opens to the northeast. The base of the cave is formed by a rockfall with a *c*. 60 degree slope from the mouth to the interior, sloping to the southeast. The floor in 2010 was relatively flat in the centre and western part of the cave, forming a platform overhung by a large flowstone covering the wall to the southwest. On the western wall is a panel of Buddhist paintings of unknown date, but reported by locals to date from the 1950s. The dimensions of the floor space in the entrance platform

area are *c*. 11 m by 7 m (by 11 m in the south), and the roof rises *c*. 8.75 to 15 m above the 2010 platform surface. There is a small side passage to the northwest, *c*. 2 m wide by 2.5 m deep, and there appear to be additional infilled passages on this side (Figure 9.2). The cave has a small roof opening. The nearby stream channel is dry much of the year, but with a cobble floor indicating relatively quick water flow during rainy times. There is secondary forest vegetation on the steep slope up to the cave.

Tham An Mah cave test excavations in 2010 and assessment of the damaged site in 2013

In 2010 MMAP excavated by trowel two test pits in the platform of TAM (Figure 9.2). Trench A was a 1 x 1 m test pit, excavated to 1.2 m depth. Two large rocks which met at this depth dictated the base of excavation. Trench B began as a 1 x 2 m test trench, which was then extended 0.5 m to the north. The northern half-metre was further extended 0.5 m to the west and the east, upon encountering two pits with buried ceramic jars, and a *c*. 40 cm diameter stone disc. Most of the trench was excavated to *c*. 60 cm depth, with the exception of one area in the south metre which was excavated in a sondage to 1.3 m deep, following a pit which was found to have an additional jar at its base. The excavation stopped at an arbitrary level due to time constraints; the sondage revealed that potentially at least 70 cm deeper of unexcavated archaeological deposits remained across the trench, if not more.

During the archaeological excavations in 2010, the deposits in both trenches were recorded by single context, as well as by layers within contexts. All deposits were double sieved using 4 mm and 1 mm mesh sizes, and recorded in plan and section and by photographs and drawings. Samples were taken for environmental archaeological study of macrobotanical, pollen and animal remains, for comparison to the other MMAP excavations; samples for flotation were sieved using standard small-scale bucket flotation with 1 mm mesh for the heavy residue and 500 micron mesh for the flotation. The residue was sorted in Luang Prabang and the archaeobotanical remains were sent for analysis to the University of Toronto at Mississauga. Several block samples were taken for soil micromorphology but these were unfortunately lost in shipping. Speleothem samples were also taken as part of a wider study investigating climate change history in the South China Sea region (Yang *et al.* 2012). The excavation field team was a combination of professional research archaeologists, museum and heritage experts, and archaeology and heritage students, along with several local villagers who assisted with sieving. The activities of the field season were videoed by the University of Pennsylvania; these included several outreach activities led by the Department of Heritage, aimed at informing and educating local people about archaeology and the importance of the cultural heritage of Laos.

The Trench B test excavation was targeted by 'looters' in 2010, after our field season and backfilling. The looters were apparently primarily interested in the rice bags used in the backfilling process and the damage to the site's unexcavated deposits was reported as modest. When we surveyed the site in January 2013, however, we recorded that the non-archaeological excavations had expanded Trench B to roughly 7.7 m wide north-south, and to 5 to 7.3 m wide east to west (Figure 9.3). This represents the majority of the platform area. Our measurements of the resulting pit indicate the unauthorised pit to have depths of between 1.8-2.5 m from the surface across this area, thus effectively destroying the large part of the unexcavated area around the excavated portions of the known archaeological site, and into unrecorded deposits. For comparison, while our two test excavations had removed (and then backfilled) about 4 m^3 of sediment, the sediment removed by the unauthorised excavations is estimated to be over 100 m^3 (Beth Van Horn 2013, pers. comm.). The sediments from the huge pit were nowhere to be seen. The pit remains open, with frequent stone rubble, lithics (including sumatraliths), potsherds, and human and animal bones scattered about the base of excavation and adjacent parts of the cave. The spoil appears to have been mostly removed from the site; local informants indicated that the fine sediment was taken and sold for garden farming to non-villagers. Trench A was not disturbed, retaining its backfill in January 2013. Based on this, it seems clear that the looters were aware of our excavation findings, at least regarding sediment depth (see above and below). As such, we were disappointed to realise that our own investigations had obviously contributed to the choice of TAM as a source of sediment, if indeed fertiliser was the goal of those who damaged the site.

Under the modern reddish-brown silty sand surface layer, which was less than 10 cm deep across both trenches, in Trench B we encountered the first of a group of pit features and archaeological layers, comprising ashy deposits and reddish-brown silt and silty sand layers, with disarticulated human and animal bones, potsherds and charcoal. These deposits were difficult to follow in the upper parts of the site, as they mixed and merged with each other, but with depth a number of pit cuts and layers became better defined. The upper 50 cm of the site in general appeared to comprise alternating layers of reddish-brown silty sand, and hearth and/or disturbed wood ash deposits (Figure 9.4). This layering suggested at the time that burning at the site occurred on an occasional, but regular basis, at unknown time intervals. Although samples were sent for dating, no successful dates were returned from this trench.

The first large buried ceramic jar was encountered in the northern corner of the eastern profile at *c*. 18 cm depth (Figure 9.5); this was first seen in a reddish-brown silty sand layer which was later interpreted as the upper fill of a large pit. The pot is *c*. 48 cm by 38 cm in size, and contained three human skulls and partial skeletal remains; no single entire body was represented in the skeletal remains inside the vessel (Figure 9.6). The upper cut for this pit was never clearly determined, so we cannot state its relative age regarding site stratigraphy. The pit fills included layers of ashy sediment as well as reddish-brown silty sand. Underlying this feature we found additional human remains in a light grey silty sediment.

In the northwest corner of the original Trench B, at *c*. 30 cm depth, we uncovered an arc of a horizontally-oriented yellowish white stone disc in ashy sediment; upon extension of the trench and further excavation this was revealed to be circular, roughly shaped and made of a soft calcareous sedimentary rock composed of strongly compacted shells, perhaps a type of coquina eg. *Donak* spp. or coquinoid limestone, with a diameter of *c*. 42 cm and a thickness of *c*. 5-8 cm (Figure 9.7). It directly overlay a broken pot found together with loose human remains (Figure 9.8).

In the south profile of the original trench we found a third ceramic jar in a greyish brown silt fill, at a depth of *c*. 50 cm. Body sherds from this ceramic jar have been reconstructed; no rim or diagnostic elements were present. Directly overlying this was a small irregular boulder *c*. 15 x 30 cm in size (Figure 9.9). The fill was not bottomed; underlying the silt was a layer of white wood ash. A disarticulated burial with pottery sherds was found at the southwest corner, but its relationship with the buried jar pits was not clear.

In the south metre along the east section, a possible pit seen from *c*. 25 cm depth appeared to continue down, or to be a recut of an earlier pit, and a sondage was excavated to follow this. The deposits in the sondage included the fill of a pit around 60 cm depth, comprising a light greyish brown sediment over a reddish-brown ashy sediment with ash patches, all over the probable cut of a second pit at 100-110 cm depth. This lower pit cut went through a layer of wood ash which physically underlay the lower fill discussed above, and overlay a layer of light greyish brown sediment, possibly ashy and with frequent roots. A fourth large intact (except for its rim) ceramic jar 42 by 34 cm in size was found within this deposit at *c*. 90 cm depth (Figures 9.10 and 9.11); no human remains were found within it, but additional human remains, some apparently articulated (a foot, possibly from a separate adjacent burial), were found lower down in the pit, at *c*. 130 cm depth.

Trench A produced a much less interesting sequence, with a 10-30 cm thick layer of reddish-brown silty sand containing some bones, including human bones, found in the southwest corner. Two human leg bones were also found together in a possible pit. As in Trench B we found some alternation between layers of reddish-brown silty sand and layers of ashy sediment. The test pit was bottomed at *c*. 120 cm depth, where it hit large boulders that formed its base. The lowermost deposit over these rocks, while possibly a disturbed context, produced the only datable charcoal sample from the site thus far. This dated to *c*. 13,000 cal. yr. BP (Beta-279812), which, along with finds of Hoabinhian lithics from the excavations, suggested that there was a potentially interesting early archaeological site remaining to be recorded at Tham An Mah.

The significance of the Tham An Mah buried jar site

The story of this test excavation is far from complete, as only preliminary post-excavation analysis has been carried out. In general, the site assemblage comprises human and animal bone, shells (including rare possibly worked shell), charcoal, seeds, pottery, lithics (flakes, occasional cores, rarely polished stone), and occasional iron objects. We will report in future publications on findings from this assemblage. The near-total destruction of the site has, however, spurred us to present this preliminary report to inform our colleagues and the public of the significance of what may have been lost through the recent removal of sediments without archaeological recording.

Based on the limited research we have conducted to date, Tham An Mah appears to be an important site archaeologically for four reasons: first, the extremely well-preserved nature of the site and its remains before it was damaged; second, the apparent material cultural connections to the iron age stone jar sites found at the Plain of Jars and in the Luang Prabang region; third, its well-preserved evidence for distinctive iron age burial traditions, including intact whole pottery vessels; and fourth, probably undisturbed deposits dating from before the iron age that could have provided important information on human occupation of northern Laos in the terminal Pleistocene through middle Holocene (older than 14,000 BP to *c*. 5,000 BP). Its evidence could have provided a foundation for understanding the prehistory of Lao PDR for thousands of years, as well as an important body of evidence with which to compare both archaeological cave and open-air sites with hunter-gatherer remains and iron age buried pots associated with human remains across the region.

Tham An Mah is one of several known probable iron age sites with buried jars, jar burials and/or stone jar sites in the Middle Mekong region. The most famous of these in the area are those on the Plain of Jars, where open-air stone jar sites and other megalithic sites were recorded by Colani (e.g. 1933, 1935), Nitta (1996), Sayavongkhamdy and Bellwood (2000), van den Bergh (2008), Rogers and van den Bergh (2008) and UNESCO (2010). There are many other comparable sites, including in the Luang Prabang area (e.g. Kidavanh 2011a-c, 2012) (Figure 9.12). None of these sites has seen extensive full-scale excavation or documentation, and most are unpublished; the fieldwork of Colani in the 1920-30s remains the most comprehensive dataset. Regarding the sites on the Plain of Jars, Colani (op.cit.; 1940) proposed that they could be related to jar burial sites in northeast India, although certain artefacts, including bead and ceramic types found at the sites, suggested links with the Sa Huynh archaeological culture in Vietnam. She suggested that there were trade links from Vietnam to the Luang Prabang area, and perhaps also to India, and that by exploring the archaeology of the areas along these 'routes' we would find additional sites in this late prehistoric cultural network. Based on jar burial and stone jar finds, as well as other artefact types, various authors have proposed that the Plain of Jars finds could relate to discoveries in the Khorat Plateau and the Mae Hong Son region in Thailand, to the North Cachar Hills of India, and to sites in Indonesia and Cambodia (e.g. Colani 1935; Kiernan *et al*. 1988; Mills and Hutton 1929; Coates 2005; Indrawooth 1997; Box 2003; UNESCO 2009; Genovese 2013; Bellwood 1978; Higham 2002). That there were extensive trade links, seen by artefact finds, during the iron age or metal age of Southeast Asia in general is well known, and these are often related to local cultures practising jar burial during later prehistory. Occasionally mentioned in the mainland Southeast Asian literature regarding the Plain of Jars is that Sa Huynh jar burial finds from Vietnam have also been linked typologically to the widespread tradition of metal age jar burial in cave sites in island Southeast Asia, such as in the Philippines, based on both pottery typologies and trade goods such as beads; these links extend the network to China and possibly even India (e.g. UNESCO 2009).

Tham An Mah could simply be seen as a site along Colani's routes, but since the networks under discussion are obviously very extensive, large-scale and complex, reaching into even apparently relatively isolated communities on small islands a long way from Laos, we would prefer not make too much of the idea of any particular 'route' regarding Luang Prabang, except to say that the Luang Prabang area, at least by virtue of its fluvial geography and its location in between later major centres, is a natural cultural crossroads on the Southeast Asian mainland, and we expect that across the entire region we will find archaeology expressing this iron age history (White & Bouasisengpaseuth 2008).

While our analyses of pottery types and other remains are not complete enough at present to allow detailed comparisons, the constellation of remains found at Tham An Mah fits well with that of the iron age sites on the Plain of Jars, and suggests a direct connection. Perhaps the most obvious indicator relates to the stone disc found at TAM. In the UNESCO Plain of Jars guide training manual (2009) a distinction is made between discs and lids; discs are interpreted as grave markers placed on burial pits. This source also mentions unworked stone grave markers, which might also be represented at Tham An Mah by the buried pot with the irregular stone overtop of it (Figure 9.9). The reported discs from the Plain of Jars are usually 1-2 m in diameter (Sayavongkhamdy and Bellwood 2000; see Genovese 2012), and thus much larger than the disc we found, and some are decorated, while ours is plain. Colani (1935, Vol II, 208), however, also mentions smaller, circular, worked stones of sandstone, found buried in association with pots or potsherds at Ban Xot and San Hin Oume, and suggests that these were covers. We believe that the TAM disc is related to these types of artefacts, and to the Plain of Jars by virtue of both its stone type and the particularities of its association with buried pots and human remains.

Colani (1935, Vol II, 29-30) reported a find at Ban Ang of a coquina block ('un calcaire coquillier') covering human bone fragments in a ceramic jar. The coquina rock at Ban Ang was not shaped into a disc, but the arrangement of these elements is strikingly similar to that seen at Tham An Mah. Both Ban Ang and Tham An Mah are in limestone areas, but in neither location was the source for coquina rock identified; Colani remarked that this seemed to be quite rare in the Ban Ang area (Colani 1935, Vol II, 30), and seems to imply that a source location was unknown to her. Coquina distribution in Laos is not mentioned in the geological maps or literature (e.g. United Nations 1990), despite this rock being a building material of some economic value. While it is possible that certain of the Khammouan limestone formation 'breccias' might relate (Waltham & Middleton 2000), this could not be confirmed. Coquinas are mentioned as common in Jurassic formations in Chumphon Province in coastal southern Thailand (Meesook & Saengsrichan 2011, 159-160), in Triassic deposits in northwest Vietnam (Khuc 2000), and are found dating to as late as the Holocene in the broader region, e.g. in east Guandong province, China (Shen *et al.* 2013). They are also reported as Holocene coastal beachrocks ranging from the northern coast of the South China Sea down to the Spratly Islands (*ibid.*). Finding this particular stone type, from as yet unidentified sources, in both locations is an interesting coincidence. Colani (1935, Vol II, 30, 202) suggested that something to do with the colour or quality of her coquina block might have made it significant in the burial context. At TAM the use of coquina worked into a small disc suggests at least a reference to Ban Ang, one of the most important sites on the Plain of Jars. Future geological study of the type of coquina from which the disc was made might determine what geological period the source rock dates to, which could help in proposing a possible origin. However, Lao PDR has large regions of calcareous rock formations, many of which are still poorly explored (Kiernan 2009), meaning that sourcing these important artefacts, even to a basic level such as local/non-local, may not be feasible in the near future. At present we can only comment on how interesting it is to find this similarity in the archaeological record of the two locations.

The disc from Tham An Mah was directly associated with a buried complete but broken pot and burial of secondary, partial, human remains, echoing the arrangement at Ban Ang. In addition to the sites mentioned above with small round worked 'discs', Colani (1940) also noted stone discs associated with jars at the sites of Na Nong (Site 13) and Song Meng. And at Ban Ang, Nitta (1996) found seven 'flat stones' over pits, six of which contained human skeletal remains, and the seventh of which also contained a buried jar with a few human remains inside it. With the evidence from Tham An Mah, this constellation of associated types of deposits appears to extend well beyond the Plain of Jars, and into the Luang Prabang area. This is not surprising, given that other parts of the Plain of Jars 'complex', for want of a better word, are also found in Luang Prabang, including stone jars and megalith or stone circle sites (e.g. Colani 1935; Kidavanh 2011a-c; 2012). Given the position of Luang Prabang on the Mekong and the confluence of several major tributaries in this location, one might expect that this particular 'route' to or from the Plain of Jars would be of enormous importance during the iron age (White and Bouasisengphaseuth 2008:43, 47).

The variation in specifics of remains associated with the various buried jars at Tham An Mah also fits within the broader comparison. Colani (1935; 1940) found that the stone jars at the Plain of Jars sites were associated with cremated human remains, while Sayavongkhamdy and Bellwood (2000) found no

cremated bone at their excavations; at Tham An Mah we found both cremated and non-cremated human remains (Phil Piper 2013, pers. comm.). At some possibly-related sites buried jars may not be associated with burials or human remains at all, such as at Lao Pako open-air site to the south (Källén 2000; 2004; Källén and Karlström 1999), and at Tham An Mah the deeply-buried complete pot (Figure 9.10) had no human remains directly associated with it, although buried partial remains, possibly from an earlier neighbouring feature, were found at some depth underneath it. This kind of variation is also commented on by Colani (1935 Vol II, Chapter VI), who discusses the cremated bone found around the 'crematorium' cave site at Ban Ang, in comparison to some open-air sites further afield, which had only uncremated human remains. The link of that cave site with cremation is also interesting in regard to Tham An Mah; while we cannot demonstrate that cremation occurred at the TAM site itself, there were several ash or 'ashy' deposits recorded, in addition to some cremated human remains.

Sayavongkhamdy and Bellwood (2000) suggest that the stone jars in Xieng Khouang could date to somewhere around 500 BC to AD 300, while Nitta is said to have suggested that the burial sites at the Plain of Jars date to between the late first to early second millennium CE (UNESCO 2009). Genovese (2013) suggests that although Colani proposed finds of buried stone jars in Laos were related to 'occult' practice, later evidence shows the burial of at least some jars is probably relatively recent, even modern, and is perhaps related to local disassociation with the sites. She does not discuss the burial of ceramic jars in this regard. Based on the stratigraphic sequence of the Tham An Mah site, the association between the buried jar pits, and the intact sequence of materials under the stone disc, we believe the Tham An Mah ceramic jars were buried in late prehistory. While there is obviously much need for direct dating of these sites, the general consensus is that they are iron age. This is also the impression from the inhumation burials seen at other cave sites we excavated as part of the MMAP study. Indeed, two of these sites have produced direct dates to the iron age – on a human tooth from Phou Phaa Khao (White *et al*. 2009), and luminescence dates on potsherds from Tham Sua (Marwick et al. in prep.), although much more work needs to be done regarding dating, contextual associations and the variations seen among these late prehistoric cave sites.

For one thing, it would be interesting to explore the various traditions, even those seen among the four sites we excavated: Why did only Tham An Mah contain buried jars and a stone disc, while Phou Phaa Khao rockshelter in the neighbouring Khan basin only contained inhumation burials? How can this variation fit into iron age cultural sequences in the region, and does it reflect variation in meaning of particular caves, changes in practice over time, or different groups of people burying their dead in caves? Finding a site like Tham An Mah causes us to revisit many of the questions raised long ago about the Plain of Jars megalithic and burial sites. But unlike the Plain of Jars, cave sites in Luang Prabang are not inaccessible due to unexploded ordnance, and burial sites dating to the iron age appear to be common, meaning there is great potential for better understanding these practices in the future.

The possibility of future research at Tham An Mah

Ceramic jars in caves are known from the local region, including buried in pits (e.g. Tham Nang An, possibly Tham Hua Pu – Sayavongkhamdy and Bellwood 2000), but there have been a very limited number of recent cave excavations focused on later prehistoric archaeology. This situation is due partly to the history of war and the issue of unexploded ordnance in many areas of Laos, the relative lack of funding for archaeological research in the country, and the focus on earlier prehistoric and later historic archaeology. It is also partly due to the rescue-based nature of certain more recent studies (e.g. Kidavanh op. cit.), where sites are quickly found, recorded, partly excavated, and materials (including large stone jars) then removed before the sites are destroyed by infrastructural activities such as hydroelectric power development. All contributions, including that from the limited excavations at Tham An Mah, thus have the potential to add significantly to our understanding of these types of sites and the ancient cultures in the region.

At present, due to developing rescue and minimal impact approaches at cave sites elsewhere in Southeast Asia (e.g. Barker *et al*. 2007), we do have some tools to hand to continue to reap new insights from sites with a poor or limited physical record, whether this has come about through deliberate site destruction or earlier archaeological excavations that were never written up. The remaining sections at

Tham An Mah can be recorded and sampled for environmental archaeological studies and dating, and one of the two apparently undisturbed small areas adjacent to the unauthorised pit excavation could be investigated further. The currently-exposed floor of the dug area is still sediment, apparently undisturbed, and it might be possible to explore these older deposits in addition to gathering as much rescue information as possible from the important later deposits.

Caves and rockshelters in Southeast Asia have provided some of the most important information on later prehistoric cultures and palaeoenvironments in the region (e.g. Anderson 1997; Barker 2013; Barker *et al*. 2002; 2007; Bellwood 1997; Fox 1970; Harrisson 1967; Sémah *et al*. 2004; Solheim 2006; Lewis *et al*. 2008). Cultural activity in caves is mainly occupational and funerary in earlier periods (palaeolithic), but predominantly focused on burial in late prehistory (neolithic and metal ages), protohistoric and historic times (Anderson 1997). For a summary of the history of cultural research and heritage of cave and karst research in Laos see Roberts (2015). It is still possible to gather more information through rescue archaeology and targeted sampling from the deposits left at Tham An Mah in regard to all of these periods. More recently, caves have been used for burial and storage of goods, and as refuges or military bases in times of conflict; the latter activities are known to have occurred in northern and northeastern Lao PDR in the later 20th century, for example (Kiernan 2012). Caves in the Luang Prabang region are also famous as shrines, such as the Buddhist caves at Pak Ou (e.g. Heywood 2006; Mouret 2001), and Tham An Mah has also played a role in this later archaeology, as it contains a panel of Buddhist rock art of undetermined date (Figure 9.13). This panel still survives above the large empty pit that now comprises most of the site.

In northern Lao PDR some of the best known prehistoric sites are caves discovered and investigated before World War II and subsequent conflicts, and recent renewed interest in the country's archaeology has led to some field excavations and reassessment of archival material (e.g. Watanabe *et al.* 1985; Fromaget 1940; Demeter *et al*. 2004; 2009; Shackelford 2003; 2004), predominantly focused on the earliest peopling of the area. The later prehistory of the Luang Prabang region, however, while lying within the Mekong Basin at an important geographical position between China, Vietnam, Cambodia, Thailand and Myanmar, is virtually unknown archaeologically, and has seen little modern investigation despite its undoubted significance for issues of ancient communication, cultural geography, the migration of people, technologies and ideas along the major rivers crossing the region (White and Bouasisengpaseuth 2007), and the development of the early mainland Southeast Asian kingdoms (e.g. the Khmer Empire to the south). The call to provide further resources for understanding and protecting the outstanding archaeological heritage of the Middle Mekong is not new (e.g. Solheim 1970). In the case of Tham An Mah, at least there is a partial archaeological record, and we have some idea of what the site contained. We intend to redouble our efforts to inform local people in the region of the long-term importance and value of sites such as Tham An Mah, and we hope that these activities, along with our post-excavation research will help us better understand and protect the important late prehistoric sites in the Luang Prabang region.

The ownership of and responsibility for archaeological sites in Laos is, as in most places, a complicated system, in which a recorded site must officially be made the responsibility of the regional and/or national authorities, which can take some time after its discovery and assessment. If a site is not yet officially assigned to a government heritage agency, it remains the responsibility of the local authorities to administer the site. For the period immediately following our excavations, Tham An Mah remained at the local level of protection, and it appears that the damage was done before the governmental process could be completed. The protection afforded nationally-important sites, such as the Plain of Jars sites (e.g. as discussed by Tunprawat 2009, 154-165, and see citations therein) or certain temple sites (e.g. Wat Phu – see Cucarzi and Zolese 1998, Santoni 2008, among others), is not so evident in regard to other heritage sites in Lao PDR. In the case of Tham An Mah, it seems that the short-term revenue raised through digging out the site was more important to some local people than the potential long-term heritage, educational or tourism values of the site locally and nationally. This situation is well-known across the globe, particularly – but not only – in developing countries, and archaeologists and cultural heritage agencies everywhere spend a great deal of time recording sites destroyed or damaged by looting, conducting quick rescue archaeology for development purposes, and educating at local, national and international levels about the value for

communities of learning about and conserving their own heritage. Tham An Mah is simply another statistic in this global situation, but from the point of view of national and regional archaeology in Laos, the loss is profound.

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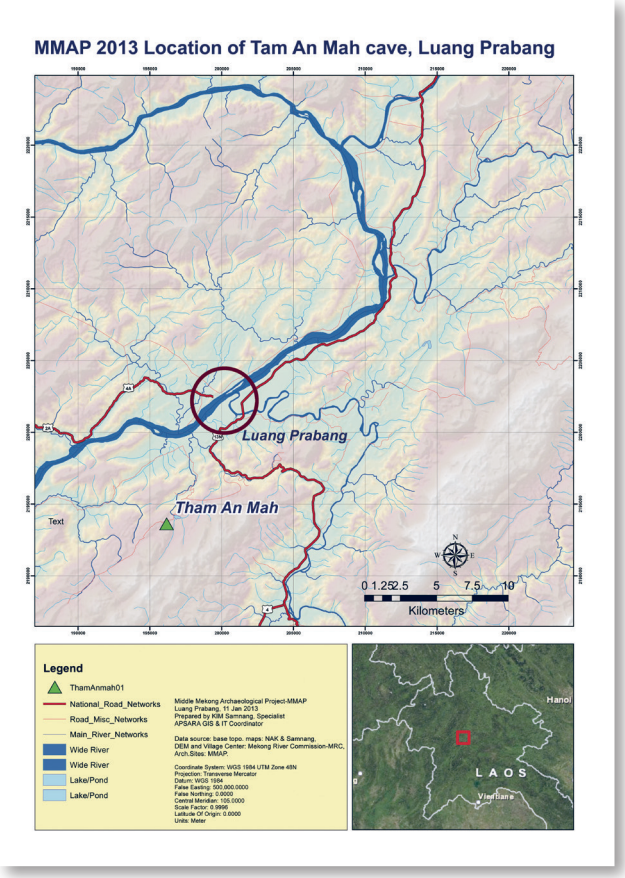

Fig 9.1

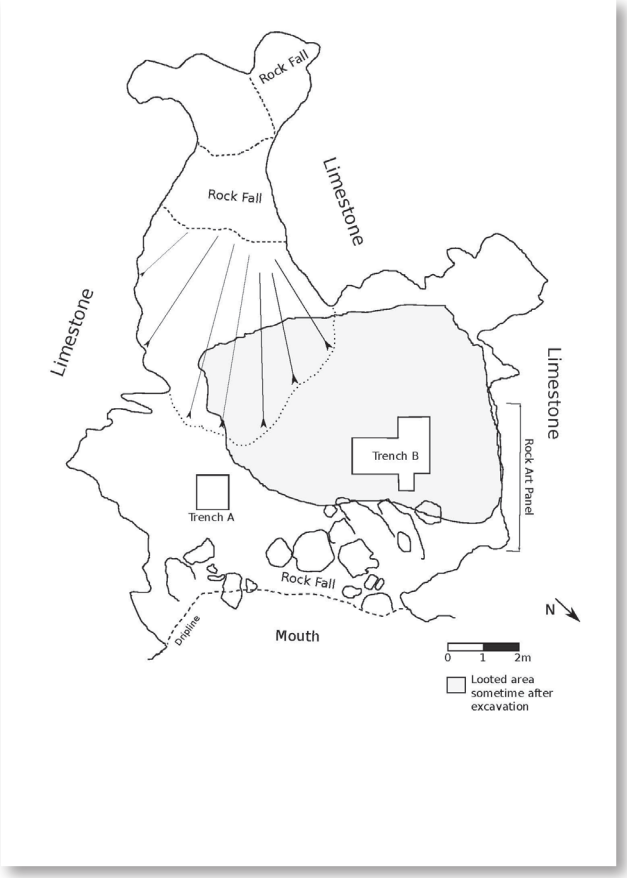

Fig 9.2

Fig 9.3a

Fig 9.3b

Fig 9.3c

Fig 9.3d

Fig 9.4

Fig 9.5

Fig 9.6

Fig 9.7a

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Fig 9.8a

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Fig 9.13