



Chapter 14

THE PRESERVATION AND MANAGEMENT OF MONUMENTS OF CHAMPA IN CENTRAL VIETNAM: THE EXAMPLE OF MỸ SƠN SANCTUARY, A WORLD CULTURAL HERITAGE SITE

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Mỹ Sơn is the largest and most important of Champa's religious architectural sites in Central Vietnam; its Hindu temple-towers, which have stood over nine centuries from the fourth or fifth through the thirteenth centuries CE, include approximately seventy structures. This chapter will address a range of issues including art history, preservation work and Mỹ Sơn's cultural landscape in of the framework of cultural resource management.

Mỹ Sơn Historical Site

Mỹ Sơn Sanctuary is located in Mỹ Sơn village, Duy Phú Commune, Duy Xuyên District, Quảng Nam Province, at N15°31' and E108°34'. The site, which lies is approximately 70km southwest of the city of Danang, and some 50km west of Hoi An Ancient Town, was rediscovered in 1885 by a group of French colonial soldiers. Ten years later, Camille Paris¹ cleared

1 Camille Paris (d. 1898), a French art collector, amateur explorer and archaeologist, was also the owner of a plantation in Phong Lê village, Hòa Vang District, Quảng Nam Province where he found a lot of Cham sculptures. Paris was originally involved in the planning and construction of a telegraph system along the coast of Annam (Central Vietnam today) during the 1880s (Southworth 2001, 47).

the site and between 1896 and 1899, Louis Finot² and Etienne Lunet de Lajonquière³ came to Mý Sơn to do research on the Cham inscriptions found there. In 1901–2, Henri Parmentier⁴ studied Cham art and in 1903–4, along with Charles Carpeaux⁵, he carried out archaeological excavations in Mý Sơn (Art Absolutement 2005, 28–33). These activities culminated in 1904 with Finot and Parmentier’s article published in the *Bulletin de l’École Française d’Extrême-Orient* (BEFEO) which describes their efforts to decipher Cham inscriptions and remnants of Cham art found in Mý Sơn (1904, 805–977).

Due to Mý Sơn’s significant historical and architectural value, it was listed as a World Cultural Heritage site by UNESCO in December 1999. The two criteria presented here provide justification for UNESCO’s decision to inscribe Mý Sơn with world heritage status:

- Criterion (ii): The My Son Sanctuary is an exceptional example of cultural interchange, with the introduction of the Hindu architecture of the Indian sub-continent into South-East Asia;
- Criterion (iii): The Champa Kingdom was an important phenomenon in the political and cultural history of South-East Asia, vividly illustrated by the ruins of My Son. (UNESCO 1999a)

The Mý Sơn complex contains a wide range of unique architectural styles and decorative motifs; it too benefited from a technological tradition of building in brick that attained perfection over many centuries of adaptation and improvement. Although the Cham did not build any large monuments resembling those of Angkor, Cambodia or the Hindu-Buddhist stone temples of Central Java (Indonesia), the architectural works of Mý Sơn reflect the subtle

2 Louis Finot (1864–1935) was a French paleographer and historian of l’École Française d’Extrême-Orient (EFEO) in Hanoi. His works on Champa include: *La religion des Chams d’après les monuments* (1901) and *Noté d’épigraphie indochinoise: Les inscriptions de Mi Son* (1904) (Goloubew 1935, 515–38).

3 Etienne Lunet de Lajonquière (1861–1933) was a French archaeologist in the EFEO who worked mainly on Khmer monuments in Cambodia during the first decades of the twentieth century. His works on Champa and Khmer arts include *Atlas archéologique de l’Indochine: Monuments du Champa et du Cambodge* (1901) and *Inventaire descriptif des monuments du Cambodge* (3 vols, 1902, 1907 and 1911) (Parmentier 1933, 1147–51).

4 Henri Parmentier (1870–1949) was a French architect, archaeologist and art historian with the EFEO. His publications on Champa include *Inventaire descriptif des monuments Chams de l’Annam* (2 vols, 1909 and 1918) and *Le Sculptures chames au Musée de Tourane* (1922) (Baptiste 2009, 14–25).

5 Charles Carpeaux (1870–1904) was a French archaeologist and photographer who worked at EFEO during 1901–4 (Baptiste 2009, 14–25).

Figure 14.1. The landscape of the Holy Mountain of Mahaparvata/Mỹ Sơn and the Holy River of Mahanadi/Thu Bon. © Tran Ky Phuong.



sense of beauty and exquisite talent of Cham artists over many generations. These artists skillfully combined perfect building techniques and refined artistry and they created magnificent and solemn beauty in their brick temple-towers at Mỹ Sơn.

The earliest inscription of Mỹ Sơn Sanctuary was set up by King Bhadravarman (Phạm Hồ Đạt in Vietnamese) during c. 380–413 CE (Đào 1957, 128) or Fan Hu-ta in Chinese historical records.⁶ The inscription

6 Higham (1989, 300) discusses the relation between King Bhadravarman's name first mentioned in the Mỹ Sơn Stele of Inscription C72 and the name Fan Hu Da or Phạm Hồ Đạt in the Chinese and Vietnamese historical records: "Christie has considered the derivation of this name (Bhadravarman), noting that, according to the sixth century Chinese document known as the *Shuijingzhu*, east gate of the capital of Linyi led to a winding road beside which was placed a stela bearing the name of Hu Da. He has suggested that this is the Chinese rendition of the Cham word *hudah*, meaning brilliant. Sanskritisation could provide the known epigraphic name of Bhadra." The stele described in the *Shuijingzhu* was located on the curve of the river and is possibly the inscription of Hòn Cụt/Hòn Cụt (Golzio 2004, 5; Insc.C147; Parmentier 1918, 387; Zolese 2009, 197–98). At present, one can still see the stele carved on the rocky bank of the Thu Bồn River during the dry season; the site forms part of Chiêm Sơn Tây village, Duy Trinh Commune, Duy Xuyên District, Quảng Nam Province, at the southern end of the Chiêm Sơn railroad bridge at N15°49.900 and E108°11.800. The Trà Kiệu site is approximately four-and-a-half kilometers to the northwest and the Mỹ Sơn site is 11km to the northeast.

mentions that the king erected a temple dedicated to Lord Bhadreśvara (Śiva) and affirmed that a plot of land was chosen to build the royal sanctuary. The inscription highlights ancient Cham beliefs, especially that mountains are the abode of the gods. This was manifested in the deification of the holy mountain named Mahendraparvata/Great God of the Mountain (Golzio 2004, 2–4; Insc. C72) which lies south of the Mỷ Son valley. Nowadays, local people call it Mount Rãng Mèo, Cat Tooth Mountain or Hòn Quắp.

The first temple of King Bhadravarman was made of wood and within it was enshrined a *linga* of Bhadreśvara. The title given to the *linga* was possibly created by the combination of the proper name of King Bhadravarman with Ísvara literally “lord” another name for Śiva: Bhadravarman + Ísvara = Bhadreśvara. This temple, one of the earliest Hindu temples in Southeast Asia, dates to the late fourth or early fifth century CE.

Mỷ Son is a narrow isolated valley about 2km in diameter and surrounded by a range of high mountains. A stream originating from the Holy Mountain flows northward through the site of Mahendraparvata and finishes its journey at the Holy River of Mahanadi or Thu Bồn (Golzio 2004, 4–5; Insc. C147). Construction of temple-towers at Mỷ Son continued from the end of the fourth or the fifth until the end of the thirteenth century.

Architectural concepts in Mỷ Son were strongly influenced by South Asian Hindu elements. The temple complex includes a sanctuary (*kalan* in Cham) encircled by small towers, ancillary buildings and a surrounding wall. Influenced by the Hindu *sikhara* (pyramidal form temple) in India, the Cham *kalan* are temples dedicated to the sacred image or *yoni-linga* housed in the *sanctum sanctorum*, a narrow square cella with a pyramid-shaped roof (Acharya 1996, 258–59).

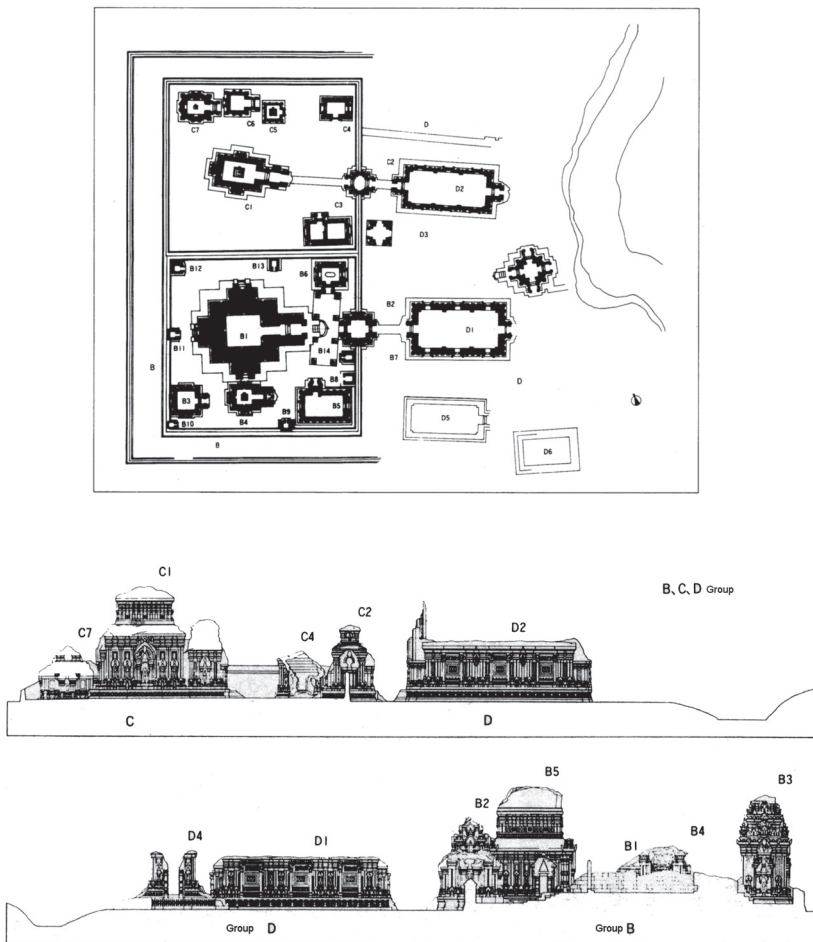
The *kalan*, a sacred microcosm, symbolizes many aspects of the ancient Chams’ interpretation of certain Hindu religious ideals. The tower represented an altar, and the tower roof was regarded as the summit of Mount Meru, home of the gods. The *kalan* usually face east (toward the rising sun) where the temporal movement of the universe starts. At Mỷ Son, the *kalan* structures face both east and west, constituting a distinctive type of temple, *kalan* Mỷ Son A1. The icon venerated in the sanctorum would be set on a dais ending in a *snana-droni*, an ablution channel used to collect liquids poured over the *linga* with a spout pointing north. Sometimes there is another square container under the altar, or a *somasutra* (water trough) through which holy water was channeled out from the temple through the wall, where it could be collected by worshippers. Around the altar is a narrow corridor or *pradakshina-patha* for devotees to file around the tower when praying (Tran 2009, 157–70).

Linked with the sanctorum through a doorway was a narrow vestibule where, to one side, stood a statue of the sacred bull, Nandin. At the entrance

to the vestibule were two finely carved stone pillars. They could be round, octagonal or quadrangular depending on their period of construction. The Cham frequently carved inscriptions on such pillars.

The *kalan* has a basic architectural style: the body of the tower is square, while the pyramid-shaped roof has three levels with a sandstone ridge. In the center of the structure is the *kalan*. Opposite the *kalan* is the gate-tower or *gopura* with doors opening east and west. In front of the gate-tower is a *mandapa*, an elongated tile-roofed structure with many windows and main doors opening east and west; in this pavilion sacred music and dances were performed (Acharya 1996, 117; 332).

Figure 14.2. Ground-plan of the temple-tower groups of Mý Son B-C-D. © Shigedda Yutaka.



To the right of the *kalan*, there was always a repository for offerings or *kosagraha*, which is called a “fire-tower” by modern-day Cham people. This structure was made of brick with a curved boat-shaped roof and had either one or two rooms. The *kosagraha* always points to the north which is the abode of the deity Kuvera, the god of wealth and good fortune. Around the *kalan* and ancillary buildings was a square low brick wall joined to the gate-tower. Outside the enclosure were often a number of stela-towers and secondary temples. The Mĩ Sơn temple complex groups A and B is a network of secondary temples dedicated to the deities of all points of the compass (*dikpalakas*) (Boisselier 1963, 155–59) or the deities of the seven planets (*saptagrahas/navagrahas*) (Tran 2004, 42–4).

In 1985, during restoration work at Mĩ Sơn B-C-D groups, archaeologists found a rectangular sarcophagus made from several pieces of sandstone which contained broken fragments of pottery and coal ash from a cremation. The sarcophagus was laid inside a low wall between B6 and C3 towers. This is believed to be the reburial tomb of a king who ruled around the tenth century, testifying to the fact that as well as a sanctuary for worshipping God Bhadreśvara (Śiva) the tutelary of the kings, and royals’ ancestors, Mĩ Sơn was also a burial ground for the Cham kings. This unique sarcophagus is now on display at the Mĩ Sơn D1 gallery at the site (Tran 2004, 35–6).

Figure 14.3. Mĩ Sơn Sanctuary was damaged during the Vietnam War, the situation in 1978. © Tran Ky Phuong.



The sanctuaries at M̃y Son demonstrate the unique cult and cosmological concept of Cham royalty in which the Śivaite cult is represented in the form of worship of both *linga* as a phallus and a statue of Śiva in human form side by side. This double system of worship is represented by the royal *linga* at M̃y Son B1 and the standing Śiva at M̃y Son C1 as well as those at M̃y Son A1 with A4 and E1 with E4; these were the most significant places in the royal cult of ancient Champa. The worship of the specific cult of Lord Śiva of M̃y Son together with the worship of Goddess Bhagavati, Śiva's *sakti* in the form of Po Nagar Nha Trang reflects a cosmological dualistic cult of the Cham dynasties i.e. male-female/father-mother/mountain-sea/areca clan-coconut clan etc. This cult was practiced at the two royal sanctuaries through the historical periods between the eighth and the twelfth or thirteenth centuries (Tran et al. 2008, 4–22).

Most surviving temple-towers at M̃y Son were built in the tenth and eleventh centuries. Art historians consider the structures, A1, B3, B5, C1 and D1 and so on as masterpieces of Cham architecture. The art characteristic of these temple-towers is manifested in pillars decorated with *rinceaux* (ornamental foliate or floral motifs), characterized by divine figures surrounded by stylized flames and standing under the vaults and stylized lotus edges on the tower roof (Parmentier 1948, 58–75).

The prosperous and powerful polity of Amaravati (seventh to thirteenth centuries) is reflected in the architectural works in M̃y Son and Quảng Nam area (Tran et al. 1997, 70–112). King Harivarman, who became ruler in c. 1074–81 CE, revived the kingdom after years of war with the Đại Việt kingdom in the north. He restored the temple-towers at M̃y Son and rebuilt villages and towns in the areas under his control. His achievements were highly appreciated and recorded on stelae such as the M̃y Son inscriptions nos. XXIV and XXV (Golzio 2004, 138–43, Insc. C90). Important temples such as B1 and E4 were restored or erected during his reign. A later successor, King Jaya Harivarman I, won several victories against Cambodia and Yavana (Vietnam) according to an inscription dating to c. 1157/58 CE (Golzio 2004, 153–61; Insc. C100). He built a notable architectural complex to worship the deity Harimeśvara and his parents on a small hill named Vugvan (Universal) Mountain, where the temple-towers of group G now stand. An inscription of King Parameśvaravarman II erected in c. 1234/35 CE (Golzio 2004, 178–9; Insc. C86) discovered near *kalan* B1 shows that he was one of the last kings of Champa to restore and make a great dedication to this main temple.

At the end of the thirteenth century, M̃y Son was isolated due to the decline of the Amaravati polity. At this time, the state of Vijaya (currently in Bình Định Province) became the political center of Champa. In 1471,

Figure 14.4. The restoration work at Mỹ Sơn in 1985. © Tran Ky Phuong.



King Lê Thánh Tông of Đại Việt kingdom attacked Vijaya's capital of Chà Bàn at the northern extremity of Champa. This event marked the beginning of Champa's decline (Maspero 1988, 235–41; Po 1997, 45–47).

The ensemble of the temple-towers of Mỹ Sơn displays the evolution of the principal styles of Cham art. The artistic value of Mỹ Sơn exhibited in the variety of architectural styles, unique decorative motifs and the excellence of building techniques, reflects many centuries of development. When one compares the Cham temple-towers of Mỹ Sơn with other ancient Hindu architectural sites in Southeast Asia, the Mỹ Sơn complex stands out as exhibiting the longest continuous sequence of development over a period of nine centuries. Many vestiges of early temple structures built in the seventh or eighth centuries are found near temples built at the end of the thirteenth century. These provide good evidence for interpreting the evolution of Hindu temples in the region (Stern 1942, 81–9).

Figure 14.5. The Royal Linga of Bhadresvara worshipped at the Mỹ Sơn B1 temple-sanctuary. © Tran Ky Phuong.



Issues in the Preservation of Champa's Monuments

At the beginning of the twentieth century, the École Française d'Extrême-Orient (EFEO) in Hanoi was founded to study and preserve Champa's monuments. In 1930, the EFEO initiated a new department entitled *La conservation des monuments historiques de l'Annam-Champa* under the supervision of Jean-Yves Claeys, whose office was located in Huế. During the years between 1931 and 1942, Mỹ Sơn and Po Nagar Nha Trang the two largest groups of Champa temple-towers were restored. In 1931, Claeys began work on the consolidation and restoration of the temples of Po Nagar Nha Trang, except for the southern temple which had been restored by Parmentier in 1902 and 1907. Claeys undertook restoration on the vestibule of Bàng An temple in Quảng Nam Province in 1933 with the collaboration of a French irrigation engineer.

Restoration work at Mỹ Sơn began in July 1937 under Louis Bezacier and Nguyễn Xuân Đồng; during this time the edifices of groups B and D were consolidated. The following year, the A1 temple (a masterpiece of Cham architecture) and six small towers (A2–A7) were reconstructed and other structures were consolidated especially parts of their foundation-bases. The restoration of Mỹ Sơn was recognized by the inauguration of the Parc Archeologique de Mỹ Sơn by Admiral Decoux, governor-general of Indochina in August 1942 (BEFEO 1930, 659–62; BEFEO 1939, 415; Southworth 2001, 55–60).

In 1939, the conservators built a dam in order to divert the course of the river which was damaging the A9 tower. The dam was finished in 1941 and the water was diverted to the west side of group B. Unfortunately, the dam broke during a large flood in 1946.

The years 1954–64 were a peaceful period for Mỹ Sơn. However from 1965 on, war gradually began to affect the countryside. Mỹ Sơn became a base for the Việt Cộng. Around 1966–68, Mỹ Sơn came under the control of the South Liberation Front and the area was designated a free-fire zone by the Republic of South Vietnam. Mỹ Sơn was fought over viciously. Thousands of mines were placed on hillsides and mountain slopes, especially on the northern slope where a path led to other villages. More devastation occurred at Mỹ Sơn when B52 bombers carpet-bombed the site in August 1969. Today, large bomb craters can still be seen at temple groups B, E and F. The two largest temples at Mỹ Sơn, A1 and E4, were completely destroyed. The greatest loss was A1, a testament to the brilliance of Cham art with its 28-meter-high tower. This important temple was attacked because the guerillas used it as a communication station.

After the bombing, Nguyễn Xuân Đồng (1909–86) curator of the Museum of Champa Sculpture in Danang from 1938 until 1973 immediately informed

Figure 14.6. The thirteenth-century Dzuong Long temple-tower group was under restoration in 2008. © Tran Ky Phuong.



Philippe Stern (1895–1979), an eminent French scholar who was then chief curator of the Musée Guimet in Paris, of the sad news (Nguyễn Xuân Đồng pers. comm. 1978). Stern contacted the White House and expressed his outrage in a letter dated 8 December 1969: “Dear Mister President, As former Chief Curator of the French National Museums, in charge of the arts of South East Asia (musée Guimet), in which Vietnam is included, I would like to point out to you, as a personal communication, dear Mister President, the very critic[al] situation in which are the historical monuments in that part of the world...” (Jarrige 2005, xxii). In January 1970, President Nixon sent an official message to the US Commandant in South Vietnam: “The White House desires that to the extent possible measures be taken to insure damage to monuments is not caused by military operations” (Heffley 1972, 13).

Beginning in 1978, Mỹ Sơn was restored and demined with 6 people killed and 11 wounded during this operation. The site was filled with bomb craters and remains of munitions; many tower walls were damaged by rockets and many stelae and sculptural works were destroyed. The bombing left great swathes of destruction in their wake which transformed the magnificent Cham temples into mounds of crumbled brick (Tran 1988, 8; 55).

In 1980, a team of Polish experts working with the Center for Restoration of Cultural Properties, Ministry of Culture and Information of Vietnam, carried out research on the Cham monuments in Central

Vietnam. A subcommittee on Champa monuments was founded and led by Kazimierz Kwiatkowski (1944–97), a Polish architect of the Ateliers for the Conservation of Culture Property of Poland (PKZ). The Vietnamese government funded this project to restore Cham monuments during the 1980s (Hoang 2009, 26–32).

During 1981–5, photogrammetry was carried out on the temple-towers of Mĩ Sơn groups B, C, and D for the purposes of consolidation and preservation or reconstruction. Between 1986 and 1990, the towers belonging to the A group were consolidated. Thousands of square meters of broken bricks were moved and rearranged. Two bulletins on the conservation were published by PKZ (Kwiatkowski 1985/1990). During the restoration of Mĩ Sơn, the Polish experts reused fallen bricks from the towers and modern cement to bind them together, employing the methodology of consolidation, anastylosis (reconstruction based on archaeological evidence) and partial restoration (Tran 2004; 22–9). The final restoration project by PKZ in Mĩ Sơn was to convert Mĩ Sơn D1 and D2 towers into two galleries housing the sculptural artifacts collected at the site in 1994.

From 2000–6, Vietnamese and international archaeologists funded by the World Monuments Fund carried out several excavations, including one in the river to recover many stone blocks from an ancient structure. An Italian team

Figure 14.7. The New Year festival of Kate organized by the Cham people at the thirteenth-/fourteenth-century Po Kloong Garai temple in Phan Rang. © Tran Ky Phuong.



from Lerici Institute of Milan University led by Patrizia Zolese also conducted excavations and restorations at G Group from 1997–2007. This project resulted in the making of a GIS map of the entire site; it also carried out archaeological surveys in the G group (Zolese 2005, 169–73; 2009, 197–237).⁷

In 2003, the Vietnamese archaeologists of the Vietnam Institute of Archaeology in Hanoi cleared a heap of broken bricks from Temple F1. Nevertheless, many towers remain in very bad condition. Mỹ Sơn A10, A12, A13, and groups E, H and K in particular still need preservation work.

Between 1980 and 1990, PKZ also restored other Cham monuments such as Chiên Đàn (Quảng Nam Province), Po Kloong Garai (Ninh Thuận Province), Hưng Thạnh/Tháp Đồi and Dương Long (Bình Định Province). Among these projects, the restoration of the Po Kloong Garai group is considered by experts to be the most successful because much of its original form was retained. During restoration work in Chiên Đàn in 1989 and Dương Long in 1985, several works of sculpture were discovered including a stone foundation-base decorated in high relief at Chiên Đàn (housed at a Chiên Đàn site gallery) and the remarkable pediments of Hindu gods and goddesses in Dương Long (housed at the Bình Định Provincial Museum in Quy Nhơn).

Recently, local authorities have carelessly restored most Cham monuments in several provinces of Central Vietnam. As a result, they have changed and distorted the surfaces and silhouettes of the temple-towers. For example, the interior sanctum of a temple had rough walls with niches where Hindu gods resided and votive items were placed. Between 1998 and 2001, local authorities used modern cement to fill in these interior walls of the sanctum. Examples of such actions can be seen at the temples of Thủ Thiện and Bình Lâm in Bình Định Province and the Po Nagar Nha Trang group. The oldest temple of this group, the northwest temple (built in the tenth century with its distinctive boat-shaped roof) was completely deformed during restoration between 1998 and 2000. From 2001–2, local authorities at the Po Dam group used new bricks to construct new walls, covering the original walls of the temple built in the eighth century. The great beauty of Hòa Lai group in Ninh Thuận Province, built in the early ninth century, was seriously damaged by the restoration during 2005–7 in which the rich and notable carvings of the superstructures of the northern temple were badly deformed by reproductions of new terracotta figures and so on. Besides, there have also been some archaeological excavations undertaken in conjunction with the restoration and conservation conducted at Khuông Mỹ group in Quảng Nam Province in 2007, at Bình Lâm temple in 2008 and

7 The results of the restoration work in Mỹ Sơn undertaken by the Italian team from 1997–2007 were announced in the book entitled *Champa and the Archaeology of My Son (Vietnam)* (Hardy et al. 2009).

at Dương Long group in 2007–8; these uncovered a large number of sandstone sculptural works which form the most important corpus for the study of the original building technique of Cham religious architecture and provide practical service to future restoration work on Cham temple-towers.

Currently, Vietnamese conservators are rebuilding Cham temples based upon whims rather than architectural or historical data. Research on the monuments is, for the most part, not completed before restoration is undertaken since government policy demands that restoration work be completed expeditiously. In the past few years, most of the main Cham temple-towers have been restored based on the instructions and priorities of the government rather than on scholarly considerations. Thus, the restoration methodology employed remains an issue of contention. Italian experts published the following recommendations for the restoration and conservation of brick buildings of Champa:

- (1) The bricks should be fired at a temperature below 850 degrees C;
- (2) Lime must not be used for mortar;
- (3) Joints between bricks should be so thin that moisture cannot penetrate them;
- (4) Contact between the bricks can be improved by the presence of a natural glue or resin;
- (5) Thin joints also helped increase the strength of the masonry even if the bricks are rather soft;
- (6) Biological growth that causes decay on wall surfaces is much less in original thin joints than where modern cement mortar is used. (Ballino et al. 2001, 209–10)

The ancient resin used to join the Cham bricks together might have been *dầu rái*, a resin from the tree *Dipterocarpus alatus* Roxb. Formerly, the Cham used this resin to strengthen brick structures. The *dầu rái* resin is adhesive, waterproof and can be produced in large amounts. Once mixed with dry clay or brick powder, this resin dries easily with exposure to sunlight. After the tower structures were completed, the Cham coated the walls with a layer of *dầu rái* to prevent moisture absorption (Binda et al. 2009, 283–311). The inhabitants of Central Vietnam still use this resin mixed with powdered mollusk shells to coat the hulls of their boats to make them waterproof. Mortar made of *dầu rái* with powdered mollusk shell has been identified at Po Rame Temple, which was built in the seventeenth or eighteenth century (Institute for Building Science and Technology 2004, 78–85).

Except for the monuments which were heavily damaged in recent wars, restoration of these remarkable ruins is not an urgent necessity. Some

conservators propose to restore half of the structures while leaving the rest for future generations to study. This policy would permit conservators to concentrate on the rescue of endangered structures. Restoration work on the monuments of Champa can provide ideal training for students who want to learn Cham building techniques and the structural processing of Cham temple-towers through centuries.

Some Contemporary Issues in the Management of Mỹ Sơn

A “Project for the Improvement of the Surrounding Area of Mỹ Sơn” entailed the construction of the Mỹ Sơn site museum using funds from a Japanese aid project “as a token of friendship and cooperation” between Japan and Vietnam. The Mỹ Sơn site museum was inaugurated on 24 March 2005 after a nine-month construction period. The museum provides a useful introduction to the site with 24 instructive panels of text, photographs, drawings and maps which teach visitors about nine centuries of history at Mỹ Sơn. Original sculpture and models document the history of archaeological excavations from l'École Française d'Extrême-Orient to the present, identifying the various types of structures in Mỹ Sơn, and placing these in the context of comparable Southeast Asian monuments such as Prambanan, Borobudur, Pagan, Angkor, and Vat Phu. A reconstructed wooden shrine modeled after eighth-century structures made by the Chăm people includes some of the original decorations such as door pillars and stelae made of sandstone. The museum provides basic knowledge of Champa civilization and architecture for visitors, enhancing their appreciation for and understanding of the site (Tran et al. 2005a; 2005b).

The number of tourists visiting the Cham monuments is increasing. In recent years, the Mỹ Sơn site has received approximately 150,000 visitors yearly, over half of whom are foreigners. Proper preservation of Champa monuments is a major consideration for Vietnamese authorities who need to learn more from international experts, especially those from ASEAN who have the most experience in the preservation and management of historical sites in Southeast Asia.

Among activities created for tourists, the management board of Mỹ Sơn Site has arranged for the Chăm from Ninh Thuận Province as well as local inhabitants to stage performances of music and dances adapted from traditional Chăm music and folk dance. These activities attempt to recreate the atmosphere of Chăm culture at a religious site which has been abandoned for a long time. Several annual festivals are associated with Cham temple-towers such as Kate New Year festival in Ninh Thuận Province at Po Kloong Garai and Po Rame temples in October, the Annual Festival at Tháp Bà or

Po Nagar in Nha Trang City during the third month of the lunar calendar, and so on. These cultural events will be encouraged as they attract tourist participation at these festivals.

The local economy in Duy Xuyên District of Quảng Nam Province has shown significant improvement since the Mỹ Sơn site was listed as a UNESCO World Cultural Heritage site in December 1999. Another important factor in Mỹ Sơn's increasing popularity as a tourist destination is that it is near Hội An Ancient Town, another World Cultural Heritage site (UNESCO 1999b) approximately 50km east of Mỹ Sơn. Thus, Quảng Nam Province is unique in Vietnam as it has two World Cultural Heritage sites. Recently, the 30km road from Highway No. 1 leading to Mỹ Sơn was rebuilt by the government, improving access for tourists from Hội An.

As the number of tourists visiting Mỹ Sơn increases, the issue of protecting the temples will become more important. The brick used in the Cham temples is structurally very weak because it is made from degradable, soft materials and has aged over the centuries. To prevent further degradation of the rich carvings on the temple walls, fences are needed to protect them from damage by visitors.

Public education is an important means to educate the young about the significance of Mỹ Sơn and measures to this end have already been implemented by the local government and UNESCO. Regular activities expose students from the primary and high schools of Duy Xuyên District, Quảng Nam Province to the historical background of Mỹ Sơn and ways to preserve the site for future generations.


Mapping Archaeological and Historical Sites in the Thu Bồn Basin

Mỹ Sơn lies in the valley of the Thu Bồn River, referred to as the Holy River of Mahanadi in ancient Cham inscriptions. An ancient capital city named Singhapura (another historical complex) lies at Trà Kiệu, conveniently located on the road between the two World Heritage sites. This site has been partially excavated since 1993,⁸ but is not currently marketed to tourists and consequently is rarely visited.⁹ These and other smaller sites should be part

8 The excavations had been conducted by an international team of Vietnamese, British and Japanese archaeologists led by Prof. Ian Glover of University College London (Glover and Yamagata 1997, 75–93)

9 In fall 2010, the Trà Kiệu Museum opened to the public; this is a small museum built in Trà Kiệu village by the Duy Xuyên District Authority. It houses the rich collections of artifacts excavated at Trà Kiệu and its vicinity during 1993–2003. The museum lies on the road leading to the Mỹ Sơn site.

of an overall cultural resource management strategy for both preservation and heritage tourism. A regional development plan for Quảng Nam Province should include these main sites:

- 1) Hòn Quắp Mount (~~Mahene~~  ~~rvata~~) Holy Mountain
- 2) Thu Bồn River (Mahanadi) Holy River
- 3) Mỹ Sơn Sanctuary Cham Royal Sanctuary
- 4) Trà Kiệu (Singhapura) Cham Royal Citadel
- 5) Hội An Ancient Town/Đại Chiêm Hải Khẩu (Great Port of Champa) Cham Port-City
- 6) Cù Lao Chàm (Cham Island) Cham Front Wharf

About a dozen other excavated prehistoric archaeological sites are also known:

- 1) Gò Mã Vôi provides evidence for prehistoric exchange between China and central Vietnam such as bronze mirrors and bronze vessels. Other items which occur in abundance at the site include low-fired earthenware, forged iron tools and *ling-ling-o* earrings. This site dates from the fifth to first century BCE and it is one of the earliest sites of the Sa Huỳnh culture in Thu Bồn Valley (Reinecke et al. 2002, 153–216);
- 2) Lai Nghi is a prehistoric cemetery richly equipped with iron tools and weapons, bronze vessels and jewelry made from bronze, glass, gold and semiprecious stones dating to c. third century BCE to first century CE (Lam 2009, 68–75);
- 3) Hoàn Châu, which belongs to the late period of Sa Huỳnh culture, is found in Trà Kiệu (Singhapura). Remains here indicate that Chinese influence was already present during the early historic period of the Cham polities, dating to c. 100–200 CE (Yamagata 2011, 91–6). Sa Huỳnh is the type-site of a significant prehistoric culture which existed approximately from the fifth century BCE to the first century CE, artifacts of which have been found mainly in central Vietnam; many archaeological sites of this culture have been excavated along both banks of the Thu Bồn River (Glover et al. 2011, 59–60).

The Thu Bồn River provided the main means of transportation for the Cham kingdom of Amaravati. The river connects the coastal area to the mountainous regions. It is exemplary of the riverine exchange networks which linked the uplands and lowlands of polities in Champa as well as in many other places in early Southeast Asia. Scholars have tried to explain the political and economic networks of Champa by using Bennet Bronson's model (1977) of a "riverine exchange network," which is apt for the long narrow coastal strip of Central

Vietnam where most of the rivers run from west to east from the high mountains to the sea (Southworth 2011, 102–19). Villages along these riverbanks in the highlands include ethnic minorities who speak Mon-Khmer/Katuic, and speakers of Malayo-Polynesian in the lowlands, connected with a trade center usually located at river mouths where local products regarded as luxury goods in ancient times in other parts of Asia were collected for export. This pattern provides context for the historical analysis of Thu Bồn River, with its coastal port-polity and trade center now known as Hội An (Tran 2006; 2010).

To improve the preservation of Mỹ Sơn, it is necessary to preserve the cultural landscape of the Thu Bồn River as a whole, including several Sa Huỳnh and Cham notable archaeological sites located on the two riverbanks and the particular cultural materials of the indigenous inhabitants (Katuic and Vietnamese speaking/Kinh people) living along the river from the uplands to the lowlands as well. In terms of cultural resource management, both the tangible and intangible heritage of the local culture can be preserved in several significant aspects such as technology of littoral agriculture, farmer wooden housing, boat building, sea-going, annual festivals; folklore, oral history, indigenous cults, gastronomy and so on which had been directly or indirectly inherited from Cham culture.

Many serious problems pertaining to the preservation of the cultural landscape in this specific region still need to be resolved. To overcome them, we need a sound strategy for the cultural and tourist development of Central Vietnam (the land overlaps the territory of the ancient Champa kingdom[s]) in which the creation of a team of local interdisciplinary experts should be made a top priority.

Today, the economy of Vietnam is rapidly developing and infrastructural developments and greater expansion of urban districts and communes in central and southern Vietnam will inevitably affect the historical sites mentioned in this chapter. Hence, practical policies and solutions are urgently needed to protect the Cham monuments.

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