

# Archaeological Heritage Management at Ban Rai and Tham Lod Rockshelters in Pang Mapha District, Mae Hong Son Province, Northwestern Thailand

*Rasmi Shoocongdej*<sup>1</sup>

## Introduction

The project took place in highland Pang Mapha, which is a small district in Mae Hong Son Province, Northwestern Thailand. This area is a borderland between Thailand and Myanmar as well as the Shan state. Significantly, Pang Mapha is distinctively diverse, both biologically and culturally. This district is populated by various ethnic groups who migrated to the area relatively recently over several decades, including the Shan (Tai), Karen, Lahu, Lisu, Hmong, and Lua. Pang Mapha has long been the target of several government modernization policies developed due to pressure from international donor agencies, including opium eradication and the elimination of shifting agriculture. One of the results of these policies has been forest degradation.

## Foundation of Archaeological Heritage Management

This area has been quite marginalized and relatively unknown archaeologically to Thai archaeologists and the public since American archaeologists excavated at Spirit cave in 1969, searching for the origin of agriculture in Southeast Asia. Over two seasons, between 2002 and 2006, I was the principle investigator of the *Highland Archaeology Project*, a multidisciplinary research program involving archaeology, physical anthropology, and dendrochronology as part of a long-term research project

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in Pang Mapha, Mae Hong Son Province. This research project addressed a series of general issues concerning the evolution of social organization and the nature of culture change in seasonal tropical environments. More specifically, this research elucidated the cultural history of an archaeologically poorly known part of Thailand and the world. Research aims included: 1) to investigate and reconstruct the paleoenvironment in Pang Mapha; 2) to study the relationships between humans and their environments; and 3) to study past social and cultural developments in highland Pang Mapha as well as to establish a local cultural chronology, paying particular attention to the processes by which social organization changed through time.

From an academic perspective, the Highland Archaeology project has recovered remarkable new data and contributed to the body of knowledge concerning the archaeology of Thailand and Southeast Asia. Over 60 sites were discovered during an archaeological survey in the area. The site occupations vary in age. Site types include burial, habitation, manufacturing, ceremonial, and rock painting sites. In 2002, the Ban Rai rockshelter was excavated, and the Tham Lod rockshelter was excavated by 2003. The two excavated sites are representative of sites in the region, and date from the Late Pleistocene to the Recent period (22,350 B.P. to over 300 years ago or 22 century B.E.).

From a local community perspective, this project has provided Thai archaeologists with valuable experience working closely with multi-ethnic communities who do not share the language and culture of the majority “Thai” ethnic group. In addition, the research results are an important knowledge-base for local communities to use in managing their cultural resources. For example the archaeological sites can serve as learning centers for school children and as tourist attractions.

## **Summary of Significant Finds**

### **Tham Lod Rockshelter**

#### **1. The Oldest Modern Humans Found in Northern Thailand**

Excavations uncovered human skeletal remains from three individuals. The skeletal remains of two individuals from Tham Lod

rockshelter are *the oldest Homo sapiens sapiens found in northern Thailand*. The other human skeleton is an old man from Ban Rai rockshelter, which dates to the early Holocene (9,720 ± 50 BP).

Skeleton no. 1 from Tham Lod, an extended burial of an adult of undetermined sex, was found at a depth of 46 cm from the surface, and dates to 12,100±60 BP. A hammer stone was found on top of a femur of this skeleton. This burial was associated with mostly freshwater shellfish and a few land snails.

Skeleton no. 2 is a flexed burial of an adult female aged between 25 and 30 years old with an estimate height of 152 cm, which is dated to 13,640±80 BP. It was found beneath Skeleton no. 1. Above the burial, three large pebbles had been laid in circle. Faunal remains and flakes were associated with the burial. A hammer stone was placed on top of a radius and ulna.

Additional analyses of human remains include a facial reconstruction of Skeleton no. 2 from Tham Lod rockshelter and the Ban Rai skeleton as well as DNA analysis of teeth from log coffin burials from Tham Lod and other log coffin sites.

## **2. The Late -Pleistocene Lithic Workshop**

The Tham Lod rockshelter is the largest excavated lithic workshop found in Thailand that dates to the Late Pleistocene period. High densities of lithic artifacts were found in areas II and III of Tham Lod rockshelter, including lithics from all stages including lithics from all stages in the manufacture of stone tools.

Raw materials include sandstone, quartzite, mudstone, andesite, siltstone, and slate. Sandstone is the dominant raw material. Typical stone tool types are chopper-chopping tools, scrapers, sumatraliths (oval shape unifacial tool which first found in Sumatra), short-axes (a broken sumatralith), discs, utilized flakes, etc.

## **Ban Rai Rockshelter**

### **1. The “Iron Age” Log Coffin Cemetery**

The log coffin culture is a distinctive mortuary practice dating to the Iron Age (approximately 2,260-1,520 BP). From archaeological surveys in highland Pang Mapha, over 50 sites of this type have been discovered to date. The log coffins are composed of two pieces of wood laid over six posts mostly made of teak wood. Generally, log coffins are placed in deep and complex caves. The Ban Rai rockshelter is different than other log coffin sites in that the rockshelter is a vast open-air area located nearly at the top of a limestone mountain. The Ban Rai rockshelter is *the largest “Iron Age” log coffin cemetery and the only one* found in Highland Pang Mapha.

### **2. Wood Working Craft Specialization**

Most of the log coffins and posts were made from teak trees (*Tectona grandis* L.) and the age spans of the trees range from approximately 41 years to 270 years. It seems that the natural environment around the study area in the past included a dense mixed-deciduous forest with teak as a dominant species.

There are 15 log coffins from the Ban Rai rockshelter with head (or handle) styles that can be classified into five styles. Most of the head styles were carved by very highly skilled specialists. The average diameter of the log coffins is about 0.5 m and the length is about 5-8 m. It is important to note that this is the earliest evidence of wood carving found in Thailand.

### **3. Rock Paintings**

A total of 32 pictures are documented at Ban Rai rockshelter. The paintings consist of pictographs painted on the rockshelter wall with red ochre that are located approximately 3.5-4.5 meters above the floor. The painted forms include human and animal figures as well as non-figures.

## **Impact of Globalization in Highland Pang Mapha**

As in other areas in the world, globalization, especially the tourism industry, has had a strong impact on the economy of Thailand in recent years. Consequently, the local government in Highland Pang Mapha has a

policy of promoting the natural and archaeological resources in this area as tourist attractions. Hence, this mountainous area has been increasingly popular for eco-tourism and adventure tourism for the Thai and foreigners, who visit the area for cave exploration, rock climbing, and to visit archaeological sites discovered by the Highland Archaeology project.

The development of tourism in Pang Mapha has created a number of problems, however. Most of the archaeological sites are burial sites, lithic workshop sites, rock painting sites, and ruins. Some tribal ethnic groups (e.g., black Lahu from Jabo village) believe that tribal spirits are present at the sites, especially at the burial sites or log coffin sites. In the past couple years, some communities have not allowed archaeologists to work at sites found in their villages because they are afraid that someone in the villages will die as a result. However, this attitude has been rapidly changing due to the tourism industry.

By working with and educating local communities in Pang Mapha, archaeologists can empower them to become involved in heritage management and sustainable tourism. In some cases, this can occur before the development of commercial tourism in this area.

### **Archaeological Heritage Management: Preserving the Past for the Present and Future**

The past can serve both the present and the future. It is our responsibility as archaeologists to continue our efforts in heritage management, because the Fine Arts Department, a government agency, has no protection plan for archaeological sites. In addition, archaeologists have a responsibility to support efforts aimed at public education and outreach.

Archaeologists also have an important role in empowering local communities by involving them in archaeological heritage management. As mentioned above, the results of the excavations at the Ban Rai and Tham Lod rockshelters are an important knowledge base for local communities to use in managing their cultural resources. For example, the archaeological sites can be used as learning centers for school children or as tourist attractions.

Both sites have been managed as open-air site museums by the project. The aims of management are to protect and preserve the archaeological sites and to develop areas to enable local communities, the general public, students, and scholars to learn to appreciate the rich heritages of Highland Pang Mapha.

We have worked closely with the local communities in order to develop the site museums and guide training for both children and adults. We have involved local communities in collecting information and designing their own management plans. In addition, we have been involved in education programs for the local communities and the Thai people. The project included three stages.

### **Stage I: The Community Involvement Processes**

This involved three simultaneous steps--village meetings, interviews, and recruitment--during the first nine months (September 2006 to April 2007). In order to link the past with the present, I decided to conduct interviews with local people. I think this is an important component of the heritage management processes. The interviews focused on their history (based on oral history), their perceptions of their natural and cultural heritages (e.g., folklore, belief, and tribal medicine), their response to archaeological discoveries in their villages, and ways to protect and manage the sites. It is important to note that the local history has been included in the exhibition content so they feel that their stories are a part of the history of area.

- *Village Meetings*: This was very important step in our community involvement processes. First, we met with the Tham Lod and Ban Rai communities at monthly meetings, solicited their opinions, and brainstormed with them regarding the management of the sites. We discussed this with the communities in order to obtain feedback from them concerning the preservation processes and exhibitions as well as development of sites for possible tourism. This process encouraged the local communities to take possession of the Ban Rai and Tham Lod rockshelter sites and to protect them by themselves in the future.
- *Interviews*: We interviewed people based on age, sex, education, and occupation and ethnic group. A total of 34 people from Ban Rai village were interviewed: 15 females, 19 males, mostly Shan (Tai Yai). A total of 26 people from Ban Rai village were interviewed: 16 Shan (6 males and 10 females), 6 Muang (from Chiang Mai or Lumpun provinces; 2 females and 4 males), 1 Karen, 2 Lisu (one male and one female), and 1 Hmong

(male). We conducted an in depth interview in order to establish the local history and cultural chronology based on their memories and experiences on various topics including people, kinship, places, history, traditions, beliefs, archaeological sites, folk medicine, folklore, local wisdom, economics, agriculture, ecology, environment, politics, food, craft, clothing, house styles, etc.

- *Recruitment:* After meeting and interviewing local people from both villages, we identified groups who were interested in our project. Then we recruited children, teachers, and adults to work together with us. These groups joined our workshops regularly. Then we selected potentially “good hosts” to serve as the representatives and guides for each village.

## **Stage II: The Technical Processes.**

This involved four steps including landscape design, exhibition design, model and animation, and conservation.

- *Landscape design:* The landscapes of the Tham Lod and Ban Rai rockshelters have been designed by Mr Karn Komkaew, Mr Sathapana and Kittikul. The fence, trail, rest area, and boardwalk to Ban Rai were designed by Ms Karuna Raksawin, Ms Naiyanet Chinthana from the Faculty of Architecture, Chiang Mai University.
- *Exhibition design:* The exhibitions at both sites were designed by Suporn Shoocongdej, a designer of laid out posters. The structural supports for the exhibits were designed by Mr Karn Komkaew, Mr Chullaporn Nantapanitch, Mr Suriya Rattanapruk, Mr Kawin Wongwitkarn, Mr Yutthana Thongthoum, and Mr Thisrayut Inthachak from the Faculty of Architecture, Chiang Mai University. We used mostly bamboo, the locally available raw material, for the construction of the exhibition displays.
- *Model and animation:* The model and a computer animation of Ban Rai rockshelter were made by an architecture student from Faculty of Architecture, Chiang Mai University, under supervision of Ms Karuna Raksawin.
- *Conservation:* The conservation of wooden coffins at the Ban Rai rockshelter was conducted by Associate Prof. Songkrot Jarusombat, Dr Ampai Piamarun and Assistance Prof. Thira Veenin from the Faculty of Forestry, Kasetsart University. The basic conservation of the artifacts and the excavated units was conducted by the project team. This included cataloging, cleaning, and storage processes at the Tham Lod Wildlife Conservation Development and Extension Station.

### **Stage III: Public Education Campaign**

The public education campaign primarily focused on the preservation and conservation of local cultural and archaeological heritages. We put our effort into a cultural heritage campaign and public education for the Thai people and local communities on the importance of archaeology in the Highland Pang Mapha area, which is quite different from the archaeology of the lowland areas in other parts of Thailand. This involved many activities including: talks, publications such as guide book, training manuals, guide training for children and adults, developing a local museum with community members, an archaeology in the arts program for children, and an art exhibition including an opening ceremony. In particular, we have trained local experts (children, adults, and school teachers) and in archaeological heritage management. As a result, we have empowered the local communities to become involved in heritage management and sustainable tourism. This occurred before the development of commercial tourism at Ban Rai village.

Other public educations were art activities and exhibitions which have been developed along the way with the preservation and conservation. Both of the excavated sites have been managed as open-air museums with support from the US Ambassador's Fund for Cultural Preservation 2006. This funding ended in February 2008. To insure that these archaeological sites are protected in the long run, there is an urgent need to forge strong connections between local people and the archaeological heritage of the region. I think visual art can be an effective conceptual tool to link the past with the present and future. Therefore, an art-based project would be an effective way to expand the work begun in the current site management program, which ended in February 2008. This is an integrated and process-oriented project, including community workshops, children art, photography, which have been designed to serve both academic and ethnic communities in order to break through cultural barriers between local and global/ethnic minority and majority groups/ academic and less educated communities. In addition, through the activities of the art program, I believe that we would create a dialogue that would have an impact on the general public. I got a partial support for the art project from the US Embassy of Thailand (4 December 2007-31 September 2008). The activities are divided into two phases. Phase I: Events in Ban Rai and Tham Lod villages, Highland Pang Mapha, Mae Hong Son Province (1 October 2007-1 March

2008) and Phase II: Events in Bangkok at the National Gallery (13-30 June 2008).

## **Talks**

The following talks were given from 2006-08.

- I gave an interview on the project for the Silpakorn Public Affairs Department on October 27, 2006 and helped edit a press release for the Thailand Research Fund.
- Public talk, entitled “*Prehistory in the Mist of the Thai-Myanmar Border*,” 8 May 2007 at the Alliance Française, Chiang Mai.
- Talk on “*Representation of the Prehistoric Past in Highland Pang Mapha, Mae Hong Son, Northwestern Thailand*,” 11-15 November 2007 at the International Seminar on 'Sharing our Archaeological Heritage' in Johor Bahru, Malaysia.
- Lecture, entitled “*Research Methodology in Archaeology: A case from Pang Mapha, Mae Hong Son*,” 19 December 2007 for the PhD program in Lifelong Learning, Faculty of Education, Silpakorn University.
- I gave a radio interview for the Radio of Thailand, Mae Hong Son Branch on “*Archaeological Heritage Management at Tham Lod and Ban Rai Rockshelters*,” 13 February 2008, Muang District, Mae Hong Son.

## **Guide Book**

We published education material in the form of a guide book for the general public in 2008.

- *Guide book for Ban Rai and Tham Lod rockshelters*, 2008.

## **Training Programs**

We designed different training programs for local children, adults, and school teachers, as well as for forestry officers, which involved a series of visits to the sites. Six training programs were carried out in 2007.

- Children’s training program on “*Tham Lod Children and their Awareness of the Past*” at Tham Lod village. It took place between 2-3 April 2007 at the village center.

- Teachers' training program on "*Curriculum Development on Local Heritages in Ban Rai and Tham Lod Villages*," involving teachers from Tham Lod elementary school in Tham Lod village and Pang Mapha Center school from Ban Rai village. It took place between 20-21 September 2007 at the Pang Mapha district hall.
- Forestry officer's training program on "*Archaeology in Tham Lod Station*." It was held on 24 October, 2007 at the Tham Lod Wildlife Conservation Development and Extension Station.
- Community training on "*Being a Good Host at Tham Lod Village*." It was held between 28-29 October 2007 at the Tham Lod Wildlife Conservation Development and Extension Station.
- Community training on "*Being a Good host at Ban Rai Village*." It took place between 17-18 November 2007 at the Ban Rai village center.
- Children's training on "*Child Guides for Archaeological and Cultural Tourism at Ban Rai Village*." It was held between 24-27 December 2007 at the Ban Rai village center.

### **Ban Rai Local Museum**

Our project team and villagers have also established the Ban Rai Local Museum at the village meeting hall as an information center for the village and Ban Rai rockshelter site. This museum shows daily life, tools, crafts, local products, and special exhibitions including history of village, tradition and ritual, ethnic food, traditional dresses, and local elders

### **Art Activities**

Four children's art activities were conducted between 2006-07. In 2006, an art workshop was held by an American artist, working in collaboration with the project. In 2007, three art workshops were held by the project. These workshops aimed to empower tribal children who do not have the same access to art education and a formal education system as children in the city. The activities focused on sharing, learning about their heritages, and developing their abilities to express themselves both verbally and creativity. The children's ages ranged between 8-15 years old. Children from Tham Lod village were mostly Shan whereas the children from Ban Rai were more diversity including Lisu, Karen, Shan, and M'ong. This project has given children confidence to speak out through art activities.

## 2006

- I collaborated with Ms Valentina DuBasky, an American artist who works with us on “Arts and Archaeology”. Her paintings presents the Ban Rai and Tham Lod sites as sacred places and as a source of wisdom that needs to be protected. She also conducted a children’s art workshop at the Ban Rai rockshelter in the early phase. Valentina visited the Tham Lod and Ban Rai rockshelters between 6-27 November 2006 and conducted her pilot project on “*Ancient Botanicals: Flora, Fauna, and Forest Archaeology.*” Her artwork includes paintings inspired by the rockshelter sites.

## 2007

Three children’s workshops were held at Ban Rai and Tham Lod villages.

- The first Children’s Art Workshop was held at Ban Rai village between 20-27 November 2007.
- The second Children’s Art Workshop took place at Tham Lod village between 22-27 December 2007.
- The third Children’s Art Workshop was held at Ban Rai village between 28 December 2007-3 January 2008.

## Art Exhibition and Opening ceremony

As mentioned on Stage III, I have expanded the project through art project covering time frame between December 2007 and August 2008. The Phase I of the art project was an open-air art installation which jointly exhibited with the opening ceremony of archaeological sites. Opening ceremony held at Tham Lod and Ban Rai rockshelters on Friday 15 February, 2008. Approximately 200 people attended the opening ceremony. Below is the opening ceremony program.

### **Scenario for the Opening Ceremony of Archaeological and Art Exhibitions**

FY-2006 Ambassador’s Fund for Cultural Preservation Project

*“Archaeological Heritage Management at Ban Rai and Tham Lod Rockshelters in Pang Mapha District, Mae Hong Son”*

Tham Lod rockshelter and Ban Rai village  
Pang Mapha, Mae Hong Son Province  
Friday, February 15, 2008, 9.00 hrs.

## Morning

### Venues:

- Tham Lod rockshelter
- Tham Lod forestry center

- 9:00 hrs      **Kenneth Foster, a representative of the Ambassador** and guests arrived in front of Tham Lod rockshelter
- 9:15 hrs      MC welcomed guests to ceremony and introduce  
Welcomed speech by a representative of Mae Hong Son governor at the Tham Lod rockshelter in Thai
- 9:20 hrs      Mr Foster delivered brief remarks in English
- 9:25 hrs      Reported of Ambassador's Fund project by the associate dean of Faculty of Archaeology, a representative of the President of Silpakorn University or his in English  
[Photos taken of a representative of MHS Governor, the Associate dean of Faculty of Archaeology, Director General of Natural Park, Wildlife and Plant Department, Fine Arts Department, Headman, Dr. Rasmi and Mr Foster in front of Tham Lod rockshelter]
- 10:15 hrs     Toured of *Tham Lod rockshelter* and exhibition by Associate Prof. Dr. Rasmi Shoocongdej, the Project Director
- 11:10 hrs     Toured of *Tham Lod cave* by Head of Tham Lod forestry station
- 11:50 hrs     Lunch at the Tham Lod forestry station

## Afternoon

### Venues:

- Ban Rai information center
  - Church
  - Ban Rai rockshelter
  - Ban Rai valley
  - Ban Rai village
- 12:45 hrs     Depart for Ban Rai village
- 13:30 hrs     MC welcomed guests to ceremony at Ban Rai and introduced *Ban Rai* headman
- 13:40 hrs     Welcomed remarks by Ban Rai headman village at the trail to Ban Rai rockshelter in Thai
- 13:50 hrs     Brief remarked by Mr Foster and opened the Ban Rai archaeological site by the Mr Foster
- 14:15 hrs     MC invited guests to Ban Rai rockshelter and viewed art installation along the way, *Ban Rai valley*, Village
- 15:15 hrs     Toured of *Ban Rai rockshelter* and art activities by Associate Prof. Dr. Rasmi Shoocongdej  
[Photos taken of a representative of MHS Governor, the Associate dean of Faculty of Archaeology, Director General of Natural Park, Wildlife and Plant Department, Fine Arts Department, Headman, Dr. Rasmi and **Mr Foster**, in front of Ban Rai rockshelter]
- 16:00 hrs     Went to the village and saw art installation along the way back

17:30 hrs Visited the Ban Rai Information center (local museum)  
18.30 hrs Dinner and watched performance by musicians, Dr Anothai Nitipon from Silpakorn University and Mr Ratchvit Musitkarun from Songkha Ratchapat University  
19.00 hrs Attended seminars/cultural performances in the rice field  
22:00 hrs **Mr Foster** departed for Mae Hong Son town  
MC thanked everyone and invites guests to refreshments

## **Accomplishments**

### **1. Local communities**

- Through the archaeological heritage management and public education programs, we helped to support community development and foster sustainable tourism in both villages. This successful project, which incorporated the desires and interests of the local communities, serves as a role model for archaeological heritage management in other areas with great ethnic and cultural diversities.
- It is fair to say that the public education program promoted understanding and genuine appreciation of the archaeological, cultural, and natural heritages of Ban Rai and Tham Lod villages in highland Pang Mapha.
- The project successfully implemented income generating activities through archaeological and cultural tours and a home-stay in Ban Rai village. Tham Lod village was already impacted by tourism, so Tham Lod rockshelter is used as a learning center for school children and the general public.
- The project put an emphasis on communication and collaboration with the local communities. We established a two-way dialog that allowed archeologists and local communities to share their experiences and expertise with each other. Our team learned a great deal about the local cultures and knowledge from the local communities. The two way communication enables us to interpret and present the Tham Lod and Ban Rai heritages in a fruitful, collaborative way through the content in the exhibitions.

### **Academic Communities**

- Through the public education campaign, the project also has made an impact on a much broader scale at the regional and international levels through my talks at the international seminars.
- Working on archaeological heritage management in a place with many cultures and ethnic groups like highland Pang Mapha forces archeologists to change our research strategies and practices.
- This is an integrated project which has brought experts from various fields (e.g., archaeologists, anthropologists, artists, educators, architects, scientists, museologists) to help preserve the “archaeological heritage” of humankind. Indeed, this project stimulates dialog among experts.
- Working closely with local and academic communities on heritage management at Ban Rai and Tham Lod rockshelter sites, demonstrates that archaeology is not only a science of the past, but also a discipline that cuts across all spatial and temporal boundaries.

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