Tam Ting Conservation Project: a decade of collaborative heritage practice in the Lao People’s Democratic Republic

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Decay is inherent in all component beings.
Work out your own salvation with diligence.
(Last words of Lord Buddha as he lay dying.)

The Lao Ministry of Information and Culture has been actively pursuing the conservation of national monuments. Within a one-party political structure, control rests with the Lao People’s Revolutionary Party and its Politburo. The Secretary-General has a central role in decision making. The Council of Ministers has 12 ministries including the Ministry of Information and Culture and the Ministry of Tourism. Ministries are represented at the Provincial tier of government as well as at the District and village level. Through provincial offices, the central government is fostering the conservation of national icons, while restoration is being undertaken at the vernacular level on village temples and municipal structures throughout Laos. In 1988, the Lao government ceased to be inward looking and began to foster external relations with non-Communist countries.

The national capital, Vientiane, is undergoing a process of renewal that has led to the restoration of Buddhist wats. In addition, some municipal and commercial structures from the French colonial period have been recycled for use by government agencies, or as residences, guest houses and restaurants. Development has led to hasty infrastructure projects that have not taken into account the likely impact on heritage resources. For instance, the construction with overseas aid of a ‘ring road’ on the remains of the ancient city wall has destroyed a significant heritage asset. Through its Australian Volunteer Abroad (AVA) program, Australia has provided a conservator for the National Liberation Museum in Vientiane and an assistant curator for the Royal Museum in Luang Prabang. A national workshop on the documentation and promotion of intangible heritage values, held in 1997, was sponsored by the Asia-Pacific Cultural Centre for UNESCO (ACCU 1997). In 1997, UNESCO (Thailand) drafted a report on museum security at selected cultural monuments throughout Laos (Krataithong 1997). These monuments include museums, wats and the shrine at Tam Ting. The report suggests that practical measures can be taken, such as locks being placed on museum and temple doors to reduce the vulnerability of heritage objects to theft, and the strategic placement of extinguishers to suppress fires. The report recommends securing groups of objects by enclosing them in cages or behind grills made of steel bars.

Heritage conservation projects supported by Lao, Swedish, Australian, Japanese, Thai and French agencies, as well as UNESCO, commenced in the early 1990s in the ancient and largely intact royal city of Luang Prabang in the northwest of the country. The French and the Swedish projects led the way. The French assisted with the effort to have Luang Prabang, which at one time had 84 temple wats of which about half remain, entered on the World Heritage List. While this process was moving ahead, the Swedish aid organisation SIDA commenced the large-scale reconstruction of the Royal Palace Museum (Lindt & Hagmüller 1991). This restoration was followed by a Japanese effort to control the structural damage that had been done to the Museum by termite infestation. Once the palace museum had
been reconstructed, Australia joined the process with the provision of a volunteer assistant curator. The Thai government has recently completed its sponsorship of the restoration of the murals in the abandoned sim of Wat Paa Huk, which lies at the foot of Mount Phusi in central Luang Prabang. The conservation of Wat Long Khan, on the opposite bank of the Nâm Kong (Mekong) from Luang Prabang, was completed in 1995 by the Department of Museums and Archaeology with the help of the École Française d'Extrême-Orient. The French continue their close heritage ties with Luang Prabang through a formal sister-city relationship that fosters conservation within a modest program designed to preserve the central heritage precinct and to provide urban facilities such as street lights.

It is understood that Luang Prabang will become the Lao centre for architectural conservation, with an ongoing partnership with French interests. Throughout the city, wats are being restored and the abundant French colonial architecture is beginning to be valued for its contribution to streetscapes and as venues for tourist hotels and restaurants. Fortunately, the Provincial government is aware of the need to preserve the ambience of the city centre. It is taking action to ensure that development lies outside the heritage core and that streetscapes are revitalised in a vernacular fashion, not in a wholesale state-controlled campaign such as evidenced in the rebuilt Duxton Hill sector of the former China Town district of Singapore. However, residents and Lao heritage professionals are expressing some disquiet over the strict 'French' controls and apparent lack of communication. It is suggested that large sums of money are being expended on expatriate European expertise and little is being provided by way of assistance to heritage-property owners.

At the same time, in the far south of the country conservation work has commenced on Wat Phu, a Khmer-style temple complex on a dramatic mountain slope with structures dating from the 6th to the 13th centuries. Documentation and heritage planning is currently being undertaken in preparation for the nomination of this ancient cultural landscape to the World Heritage List. UNESCO is supporting the establishment of an archaeological conservation facility in Champasak adjacent to the site. The conservation of Wat Phu receives Japanese funding and draws on expertise from Laos, France, Italy and Japan, with the archaeology being supported by the Musée Guimet, Paris. At Champasak, a museum and conservation facility are being established through UNESCO project funding.

There has been considerable archaeological work in Laos and some remarkable finds. The Australian sponsored excavation of Ban Xang Hai, near Luang Prabang, in 1991 revealed a pottery industry with kilns believed to have operated some 600 years ago. This is considerably older than the kilns reported from the south of the country at Sisattank, which are only a couple of hundred years old (Bouasisengpaseuth & Phimmaseng 1996). In 1997, archaeological excavations took place to the northeast of Vientiane at Lao Pako, on the southern bank of the Nâm Ngum (Karlström & Källén 1997). The site had been excavated earlier by archaeologists from the Department of Museums and Archaeology directed by Viengkeo Souksavady. However, the most concerted archaeological campaign
since the epic excavations by Madame Colani during the 1920s and 1930s has been conducted by Thongsa Sayavongkhamdy, partly in his role as Director of the Department of Museums and Archaeology and partly as a PhD student at the Australian National Museum. Initially remains of the pre-agricultural Hoa Bin Hian period were sought, but owing to the disturbed nature of the archaeological deposits, the research project has been reformulated to focus on metal-age burial practices. Rock shelters near Luang Prabang and the ancient urn burial sites on the Plain of Jars were excavated as part of this research.

Tam Ting

Tam Ting, or caves of Ting, is located near Luang Prabang. It is a Buddhist shrine of considerable antiquity that has come to symbolise the peaceful joining of the ancient practice of spirit worship, or Phii, with the new religion of Buddhism. This joining of faiths is said to have been symbolised in the 16th century by the construction of a stupa in the upper cave by the ruling monarch. Tam Ting has two large caverns: a lower cave which is high, shallow and well lit; and an upper cave that is 80 metres deep and has an artificially filled and levelled floor and a high cathedral-like ceiling. There are some 4,000 Buddha statues placed on altars, stages of stupas and masonry walls in the two caves (Figure 1). The masonry structures of the lower cave, constructed on bed-rock, are intact and stable while the platforms and stupas of the upper cave, which are built upon fill, are in ruins in many places (Figures 2 and 3). The two caves are connected by a walkway with toilets and rest shelters placed at appropriate distance from the entrances to the caves. Access to the shrine is via two river landings, masonry steps and paved walkways.

For 6 years the Cultural Heritage Research Centre at the University of Canberra participated in the conservation of the caves providing both heritage management and objects conservation skills, as well as facilitating student and staff training exercises. This project was supported by the Ministry of Information and Culture and the Australian Department of Foreign Affairs and Trade. Tourism, looting, the processes of natural decay and the collapse of brick platforms endangered the
Figures 2 & 3: Stupa in the upper Tam Tingt cave while the rubble was being cleared away and following reconstruction. (B. Egloff)
Buddha sculptures housed in the caves and detracted from the religious qualities of the place. Fieldwork was undertaken during the dry season for one month of each year. Thongsayavongkhamdy, Director of Museums and Archaeology, was the initiator of the project. His participation was followed by that of Bounheng Bouasisengphrathasuth and Vongmany Mounthisome, both senior Lao heritage specialists. Bounheng had given considerable thought to the appropriate conservation of Tam Ting. Their participation in the field was followed by that of Samlane Lunagaphy, an archaeologist trained in Vietnam. At the provincial tier of government, staff were assigned from the Department of Information and Culture and from the School of Decorative Arts. Various skills were provided at the local level, including those of the government-appointed caretakers of the caves. During the term of the project, the management of the place transferred from the Ministry of Tourism to the Ministry of Information and Culture.

The presence of 4000 sculptures meant that the project was initially regarded as an exercise in fine art conservation and involved Andrew Durham, Head of Conservation at the National Art Gallery of Australia. However, the broader nature of the conservation task was realised and the first year of field activity and all subsequent work was undertaken by the Cultural Heritage Research Centre at the University of Canberra (Egloff, Johnson & Officer 1994). The Australian team was made up of the project director, Benita Johnson, and during the first and second years Kelvin Officer, a specialist in cave recording. Brian Egloff joined the project during the second year to prepare and implement a conservation plan. That same year, two students drawn during successive years from the conservation or architecture programs joined the field crew. The Australian contingent provided its skills on a gratis basis. The team used a visitor rest-house at the caves as their ‘laboratory’, thus eliminating the need to construct conservation facilities. The wat at Ban Pak Ou, directly across the river from Tam Ting, was at one time under Royal patronage and was held responsible for the upkeep of the Tam Ting shrine. It was in this village, with its traditional close association with Tam Ting, that comfortable accommodation, sumptuous meals and friendly hospitality were provided for the crew in the home of Bouachan, a widow with school-age children living away from home. Transport of staff and materials both to and from Luang Prabang and across the Nam Kong to Tam Ting from Ban Pak Ou was by village-style ‘slow’ motor transport boats.

The site visit in 1991 by Lao and Australian specialists recommended that a joint project be initiated. This proposal was accepted by the governments of the Lao PDR and Australia, with funding from the latter initially allocated for three years and then extended to six. Surveying and mapping of the upper and lower caves, along with a preliminary description of the sculptures and the preparation of condition reports for selected specimens, commenced at the close of the wet season, from 10–24 October 1992 (Johnson and Officer 1992; Johnson 1997). That year and all following years the conservation team met with national and provincial authorities in Vientiane and Luang Prabang and at the district Centre.
The 1993 field campaign went from the close of November to the end of December, the early weeks of the dry season. The work included a detailed analysis of structural problems that focused on the collapsed stupa in the upper cave, an analysis of infrastructure and the failure of the walk-ways connecting the upper cave with the lower cave, and the initiation of trial stabilisation works. An inventory of the Buddha sculptures in the upper cave was prepared and they were cleaned and repaired. A works schedule was also prepared, as well as a video recording, and materials were gathered for a Lao and English language tourist brochure. During the period between the close of the 1993 field season and the initiation of the 1994 campaign, a conservation plan in keeping with the Australia ICOMOS Burra Charter was drafted that includes the following statement of significance:

The cultural significance of Tam Ting lies in its association with past and present religious beliefs, in particular the blending of Phi with Buddhism which is manifested in a natural cave system that has been extensively modified in order to create a religious shrine.

The placement of thousands of sculptures upon brick structures and in natural grottos is the only display of its kind in the caves of the Lao People's Democratic Republic and as such it attracts both religious worshippers and tourists.

The carved wooden sculptures offer the opportunity to study a corpus of historically related religious objects.

Aesthetically the powerful natural setting in a cliff on the banks of the Nam Kong (Mekong) adds considerably to the drama of the place.

The religious shrine is linked to the World Heritage listed Centre of Luang Prabang, in particular the former Royal Palace and Wat Phusi.

Wat Ban Pak Ou, in the village on the far bank of the Nam Kong (Mekong) directly opposite Tam Ting, is linked through history, proximity, and social and religious values with the caves.

Tam Ting is an integral feature of regional tourism and has local, regional and national importance to the economy. (Egloff and Johnson 1997)

In 1994, physical conservation commenced with the removal of fallen walls and debris and structural repairs to platforms and walls in the upper cave, and the cleaning, documentation and repair of the sculptures (Figures 4, 5 and 6). This work was followed in 1995 with the recording of the upper cave door and the ornate door surround, and an assessment of repairs necessary to reinstate the doors. Structural repairs to platforms and walls in the upper cave continued, along with an assessment of termite threats and the further excavation and reconstruction of the stupa in the upper cave. In 1996, the doors of the upper cave shrine were reinstated and the stupa reconstruction was completed. Signage in Lao and English was installed and railings and walkways within the lower cave were reconstructed. The final field season in 1997 saw the work on the doors and the stupa of the upper cave completed, and the repair of the massive failure of the external brick and mortar walkways completed.
Figure 4. Francis Fitzpatrick, conservation student, and Santalee Laangaphy reviewing the archaeological excavation of fallen rubble in the upper Yen Ting cave. (B. Egloff)

Figure 5. Benita Johnson, Project Director, Thongsay Sayavongkhamsy, and Bouanevilh studying the objects recovered from the excavation of the fallen rubble. (B. Egloff)
Each year the conservation plan was updated with a listing of the works completed that year and details of the conservation to be undertaken the following year (for example, Egloff and Johnson 1997). All work was discussed with officers of the provincial and national offices of the Ministry of Information and Culture. Each year the site was visited by an official delegation that viewed first-hand the conservation works. One of the more interesting forms of reporting was a minimal budget video produced in the Lao language.

**Key issues**

The major conservation decisions taken during the project are reviewed in an article titled 'Archaeology and the Transformation of Living Heritage Places' that is to be published in the proceedings of the Indo Pacific Prehistoric Association’s 16th Congress (Egloff in press). That paper considers the problems faced when restoring a place so that it can be used for its original function as a religious shrine, and also accommodate the majority of tourists who visit Laos. The transformation of archaeological ruins by ‘best conservation practice’ can result in subtle changes that are in keeping with the significance of the place. But it may equally produce a hideous melange of new and old elements, visually intrusive signs, clumsy engineering supports, and a plethora of viewing platforms and walkways – all with the potential to detract from the heritage significance of the place.
One of the first decisions to be made with respect to the rebuilding of the central shrine was whether or not to attempt to recreate the ancient construction techniques. The medium employed to bond the bricks is said to have been composed of a special white stone, sand, buffalo hide, tree sap and banana skins. Lao colleagues considered it all but impossible to replicate (pers. comm. Bounheng Bouasisengphraphenth, Ministry of Information and Culture). It was agreed that the structure had failed due to the weakness of this material and the inherent instability in the foundations. It was further decided that, rather than removing and rebuilding large portions of the structure, interference should be minimised; that the local vernacular rebuilding techniques, which have a long history, should be used; and that a minimum amount of cement in a sand-based mortar should be employed (Figure 7).

Having decided that the structure could be rebuilt using this modern mix of construction techniques, the next key issue to be solved related to the pictorial representation dating from the 1860s of the topmost levels of the central stupa in the upper cave (Garnier 1865-1866-1867). It became apparent that the drawing was no more than a fanciful artist’s impression that bore little resemblance to the structural remains and was consequently of little use as the basis of the reconstruction work. The team was able to draw on the skills of Tan Tit Nya Siliponge, a resident of Luang Prabang and once a Royal artist who, as a novice monk, had visited the site in the 1920s and remembered the leaning but intact structure. His drawing was accepted as a reasonable rendition of the traditional structure and the stupa was rebuilt to that shape (Figures 8 & 9).
One of the massive entry doors to the upper cave had collapsed and the carved wooden surround that was to support the doors was in a fragile condition. For conservation purposes it was considered appropriate to leave the door open to facilitate the flow of air and to rely upon metal grille doors that had been erected in the 1980s for security. In order to reinstate the fallen door and to strengthen the surround, the simple procedure of fixing both doors in an open position and at right angles to the wooden surround was adopted. This meant that the doors were in part supporting the surround (Figure 10).

The wooden sculptures within the cave are under constant threat of termite attack. An Australian
Two Lao heritage-conservation projects lend themselves to international collaboration. The first is the conservation of Wat Si Saket in Vientiane and the second is the documentation of the ancient remains at the Plain of Jars. The work of an expert studied the site and made recommendations that are difficult to put into effect as they involve chemical or mechanical treatments that are not available locally (Miller 1996).

Initially it was envisaged that the local Lao municipality would reconstruct the failed brick and concrete walkways. However, it became imperative that the conservation project take on this task as the ‘modern’ presentation of the place was considered by the Ministry of Information and Culture to be of paramount importance. This was a substantial task in terms of the amount of building materials that was required. As the work on the reconstruction within the upper cave came to a finish, it was feasible to augment and transfer the crew of masons to the rebuilding of the walkways.

Some pressure was exerted by Australian ‘development’-orientated officials to place electric lights within the cave to modernise the place and to improve security. Following discussions with Thongsa Sayavongkhamsy, it was decided that this would be an imposition on the vernacular shrine and that, from a conservation standpoint, it was best not to create hotspots within the caves.

Object security remains a real problem as many of the sculptures are small and easily removed, and much of the upper cave is in darkness. Sculptures stolen from Tam Ting have been found in the Luang Prabang hotel rooms of tourists, but the large quantity of objects in the caves makes it difficult to ascertain the extent of any loss. A report by UNESCO (Thailand) recommends the placement of all objects behind grilles (Krataithong 1997). This is considered to be an affront to the nature of the shrine and has been rejected by the Department of Archaeology and Museums. The issue of theft was dealt with by having the authorities appoint additional caretakers or guides at the cave, but the problem of artefact theft remains unresolved.

**Priority heritage conservation projects**

Two Lao heritage-conservation projects lend themselves to international collaboration. The first is the conservation of Wat Si Saket in Vientiane and the second is the documentation of the ancient remains at the Plain of Jars. The work...
at Wat Si Saket can be placed within a capacity-building framework that fosters the
development of a conservation centre in Vientiane. The Plain of Jars heritage
development project can be linked to a sustainable tourism program. The rich
heritage of Vientiane is under assault from structural failure and the ravages of
time, and one of the monuments most at risk is Wat Si Saket. The murals dating to
the 1820s are said to be most vulnerable. The temple complex of Wat Si Saket is
situated near the Presidential Palace in Vientiane. It was built in 1818 but spared
from destruction when the city was sacked by the Siamese a decade later. As such,
it is the oldest intact temple complex in the nation’s capital. Its cloister and temple
house more than 2000 Buddha sculptures. The interior walls of the temple feature
murals dating from the time of the war’s original construction. The temple
complex is both a religious shrine and a pilgrimage destination, including today’s
tourists. The main shrine has been declared a National Monument and as such is
under the jurisdiction of the Department of Museums and Architecture. A small fee
is charged for admission.

The main structure supporting the roof and the roof itself are in dire need of
engineering works. The endangered status of the murals, which are undergoing
accelerated decay, has been recognised for more than a decade. The temple
structure can be reinforced and improved, and the available technology for damp
proofing and mural conservation is locally available and well developed. In 1986,
A.P. Agrawal with the support of the UNDP provided a detailed report that was
endorsed by Thongsayavongkhamdy of the Department of Museums and
Architecture. The report provides a schedule of works and a nominal budget. A
conservation plan will need to be prepared for the temple complex and a detailed
recording of the murals undertaken. Once such a plan is prepared and accepted it
will be possible to commence stabilising and repairing the structure, as well as
conserving the murals.

There is an immediate need for a centrally located conservation facility that can be
used for the training of staff and to accommodate conservation and storage facilities.
One of the key factors missing in Laos is an effective centre for the coordination of
museum and site heritage conservation and training. Such a facility will need to be
developed as part of the Wat Si Saket conservation project. It is possible that
support can be gained from either, or both of, Australian and Swedish sources.

The Plain of Jars extends from the northwest to the southeast of Phonsavan, Xieng
Khuang Province, in the northern reaches of Laos. The groups of large stone jars
are believed to date from the Iron Age, 500 BC to AD 100, when the locality was an
important crossroads. With the total number of jars in the order of 250, the largest
vessel is 3300 mm high and weighs more than 15 tonnes. One jar site has a pavilion
and rest room and entrance fees are charged, but other sites are less accessible and
equipped. In the past, some of the small jars have been pilfered and supposedly sold
abroad. One of the more impressive sites is 30 kilometres from Phonsavan where
there is evidence that the jars were quarried on nearby mountain slopes.
The jar complex is distributed over an extensive rural area and as such is under a variety of tenures that include provision at one major site for tourist visits. During the Vietnam War, this area suffered the most intense devastation in bombing campaigns as well as land battles that has been inflicted on any region in the world. UNESCO is supporting a program to locate and remove the unexploded ordinance that litter the countryside and cause casualties among the farming population. The Plain of Jars is recognised as a particular feature of Lao heritage and hence there are plans to nominate it to the World Heritage List. The nomination project will require at least three years, preferably five years, to complete. The expertise and techniques required are transferable to Lao specialists and would build upon skills acquired during the Wat Phu exercise.

As a heritage project it may prove difficult to obtain sufficient international funding to ensure completion. However, linked to a regional tourist development program, support could be obtained from non-heritage sources. Today, most tourists go only to Vientiane and Luang Prabang. There is an obvious need to provide alternative attractive venues. The program could focus on the design and implementation of an integrated heritage survey that looks at tangible and intangible cultural values in the landscapes and searches for meaningful boundaries to the area to be nominated for World Heritage listing. The key product would be a plan that addresses the legislative requirements of World Heritage listing, but one that also fits within a broader regional cultural tourist scheme. This should include the following:

- archaeological investigation of function and meaning of the stone jars
- detailed mapping of the stone jar sites
- management planning for sites designated as international tourist destinations
- pattern and distribution of stone jar sites
- consideration of social values
- inventory of vernacular architecture
- definition of communication and transport network
- mapping of rural land use patterns
- tourist needs.

In addition, the following assessments should be undertaken:

- ancient mythology of the landscape
- patterns of warfare as expressed through time on the landscape
- buildings
- land use patterns
- folklore materials
- monuments
- war damage
- current tourism practices.

The natural qualities of the landscape provide a dramatic setting and would be considered during the planning process. The project could be an exemplar of
planning for rural heritage within a World Heritage cultural landscape with a whole
community approach to heritage conservation. Moreover, it would provide an
excellent educational vehicle, with the following skills being readily transferable
from international expertise to Lao specialists and students:

- drafting
- photography
- landscape mapping
- field systems recording
- Geographic Information Systems interpretation
- community social values work-shopping
- tourism planning and implementation
- site conservation planning.

In particular, it would provide an ideal training ground for rural heritage
conservation, as distinct from urban heritage that is catered for with training centres
in Southeast Asian capital cities.

As mentioned, tourism in Laos is focused on only two places: the national capital
and Luang Prabang. There is an obvious need to provide leader attractions in
outlying areas that could be incorporated into a tourist route. For instance, instead of
tourists arriving in Vientiane and then travelling by return ticket to Luang Prabang, it
would be possible for them to make a circular route and take in the Plain of Jars,
thus touching on both the northwest and the far north of the country. The proposed
project would be undertaken in collaboration with tourist interests and would address
commercial concerns and define community benefits (ICCROM 1993).

Regrettably, it appears that further Australian funding for cultural heritage
protection in Laos will not be forthcoming. Australian aid to the Lao PDR is about
AUD 20 to 21 million per year. Currently the three priority areas are rural health
and development, education and policy reform, and HIV/AIDS awareness training
and scholarships. An approach was made to AusAid to consider the Plain of Jars
project as a regional rural tourism development initiative. However, AusAid
responded that this kind of project lies outside the priority aid areas. Australia is
supporting the construction of the Nam Theun 2 dam, a project that has stalled due
to environmental concerns. It is difficult to understand how major infrastructure
programs such as dam, bridges and road building fit within the three key activity
areas. One might observe, however, that they are like the large environmentally
damaging projects that Australia indulged in domestically in the 1950s and 1960s,
but that fell out of favour in the 1980s. Given that sustainable cultural and natural
area tourism is regarded as a priority development sector within rural Australia, and
one that builds local capacity and supports the development of infrastructure
networks, it is surprising that this concept has not gained favour with AusAid.
endnotes

1 The funds - approximately AUD 25,000 per year - were drawn from a special one-off allocation for conservation in Southeast Asia that was administered by the Department of Foreign Affairs and Trade.

2 Refer to Lindt and Hagmüller (1991) for a discussion of this same issue as it pertains to the reconstruction of the Royal Place Museum in Luang Prabang. Their decision was to use the cement-based render 'traditional' technique.


Acknowledgments

The Tam Ting conservation work documented in this paper was initiated by Thongsayavongkhamdy, Ministry of Information and Culture, Vientiane. Bounheng Bouasisesengphrathath, also of the Ministry of Information and Culture, was a major influence on the course of the Tam Ting project. Bounheng died tragically, after a short illness, during the final stages of the conservation work. The final project report names some 56 individuals who contributed to the project. They include the villagers and caretakers of Tam Ting, the student volunteers and the academics from the University of Canberra, officers of the Lao Ministry of Information and Culture, and the Department of Foreign Affairs and Trade in Canberra.

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