

ACCU Nara
International Correspondent

Vol.24 2020

The Twenty-fourth Regular Report



公益財団法人 ユネスコ・アジア文化センター文化遺産保護協力事務所
Cultural Heritage Protection Cooperation Office, Asia-Pacific Cultural Centre for UNESCO (ACCU)

ACCU Nara International Correspondent

The ACCU correspondents periodically send reports on cultural heritage protection activities in which they have been recently involved. This is a collection of eight reports submitted by international correspondents in the Asia-Pacific region.

The Twenty-fourth Regular Report

Contents

Bhutan ————— 1

Karma Tenzin

Drapham Dzong Ruins Consolidation Project

Cambodia ————— 7

Sokonthea Sort

National Museum Building, Conservation and Repair

China ————— 11

Bi Yi & Yang Ge

On the New Practice of Protection for Heritage with Chinese Characteristics—Construction of the Long March National Cultural Park

Kazakhstan ————— 17

Gulnaz Kulmaganbetova & Smailov Zhuman Eginbaevich

Archaeological Research on the Zhoshy Khan Mausoleum

Kyrgyzstan 24

Kunbolot Akmatov

The Horse Harness of the Tien Shan Nomads in the Mongol Epoch

Nepal 26

Suresh Suras SHRESTHA

Patan Durbar Protected Monument Zone: Post Earthquake Rehabilitation of Cultural Heritage

Papua New Guinea 33

Jason Kariwiga

Motupore at the Crossroads: A Study in Increasing Value & Diminishing Care

Sri Lanka 37

Getsy Thavarajah

History and Conservation of Theru Moodi Madam in Jaffna District, Northern Province, Sri Lanka



Drapham Dzong Ruins Consolidation Project

Karma Tenzin, *Senior Architect*

Division for Conservation of Heritage Sites, Department of Culture, Ministry of Home and Cultural Affairs

Brief description of the project

The Bhutan Swiss Archaeology Project, a cooperation project between the Royal Government of Bhutan, HELVETAS Swiss Intercooperation (HSI) and the Swiss Liechtenstein Foundation of Archaeological Research Abroad (SLSA), was established in 2007, on the request of the Royal Government of Bhutan to HSI to support an archaeology project in Bhutan. Drapham Dzong Archaeology Project was the first ever archaeology project executed in Bhutan under Phase I of the Bhutan Swiss Archaeology Project, which spanned over three years from 2008 to 2010. The project resulted in three excavations, a comprehensive survey of the entire site, and human resource development through hands-on training given to Bhutanese counterparts at the site as well as educational exchanges, and presentation of the project to the Swiss public.

Location

The Drapham *dzong* (fortress) ruins are situated in the Bumthang district in central Bhutan. (Exact position: N 27 39' 15.4" E 90 45' 14.9" Height: 2930 m above sea level)

Oral history

The fortress is said to have been the winter residence of Choekhor Deb (leader of the Choekhor community in Bumthang). It dates back to the early 15th century during the period of Pema Lingpa (a great Buddhist saint and treasure revealer), before the period of Zhabdrung Ngawang Namgyal (a great Buddhist saint and historical figure of Bhutan, who unified the country in the 17th century). In Bhutan, the existing Dzongs (fortresses) were mostly built by Zhabdrung Ngawang Namgyal himself during his period, or built later. Since the Dzongs of the pre-Zhabdrung era are all in ruins, one of the objective of the Drapham Dzong excavation project was to study and compare pre-Zhabdrung Dzong architecture with Zhabdrung architecture.

Consolidation of Drapham Dzong

Following the successful implementation of the Drapham Dzong Archaeology Project, a monograph was published in 2018. The scientific excavation resulted in a better understanding of the layout of the fortress. The main fortress complex runs approximately 200 m long in a north-south direction, with the main tower (*Utse*) situated in the northernmost side as the innermost sanctum of the complex. The surrounding structures (*shabkhor*) were built along the north-south direction while maintaining a courtyard space in the center (see Fig. 1).

With the aim of presenting the site to the public and visitors as a model for display and conservation of archaeological heritage in Bhutan, the consolidation of Drapham *dzong* was carried out in April, May and June 2020. The consolidation works were carried out strictly as per conservation principles by consolidating only the damaged portion of walls of the ruins structure (see Figs. 2, 3, 4, 5, 6, 7 and 8). All the walls of the Drapham *dzong* ruins were built in stone masonry with mud mortar. Only the upper section of the walls of the ruins which were damaged over the period were consolidated using the same construction techniques and skills. The larger damaged sections of the walls were repaired using the same technique by maintaining and respecting the same layout, form and thickness of the original walls.

A plain cement concrete band (5-10 mm thick) was provided on the topmost level concealed by one to two courses of stone masonry as a water proofing layer to protect the walls from rainwater seepage, which is one of the main causes of damage to the walls. A footpath was also constructed from the base of the hill leading to the site for visitors along the old original footpath to the *dzong* (Figs. 9 and 10).

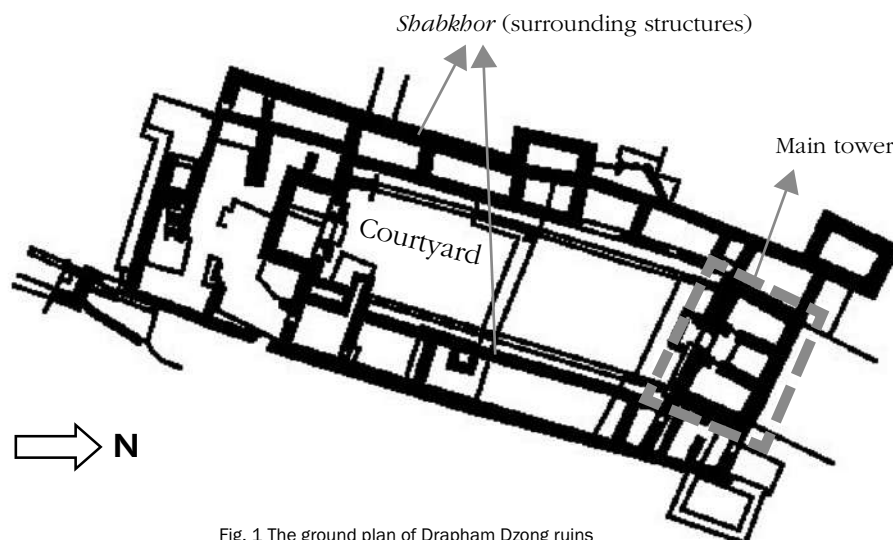


Fig. 1 The ground plan of Drapham Dzong ruins

In continuation, the master plan for presentation of the site to the general public and visitors with proper signage, maps, and information boards on the history and

findings of the excavation shall be developed based on the monograph and later installed and implemented in 2021 and later opened to the public and visitors.



Fig. 2 Before consolidation works of Utse



Fig. 3 After consolidation works of Utse



Fig. 4 Before consolidation works at the main entrance of *shabkhor* (surrounding) structure



Fig. 5 After consolidation works of *shabkhor* (surrounding) structure



Fig. 6 Before consolidation works



Fig. 7 During consolidation works



Fig. 8 Before consolidation of main entrance steps to the fortress



Fig. 9 After consolidation of main entrance steps to the fortress



Fig. 10 The footpath to the site before works



Fig. 11 Construction of the new footpath to the site



National Museum Building, Conservation and Repair

Sokonthea Sort, *Officer*

Project and Planning Office, Department of Museum, Ministry of Cultural and Fine Arts

1. Introduction

The National Museum of Cambodia is located on Street 13 in central Phnom Penh, next to the Royal Palace (Northern). The museum houses one of world's greatest collections of Khmer cultural material including sculptures, ceramics and ethnographic objects. With the aim of educating and inspiring its visitors, the Museum promotes awareness, understanding and appreciation of Cambodia's heritage through the presentation, conservation, safekeeping, interpretation and acquisition of Cambodian cultural material. The National Museum's shape and design is also of importance for young Khmer architects to learn about traditional Khmer architecture. The design of this quintessential building is today synonymous with "traditional Khmer architecture." Both the collection and building are important to conserve.

We are working on three main projects this year to protect the museum building such as preventing pigeons from living in the building, restoration of the southern part of the roof, and repairing and recoloring some damaged parts of the wooden windows and doors. The Department of Museum is also cooperating with other departments of the Ministry of Culture and Fine Arts for expert and technical work on the roof repair project.

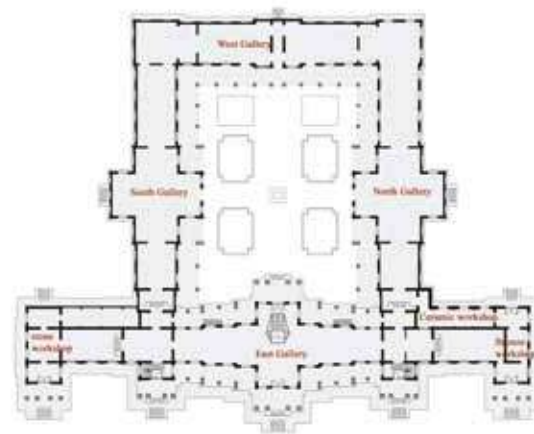
2. Historical Background

The National Museum was built in 1917 and inaugurated in 1920 during the period of the French Protectorate in Cambodia (1863-1953), with the original design by George Groslier and the curator of the Museum being Albert Sarraut. Instructors and students at the Royal University of Fine Arts were responsible for the ornaments on the wooden windows and doors, and also the composition of paintings representing various characters from traditional folk tales. The first design of this building in 1920 comprised just the three main buildings. In 1924, it was slightly altered with wings added at either end of the eastern façade, which made the building even more imposing. In 1969 the East Gallery of the Museum

was reconstructed under the direction of Mr. Chea Thay Seng. The renovation included a new upper level for an administrative office and library as well as underground storage. This building was used as the Museum (east gallery) and School of Art Decoration of the Royal Palace (south, west and north galleries).

3. Plan

A huge building with three top roofs decorated with traditional Khmer ornaments from eastern façade, and two wings at the either side of the eastern façade. The two wings are now used as repair workshop (stone, bronze and ceramic) for the collection, and the main building is a temporary exhibition gallery. The upper level of the building is an administrative office, with a library and storage underground.



After the addition of wings at either end of the eastern façade

4. Damage

After 100 years, most parts of the building are already damaged, including the exterior, ground floor, wall, roof structure and ornaments. There are many cases of damage from the atmosphere (rain, sunshine) and animals. Rain has caused flooding around the foundation causing erosion. Pigeons live everywhere in the building including the rooftop. Nests, droppings and eggshells are piled on



Original design, 1920



After the addition of wings at either end of the eastern façade

the water tank, clogging it up so that water can't flow, and missing tiles allow water to flow into the building and cause timber decay. There is also erosion of the brick wall, as well as moss on the foundation.

4.1 Damaged Parts

Roof: decaying timber, missing and damaged roof tiles, decaying water tank structure, damaged ornaments

Wall: erosion of mortar on the brick wall, moss and cracks in the foundation

Windows and Doors: faded color on ornaments, erosion of painted drawings, cracked wooden doors

Floor: broken, shrinkage and erosion of floor tiles

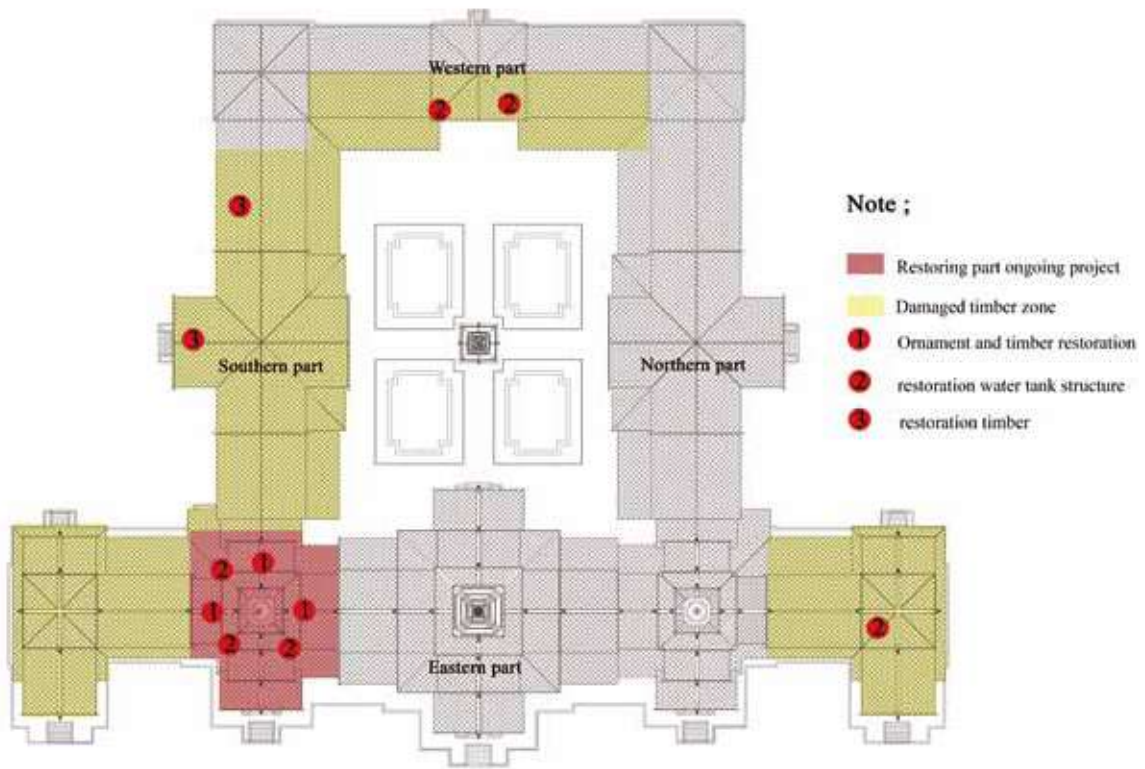
Foundation: surrounding moss, cracks and erosion

5. Conservation Activities

5.1 Restoration

There are three ongoing projects for preserving the

building. The first project involves roof restoration. The Department of Museum is in cooperation with the Department of Safeguarding and Preservation of Monuments of the Ministry of Culture and Fine Art to provide expertise and techniques to repair roof damage. Here are the steps to be taken: Restore part of the roof, block damage on part of the roof and select which is seriously damaged. Do the documentation (photographs, risk map and report) before, during, and after finishing the restoration. Restore the south-east part of the roof, dismantle roof tiles and take down ornaments to remove decayed wooden timber and the water tank structure of the roof and install new timber. Use traditional paint to protect water proofing on the water tank structure. Then reinstall the roof tiles. Some old tiles are broken so we need to use new tiles by matching the color of the originals to provide the same look.



The damaged timber zone



Damaged timber before and after restoration



Damaged timber before and after restoration



Damaged timber before and after restoration

5.2 Prevention

The second project involves protecting the museum building from pigeons. Pigeons are a big problem for the museum building as their nests and droppings cause harm to the roof structure, the building's aesthetics and the collections in the museum. The plan is to install a protective barrier to bar pigeons from the parts of the building where they live. The pigeons live in the space between roof levels, on the window frames, beams, and

the ornamental roof. They will leave the building if they cannot find a good place to build their nests.

5.3 Repairing windows and doors

The plan is to remove old damaged paint from the windows, doors and repaint them with traditional paint. Then fill the cracks in the doors with wooden pieces before repainting.



The pigeon nest and droppings on the roof

6. Conclusion

There is damage to the entire National Museum building, from the rooftop to the ground floor, but rooftop restoration and pigeon prevention should be the first step in protecting the building. The next plan may focus on foundation or wall repair. In addition to the conservation work that I have presented above, another activity in

progress is maintaining the fire protection system such as the installation of firefighting equipment on some part of the building and checking to see if the equipment is working or not. Finally, giving presentations to young students about architecture conservation work in the museum is our next step.



On the New Practice of Protection for Heritage with Chinese Characteristics—Construction of the Long March National Cultural Park

Bi Yi, Project Leader

Studio Three, Beijing Guo Wen Yan Cultural Heritage Conservation Centre Co.Ltd.



Yang Ge, Planner

Beijing Tsinghua Tongheng Urban Planning & Design Institute Dept.V of Research Center for Heritage Conservation and Urban-rural Development (Enterprise)

1. On the “Long March” Cultural Heritage

The Long March is an important historical event in the modern history of China. In 1927, the cooperation between the Chinese Communist Party and the Chinese Kuomintang against the rule of the northern warlords broke down. Beginning in 1930, the Kuomintang army launched several “encircling and subduing” actions towards the heads of the Communist Party, government and military of the Chinese Soviet Republic. After the failure of the fifth counter-campaign in 1934, the Central Committee of the Communist Party of China and the Red Army under its leadership began a strategic shift to withdraw from the central revolutionary base and moved north to take part in the Anti-Fascist War. This great and arduous military operation was known as the “Long March.”

From October 1934 to October 1936, the Central Red Army, the Second Red Army, the Fourth Red Army, and the Twenty-fifth Red Army under the leadership of the Communist Party of China experienced more than 600 battles during the Long March, spanning nearly 100 rivers, more than 40 mountains, and total travel of more than 65,000 miles. They traveled across a large area of China and left thousands of Long March cultural relics. They formed a huge cultural route with different human and geographical environments in the Hengduan Mountains,

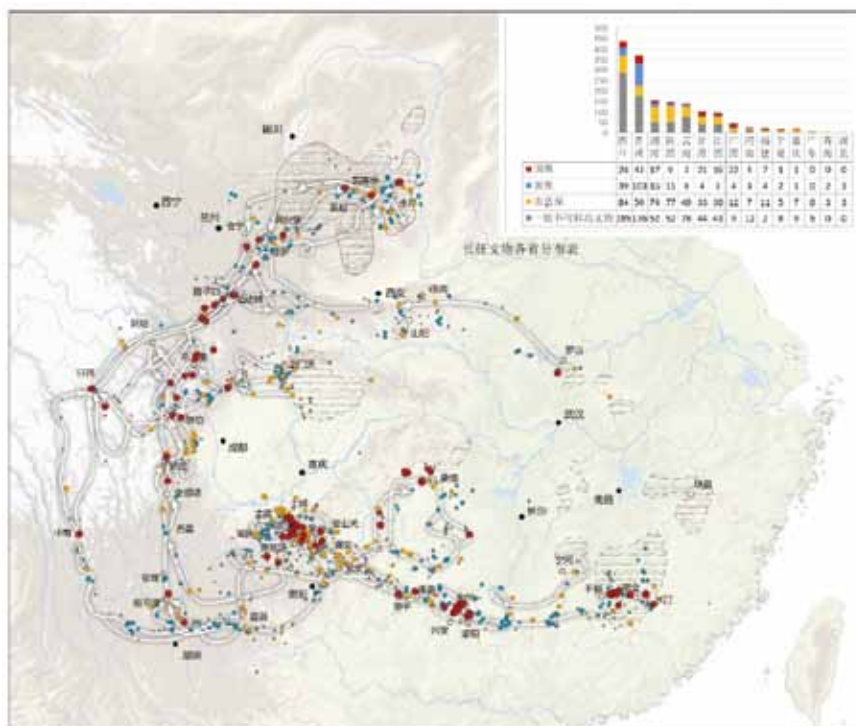
Sichuan Basin, Qinghai-Tibet Plateau, and Loess Plateau along the way.

The Long March lasted only two years, but it had a huge and lasting impact. Over the past 80 years, the continuous memory of the Long March and the inheritance and promotion of the “Long March spirit” have penetrated every level of Chinese society. The Long March has become an important part of China’s national memory and national spirit.

Similar to cultural routes such as the Grand Canal and the Silk Road, The Long March cultural route reflecting the historical facts of the Long March of the Red Army is an extremely large heritage system. According to statistics, there are more than 1,600 Long March cultural relics distributed over 15 provinces, autonomous regions and municipalities directly under the central government. “Long March” is the common theme of these relics, and they reflect historical facts about different teams or historical events.

2. Proposal for the Construction of the Long March National Cultural Park

On July 24, 2019, General Secretary Xi Jinping chaired the ninth meeting of the Commission for Deepening Overall Reform of the CPC Central Committee, which deliberated



Distribution of cultural relics of the Long March at different levels



Construction of the National Cultural Park is of great significance to the inheritance of the national spirit.

and approved the *Construction Plan for the Great Wall, Grand Canal and Long March National Cultural Park*. The plan points out that construction of the Great Wall, the Grand Canal and the Long March National Cultural Park, with a focus on creating important symbols of Chinese culture, is of great significance for strengthening cultural confidence, highlighting the lasting influence of Chinese excellent traditional culture and the strong vitality of the advanced culture of socialism.

The emergence of the concept of “national cultural park” not only puts forward a new mode of heritage protection, utilization and inheritance, but also serves as a carrier of public culture, which is expected to shape the national image, strengthen cultural confidence, promote cultural communication and build the national identity.

3. Difficulties in the Construction of the Long March National Cultural Park

The Long March is a magnificent epic composed by the Communist Party of China and the Red Army, a towering monument in the historical process of the great rejuvenation of the Chinese nation, and an important part of the national memory of the new China. The construction of the Long March National Cultural Park is of great epochal and practical significance for “the Long March in the new era.” However, there are quite a few difficulties lying ahead.

The Grand Canal was declared a World Heritage Site in 2014 after eight years of application, while the Great Wall was added to the World Heritage List as early as 1987. After years of research and protection, these two grand projects, which span a long historical period and cost a lot of manpower and material resources, have cultivated a high degree of consensus on their heritage value, components, and protection and inheritance concepts both at home and abroad, and complete plans have already been drawn up in terms of their protection. In contrast, the concept of preserving and utilizing the historical remains of the Long March as a whole heritage system has only been put forward in recent years, which cannot be compared with the former two in terms of research and practice. In addition, although there are a large number of Long March remains, they are scattered across 15 provinces, municipalities, and autonomous regions, and most of them are remote. Considering the fierce battle conditions at the time, most of them were not built specifically for the Long March, but only transformed from existing building structures, so the types are very complex, from residential structures, Taoist temples, churches, and workshops, to ferries, bridges, roads, and passes, as well as slogans written on walls, trenches submerged in the mountains, tombstones set up by the side of the road, and even a cave, a tree, and a well. Most of these remains are small in scale and of limited artistic or scientific value, which makes them more difficult to protect and display.



The Long March cultural relics are scattered in terms of distribution, and their individual value is not prominent.

Scattered and small, the Long March remains are limited in visual impact and visual appeal. “Can you see the Great Wall from space?” This proposition has been debated for decades from common people to academic circles, and it is enough to prove the visual shock and deep impression of the Great Wall, which stretches to the end of sight. Many important passages of the Grand Canal are still navigable, and you can see all the scenery on both sides of the river, which is undoubtedly a highlight of the exhibition. In contrast, many historical relics of the Long March cannot achieve a good display effect based on their appearance alone. They would need detailed content design and environment creation. In addition, in order to maintain the red atmosphere and revolutionary tone, they must be controlled in terms of entertainment and commercialization. This makes it difficult for some historical relics of the Long March to find suitable forms of display and utilization. They are often too serious, insufficiently flexible, and lack attractiveness to the public, especially the younger generation. They would be limited to a reception unit collective visit. Therefore, the value of heritage and revolutionary culture cannot

be fully disseminated, and social and economic benefits cannot be brought into play.

In the aspect of environment, the Long March red heritage also has particularity. With a poetic touch, the Long March outlines the difficulties and obstacles that were overcome in the natural environment. The Red Army’s march routes were seldom flat and thoroughgoing, and mostly involved steep mountains, rapids, and even the traverse of inaccessible areas such as snow-capped mountains and grasslands on many occasions. These places are restricted by geography and transportation conditions, and can be considered as remote areas. Compared with the Grand Canal, which winds through the developed provinces along the eastern coast, and the Great Wall running across the Beijing-Tianjin-Hebei region, the Long March National Cultural Park, which runs through the relatively underdeveloped regions of southeast and northwest China, undoubtedly faces greater difficulties in terms of the foundation of the cultural tourism industry and the support of large city clusters.



Loushanguan Battle Site



The Wumeng Mountains through which the Red Army passed

4. Innovative Ideas for the Construction of the Long March National Cultural Park

The objective difficulties mentioned above are the difficulties in the construction of the Long March National Cultural Park. However, challenges are always accompanied by opportunities. With a positive perspective and careful analysis, some of the most shining characteristics of the Long March red heritage are hidden in these “difficulties.”

Scattered in locations and gathered in the same spirit.

The historical remains of the Long March are loosely distributed in space, but as a part of the great epic of the Long March, it has a more concentrated and distinct theme and a complete and compact storyline compared with other large cultural lines. The “bright line” woven by the route of the Long March and the “dark line” turned into the historical facts of the Long March are closely connected, together showing a grand and detailed historical scene, which achieves the idea of “scattered in locations and gathered in the same spirit.” The concept of “cultural route” in the field of international heritage

protection emphasizes the integrity of values, and the overall value is greater than the sum of individual values. The historical remains of the Long March are connected with each other through the road and the story, which reflects the integrity value of “1+1 > 2.” Each individual is like a jigsaw puzzle containing unique historical information and historical details, presenting a panoramic story of the Long March from an overall perspective.

Full of charisma of the times.

Compared with ancient cultural relics, there is an important way of thinking in the protection and utilization of modern and contemporary heritage, which can be described as “heritage is memory.” The Long March does not have a long history, but because of this, the memories and emotions of the nation, and the collective and individual memories are still vivid. Today’s literature, paintings, music, and film and television often “return to the historical scene” in various ways, showing people’s spiritual need to rediscover and understand history. In the exhibition and communication of the Long March red heritage, the perception and experience of



The memories and emotions carried by the cultural heritage of the Long March are still fresh.



About 30,000 people visit Zunyi, the holy land of the Long March, every day at its peak (2019 data).

living historical memory—rather than simply watching or looking at the exhibition—will have a strong appeal to people, especially the younger generation.

The original ecological natural and cultural environment.

The Red Army marched from southeast to northwest across a large area of China, through the transition area of the landform ladder in central and western China, but also the region with the most diverse ethnic culture and regional culture. The endless grassland in northern Sichuan recorded the hardships as depicted in a poem: “The green fields are boundless, and all you can see are wind and sand. People walk through the quagmire, and the grass is higher than the knee.” The scattered, uninterrupted loess beams and hilly terraces of Sichuan and Taiwan contain the heroism as depicted in the poem: “The mountains are high, the roads are long and the pits are deep, and the army gallops ahead.” On the Qin-Jin Plateau covered by ice and snow, the scenery in the line “Silver snake dancing in the mountains and wax elephants rampaging across the plateau” can still be seen. The line “Tibetan pot, Miao pot and soldiers of all ethnic groups share one pot” expresses the Long March spirit of national unity. The Long March passed through remote and dangerous areas, but at the same time, the areas are also magnificent and rich, just as “the world’s great, strange, extraordinary view, often lies in the danger far.” It was through the Long March that the Chinese Communists first had a comprehensive and in-depth understanding

of the different physical geography, history, culture and folk customs in the land of China, thus gaining a deeper understanding of the national conditions and finally achieving the victory of the revolution. Because of its remoteness, the natural environment and cultural ecology along the route of the Long March have been more completely preserved. In the eyes of urbanites, the Long March is not only a red revolutionary road, but also a cultural and natural route of tour and adventure, which naturally coincides with self-driving travel, outdoor sports and cross-country hiking.

5. The Construction Strategy of the Long March National Cultural Park

In the traditional sense, a “park” is a place mainly for rest and entertainment. As a cultural strategic project, the goal of a national cultural park is obviously not limited to that, but also to achieve image building, tradition inheritance, cultural communication and spirit promotion in this process. The characteristics of the Long March relics and cultural resources—a distinct and unified theme, a skeleton of historical paths and story lines, vivid historical memories and emotions, and prominent natural and humanistic ecological conditions—all highlight the importance of emphasizing a narrative, experiencing and creating an atmosphere, and integrating it into the environment. Therefore, the construction of the Long March National Cultural Park should focus on the protection, utilization and inheritance of a series of



Natural and cultural beauty along the way of the Long March

Long March cultural relics and resources with the core of “retaking the road of the Long March and feeling its spirit.”

Take the “story” as the main line and “retake the road” as the means. The Long March historical trail should be taken as the most important and basic way of experience and display in the Long March National Cultural Park. Combined with historical data research and field investigation, the existing “Red Army road” and “Red Army village” were searched and sorted out. The Red Army road with its clear route, rich heritage, complete historical environment, safe geological conditions and relatively mature infrastructure was selected. After cleaning and introducing protection measures, it was moderately renovated and upgraded to become the

historical trail of the Long March. The Red Army village with a strong red atmosphere, concentrated cultural relics and cultural resources, foundation of cultural and tourism development, and great potential was selected to be the Long March camp, forming the basic framework of “thousands of miles of footpaths and thousands of villages.” This framework connects the rich Long March cultural relics and cultural resources, memorial halls, and related natural and cultural resources along the line, connecting, telling and displaying the Long March stories and historical memories contained in them according to historical themes. Thus, an immersive walking experience throughout the whole process was formed, achieving the purpose of unity of knowledge and action, refreshing the body and mind, and understanding of the spirit of the Long March.



The activity of “revisiting the Long March” on the historical trail

Take “interaction” as the focus and “activity” as the approach. The exhibition of the Long March National Cultural Park should break free from the previous mode of “watching exhibitions and listening to explanations”, and hold active and interactive cultural activities represented by “revisiting the Long March” by relying on the Long March historical trail, Long March cultural relics and pavilions. This includes not only the “Red Army Festival,” “martyr worship,” “historical scenes re-run,” and other activities with a certain sense of ritual. It also covers “Long March story sharing,” “literary and artistic works recitation,” “indoor and outdoor scenography drama”, “theme photography and painting competition,” and other activities with a high level of participation from local people, diverse organizers, life and regular activities. In addition, orienteering, mountaineering, hiking and other

sports and events are also highly consistent with the story and spirit of the Long March, thus creating a series of cultural activities of the Long March National Cultural Park that are open and shared, rich in red atmosphere, and deeply integrated with the public's spiritual and cultural life.

Take “penetrating” as the guide and “spreading” as the goal. Compared with the Great Wall and the Grand Canal, the historical relics of the Long March are scattered in distribution, so it is more necessary to strengthen the unity in visual image, so as to strengthen the integrity of the heritage and assist it to achieve the goal of “penetrating.” Therefore, a visual image recognition system should be established for the National Cultural Park of the Long March to form an exclusive cognitive symbol. The main



The Long March themed sports events



Martyr worship memorial activities

work includes the formation of a unified, exclusive, and highly recognizable visual image in the aspects of theme logo, identification system, promotional materials, media interface, cultural and creative product image, public space landscape design, etc. And this should be combined with the construction of the Long March historical trail to form a linear historical and cultural landmark throughout the whole process, thereby shaping the image IP and cultural brand, making the National Cultural Park of the Long March “a park” and expanding its social influence and communication power. At the same time, under the guidance of the idea of “new infrastructure,” 5G+AR, VR, big data, cloud platform, AI, XR and other new technologies and means will be used to form online and offline communication patterns that complement each other and enhance the enjoyment and experience of the park.





The Long March cultural relics are scattered in terms of distribution, and their individual value is not prominent.

Take “education” as the meaning. Education and inheritance have always been the most important functions of the Long March National Cultural Park. As an important educational resource along the Long March, party schools and executive leadership colleges should include the Long March cultural relics and cultural resources into the curriculum, and expand the scope of on-site teaching and experiential teaching. Based on this, they should fully cooperate with universities, primary and secondary schools, and private organizations to develop and launch research, education, and training courses and routes for young people, corporate employees, parents and children, middle-aged and elderly people, and other social groups to form a diversified Long March Academy Red education system.

6. Conclusion

This national cultural park is a major innovation of China’s cultural strategy, which should be actively tried in theoretical research and practice in shaping the national memory, strengthening national identity, and establishing a national image. We should give full play to the important role of cultural heritage in carrying forward China’s excellent traditional culture, promoting regional development, and improving the quality of the people, and build a symbol of national spirit recognized by the whole people. Through theoretical innovation, practical innovation and institutional innovation of the Long March cultural heritage in cognition, protection, management, display, utilization and dissemination, we will promote the establishment of a cultural heritage protection theory with Chinese characteristics and open a new stage of development for protection of the country’s cultural heritage.

| | |
|---|--|
|  | <p>Archaeological Research on the Zhoshy Khan Mausoleum</p> <p>Gulnaz Kulmaganbetova, <i>Chief Researcher</i> Kazarchaeology LLP</p> |
|  | <p>Smailov Zhuman Eginbaevich, <i>Director</i> Kazarchaeology LLP</p> |

In order to study the history of the development of the State of the Kazakh people, it is important to study monuments connected with the period of the *ulus* (state) of Zhoshy Khan. Our knowledge of these issues was originally limited to oral folk tradition, in which the Ulytau region occupies the primary role as the center of growth and development of the Kazakh state's power. The significance of Ulytau as the political center of the Kazakh people was established by Kanysh Satpayev. Research on monuments of historical and cultural heritage, carried out in due time by A. Kh. Margulan, gave a scientific basis for the historical legends of the Kazakhs about the role of Ulytau in the history of our people and statehood. Unfortunately, in those years there was no opportunity to identify cultural layers, or to carry out a comprehensive identification of monuments linked with specific historical figures and events. Also, the time of Margulan's research on the Ulytau monuments, the mausoleums of Alash Khan and Zhoshy Khan, coincided with a period of repressive policies on the part of the Soviet authorities.

Despite the negative attitude of the authorities to the study of history, archaeological and architectural research, and restoration work on the medieval mausoleums of Ulytau were carried out. Information about the Zhoshy Khan mausoleum is mainly contained in the historical legends of the Kazakh people. Without collecting historical legends, epics, place-name data, and other materials on the ethnography and culture of the Kazakh people, the study of the Zhoshy Khan mausoleum would be impossible.

The earliest written evidence of the Zhoshy Khan mausoleum dates back to the 16th century. In a description of the campaign of the Bukhara ruler Abdallah against Ulytau, undertaken by him in the spring of 1582, the mausoleum of Zhoshy Khan is mentioned: "On Saturday, the 6th [day of this] month, [the khan] stopped near (Navaja) Sarai in front of the *mazar* [mausoleum] of Jochi Khan." Analysis of the data on the route of Abdallah's troops makes it possible to identify the *mazar* indicated by the author of this text as the mausoleum of Zhoshy Khan. Prior to the above description of Abdallah's campaign, the only mention known is in the history of the move to Ulytau of Emir Timur. According to scant information, the chroniclers of Emir Timur traced the route as follows: Saryk-uzen – Kyachik-tag – Ulug-tag – Ilanchuk. Those names have survived in ones used today, which are: Sarysu river (Sarik-uzen), Kishitau mountain (Kichik-tag), Ulytau mountain (Ulug-tag), Zhylyanshyk river (Ilanchuk). From the route thus given of the troops of Emir Timur, it is clear that it ran not on the western part of the Ulytau mountains, but therefore on the eastern side, in the basin of the Kengir river,

where the monuments being studied are located. Emir Timur immortalized his stay on Ulytau with a "triumphal" inscription on Altyn-shoky, located to the west of the Ulytau mountains, which confirms the route of the troops of Emir Timur. The route of Abdallah from Bukhara to Ulytau also followed the basin of the Kengir river, and the author of the textual description noted above, Hafiz Tanysh, thus mentions the *mazar* of Zhoshy Khan.

Subsequently, in the period of the 19th to early 20th centuries, the mausoleum of Zhoshy Khan was mentioned in connection with the mausoleum of Alash Khan. These monuments are named in the article by Ch. Ch. Valikhanov "On the Kirghiz-Kaisak tombs (*molabs*) and antiquities in general." The monuments are described in more detail by Yu. Schmidt in his "Sketch of the Kyrgyz steppe south of the Aral-Irtysh watershed." About the mausoleum of Zhoshy Khan, in the work of K. Schmidt it says only the following: "3 *versts* south of Kyzyljar, in the steppe of the left bank, another monument has stood, this is the grave of Khan Dzhus, which is made of red brick with a spherical dome of blue glazed bricks and generally resembles the Alash Khan monument." In the work of Yu. Schmidt, the legend about Alash Khan and Dombaul is given.

A. Krasovsky mentions the Zhoshy Khan mausoleum. In giving a description of and dating the mausoleum of Alash Khan, comment on the mausoleum of Zhoshy Khan is contained in the 18th volume of the *Complete Geographical Description of Russia*.

None of the above sources provide information sufficiently complete for the restoration of the lost elements of the portal, decor, or the outer dome of the Zhoshy Khan mausoleum. The first scientific study of the monument is associated with the activities of Margulan, working with the Kazakh SSR Academy of Sciences. But first, the informative article by Satpayev, "Prehistoric monuments of the Dzhezkazgan region," should be noted, which set the task for archaeologists to study Ulytau as the ancient political center of the Kazakh steppes. In his article, Satpayev ascribes the Zhoshy Khan mausoleum to the Golden Horde period.

In 1945, the mausoleums of Zhoshy Khan and Alash Khan were examined by M. B. Levinson's expedition. The expedition made a preliminary survey of the sites, but winter conditions did not allow them to study the sites in detail. In 1946, archaeologists Margulan and G. I. Patsevich, together with architects M. B. Levinson and G. G. Gerasimov, examined the mausoleum.

Archaeological research was carried out at the Zhoshy

Khan complex by Margulan in 1946. He excavated burials in mausoleums of the Zhoshy Khan necropolis and both burials of the Zhoshy Khan mausoleum. He notes that before him, the Zhoshy Khan mausoleum was robbed in 1929 by a group of Atbasar residents, together with a certain party named Shon (Chong) who lived near the mausoleum. As a result, the grave goods and human skeletal remains buried in the mausoleum were not in their original condition.

In addition, he notes that in the past the portal niche of the mausoleum had tiles with inscriptions, which were removed in 1911 “for showing to the Steppe Governor-General.” Inside the mausoleum, Margulan excavated two graves. In the first burial he found the remains of a wooden coffin, reinforced with iron nails. The researcher was interested in the fact that the deceased did not have the bones of one hand. In the burial, in addition to the skeleton of a person, the bones of wild animals, a camel’s skull, fragments of skin, tissue, and a banner (*tug*) were found.

The second burial, in contrast to the first, was lined with unfired bricks measuring 48 × 21 × 10 cm and plastered with alabaster mortar. The length of the burial chamber was 190 cm. Inside the crypt, Margulan discovered an oak coffin with a skeleton, but without a skull, which had been seen during the predatory excavations in 1929. In this crypt, a slab with the inscription “*ykpai*” was found. The letters of the Arabic script are carved against a background of a complex floral ornament. The slab, measuring 42.5 × 42.5 × 2.5 cm, lay under the scapula of the interred, with the inscription down. Based on the absence of the bones of one hand, the presence of bones of wild animals in the grave, the historical legends of the Kazakhs, and the information from Hafiz Tanysh, Margulan believed that Zhoshy Khan himself was buried in the first grave, and in the second was his elder wife, Bektumysh, daughter of Toghrul, the Kereit Khan. The construction of the mausoleum according to Margulan dates to 1228. A number of works by the professor of architecture M. Mendikulov are devoted to the architecture of the mausoleum and to issues of the genesis of monuments such as the Zhoshy Khan mausoleum.

The next period of study of the monuments is associated with the work of the Central Kazakhstan expedition of the Ministry of Culture. In 1973, this expedition surveyed the Zhoshy Khan mausoleum. From a historical and archaeological point of view, noteworthy in their research is the clearing of the inner dome near the barrier on the inner side of the portal, as a result of which fragments of the outer dome were found. In addition, the researchers made probes at the site and its fence.

M. K. Sembin collated extracts from research and sources regarding the Zhoshy Khan mausoleum, providing historical information. In 1991, the necropolis was examined by the Zhezkazgan detachment of the Novostroyechny archaeological expedition, under the leadership of Zh. E. Smailov. In the course of archaeological excavations, we discovered the unfortified settlement of Zhoshy-Ordasy. It was also concluded that the mausoleum and the settlement constitute a single complex of the Zhoshy Khan Ulus period. The excavations revealed the remains

of houses. Based on the materials of these archaeological excavations, for the first time remains of settlements of the Ulus period of Zhoshy Khan were identified in the territory of Central Kazakhstan. Analysis of the archeological data and written sources made it possible to identify the unfortified settlement of Zhoshy-Ordasy with the city of Orda-Bazar mentioned in written sources.

To give an overview of the monument, the Zhoshy Khan necropolis is located on the east bank of the river Kengir, 45 km northeast of the city of Zhezkazgan, on a small hill. Downstream, the Kengir river flows into the drying up Basbulak stream, which originates from the Kyzylzhar springs. The Zhoshy Khan mausoleum looks most impressive from the south along the east bank of the Kengir river. From this side, the mausoleum is clearly visible from a distance of 9 km. At the same distance from the mausoleum, near the former water metering station Shotkara, on the top of the hill there are the ruins of a medieval fired brick *mazar*, surveyed in 1991. Here, near the structure, there was the medieval settlement of Shotkara.

Near the necropolis of Zhoshy Khan, the Kengir river has a bend and flows over a 1 km stretch from east to west. Old riverbeds of the Kengir run parallel in the form of dry channels, one below the necropolis under the base of the hill on which it is located, and a second at the wintering place of Adylbai. An area in the floodplain of the river, bounded by an oxbow near the necropolis and the riverbed, was used for crops. There are remnants of an irrigation system here. The dating of the irrigation system is difficult, but it can be assumed that the last time it operated was at the beginning or middle of the 20th century. Upstream along the river Kengir, 5 km from the Zhoshy Khan mausoleum, there is the ritual structure of the Dombaul mausoleum, surrounded by *mazars* of the 19th to early 20th centuries. Next to the Dombaul mausoleum, there are burial grounds of the Bronze Age, of early nomads and of the Middle Ages.

The Khan complex consists of the Zhoshy Khan mausoleum, the remains of medieval mausoleums and residential structures in the form of hillocks, and a pit up to 2.7 m deep. Kazakh *mazars* lie adjacent to the mausoleum to the south and southeast, among which there are grave structures made of lime mortar similar to those at the Koitas cemetery, which are uncharacteristic for Central Kazakhstan.

From the southeast to the northwest behind the Zhoshy Khan mausoleum, a chain of mounds stretches in an arc in three rows at the top of small hillocks, which are the remains of structures made of unfired and fired bricks. Near the Zhoshy Khan mausoleum, on the northwest side, there are the remains of three medieval fired brick mausoleums. One of them was eventually excavated by Margulan. On the eastern side of the Zhoshy Khan mausoleum, there is a pit 11 m in diameter and up to 2.7 m deep.

The use of aerial photographic data made it possible to identify a settlement adjacent to the necropolis complex. The study of the settlement showed that it directly relates to the Zhoshy Khan complex. The settlement stretched from north to south for a distance of about 350 m, along

the east bank of the Kengir river. The area occupied by the settlement was repeatedly plowed for crops in the 1940s to 1950s. Remains of structures in the form of extensive mounds up to 0.4 m high are recorded only on the peripheral part of the settlement. The rest of the structures can be traced by aerial photography. During a ground survey, the remains of the settlement's structures were faintly traced. In this regard, the master plan of the complex includes the remains of those structures that have been identified as a result of localized clean-ups and excavations. Supporting material, as in most medieval settlements as yet known in this region, is practically absent. Thus, a partial cleaning of the northernmost hillock showed that these are the remains of a structure subrectangular in plan. The walls of the building were made of 40 × 20 × 10 cm mud bricks, i.e. the same brick from which the “large” and “small” houses of the investigated complex were built. The southernmost structure of the settlement is the remains of a brick kiln. The remains of the furnace before the excavations were a massive mound with weakly defined edges up to 15 m in diameter. The surface of the mound before the excavations was strewn with broken bricks, pieces of slag, and modern debris.

Thus, of the two remains of structures surveyed in the settlement, one can be interpreted as a residential building, the second as a production building – a brick kiln. At this stage of research, we cannot determine the number of structures in the settlement or definitely say anything about the functions of the settlement.

Archaeological surveys conducted over two years made it possible to eliminate the question of the presence of pre-Muslim burials at the necropolis. Searches for “hidden” burials described in written sources have yielded no results. Based on this, we can conclude that the necropolis originally appeared as a Muslim one. We associate the emergence of the Zhoshy Khan necropolis at this place with the location of the earlier cult building of Dombaul not far away. A paucity of studies of monuments of the Dombaul type forced us to examine two other monuments of this type near the villages of Otkelbai and Yeginda. Inspection of those monuments allowed us to verify Margulan's conclusion that this type of religious building was in essence a “temple of the ancestors.” In our opinion, the mausoleums of Alasha Khan and Zhoshy Khan served not only as burial structures, but like the structures of the Dombaul type, they also served as ancestral temples, places of worship, and monuments to statehood. In Kazakh historical legends, the khans were elected at the mausoleum of Alash Khan. Legends link the historical election of Kenesary as khan in Ulytau with a specific place near the Zhoshy Khan mausoleum, on Kyzylzhar.

The study of archaeological monuments of the nomads of the Kazakh steppes, due to the absence or paucity of such written sources, must draw upon folk knowledge in the form of oral histories of the steppes, mythology, and epic legends. These realms of historical knowledge of the steppes were widely used by Margulan in his works. Archaeological excavations at the complex pursued not only purely empirical goals, but also the achievement of the necessary scientific and practical results to enable the identification of additional cultural aspects, of doubtless

value for a more complete restoration of the monument. Therefore, along with the description of the excavations, we drew conclusions as far as possible regarding the purpose of the identified elements.

During archaeological excavations, one focus consisted of the remains of a “large” house, which have survived to a height of up to 1.5 m. The walls of the house were made of adobe bricks 40 × 20 × 10 cm in size. The house in plan is an almost symmetrical structure with an entrance oriented to the southeast. The central room, from the entrance to the back wall of the house, has an area of over 20 m². This room is adjoined by a niche formed by strongly thickened (up to two meters) walls separating Room 5 from Rooms 4 and 6. A *sufa* (bench) was attached to the back wall of the niche.

Judging by the thickness of the side walls, and the finds of trapezoidal bricks, this room could well have been covered with a vault or dome. The paucity of studies of examples of residential architecture of the Middle Ages of Sary-Arka does not allow drawing close analogies for this type of dwelling. However, anyone who has studied the monuments of religious architecture of the Kazakhs of the 19th century is fully aware that some Kazakh *mazars* are nothing more than copies of residential buildings, from simple yurt-like to complex multi-chamber dwellings.

The residential buildings of the Zhoshy Khan necropolis are currently the only structures representing this type of detached house of the Middle Ages in Central Kazakhstan. It is also important that the fill on the premises of the small house, and especially as seen at Room 5, consists of blocks of adobe bricks. The absence of any ceiling remains or other material in the rubble allows for attention to be drawn in the following observations to the presence of elements favoring domed or vaulted ceilings of residential buildings in the Middle Ages. In the fill of the premises of the “large” house, we observe not the gradual destruction of the walls in the form of layers deposited from flooding, but a jumble of bricks, which is a typical condition most likely resulting from the collapse of the walls with a domed or vaulted ceiling.

Rooms 1, 2, 3, 6, and 7 served as living rooms. Their interior is made with an L-shaped *sufa* located along two walls. The rooms were heated with the help of *tandoors* (ovens) deep in the *sufas*. Fragmented chimneys leading into the wall run from the *tandoor*. The floors in the rooms are clay, well defined by a thin ash-humus artifact-bearing layer. Clearing the *sufa* fill in Room 6 revealed an interesting heating design. The entire inner space of the *sufa* was lined with stone. The stones had previously been fixed by the use of chips to fit closely together. On one side, the stone layout is closely adjacent to the walls of the *tandoor*, located at the end of the *sufa*. The *tandoor*, embedded in the *sufa*, had an unpressed chimney, judging by the accumulation of ash, and from traces on the surface of the *sufa*, the chimney was installed at the corner of the room. The fact that the builders of the house knew how to make chimneys can be seen from the excavations of Rooms 1, 2, and 3, in which stoves such as fireplaces with chimneys were uncovered. The stonework inside the *sufa*, coated with a layer of clay on top, served for an original way of heating the *sufa*'s surface. The stones, closely fitted to each other

and to the *tandoor*, gathered heat from the *tandoor* and conducted it to heat the surface of the *sufa*.

As a result, when studying the method of heating living quarters, an especially important element for the territory of Sary-Arka, we have two types of heating spaces that are unlike each other. The first type includes stoves of the “fireplace” type, the second consists of tandoors. The presence of three fireplaces in a single room indicates the use of these types of heating in the first construction period.

When examining the house, it was revealed that the house originally consisted of five rooms, three residential and one for storing grain. The absence of running bond in the masonry indicates places where two rooms each were later added on both sides of the house, living quarters on the northeast side, and a utility room and a mill on the southwest side – a room with a millstone in the middle. The paving under the millstone, as it turned out during detailed cleaning, was made of adobe bricks. The lower part of the millstone had split into dozens of parts, with the fragments being identified by the presence of the grinding surface of the millstone. The upper millstone with a diameter of 105 cm was found at the entrance to the room and has an opening in the central part, from which four grooves extend along the working surface at right angles to each other. On the edge of the millstone, a hole was made up to 7 cm deep and up to 3 cm in diameter.

In general, excavations of the “large” house have shown that this house was originally planned almost symmetrically. In the center, behind the vestibule, there was Room 5, from which it was possible to enter Rooms 3 and 4 on the right and on the left into Rooms 6 and 7. Later, Rooms 1 and 2, and Rooms 8 and 9, were added on both sides of the house as shown by the masonry of the walls.

Excavation No. 2 was set up at the site of the mausoleum. After clearing the excavation area of the fences and pavements left by the excavation conducted in the early 1970s, the entire area of the excavation precinct was divided into a grid of 2 × 2 m squares. After removing a layer of 5–7 cm, a medieval pavement of the site was revealed in the western part of the excavation, made of flatly laid fired bricks of various sizes. The central and eastern parts of the excavations were deepened by 0.15 m and cleaned out. There was no pavement in this part of the excavation. Four late burials were uncovered there.

During the excavation, a subsidence in the pavement was revealed in the squares V-1, V-P G-1, G-N. After fixing the pavement in these squares, the pavement bricks were removed. Cleaning off the subsoil revealed a grave pit, in which the burials of an adult and a child were found when excavated. The burials were made according to Muslim burial rites and covered with fired bricks. Apparently, a small foundation pit existed here before the burial. Then, after digging back all of the edges of the excavation precinct and cleaning down to the subsoil, squares Г-IV and Г-V were deepened. Deepening these squares by 0.2 m further showed undisturbed natural strata. The area paved with fired bricks was thus only 5.9 m wide. A portion of a wall of fired bricks stretches for the same distance along the southwestern side of

the excavation. The site of the wall of fired brick is fragmentary to the southwestern side, but complete on the northwest side. An open section of the site, bounded by a wall of fired bricks, is paved with fired bricks. In the excavation precinct were found fragments of ceramics, carved glazed tiles, and a coin.

Later, this excavation was expanded to the northeast and embraced the hilly area adjacent to the mausoleum site. An excavation area of 420 m² encompassed the entire structure. During the excavation, the remains of a mud brick wall that enclosed an area of 225 m² were found. The fill inside the walls was clay soil formed during the collapse of the walls, interspersed with whole and broken fired bricks. Judging from the excavation site and the rampart around the mausoleum, the mausoleum had fences made of adobe and fired bricks. The fragmentation and strong destruction of the walls makes it impossible to determine the temporal connection between the fences made of unfired and fired bricks. It is quite possible that the wall and the fired brick pavement were not completed and belong to a different construction period than the mud brick fence.

Related to this excavation site is another excavation precinct set up inside the Zhoshy Khan mausoleum. The excavation covered the central and rear parts of the mausoleum, i.e. the area above the two burials described by Margulan, based on the results of the excavations in 1946. Excavations of the burials were carried out in order to clarify the structure of the burial facility, conduct anthropological research on the skeletal remains, and clarify the funerary rites associated with the burials. After dismantling the brick floor laid by restorers in the 1970s, a layer-by-layer deepening of the excavation was started over an area 2.8 × 2.65 m. After removing a layer 0.3 m down from the level of the modern floor, the original ancient floor of the mausoleum, laid with fired bricks, was fragmentally revealed. With further deepening, both burials were revealed. The fill in the excavated area was loose light soil interspersed with construction waste.

Burial A is located at the back wall of the mausoleum and is an earthen pit, dug into a dense white natural stratum. The dimensions of the grave pit are quite extensive, although due to repeated excavations they cannot be taken as the original ones. The grave pit is oriented with its long axis from east to west. At the edge of the grave pit on the eastern side, a camel's skull was uncovered, mentioned in the description of the excavations carried out by Margulan. The fill of the grave pit contained the remains of a wooden coffin and construction waste. On the lateral side, adjacent to Burial B, the wall of the burial is adobe brickwork belonging to the neighboring burial. The expansion of Burial A towards Burial B is most likely associated with repeated predatory excavations carried out before 1946. At the bottom of the burial pit, the bones of the interred were uncovered, the main portion of which was stacked in the western part of the pit. The skull is missing. From the parts of the coffin obtained during the excavations, we reconstructed one of the pieces, consisting of two horizontal boards and a crosspiece connecting these boards. Judging from the recovered fragments, it served as one of the sides of the coffin and was more than one meter in length. If we consider that the width of the grave pit is 86 cm at the

head (i.e. on the west side), and 64 cm at the feet, then the part we reconstructed could only serve as the long side of the coffin. In this case, this is a part of a coffin with a length of more than one meter.

Burial B is located in the center of the mausoleum. During excavations above this burial, at the level of the ancient surface, fragments of the facial part of a human skull were found. The burial was made in a burial chamber, the walls of which were lined with mud bricks measuring 38–40 × 20 × 10 cm, i.e. they are identical to the bricks of the “big house.” The bottom of the burial chamber, as described by Margulan, was lined with fired bricks. The fill of the burial pit was loose sifted soil interspersed with construction waste. The burial chamber is trapezoidal. As in Burial A, the bones of the deceased were gathered in one place at the head, although the skull was missing. In the pavement of the bottom of the burial chamber, at the position of the head, there were two bricks missing, which Margulan had removed.

As a result of the excavation of the burials, due to the repeated destruction by grave robbers, it was not possible to identify any elements of the grave structure. When examining the burials, special attention was paid to their correspondence with the mausoleum. The assumption that a corresponding structure should have been erected over the burial of Zhoshy Khan, who worshiped the Great Blue Sky like all his fellow tribesmen, and the spirits of his ancestors, required the identification of elements corresponding to this rite. First of all, these could be the remains of the original structure such as a mound or dyng, as, for example, over the grave of Emir Edygei, buried on one of the peaks of the Ulytau mountains. Or, according to information we know from written sources, he could have been interred secretly in a “hidden” burial. In that case, we can doubt that a Muslim mausoleum was later erected over the “hidden” burial of Zhoshy Khan. Excavations have not revealed traces of any early structure. Objects of material culture, the skull of a camel, and a burial in a wooden coffin described during the excavations in 1946 do not allow one to unambiguously attribute Burial A to either the shamanic or Muslim burial rites. Burial B can be interpreted as Muslim, associated with the time of the existence of the mausoleum. A study of the ruins of other mausoleums at the Zhoshy Khan necropolis showed that the main burials located at the back wall of the mausoleums were made in earthen pits under a fired-brick tombstone in the form of a *sufa*. From this we can conclude that initially, burials were made in earthen pits. Then, during the construction of the mausoleum, a tombstone in the form of a *sufa* was erected over the burial. Therefore, we cannot unequivocally classify the pit burial as an early burial, over which, after many years, a mausoleum was erected. Based on the results of the study of the mausoleum, we are inclined to believe that the mausoleum was most likely planned over Burial A, and that the mausoleum was originally planned for one burial.

Excavation 3 was laid out at the location of the pit and divided into 5 × 5 m squares, so that their border divides the pit into two equal halves. The excavation was conducted to a depth of 3.69 m. Fragments of ceramics and animal bones were found in the pit. According to the results of excavations, the pit can be interpreted as a well.

Excavation 4 was focused on the “small” house located behind the Zhoshy Khan mausoleum. In addition to the house, the excavation uncovered a small pit, which we marked as Pit 2. The excavations revealed the remains of a small house made of adobe bricks. The house consisted of three rooms arranged in a row. The eastern room has a separate entrance, into which a late burial was inserted. The main part of the room is occupied by a fragmentary surviving *sufa*. In the eastern corner of the room, a ruined hearth was uncovered, filled with ash, animal bones, and pottery fragments. The remaining two rooms are connected to each other, and their common entrance is equipped with a vestibule. There is one *sufa* on the northwestern wall of both rooms. Both *sufas* were destroyed by late burials introduced into them. The floor of the premises is earthen, in which utility pits and hearths are arranged. Fragments of glazed and non-glazed ceramics were found in the excavation, along with animal bones, and two iron plowshares. Excavation of Pit 2 showed it to be a pit with straight edges, and with a bottom that had been scorched by fire. Animal bones and pottery fragments were found in the lower part of the pit fill. Among them, the most interesting is the fragment of the crescent top of a dome covered with blue glaze, apparently related to the earlier top of the Zhoshy Khan mausoleum, which was eventually replaced by a lower quality analogue.

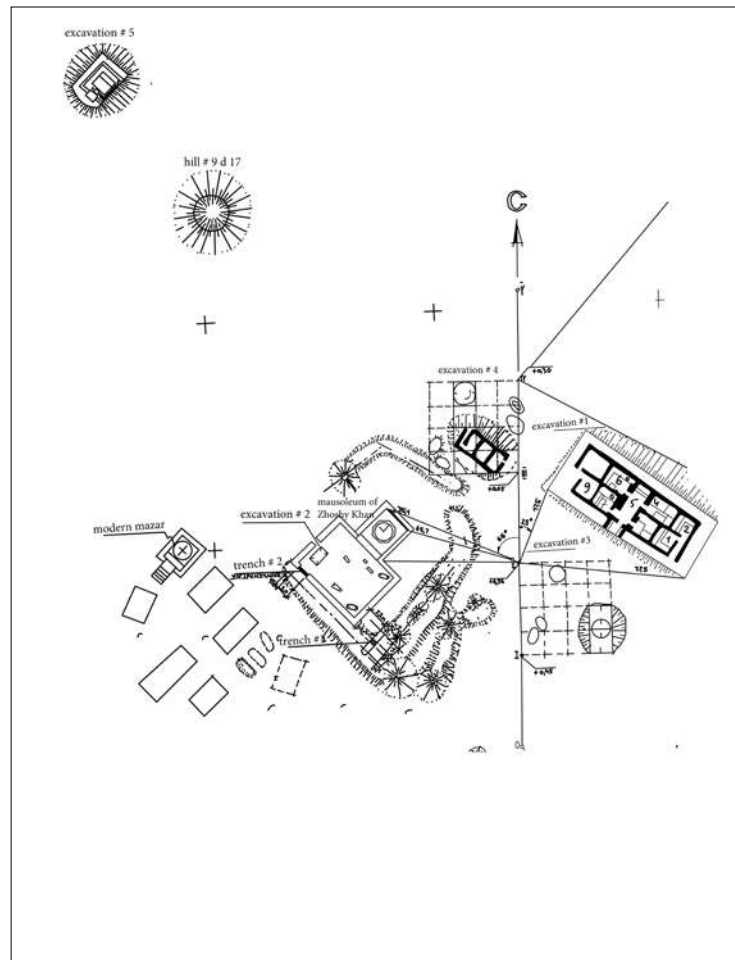
Conclusions are important for the restoration of the mausoleum, and determination of its time of construction based on architectural research was done by the author of the project for the restoration of the Zhoshy Khan mausoleum, E. Kh. Khorosh. As a result, an important conclusion for the study of the Zhoshy Khan mausoleum was made. This allows us to say that the mausoleum was originally lower in height, about 0.7 m, and had only one dome. Later, the walls and portal of the mausoleum were added, and a star drum with a second dome was erected over the original dome. During this second period of construction, the outer drum dome was tiled with blue glazed tiles. In addition, Khorosh verified that the mausoleum had been periodically repaired.

These findings explain many things, in particular, that the mausoleum was constantly looked after as a religious building. The original mausoleum was without its current exterior cover, which allows it to be attributed to the period of Uzbek Khan. We have written that the headquarters of the Jochids Orda-Bazar was located near the mausoleum, known in literary sources as the place where the “throne of Sain Khan,” that is, Batu Khan, was located.

In the 15th century, Abu'l-Khair Khan ascended and seized the “throne of Sain Khan” in Ulytau. The great-power policy pursued by Abu'l-Khair Khan demanded the appropriate expressions, which could be satisfied by the construction of a superstructure over the Zhoshy Khan mausoleum. As noted by V. P. Yudin, the Shaybanids were proud descendants of Tokhtamysh and Tuqa-Timur, and glorified themselves by the fact that they counted as their ancestors Genghis Khan, Horde Ejen, and Sain Khan. In “Tarikh-i Abu'l-Khair-khani,” as chroniclers have noted, the idea is put forth that Abu'l-Khair Khan became ascendant over the Timurids, taking the role as their patron while the Timurids became his vassals.

Having settled in Ulytau, Abu'l Khair Khan fought for possession of the Timurid territories. In this struggle with the Timurids, he needed exaltation of his famous ancestor to prove the legitimacy of his rule over the territories of the Timurids. This great-power policy is reflected in the sources of the Shaybanid dynasty and is aimed not only at supporting the Shaybanids' claims to the Timurids' possessions, but also the legitimacy of their accession to Mawarannahr.

In this situation, perhaps during the burial of one of the Jochids in the mausoleum, or during the ceremonial accession to the "throne of Sain Khan," a superstructure was erected over the existing mausoleum. According to the data on the restructuring and constant care of the Zhoshy Khan mausoleum, it can be said that the mausoleum, like the grave of the first ancestor of the khans of the Zhoshy *ulus*, played a great ideological role.



A plan of Zhoshy Khan's mausoleum



The mausoleum of Zhoshy Khan, a front view





The Horse Harnesses of the Tien Shan Nomads in the Mongol Epoch

Kunbolot Akmatov, *Specialist*

The Archaeological-Ethnographical Museum-Laboratory, Kyrgyz-Turkish Manas University

Horse harness items are some of the most common finds in the burial sites of the Mongol Epoch in Tien Shan. They have been discovered both in male and female graves. In one documented case, some horse harness items were found in the grave of a child. Usually, these items are situated at the feet of the deceased, and rarely near the head or other parts of the body.

Full sets of horse harnesses are rare finds in the burial sites. In most cases, a combination of a saddle, bits and stirrups or a buckle from belly-band have been discovered. Finds of bits and stirrups or a saddle and stirrups have been documented in several burial sites. It is interesting to note that all three known full sets of horse harnesses have been found in female burial sites, which include remains of a bridle with or without bits, saddle, stirrups and a buckle from a belly-band. Some bridles were lavishly decorated with metal plates. On the basis of the archaeological finds, taking into account the pictorial sources, it is possible to reconstruct the horse harness used by the Tien Shan population in the 13th to 14th centuries.

Four remains of bridles have been found in the burial sites of Tien Shan. The bridle from a female grave at the Seki I cemetery is more complete and richer example, which allows us to reconstruct it more easily and confidently. According to our reconstruction, it consists of a leather headstall comprising a noseband, a forehead band, two cheek bands, a crownpiece and a throatlatch, an iron bit, and two lead straps for the reins. The headstall is lavishly decorated with metal plaques and pendants. Large and round plaques are mounted at the juncture of the cheek

straps and the noseband and forehead band. E-shaped plaques are fitted onto the cheek bands and noseband. The same fittings are used to decorate the “heart-shaped” leather pendant in the center of the noseband. The forehead band is decorated with triangular plaques. A spherical bronze rattle-bladder is also attached to it. The bit is composed of a two-piece snaffle with a large round ring at either end, to which the reins are attached.

The saddle set from the burial sites is represented by wooden saddletrees, iron stirrups, girth buckles and metal pendants to the breast and crupper straps. The saddletrees are made up of two sideboards, a vertical pommel and an inclined cantle, which are tightly tied together with leather laces. They belong to the so called “Mongolian” type, which is known to date from the beginning of the II millennium AD. There are three subtypes of “Mongolian” saddles in Tien Shan. The main difference among them is in the shape of the pommels. Obviously, different subtypes of saddles were used for different purposes and/or by different age/sex groups. For example, saddles with trapeze-shaped pommels were presumably used mainly by women. The saddles were accompanied by a girth strap, a breast strap and a crupper strap. They are not preserved in the burial sites. But there are finds of girth buckles and pendants made of metal and bone, which are included in our reconstruction. The stirrups from the burial sites are made of iron and consist of two posts that form an arch over the foot and a tread on which the foot rests. There are three types: arch-shaped, trapeze-shaped and round. Judging by the number of finds, the arch-shaped stirrups were in widespread use.

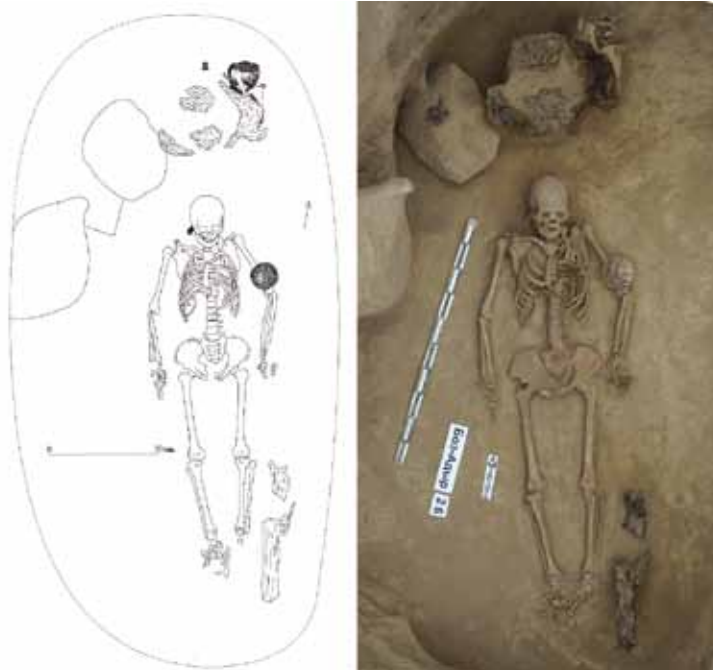


Fig. 1. A photo and a graphic illustration of burial 26, the cemetery Boz-Adyr, with remains of a horse harness (a)

On the whole, we may conclude that the grave items represent an important and almost complete source on the subject. On the basis of these materials, taking into

account the pictorial sources, we were able to reconstruct the most likely original look of the horse equipment of the Tien Shan population in the Mongol epoch.

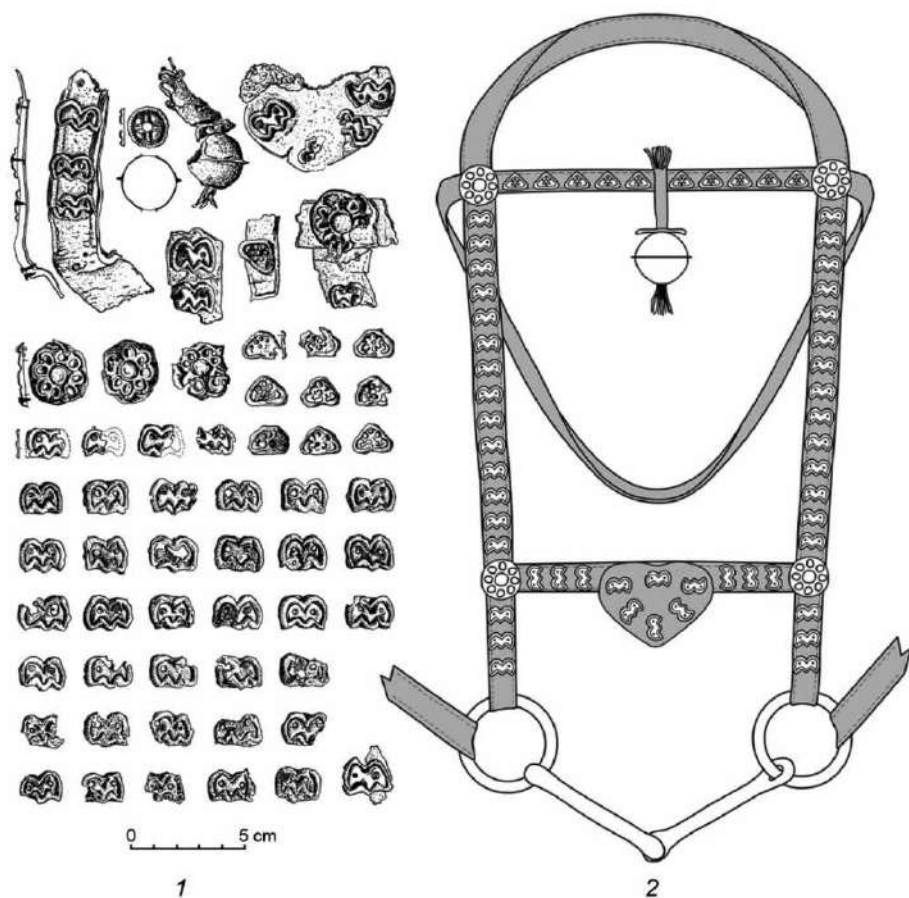


Fig. 2. The bridle remains from cemetery Seki (1) and its reconstruction (2)

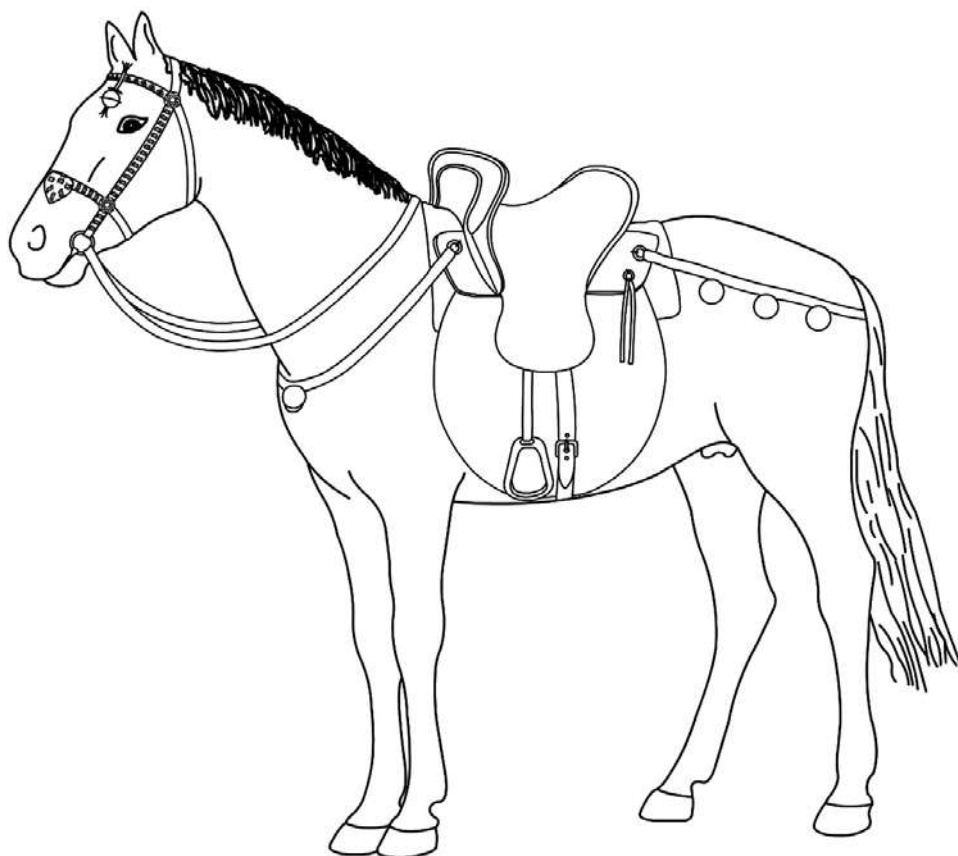


Fig. 3. Reconstruction of the horse harness of the Tien Shan nomads in the 13th to 14th centuries



Patan Durbar Protected Monument Zone: Post Earthquake Rehabilitation of Cultural Heritage

Suresh Suras SHRESTHA, *Head*

World Heritage Conservation Section, Department of Archaeology, Nepal

1. Introduction

Nepal has its own glorious history and is well-known around the world for its diversified cultural heritage. The Lichchhavi period is known as the Golden Age in the ancient history of Nepal. The special bronze art, wood art and building architecture developed in the medieval period, known as the Golden Era for Bronze art in Nepal, still exists today, especially in the Kathmandu Valley. The same art and architecture continued in the Shah and Rana periods as well, and is actually the original tradition or culture of Nepal. They comprise the unique cultural heritage not only of Nepal but also of this universe, fulfilling the criteria as per the Operational Guidelines for implementation of the World Heritage Convention, Kathmandu Valley was listed on UNESCO's World Heritage List in 1979, consisting of seven separate monument zones. Patan Durbar is one of these monument zones, in which the 25 most significant monuments are included.

The Nepal Earthquake 2015 badly affected 14 districts with huge physical destruction as well as human casualties, and impacted 35 districts in total (DoA, 2015). The earthquake damaged several significant cultural heritages of Nepal. Many cultural and historically significant monuments in Kathmandu Valley including seven protected monument zones were severely damaged and collapsed. Some 170 monuments were affected by this earthquake: 33 monuments completely collapsed and 137 monuments were partially damaged and/or partially collapsed within the Kathmandu Valley World Heritage Property (DoA/GoN, 2019). Among them, seven monuments completely collapsed, whereas 15 were partially damaged in Patan Durbar Protected Monument Zone, a component of Kathmandu Valley World Heritage Property (DoA/GoN, 2015; KVPT, 2017).

The Department of Archaeology/Government of Nepal, however, started the renovation and rehabilitation of damaged monuments, mostly through Kathmandu Valley Preservation Trust (KVPT), which has been working on the renovation and rehabilitation of those damaged monuments with permission from and in coordination with the Government of Nepal/Department of Archaeology (DoA). Most of the monuments within Patan Durbar Protected Monument Zone have now been rehabilitated.

2. Rehabilitation of Earthquake Damaged Monuments in Patan Durbar PMZ

It has been the practice worldwide that human beings should be the first priority for rescue in any kind of disaster situation, and only then should other things would come (SHRESTHA, 2009). Accordingly, there were several rescue teams from different agencies either from the Government of Nepal or the non-governmental agencies an hour immediately after the earthquake

(SHRESTHA, 2016). However, it was a devastating situation and no one could think about heritage, the creation of human kind, which always comes after human beings. Nevertheless, the Department of Archaeology inspected the site as much as possible to at least find and identify collapsed or damaged monuments immediately after the earthquake.

In the beginning, from right after the earthquake, whenever a staff member got in contact with the DoA, they were sent to sites to conduct a preliminary assessment on an ad hoc basis, and from the second day after the earthquake, most of the staff were in contact and this task could be done systematically, and they did whatever they could do in that situation (SHRESTHA, 2017).

Then after a week, with the preliminary assessments having been done, the Department deployed a team consisting of an archaeological officer, an engineer/architect and a photographer as *EMERGENCY HERITAGE RESCUE TEAM* to the various sites. The team urgently worked through the preliminary data and undertook the emergency rescue of art objects, determined the vulnerability of structures, and such necessary activities right at the sites. The rescue team worked jointly with the Nepal Army, Armed Forces Police and Nepal Police as well. All the teams were very closely coordinated by the Department of Archaeology regarding all post-earthquake activities for cultural heritage during this time (SHRESTHA, 2017). The main objective of this joint team was to salvage the art objects and other elements scattered around the collapsed and damaged structures at the sites; therefore, the team salvaged all the elements and stored them in a proper place where possible with onsite documentation — photographs, listing or preparing the name and number of objects salvaged, storage place, custodian and other required data as used in the Nepalese MUCHULKA (a kind of traditional legal documentation system for preparing to hand over or store anything). Most of the sites were salvaged by the rescue team but at some sites, especially in Patan and later in Sankhu, the local communities, with Department of Archaeology representatives, salvaged in this way as they were very much aware of the need to safeguard the heritage. They also stored all elements/objects in the proper place as guided by the representatives from the Department of Archaeology. Kathmandu Valley Preservation Trust and Patan Museum made their best efforts in this as well (DoA/GoN, 2016).

The Department of Archaeology also immediately formulated the NATIONAL EXPERT TEAM, which consisted mostly of structural engineers, architects, archaeologists, earthquake engineers, legal experts and other required experts. This expert team visited sites as and when necessary, making a detail assessment of the whole site (DoA/GoN,

016a). The expert team was also involved in providing proper instructions for the stabilization of vulnerable and remaining structures for their rehabilitation or conservation, and renovation after proper planning would be came out (SHRESTHA, 2016 & 2017).

During this time, the Department of Archaeology invited ICCROM to assist Nepal through their experts in salvage and proper scientific documentation. The result was the Joint Mission Team consisting of experts from ICCROM, ICOMOS, ICOM, and the Smithsonian Institution. The Mission worked for a week on evacuation, salvage and emergency documentation, and was the first formal mission for heritage rescue after a disaster in Nepal that included related staff from the Department, through which an opportunity was provided to build the capacity of local experts in such a situation (DoA, 2015; SHRESTHA, 2016). The Joint Mission Team from ICCROM played a training-cum-working role with a team of the Department that included site engineers, architects, traditional carpenters who carried out shoring/supporting work, masons, and some contractors as well. Therefore, it was also an opportunity for national experts and staff of the Department to engage in capacity building (DoA/GoN, 2017).

In the case of Patan Durbar Protected Monument Zone, KVPT, as a leading non-governmental organization, with permission from the Government of Nepal/DoA, actively led the various efforts for salvage, documentation and storage of the salvaged artifacts and all kinds of materials during that time; this was much useful later on during the renovation and rehabilitation of monuments.

KVPT took the initiative to conduct for some research and detail study on the damaged and collapsed monuments, the elements or components of the monuments, and the stability of the land where the monuments were constructed, and re-assembled the monuments which were salvaged. It has also been taking the lead in the conservation and rehabilitation of the cultural heritage of Patan Durbar Protected Monument Zone as well.

The coordination among almost all stakeholders in Patan Durbar Protected Monument Zone was very good, which resulted in an extremely smooth post-earthquake rehabilitation process. At the very beginning of the post-earthquake salvage and storage of all elements from the site, the local people were very much aware of and interested in assisting with the salvage efforts, and helping to provide secure storage in coordination with the DoA and other local authorities/institutions (DoA/GoN, 2015a).

The major authorities responsible for Patan Durbar PMZ were the DoA, Kathmandu Valley Preservation Trust (KVPT), Lalitpur Metropolitan City, Metropolitan City Police, various local clubs and social organizations, Mangal Tole Sudhar Samiti, Hakha Tole Sudhar Samiti, and local residents. Almost all stakeholders also accepted the leadership of KVPT and KVPT followed the guidelines and instructions of the DoA; this was the major positive part of the process that kept the site under control and enabled further progress in a managed way. Therefore,

each and every activity in Patan Durbar Square Protected Monument Zone is still going smoothly, even the implementation activities of conservation, renovation and rehabilitation in the post-earthquake situation.

The DoA, as the sole authority of the government regarding cultural heritage conservation and management, must grant permission or approval for any conservation, renovation or rehabilitation of cultural heritage; therefore, KVPT as a heritage partner that has been collaboratively working for more than a decade in the Patan Durbar, applied for permission to rehabilitate those monuments which were badly damaged and had collapsed due to Earthquake 2015 (DoA/GoN, 2016). The DoA/ Government of Nepal granted permission to KVPT to renovate the monuments in close coordination among the DoA, Lalitpur Metropolitan City (LMC), local communities, and all stakeholders as necessary.

In this context, the previously formulated steering committee for the conservation of Patan Durbar has been working continuously in this post-earthquake conservation and renovation project of the monuments within Patan Durbar PMZ by KVPT. The committee consists of representatives from the District Administration Office (CDO office), LMC, KVPT, Kathmandu Valley Heritage Trust (KVHT – a local partner of KVPT), the Metropolitan Police – Mangal Bazar, Chair of Ward / LMC (2 Wadadhyaksha), Guthi Corporation and head of the Monument Preservation and Durbar Maintenance Office, Patan. The committee is chaired by the Director General of the DoA (DoA/GoN, 2015- 2018). It is mandatory for KVPT to coordinate with the National Reconstruction Authority and Social Welfare Council, as an International Non-governmental Organization under its governing rules and regulations in Nepal.

As per the permission granted to KVPT, it has been working on the site in a very balanced way, coordinating with related authorities, local communities, and stakeholders as well. Therefore, the rehabilitation works are almost in the final stages; however almost all of the monuments have been renovated/rehabilitated completely. The permission/approval was granted for the following monuments in order to carry out appropriate conservation and rehabilitation activity after the damage caused by Earthquake 2015:

1. Sundari Chowk – East Lounge
2. Mulchowk including Taleju Temples
3. Mani Mandap (two Manadapas)
4. Yog Narendra Malla Stone Pillar Statue (in front of Patan Durbar)
5. Stone Pillar in front of Bhimsen Temple
6. Krishna Mandir
7. Bishweshwor Temple
8. Char Narayan Temple
9. Hari Shankar Temple

The conservation and rehabilitation of Sundari Chowk, Mulchowk including two temples of Taleju, Mani Mandap (two Mandapas), Yog Narendra Malla Stone Pillar Statue in front of Patan Durbar, Stone Pillar in front of Bhimsen Temple, Krishna Mandir, Char Narayan Temple, Hari Shankar Temple and Bishweshwor Temple have already been completed (DoA/GoN, 2018; 2019; KVPT, 2017). The conservation and rehabilitation of Kumbheshwor Temple, which will be completed soon, is being carried out by the DoA, and the rehabilitation of Bhimsen Temple is being carried out by the local community in support of LMC with the technical support of KVPT (DoA/GoN, 2017, 2019).

The renovation and rehabilitation of almost all of the monuments for which permission has been granted to KVPT have been completed; however, there are still a few monuments to be completed. Hopefully they will also be completed very soon, even in this worldwide COVID-19 pandemic and its widespread negative impact.

3. Conclusion

Earthquake 2015 damaged the most significant monuments of Nepal and more damage occurred in Patan Protected Monument Zone. However, the dedication, excellent management and good coordination of all those involved resulted in positive progress in the Patan Durbar area. The LMC could not contribute financially towards the rehabilitation of these monuments; however, due to its positive and coordinative attitude towards heritage conservation and management, KVPT has been successfully making progress in all these activities, while coordinating with the national authorities, local communities and international agencies as well.

The progress made in the Patan Durbar Protected Monument Zone regarding post-earthquake conservation, renovation and rehabilitation indicates that good and adequate coordination among the authorities, local communities and stakeholders, as well as excellent management, can result in successful completion of the rehabilitation of all damaged and affected cultural heritage in the future. This is a good example of the participation of the community and coordination among all stakeholders for the rehabilitation of cultural heritage in Nepal.

References:

- DoA/GoN (2015). *Preliminary Report of Monuments Affected by Earthquake April 25, 2015*. Kathmandu: DoA/GoN
- DoA/GoN (2015a). *Preliminary Assessment of Monuments Affected by Earthquake 2015 in Patan*. Kathmandu: DoA/GoN (Unpublished Reports)
- DoA/GoN (2016). *State of Conservation: Kathmandu Valley World Heritage Property*. DoA/GoN (Unpublished Reports).
- DoA/GoN (2016a). *Assessment of Monuments Affected by Earthquake 2015 Kathmandu Valley World Heritage Property*. Kathmandu: DoA/GoN (Unpublished Reports)
- DoA/GoN. (2017). *2072 Salko bhukampabata kshati bbayeka Lalitpur jillaka sampadabaru* (The Monuments of Lalitpur District Damaged by Earthquake 2015). Kathmandu: DoA/GoN.
- DoA/GoN (2018). *State of Conservation: Kathmandu Valley World Heritage Property*. DoA/GoN (Unpublished Reports).
- DoA/GoN (2019). *State of Conservation: Kathmandu Valley World Heritage Property*. DoA/GoN (Unpublished Reports).
- DoA/GoN (2015-2018). Disseminated Information. Kathmandu: DoA/GoN (Unpublished)
- KVPT (2017). *Earthquake Response Campaign Overview of Projects*. Kathmandu: Kathmandu Valley Preservation Trust.
- SHRESTHA, S. S. (2009). "If Hundreds of People Work for Rescuing People, Only One Person Can Do for Heritage Rescue". In *Research, Analysis and Preservation of Archaeological Sites and Remains*. Nara: ACCU Nara, Japan.
- SHRESTHA, S.S. (2016). "Post-Earthquake Conservation, Reconstruction and Rehabilitation in Nepal: Current Status". In *The International Correspondent Regular Report No. 17*. September 2016; Nara: Cultural Heritage Protection Cooperation Office, Asia-Pacific Cultural Center for UNESCO (ACCU) Nara, Japan.
- SHRESTHA, S.S. (2017). "Post-Earthquake Response to Cultural Heritage: Tradition of Cyclical Renewal". In *The Cultural Heritage of Nepal, before, during and after the 2015 Earthquakes; Current and Future Challenges*. Kathmandu: Oriental Cultural Heritage Sites Protection Alliance (OCHSPA).

Some photographs of the monuments which have been rehabilitated and some which are continuing to undergo rehabilitation work



1-1 Sundari Chowk, collapsed by the earthquake



1-2 Char Narayan Temple, collapsed by the earthquake



1-3 Harishankar Temple (behind the stone pillar), collapsed by the earthquake



1-4 Krishna Mandir, collapsed by the earthquake



1-5 Manimandapa, collapsed by the earthquake



1-6 Taleju Temple, collapsed by the earthquake



1-7 Vishweshwor Vishwanath, collapsed by the earthquake



1-8 Yognarendra Statue, collapsed by the earthquake



2-1 Sundari Chowk-East after rehabilitation



2-1-1 Sundari Chowk-East after rehabilitation



2-2 Char Narayan after rehabilitation



2-3 Harishankar Temple after rehabilitation



2-4 Krishna Mandir after rehabilitation



2-5 Maniwandapa after rehabilitation



2-6 Taleju Temple after rehabilitation



2-7 Bishweshwor Temple after rehabilitation



2-8 Yognarendra Malla Pillar after rehabilitation



2-9 Bhimsen Temple Pillar after rehabilitation



2-9-1 Yognarendra Temple Pillar after rehabilitation



2-10 Kumbheshwar Temple, work on going



2-11 Radha Krishna (Octagonal) Temple, work on going

Papua New Guinea



Motupore at the Crossroads: A Study in Increasing Value & Diminishing Care

Jason Kariwiga, *Teaching Fellow*
University of Papua New Guinea

The island of Motupore, located in the Central Province of the Independent State of Papua New Guinea (PNG), is an excellent case study of what can be done to both manage and protect a cultural and historically significant site. In the decades since its acquisition by the University of Papua New Guinea (UPNG), significant strides have been made to ensure the island's management plans, infrastructure and legacy are safeguarded. On the other hand, Motupore serves as a reminder to all stakeholders that the practice of cultural heritage management is a thoroughly fluid one, one that must respond to both internal obstacles and external pressures, and which requires constant monitoring and constructive reinforcement.

Motu = island; pore = gravel or sand bank (in the indigenous Motu language)

Motupore is a small waterless island located 15 km south-east of the capital city of Port Moresby and situated in the picturesque Bootless Bay (see Fig. 1). The island is dominated by a single steep ridge and measures c. 800

m long, 61 m high and around 275 m at its widest point and is separated by 600 m of shallow water from the mainland. Vegetation on the island consists largely of grassland—*Themeda triandra*, formerly *T. australis*—and *Eucalyptus* with mangroves lining the shores. The northern end of the island is a cusped sandspit (~1.4 ha) stabilised by grassland (Allen 1978) and the only flat area; fronting this is a tidal sandspit extending northward with the shore protected by a seawall (see Fig. 2). The climate of the whole Bootless Bay/Port Moresby area is dominated by two opposing wind systems—south east trade winds bringing dry and cool conditions to the island blow from April until December and in between, north west monsoons dominate, delivering warmer and wetter weather; finally, because the Port Moresby area lies within a rain shadow, precipitation is among the lowest in the country (1000-1500 mm per annum) (MacAlpine et al. 1983). Motupore was purchased by UPNG in 1970 as an archaeology field station and laboratory as well as for use by other disciplines. Today, Motupore is still yielding up its past secrets, as well as being a centre for marine

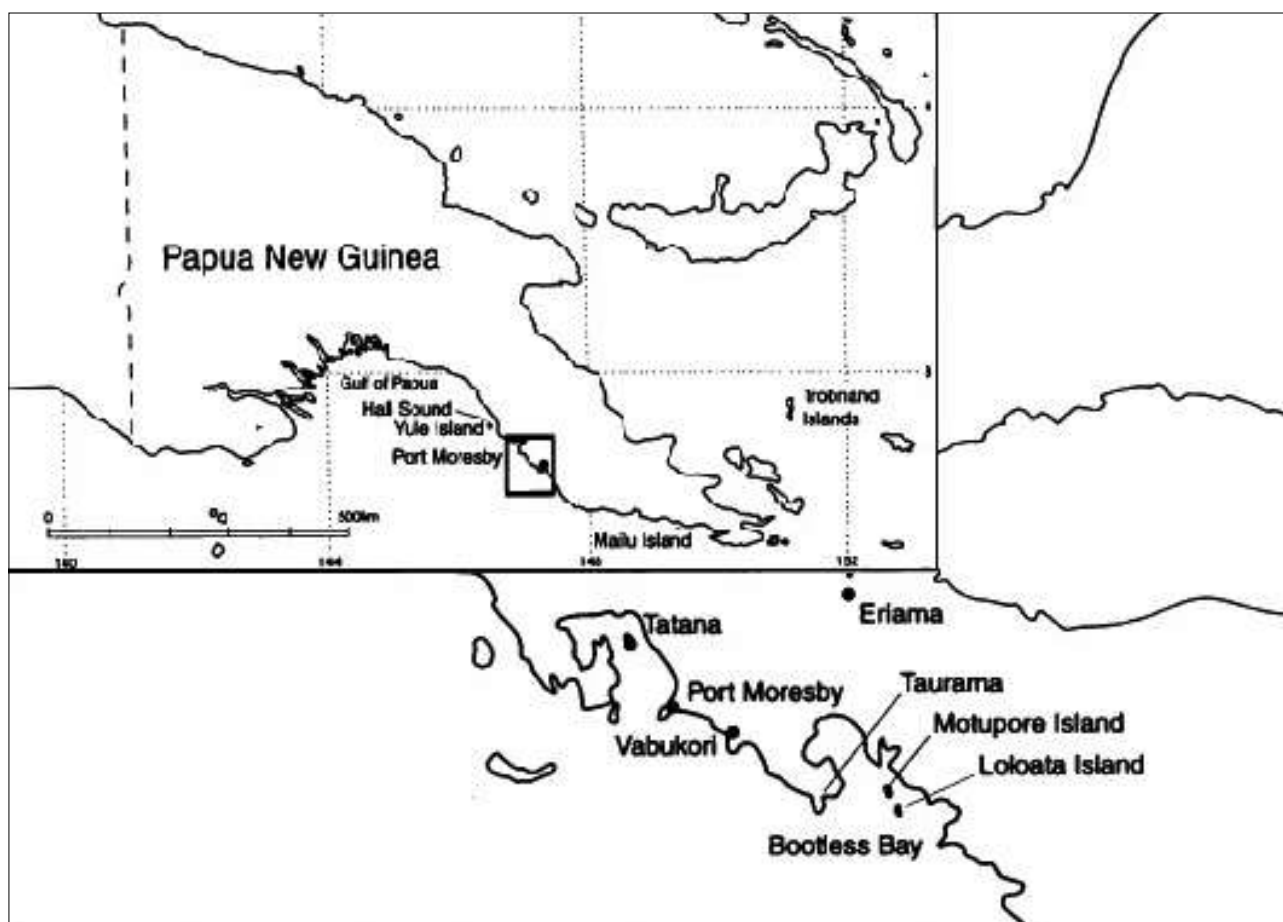


Figure 1. The map showing the location of some sites mentioned in the text. Adapted from Allen et al 1997:13

biology and environmental science research. Programmes at Motupore are currently run by the Motupore Island Research Centre (MIRC).

They came, they made pots, they traded, they disappeared.

Archaeological investigations at Motupore have been sporadic but ongoing since the late 1960s to as recent as 2018. Cumulative evidence suggests that Motupore was first occupied around 1200 AD by a group of people from the east who settled the island and created a massive pottery manufacturing centre, focused on long-distance trade and the production of large quantities of shell bead ornaments (Allen et al 1997). Archaeological deposits are massive and include (but are not limited to) flaked stone artefacts, faunal remains, shell beads, abundant human skeletal remains and the ever-present and stylistically unique pottery (Allen 2017). The extent of the Motupore trade network is astounding given that sites in the non-pottery-producing Papuan Gulf, approximately 300-400 km to the west, report having pottery stylistically akin to those made at Motupore (Frankel et al 1994:28, Rhoads 1994:67). Occupation at Motupore lasted 500 years until around 1700 AD, when the island was suddenly abandoned (Allen 1977). The history of Motupore is also closely intertwined with the oral histories of the indigenous Motu people. The Western Motu, who today occupy the site of the capital city and the surrounding areas to the west of Bootless Bay, trace their ancestry to Motupore, which they say was settled and then abandoned after continuous warfare between its inhabitants and those living on the neighbouring island of Loloata, the latter are regarded as ancestors of the Eastern Motu who currently occupy Bootless Bay and nearby areas (Oram 1969). In fact, Motupore once had another name—Motu Hanua—hanua meaning ‘village’.

A country needs a constitution.

There is a small permanent structure on the northern end of Motupore facing the mainland that sits snugly and close by a small grove of mangroves adjacent to the water. It is quite modest and solitary, and is built away from the main residential dwellings on the island. Perhaps only someone intimate with the political history of PNG would know the significance of this unassuming dwelling, for it was in this house that a group of young Papua New

Guineans spent time writing and ironing out an important text—the constitution of a soon-to-be independent nation. The Constitutional Planning Committee was set up in June 1972, charged with developing a ‘home-grown’ constitution (Woolford 1976:138), one that would eventually be formally adopted one month before independence in September 1975. Today, ‘Constitution House’ as it is called, is cared for by the MIRC as a historical building of national significance.

There’s something in the water.

Today, Motupore is probably most known to the PNG public as a marine conservation area and a marine biology research centre. The island is within the Bootless Bay Marine Conservation Initiative/Bootless Bay Managed Marine Area, managed by the country’s top environment conservation body, CEPA (Conservation and Environment Protection Authority), and funded and run jointly by the Japan International Cooperation Agency (JICA) (see Kama 2016a, also ‘Cepa, UPNG to protect marine life’, 2017). According to CEPA:

Bootless Bay displays a wide range of major marine habitats, including mangrove forests, seagrass beds, sandy beaches, rocky shores and reefs, intertidal and sublittoral carbonate and mud bottoms, open water, patch and fringing coral reefs. The Bay also has a number of wrecks scattered on its bed, each with their own distinctive biological communities.

(Conservation and Environment Protection Authority, n.d.)

Indeed, Bootless Bay is known for its fauna and flora diversity (e.g. Baine & Harasti, 2007). For example, fish species calling the bay home number 485, representing a total of 72 different families and with a further estimate of between 515 and 558 from the same study (Drew et al 2012).

So, what’s working so far?

UPNG through its MIRC has effectively run and managed heritage on Motupore for the last forty years. This is despite the numerous issues and challenges facing the institution (see below). Facilities on the island consist of two large multi-room accommodation buildings, a



Figure 2. Motupore at low tide, as seen from the sandspit, facing south towards the northern end of the island, 2016. Location of Constitution House is circled. Photo: Nick Sutton <<http://archaeologyactually.blogspot.com/2016/07/motupore-island-excavations-2016.html>>

conference room and a kitchen with full amenities, the director's on-site residence, a recently completed field laboratory space, along with a water tank and pump, a home for on-site caretakers and a power generator. At the insistence of MIRC and its partners, Bootless Bay is now earmarked as a protected area. The MIRC has also created effective partnerships with both local and international groups, and government and non-governmental organisations. For example, MIRC is at the forefront of teaching and organising local participation towards rehabilitating, replanting and managing mangrove forests along Bootless Bay on the adjacent mainland (see Mangun 2019). Motupore is still used by undergraduate and post-graduate students from UPNG and researchers as a conference, training and research centre.

Challenges? Yes!

The challenges that face Motupore are both unique and similar to many other sites of cultural significance around the world. Apart from the new field laboratory, the rest of the facilities date back to the transfer of the island to UPNG, and although very well maintained, have fallen victim to the ravages of time that even Constitution House itself stands in a state of disrepair. Limited funding has always been an issue; the Acting (now) Director of MIRC John Genolagani has said in the past:

[Motupore] is the first and the only surviving marine research icon of PNG. Since the 1970s, hundreds of publications were produced based on research at MIRC. Unfortunately, due to usual budget cuts, the research station has depreciated over the last 20 years. The university is trying its best to bring it up again. Right now, we are only doing core and important maintenance (sic) works on the facilities, including accommodation, staff residences both on Tahira and Motupore Island. In terms of studies, the normal classes for undergraduate and post-graduate are going on but when these (sic) research requires facilities like laboratories or diving or IT services like internet and telecommunication, are (sic) no longer available here. [Kama 2016b].

The most recent concern that has an indirect effect on Motupore is tourism. The neighbouring island of Loloata, less than 1 km to the southeast (of Motupore), has an interesting history. Compared to Motupore, archaeological research on Loloata has been minimal. This suggests that Loloata was occupied twice, the last time 300 years ago, which is contemporaneous with Motupore; pottery recovered from Loloata is also similar in design to other pieces found on Motupore (Sullivan & Sassoon 1987). Taken from landowners around the time of European contact in 1895, Loloata has been privately-owned, and in 1977 a resort was opened on the island. In September 2019, a new PGK130 million diving resort was opened. The issue of ownership came to a head in August 2020; on 14 August, traditional landowners from the adjacent mainland village of Tubuseria protested against the Loloata developer, alleging the destruction of traditional burial sites, physical and verbal harassment by employees of the resort when fishing in nearby waters, and missed business opportunities along with overall historical claims

to the island ('Nasfund will look into villagers concerns', 2020, Emtv Online 2020). These issues have been taken on board by the local governor and the resort owners so it remains to be seen what outcomes will eventuate. Whilst the example of Loloata does not directly impact Motupore, there are a few takeaways:

- Motupore was recognised as culturally significant early on, which was acted upon, in contrast to Loloata;
- There needs to be a compromise between local fishermen and conservation-enforcing authorities in Bootless Bay;
- The local Motuan landowners must be involved in the management of Motupore; and
- The tourism industry centred in Bootless Bay needs to be aware of the significance of the surrounding lands and waters, so they adhere strictly to conservation rules.

Motupore at the crossroads: the future

So where to now for Motupore? It's certain that Motupore must be protected, but where will that urge for cultural protection come from, given that Motupore is relatively unknown outside of academic circles, and not in the wider public imagination, where economic development sometimes supersedes heritage protection? As Muke (1998:66-67) points out, "many Papua New Guineans also have the mentality that traditional and archaeological sites are obstacles to development issues and therefore planners and policy makers often have the misconception that they should not waste money on an uneconomic enterprise". In addition, adequate funding, properly updated management plans and continued institutional partnerships are vital to keep MIRC afloat. What's certain is that UPNG's ownership of Motupore into the future is essential; as Professor Steven Winduo (of UPNG) affirms, "As long as it remains with UPNG, the archaeological, anthropological, historical, political, scientific, and educational platform it provides to the young people of Papua New Guinea will remain intact. It is a unique space for learning and for our people" (Winduo 2016).

Acknowledgements:

The author was part of excavations carried out at Motupore from 2016-2018, attempting to redate the site, under the guidance of Dr Matthew G. Leavesley (UPNG) and a master's candidate Ms Teppy Beni. Thank you to the UPNG Archaeology Lab Group.

References

- Allen, J. 1977. Fishing for wallabies: Trade as a mechanism for social interaction, integration and elaboration on the central Papuan coast. In J. Friedman and M. Rowlands (eds), *The Evolution of Social Systems*, pp. 419-455. Duckworth, London.
- Allen, J. 1978. The physical and cultural setting of Motupore, Central Province, Papua New Guinea. *Bulletin of the Indo-Pacific Prehistory Association* 1:47-55.
- Allen, J. 1985. Comments on complexity and trade: a view from Melanesia. *Archaeology in Oceania* 20(2):49-57.
- Allen, J. 2017. *Excavations on Motupore Island Central District, Papua New Guinea*. University of Otago,

- Working Papers in Anthropology, Number 4. Department of Anthropology and Archaeology, University of Otago, Otago.
- Allen, J., Holdaway, S. & Fullagar, R. 1997. Identifying specialisation, production and exchange in the archaeological record; the case of shell bead manufacture on Motupore Island, Papua. *Archaeology in Oceania* 32:13-38.
- Baine, M. & Harasti, D. 2007. *The marine life of Bootless Bay Papua, New Guinea*. Motupore Island Research Centre, Port Moresby
- Cepa, UPNG to protect marine life in Bootless Bay. 2017, July 27. *The National*. Retrieved from <<https://www.thenational.com.pg/cepa-upng-protect-marine-life-bootless-bay/>>
- Conservation and Environment Protection Authority. n.d. *Bootless Bay Managed Marine Area*. Retrieved from <<https://oceanconference.un.org/commitments/?id=21432>>
- Emtv Online. 2020, August 14. Loloata Island under Dispute. *Emtv Online*. Retrieved from <<https://emtv.com.pg/loloata-landowners-present-petition-to-government/>>
- Drew, J., & Buxman, C., Holmes, D., Mandecki, J., Mungkaje, A., Richardson, A., & Westneat, M. 2012. Biodiversity Inventories and Conservation of the Marine Fishes of Bootless Bay, Papua New Guinea. *BMC Ecology*, 12(1):1–15.
- Frankel, D., Thompson, K., & Vanderwal, R. 1994. Kerema and Kinomere. In D. Frankel and J. Rhoads (eds) *Archaeology of a Coastal Exchange System: Sites and Ceramics of the Papuan Gulf*. Research Papers in Archaeology and Natural History, No. 25. pp. 1-49. Canberra: Division of Archaeology and Natural History, Research School of Pacific and Asian Studies, The Australian National University.
- Kama, L. 2016a, August 11. Marine protected area to be established. *The National*. Retrieved from <<https://www.thenational.com.pg/marine-protected-area-to-be-established-2/>>
- Kama, L. 2016b, August 12. Motupore island loses value. *The National*. Retrieved from <<https://www.thenational.com.pg/motupore-island-loses-value/>>
- Mangun, W. 2019, December 27. Awarded for saving mangroves. *The National*. Retrieved from <<https://www.thenational.com.pg/awarded-for-saving-mangroves/>>
- McAlpine, J.R., Keig, G. & Falls, R. 1983. *Climate of Papua New Guinea*. Canberra, Commonwealth Scientific and Industrial Research Organisation and Australian National University Press.
- Muke, J. 1998 The Death (and Re-birth) of Kuk: A Progress Report on the Recent Development at the Kuk Prehistoric Site, Western Highlands Province. In *Kuk Heritage: Issues and Debates in Papua New Guinea*. A. Strathern and P. Stewart, eds. pp. 64–86. Port Moresby, Townsville and Pittsburgh: The National Museum of Papua New Guinea, the James Cook University Centre for Pacific Studies and the Department of Anthropology, University of Pittsburgh.
- Nasfund will look into villagers' concerns. 2020, August 15. *Kalang FM*. Retrieved from <<https://kalangfm.com/news/nasfund-will-look-into-villagers-concerns-912>>
- Oram, N.D. 1969. Taurama. Oral sources for a study of recent Motu prehistory. *Journal of the Papua New Guinea Society* 2(2):79-91.
- Rhoads, J.W. 1994 The Popo site. In D. Frankel and J. Rhoads (eds) *Archaeology of a Coastal Exchange System: Sites and Ceramics of the Papuan Gulf*. Research Papers in Archaeology and Natural History, No. 25. pp. 53-69. Canberra: Division of Archaeology and Natural History, Research School of Pacific and Asian Studies, The Australian National University.
- Sullivan, M.E. & Sassoon, M. 1987. Prehistoric occupation of Loloata Island Papua New Guinea. *Australian Archaeology* 24:1-9.
- Winduo, S. 2016, November 25. Necklace of green shells. *The National*. Retrieved from <<https://www.thenational.com.pg/necklace-green-shells/>>
- Woolford, D. 1976. *Papua New Guinea: Initiation and Independence*. University of Queensland Press, Brisbane.



History and Conservation of Theru Moodi Madam in Jaffna District, Northern Province, Sri Lanka

Getsy Thavarajah, *Development Officer III*

Archaeological Museum, Regional Archaeological Office-North, Department of Archaeology, Ministry of National Heritage

Introduction

In Sri Lanka, *madams* have been constructed as houses or halls for pilgrims, traders, employees and travelers to take a rest. In common usage, this monument is called a *madam* in Tamil and *ambalama* in Sinhalese. But this particular monument was built across the street and with aisles on both sides of the road. The two aisles have provided space for people to rest safely when they travel from towns to villages with commercial goods. The terminology *THERU MOODI MADAM* in the Tamil language means the roofing system across the street that runs through the *madams* on either side of the street.

This heritage site is being protected as an archaeological protected monument under Antiquities Ordinance No.09 of 1940. This place is located 32 km from Jaffna city and 140 m along Thumpalai Road from Sivan Koviladi junction on Jaffna-Point Pedro Road on the right side. This heritage site is located in the Point Pedro Divisional Secretariat Division, Point Pedro J/401 Grama Sevaka Division. The location falls on latitude 15°N and longitude 30°E.



Fig. 1: Madam - Location

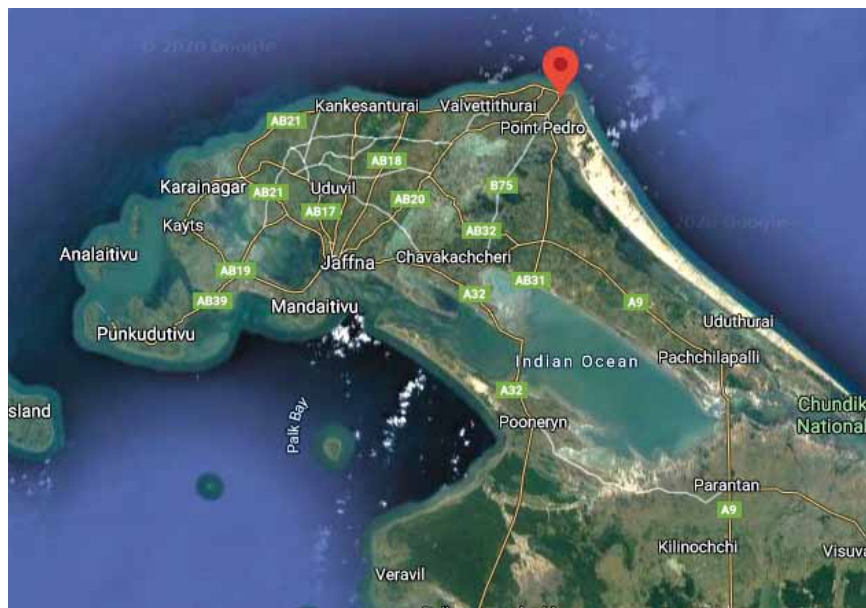


Fig. 2: Location



Fig. 3: Madam in 19th c. AD



Fig. 4: Madam in 1990-2019



Fig. 5: Madam in 2019—After being damaged



Fig. 6: Madam in 2020—After conservation

1.1 Ancient transportation and madams

In Northern Sri Lanka, people in earlier periods moved between their settlements and traded with the use of transportation systems which enhanced their lives. They used transportation via both land and sea. When they used land routes to travel to harbors and jetties from towns and villages they used a bullock cart as the main vehicle for long distance travel and to transport things.

When the passengers travelled along the land routes by bullock cart, they put their loads down and stayed at the *madam* during their travel for safety and peace of mind day and night. Therefore, these monuments were erected in Jaffna as major business centers, public gathering places in the areas nearby temples, and at the sites of drinking water centers on the journey. Though there are many examples of this type of structure found in other parts of Sri Lanka, this one does not resemble the others in terms of the style of architecture or its pattern. The only example in Jaffna of these roadside heritage monuments is the Theru Moodi Madam at Point Pedro with the unique feature of the Dravidian style of architecture. This *madam* is facilitated with a cattle rubbing stone (*aavuranckkkaal*), a well (*kinaru*), a stone water tub (*thanneer thoddy*), etc.

1.2 Origin of madams

When the road system was introduced by the Dutch rulers in Jaffna, these type of *madams* were also built for the purpose of transporting and selling goods like salt, arricanut, etc. It is said that the madam at Point Pedro was built by a Brahmin priest, namely Panchadchara Sarma, the father of the Brahmin Vaitheeswara gurus who lived there between 1898 and 1901.

1.3 Architectural features

The building was constructed by using well-polished limestone. Theru Moodi Madam is an open double-walled structure with a rear wall 35 feet long and 34 feet wide, allowing passengers to rest safely from the rain and harsh sun. The distance between the two walls of the main structure is 15 feet 8 inches. The back walls of the verandas on both sides are built of limestone and plastered, and the height from the existing ground level is 13 feet 10 inches.

1.4 Pillars

The pillars are made of engraved masonry reflecting Dravidian architecture on top of four limestone bases that at the ground level. Parts of the pillar can be divided into pillars, columns or capitals, architraves, friezes, or cornices. On one side of the *madam* there are a total of eight engraved masonry pillars—six of these are on the front side and two are at the back. On the opposite side the *madam* has the same structure. The names of people who supported the building of this *madam* and to prepare the pillars appear in Tamil script on 1.5 feet high engraved stones on the six pillars. Some of the inscriptions are obscure.

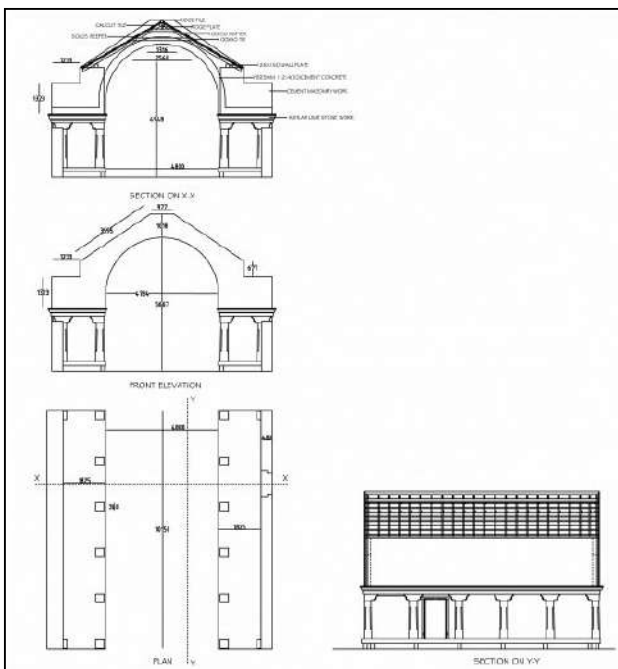


Fig. 7: The side elevation



Fig. 8: Pillars

2. The reason for conservation of Theru Moodi Madam

The ground level of the *madam* was naturally covered with sand originally. Due to the rise in the road level as a result of road renovation, the structure was damaged by heavy vehicles twice in 2019.

2.1 Funding the project

After the last accidental damage, an effort was made by Jaffna Archaeological Office to conserve the monument immediately. The Point Pedro Town Development Society and Point Pedro-Switzerland branch requested the Archaeological Department to conserve the Theru Moodi Madam immediately by allocating a financial contribution through the Divisional Secretariat. Accordingly, with the approval of the Director General of Archaeology, the guidance of conservation officers, and with the contribution of the Central Cultural Fund, the construction works started by restoring the roof and *madam* as it was before, to be handed over to the public.

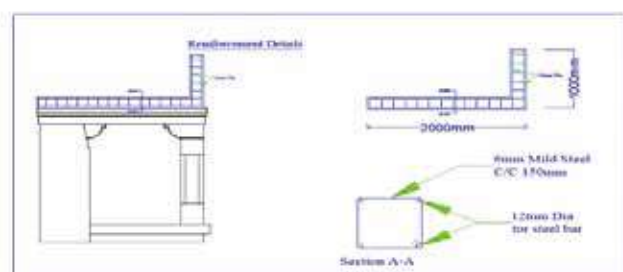


Fig. 9: The square shaped bended iron rod for the arch

2.2 Conservation works

Project Period: 10.09.2019 to 15.01.2020

Expenditure: LKR 1,103, 158.00

2.2.1 Method of restoration of the arch as it was before to bear the roof of Theru Moodi Madam

Conservation experts tested whether the arch of the *madam* could bear the roof and the ancient *madam* for a longer period and whether the *madam* was sturdy. As per their advice, on a bended iron rod, formwork (shuttering) was set up using wooden planks (Fig. 9). The concrete arch was prepared with a width of 9" by using a mixture of cement, sand, and crushed limestone (size 3/4") in the ratio of 1:2:4. The arch was erected similar to its original shape by placing engineering bricks on the concrete and painting it with lime. To bear the weight of the arch on four sides of the *madam*, additional concrete pillars were erected (Figs.10 &11).

2.2.2 Restructuring the roof to the traditional model

In 1990s, a roof was installed on both sides of the *madam*; a wall plate was fitted and four iron bars were fitted across the wall, and on the iron pillars a roof arch made with palmyra timber was fitted. The deteriorated and damaged roof structure was replaced by employing trained traditional carpenters found locally. Timber for the roof was fitted in 11 cubits and with the space of 45 cm. Because of insufficient quality palmyra batten (reeps), first-grade timber was fitted as it was. Old tiles were cleaned and additional tiles were also purchased for the balance. Ridge tiles were fixed by cement mortar. At the ends of both sides of the roof, wooden valance boards



Fig. 10 & Fig. 11: Arch conservation



Fig. 12 & Fig. 13: Restructure of the roof

were fixed for the safety of the wood. The wood was coated with preservative oil to increase the durability of the timber (Figs. 12 &13).

2.2.3 Restoration of deteriorated walls and pillars

Two side walls of the *madam*'s deteriorated parts were removed due to accidental damage to the wall made of limestone with cracks caused by the used of massive iron slabs, and roots of trees growing on the building surface and penetrating into the building. In order to bear the weight of the roof, two 6" long, 12 mm thick iron rods were placed inside the wall and plastered with a mixture of cement, lime and sand in the ratio of 1:2:10. The right

front porch of the *madam* (off Point Pedro Street) and the continuing walls connecting the shop and the Brahmin's house at the back were removed and rebuilt to preserve the uniqueness of the *madam*.

As peepal (*Ficus religiosa*) tree roots penetrated into the wall near the shop, part of the old wall measuring 65 cm in length and 40 cm in width was removed and rebuilt. The concrete pillar erected by the general public for the protection of the *madam* was removed and the area was restored to its original form (Figs.16 &17).



Figs. 14, 15, 16, &17: Wall conservation progress

2.2.4 Finishing the floor stones in the veranda of the *madam*

The ground of the *madam* was rendered with neatly sized limestone slabs, and the grooves between the stones were plastered with a fine mortar (ashlar). Plaster layers on the floor were found to be in a state of extinction due

to human activity and natural factors. The gaps for the stones were coated with the tested cement mixture of lime, termitarium soil, and red roof tile powder in equal amounts (Figs. 18 & 19).



Fig. 18 & Fig. 19: Pointing work before conservation

2.2.5 Restoration of the stone-framed doorway located in the back wall of the left side *madam*

People used to close the entrance with concrete blocks because there was no door. Those concrete blocks were removed and rebuilt with bricks to provide temporary protection during this conservation work. This temporary brick wall will be removed when it is re-fixed in the future.



Fig. 20: Before & After, door conservation work

2.2.6 Restoration of other unique building parts associated with the *madam*

Due to threats to heritage monuments, a lamp stand, a round stone water tub made from a separate stone for drinking water for the cattle, and a cow rubbing stone that had been erected near the *madam* for the use of Theru Moodi Madam, which have been handed over to the management of Point Pedro Sivan Temple for safekeeping, were brought back. The lamp stand and water tub (Fig. 21) were brought from the temple and re-fixed permanently.

2.2.7 Finishing activities

All walls were washed and old lime wash removed, while the interior and the exterior of the walls were coated with lime wash twice. With the permission of the Director General of the Department of Archaeology, a description board was prepared measuring 6 feet high and 3 feet long in three languages—Tamil, Sinhala and English—and placed near the *madam*. To reveal the antiquity of the *madam*, automatic glowing yellow light bulbs were fitted for night lighting in the *madam*. Electricity was temporarily obtained from a neighboring house. Efforts are underway to obtain a permanent power connection.



Fig. 21: The lamp stand and the water tub



Fig. 22: Night view

Conclusion

Even though the need for reconstruction of endangered heritage monuments in Northern Sri Lanka is high, it is not possible to rehabilitate them due to various reasons such as inadequate allocation of funds, disruptions in the reconstruction of heritage monuments in private places, non-co-operation of people, urbanization, and the widening of roads. We need to protect the residuary heritage of our region from past civil wars, natural disasters and human activities. It is noteworthy that the Point Pedro Theru Moodi Madam in Jaffna, which boasts of being the only unique *madam* in Sri Lanka, was renovated and handed over to the public on 15.01.2020.

References:

1. Sivalingarajah, S. "Jaffna Culture - Vanished and Hidden", *Transport* (pp.46-47). Colombo: Kumaran Book House, 2014.
2. Dr. Malini Dias, Sunil Bandara Korale, Kalpa Asanga, "The Archaeological Heritage of Jaffna Peninsula" (pp.154, 225), Department of Archaeology, 2016.
3. Sasitha, K. "Heritage Symbols of Northern Sri Lanka & their Preservation: A Study Base on Jaffna", *Life Style of Jaffna* (pp. 55-65) Jaffna, 2012.
4. Sivaruby, V. "Aavuranchi (Cow rubbing) Stones and Sumaithaangi (Load Bearing) Stones in Tamil Cultural Life", *Life Style of Jaffna* (pp. 60-72) Jaffna 2012, in Tamil.
5. Magazine, *The dal* (pp. 60-173) Archaeological Study Circle, University of Jaffna, 2016.
6. Kumutha. S, "Madam & Madam Architecture in Jaffna Culture," 2007.
7. B. Kabilan, Conservation Officer, *Therumoodimadam Conservation Report 2020*, Department of Archaeology, Jaffna.
8. "Documentation of Heritage Features: A Research Based on Jaffna District", Central Cultural Fund, Jaffna Project (Tamil), 2017.

Published by
Cultural Heritage Protection Cooperation Office,
Asia-Pacific Cultural Centre for UNESCO (ACCU)
757 Horen-cho, Nara 630-8113 Japan
Tel: +81-742-20-5001
Fax: +81-742-20-5701
E-mail: nara@accu.or.jp
URL: <http://www.nara.accu.or.jp>

© Cultural Heritage Protection Cooperation Office,
Asia-Pacific Cultural Centre for UNESCO (ACCU) 2020

公益財団法人 ユネスコ・アジア文化センター
文化遺産保護協力事務所

Cultural Heritage Protection Cooperation Office,
Asia-Pacific Cultural Centre for UNESCO (ACCU)