The Monumental Architecture of Po Ramé in Ninh Thuan Province, Vietnam

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Abstract. This article aims to examine the architecture and characteristics of sculptures at the Po Ramé temple in Ninh Thuận province, Vietnam. There are the statues of Po Ramé himself, the queen Bia Su Can, the queen Bia Su Cih, a Nandin cow, a linga and a kut depicted more meaningfully. This provides clear assessment of preservation works that have been completed at the contemporary temple. In practice, those initiatives of the conservation effort figure out very first achievements that are definitely useful for improvement later on. Therefore, potential directions of preserving those heritages are proposed respectively from short, medium and long term in the future.

Keywords: monumental architecture, localized Hinduism, temple sites, historical preservation

1. Introduction of Po Ramé - a monumental architecture
Like many other Cham temples, Po Ramé\(^1\) temple is built up in accordance with a relatively common style, which is reminiscent of many Hindu-Buddhist classical structures in Southern Asia. It is located

\(^1\) Po Romé reigned the kingdom of Panduranga-Champa (1627-1651). He has been a King with substantial merit as whom the Cham is venerated for that reason. He is also especially well known for his developments in the field of irrigation, such as constructing works of Ca Tieu dam (Banâk Katéw), Chavin dam (Banâk Caping), Maren dam (Banâk Marèn) and so forth.
on a hill – *Mbuëm Acaow* – at the outskirts of Palei Thuen, known as Hậu Sanh village, Phước Hữ commune to the local Vietnamese community. Its settlement is located in the Ninh Phước district, Ninh Thuận province, 15km Southwest of Phan Rang-Tháp Chàm city. The site is infused with Indic influences. This Cham temple had been constructed to be last symbol of the Cham cultural trends ending the ancient Cham society, but it continues spiritual activities related to a god. The temple is an active site of worship and Katé festival\(^2\) for the more Shaivite-influenced *Cham Ahier* and the Islamic-influenced, though ‘polythetic’, *Cham Awal*. The first appearance of the *Akhar Thrah* script may be inside this temple [14]. The temple itself is also a religious center for the local contemporary Cham community, called *Bimong Po Ramé* in Cham. This temple is smaller than many similar structures in the subcontinent but shares quite a number of characteristics with them. At the same time, it also exhibits a number of local features. Although initial archaeological studies showed the foundations of this religious site pre-date his reign, possibly to the 15\(^{th}\) or 16\(^{th}\) century, later researches demonstrated the site was only dedicated to the worship of Po Ramé after his reign ended in 1651 CE. The overall monumental architecture of the site originally included three temples: the main temple (*Kalan*), the temple of the gate (*Gopura*), and the fire temple (*Kosagarha*). However, only the main temple remains, with a base maintaining a particular dimension of 7.04 m length, 7.04 m wide and 16.5 m height. The others have been collapsed eventually.

One feature of the Po Ramé temple is that we have historical records of its statues as which have taken from the site or destroyed recently. According to H. Parmentier (1909), there were two lions statues originally positioned as temple guardians. One was found in the Southwest corner of the main temple and the other had rolled to the gap behind the main temple, although only a piece of the latter was recovered in the early 20\(^{th}\) century [5]. Local Cham dignitaries from Palei Thuen noted that the lion, made of fine gray sandstone, which was 1.3 m height, stood at the southwest corner as of 1964, although they noted that the statue had been ‘lost’ (perhaps stolen) by the Liberation Day (April 30\(^{th}\), 1975). The concern over the loss of valuable archeological evidence, of both spiritual and cultural importance for the local community, motivates our closer examinations of the Po Ramé temple site.

1.1. **Architecture of main temple (Kalan, figure 1a, 1b)**

The main temple, outside Palei Thuen shaped as a square surface and the base of the temple, is essentially a block-brick foundation built upon a rocky hill. The temple door opens to the East, as with all such Cham and Champa constructions. The door is composed of two layers of coarse brick pillars, extending 2.2 m out from the temple core. In front of the door, there is a small rectangular yard, 5.0 m length and 3.0 m wide. Connecting the yard to the entrance, there are three steps up to the doorway, 1.7 m length and 1.2 m wide. While the door frame is stone, the door itself is wooden, painted in the color of the blood of cattle. We might presume the door was formerly made by stone, because there is a thin slab that has been inserted into the floor, and although it is now broken in half, with the remaining piece now located to the right of the temple door, to the east, the size of the slab matches the size of the door to the temple. Outside the temple, there are also two Nandin bull statues. Above the doorway are two supporting arches, facing one another and protruding outward, composed of monolithic brick, and their faces have no decorative patterns, although at the top of the arch, there is a stone artifact attached to the outer arch, along with a cylindrical stone for the inner arch. The remaining three walls of the temple include false doors, decorated with three layers of building blocks and three layers of arches [7, 8].

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\(^2\) The Katé Festival, so called Mbeng Katé in Cham, is organized by the local Cham community over the course of at least three days at the beginning of July of the Cham sakawi calendar. Typically, the festival falls in the autumn according to the Gregorian Calendar. The events are particularly large at the Champa temples of Po Klaong Garai and Po Ramé, as well as the Po Iná Nágár temple in Palei Hamú Tanran (Hữu Đức, Ninh Phước district, Ninh Thuận province). However, during the Katé section of the festival, large crowds gather at the temples, there are parades, and a substantial series of public celebrations, along with feasting. This gives members of the local community time to relax, to meet one another socially and to wish one another fortune in the near future.
The four corners of the temple are supported by four protruding columns and made by smooth blocks to follow the pattern of the walls of the temple, which are also flat and smooth. At the corners and tops of the columns, there are protruding decorative stones, shaped like flames. The border of the roof of the temple is gradually beveled toward the base of the roof. There are also separate roofs and frills for these miniature roofs with decorative stone points adorning the corners. The stones here were roughly carved, although they seem to resemble birds’ heads protruding from the relatively pyramidal shape of the temple.

The roof of the temple consists of three levels, each replicating the last, although they grow proportionally smaller in size as they ascend. The corner of each level is also decorated like the outer corners of the temple. These appear to be like miniature temple constructions and are built from simple blocks, being square at the bottom, with four-sided cylindrical blocks at the top. At the peak of each structure is a cylindrical stone block, symbolizing a linga, decorated with carved lines. The base of each level has sides adorned with decorative symmetrical doors, although they do not open. In other words, there are microcosmic temple structures as used as decorations in a pattern that is somewhat reminiscent of the ratios used in fractal patterning [7, 8]. The upper two levels of the temple are identical to the lower level, again with the usage of decorative doors which do not open. The third level is the same as the first two, although there are no pointed mounds at the corners, although the corners are decorated this time with four half-shaped Nandin bulls. In lower levels, there are anthropomorphic statues in the decorative doors. Yet, in the top level, the anthropomorphic form is replaced by a stone place with a homkar engraving.

The interior of the temple is quite narrow, stretching just four meters east to west, and narrowing toward the ceiling. However, the ceiling is not solid brick and flat, as with other temples. In this case, it is open, gradually narrowing at the upper levels, reflecting the pattern of the external structure. Four cylindrical holes open on the insides in four directions, providing for some relative ventilation. The general construction has led a number of researchers to suggest that this temple was built in a relative hurry compared to other temples of Champa, leading to less elaborative decoration, which would help to explain why we do not find any decorative carvings on the bricks of this architecture. Nonetheless, even as Po Ramé temple is not as grandiose a construction as the nearby Po Klaong Garai construction, numerous researchers have concluded that it indeed has a distinct architectural and artistic style, which is now generally referred to as the ‘Po Ramé style’ of Champa art [9]. This is an important style, since it is not only the last sample of the classical architectural artistic movements of Champa, but it is also a bridge into the early-modern and modern forms of Cham art, of which precious few samples remain today. The sculptural formulations of ‘Po Ramé style’ found at the site provide a similar bridge between Champa and Cham arts.

![Figure 1a. The body of Po Ramé temple](Source: H. Parmentier, 1918).  

![Figure 1b. The body of Po Ramé temple](Source: Quang Van Son, 2020).
1.2. Sculpture If we consider monumental architecture to be the bones and cartilage of a site, the sculpture is the flesh and soul, reflecting aesthetic perceptions of its creators and manifesting their belief systems in lasting physical form. Champa sculpture is often divided into two forms: architectural decorations and religious statues. Stone sculpture is found at the earliest of Champa sites, at least attested from the 7th century onward, with the earliest known sample being from Mỹ Sơn E1 pedestal (Quảng Nam province). Following the Po Ramé architectural style, the stone sculptures found at the site are indicative of an artistic movement. However, due to a history of local governmental upheavals, they have not always been protected. Some of the original sculptures have been looted, destroyed, and consequentially have been replaced by restored models. Our examination includes the current styles.

1.2.1. Statue of Po Ramé: the 1.2 m tall-stone statue of Po Ramé, ‘figure 2’, is kept inside the temple as an altar site. It predominantly is a carved bas-relief embossed body, which occupies the lower and middle portion of a stele. It follows the patterning of a mukhalinga-like construction. The head of the figure wears, however, a cylindrical hat reminiscent of early-modern Malay influence, with a brim that is decorated by a band of four-petaled flowers. The king himself has two arms folded in front, in a meditation pose, while six other arms are behind. The right hands appear to hold a trident, a knife, and a cup; while the left hands hold a knife, a lotus bud, and a comb. He has a pointed goatee, with a thin, upturned, yet elongated mustache. Two Nandin rest upon his knees, with one on the left and one on the right-hand side. Directly above his head, three more heads protrude upward, with trident-like spears protruding from them. Alternatively, these could be described as rays that also remind the viewer of a peacock. Shell spirals appear to the left and right of the hat of the main figure, with two additional heads above them, also with protruding trident spikes, or rays, reminiscent of peacocks. All of the ears appear to be pierced and have earrings in them. The body of the main figure, however, does not appear to have any clothing, and the waist and abdomen are decorated with flowers, each having four petals. The figures also have necklaces; it seems, perhaps of pearls. The statue is also painted black, red and yellow.

At the base of the Po Ramé statue, we find a yoni sandstone construction, 0.3 m tall, 1.7 m length, and 1.25 m wide. The yoni stone has a groove flowing around the statue, which extends all the way to a small elephant on the side of the construction, nearby the yoni stone. In the front of the statue, toward the front of the yoni stone, there is a small hole, which is used by priests when they have ceremonies in the temple, to hold torches, etc.

1.2.2. Statue of Queen Bia Su Can: the statue of Queen Bia Su Can, ‘figure 5’, is on the left of the interior of the Po Ramé temple. Bia Su Can was an Ede wife of Po Ramé who jumped upon a funeral pyre in a sati-like fashion, as a sign of her devotion to Po Ramé. This also ensured her place nearby.
him in the temple and, very likely, lines of inheritance. Her statue is 0.75 m tall, 0.3 m wide, and sits on a simple stone pedestal, 0.52 m length and 0.41 m wide. The image above is actually of an older statue, in this one case, which was stolen, perhaps by Vietnamese looters, but recently replaced, by another similar statue. Both of Bia Su Can’s hands rest on her thighs in a meditation pose, while the left hand was more definitively folded in the older statue. Both wrists are adorned with golden brown bracelets. She wears a queen’s headdress on her head, similar to one which remains in the collected royal treasures of the Cham royal family. She also wears distinct sarong style belts, decorated with rectangles and floral patterns. While her ears are pierced, there are no visible earrings. At the stone base of the statue, we also found a hole to place candles for ceremonies. This statue had been stolen in 1993, 2007 and 2014 respectively, although it has now been restored.

1.2.3. Statue of Queen Bia Su Cih, ‘figure 6a, 6b’: behind the main temple, to the Southwest, there is a smaller, much newer construction. This is the statue of Bia Su Cih. The hands of Bia Su Cih are also crossed in front of her abdomen in a meditation pose, although she seems to hold a long, rolled lotus. A hat that bends gently forward rests on her head, while she wears a sarong that is decorated like Bia Su Can. Her ears are also pierced, while she too wears bracelets. In her case, however, we find the chest and stomach have Akhar Thrah Cham script written upon them [5]. This statue had been stolen in 1993, 20011, although it has now been restored.
1.2.4. Nandin cow (god), ‘figure 8a, 8b’: according to Hindu mythological understandings, Nandin is the steed of Shiva. Hence, we find Nandin statues at many Champa sites. Some sources suggest that this was a manifestation of the god in a previous life, and this is the reason that the Nandin became the mount of the god in this life. In the conception of the Cham Ahiér community, which practices a highly localized form of Hinduism, when individuals die, Nandin may carry their essence into the next realm. Hence, it is not a surprise that we find the statue of the Nandin in the heart of the temple and on the top of the roof in four manifestations, facing four separate directions, but also outside the temple as well.

Furthermore, on two sides of the main section of the Po Ramé temple, there are also two more Nandin bulls, carved from white stone, with small black speckles. Their heads are large, held high, with wide foreheads. They also have a third eye, while the eyes below the forehead are flat and without eyelids. Their necks are strong, encircled by a ring of rattles. Their bodies are long and round, with full bellies, and a gently flowing spine along the characteristic bump of the Nandin cow, roughly in the middle of the back. The Nandin have a slightly upturned posture with their heads turned toward the main hall, with front legs protruding, and hind legs half hidden. The tail hangs downward. The Nandin on the right side is 0.5 m height and 0.8 m length and understood to be male. The Nandin on the left side is 0.45 m height and 0.7 m length and understood to be female (although she is missing her calf in 2007).

1.2.5. The Linga, ‘figure 4’: the linga form is very popular in Champa and Cham sculpture. Mukhalinga, mukhalinga-like, linga, and linga-like sculptures are able to be found out the epochs. Lingas, being linked to the worship of linga-yoni structures are indeed popular across Southern Asia. Here, ‘their beliefs are associated with the myth of their mother and the worship of the yin; they consider the woman's vagina to be the source of all creation. Besides the mother god, there is also a male god, represented by a phallic-shaped stone slab...’ [8]. The Linga sculpture of the Po Ramé temple is composed of dark stone, which features white spots, as a result of the passage of time. It rests upon a four-sided block, the lower part of which is flared gradually and bunched upwards, resembling a lotus bud. The Linga is smooth, in this case, without any motifs, and approximately 1.3 m tall.

1.2.6. Kut, ‘figure 9’: among the linga-like structures of Cham culture are one particular form that is quite important: the Kut. Kut is a special form of epitaph. They are generally unmarked and associated with particular clan lineages. They are concentrated entirely in Ninh Thuận and Bình Thuậ provinces. They do not appear to be associated with older Champa temple sites, leading to the hypothesis that they might have originated from early-modern religious adoptions of Shiva-like worship, which would parallel the appearance of similar stones in Tamil Nadu during earlier historical epochs, and was likely
a local adoption of earlier Śiavite practices from Champa. Two *Kut* are located behind the Po Ramé temple. They are composed of light grey stone, which is of a fine grain, and the first is simply decorated with winding floral patterns. It is about 0.4 m tall, 0.25 m wide and 0.15 m thick. The second has a fire shaped pattern with a winding four-petalled floral pattern. This one is about 0.2 m tall, 0.3 m wide and 0.1 m thick respectively.

2. Present conservation and its orientation  

2.1. Current conservation status  

We have highlighted the broader context of conservation in relation to Champa and Cham culture recently, and therefore do not need to repeat it here. Of course, we have concluded that our current situation is that we do not fully understand the methods and materials of the original construction in this area, as with the monumental architecture further northward in Quảng Nam province. However, we have found that the portions of the Po Ramé temple that appear to have been restored have been completed with units chiseled directly into the original body of the temple, before new bricks and cement adhesive were attached. Our concern is that with the natural wear of the elements, these sections will decompose quickly, taking portions of the original structure with them. Another nearby case for us is the restoration of the Hoa Lai temple. In 1995, restoration was funded and granted to the Department of Museum Conservation. The project attempted to repair the footprint of the temple first, then built a guard house, and erected a fence surrounding the site. However, during the process, the office in charge of restoration, the Department of Construction in Ninh Thuận province, was wantonly negligent in their work. They paid no attention to attempting to maintain as much of the original structure as possible and destroyed much of it during the restoration process. Many portions of the monument were broken and much of the ornamental carving was lost. Of course, we accept that restoration work is an extremely difficult process, particularly when we want to maintain the beauty of the original site for the sake of an active indigenous religious community.

In the case of the Po Ramé temple, like Mỹ Sơn, a portion of the original structure was damaged by the bombs of war. The main temple was severely damaged, as bricks in the arch of the Eastern door collapsed, the anthropomorphic statues were destroyed, the foundation was cracked dangerously, and decorative detail work damaged as well. The main entrance to the East was lost, the statues from the second level were lost, and, furthermore, erosion damaged the third and fourth levels of the temple, while most of the original stone pillars at the corners of the temple were lost. In June 1992, the administrative boundary of the area (then Thuận Hải Province) was redrawn to create Ninh Thuận and Bình Thuận province. The central government then granted 200,0 million VND (approximately 8000 Euro) to the Department of Culture & Information (now, Department of Culture, Sports & Tourism) to coordinate with the Department of Construction in the newly created Ninh Thuận province to carry out restoration work. They repaired damaged old bricks and replaced them with ‘restoration bricks’. They replaced some of the decorative motifs on the main body of the temple, such as flame motifs, anthropomorphic images, and created statues to replace the original terracotta figures that had been damaged or lost. They also poured concrete to reinforce the foundation of the temple, placed adhesive in the cracks of the temple, and used steel bars around the temple body to reinforce the structure [2]. The structure was well protected from imminent collapse, but the cement and adhesive were temporary fixes. The adhesive is already peeling at two of the doorjambs around the main entrance. If this situation is not addressed, the cracks will begin to spread again, damaging inscriptions, and possibly, the overall structure.

2.2. Orientation of preserving the heritage  

From our point of view, local conservation work on the Po Ramé temple needs to be carried out in the spirit of International Conventions, emphasizing the preservation of as much of the original elements of the temple as possible, and the value of the original religious relics. Additionally, such conservation work ought to be carried out in accordance with the values of the intangible heritage of contemporary...
Cham indigenous culture. These values are especially important to keep in mind if the structure is to be restored with contemporary scientific methods [11, 13].

We recommend future conservation works based on our research towards a comprehensive plan as below:

a. Surveying the area carefully with scientific methods, measuring each portion of the temple, confirming existing damage, and assessing the status of relics.

b. Exploring and excavating the surrounding archaeological site in the vicinity of the main tower as we suspect that several aspects of the area may be found in the earth below, especially within relatively closed proximity to the footprint of the original temple structure.

c. Developing the approach to tourism in the area working with community leadership and provincial governance, as well as our previously proposed more centralized study of Champa culture. In parallel, training local specialized officials from the Cham community to propagate knowledge to research centers in country and internationally. This will greatly aid conservation work.

d. Carefully selecting a method to remove plants, weeds, and moss growing around the existing structure in a sustainable fashion that avoids the use of polluting chemicals, as much as possible, while also accepting that local community members desire to have methods to clean the area and prevent decay from plant growth.

e. Developing a master plan with general layout of the overall relics based upon a scholarly understanding of Champa and Cham aesthetic values. Additionally, solidifying foundations according to the results of new restoration methods developed during the survey phase and restoring any remains that have been discovered during excavation.

f. Raising funds for the restoration from individuals, collectives, communities, local governance, national governance, and international sources, for the sake of the restoration of the monumental architecture.

g. Taking on another phase of research, before restoration begins, to carefully and critically analyze construction techniques, temple architecture, sculpture, artistic style and so forth; to restore the temple in better form rather than the fashioned Hoa Lai temple case and the previous restoration completed at Po Ramé temple.

3. Conclusions

After considering the potential conservation process in the case of the Po Ramé temple, we would like to make several final recommendations. Firstly, we must pay attention to the fact that local Cham communities only open the temple during specific times of the year and specific hours. This practice must be followed, rather than the local Vietnamese practice of opening the doors whenever it seems there may be tourists. Secondly, while we are aware that there must be a synergy between the developments of tourist cites and local practices, we strongly encourage practices to keep in mind values of sustainable development as much as possible. This includes minimizing the impact of foot traffic and also preventing the build up of pollution, specifically litter from visitors.

Next, the process needs to work collaboratively with the development of local education programs, such that local communities, including Vietnamese communities, in Ninh Thuận and Bình Thuận province, become aware of the importance of these local, national, and international heritage sites from a young age. This will help promote local respect for these precious sites, along with the respect for Cham cultural norms dictating behavior for visitors of these sites. Fourth, we strongly emphasize that a key practice that should be abandoned is the burning of joss stick incense at the temple, especially by Vietnamese and international visitors. Burning this type of incense produces a large amount of smoke, impacting the interior of the temple, damaging wood and brick structures. The Po Ramé temple is a valuable architectural work. There is a distinct need to research this site with contemporary archaeological and historical methods, to better develop reasonable plans for conservation. Finally, this research gives us further trajectories to better understand the complexities of Cham and Champa culture, history and art to support coming conservation plans accordingly.
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