

BUDDHIST RELIGIOUS ARCHITECTURE IN PAKHAN AREA, PAKOKKU, MYANMAR

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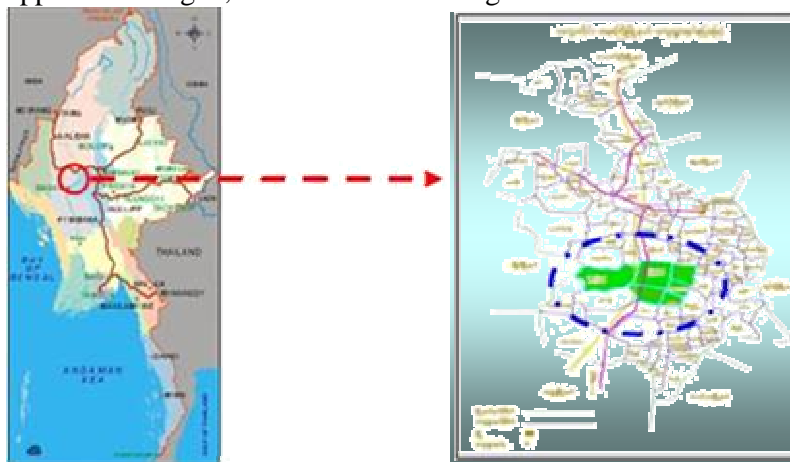
Abstract

The Religious buildings are important for every nation. Religious buildings should be considered as features in the built environment in country. There are many religious buildings in our country; Myanmar, Innwa, Sagain, Mrauk-U, Mandalay, Pakhan area, etc. Ancient Pakhan city was an important fort city of military although it was not the capital of a Kingdom. Throughout the history of Myanmar, the government servants, merchants and monks came and to be the safe and secure Pakhan area during the destruction of Bagan, Innwa, Nyaung-yan and Koung-bound. Thus, culture, social, economics values and construction techniques were brought with them into Pakhan region. So, this area can be seen a mixture of different styles from Bagan era to Koung-bound era (12th Century to late 18th Century). Pakhan area was flourished especially in Innwa and Koung-bound era. According to the record of Pakhan Archaeological Department, there have 360-numbers of ancient religious buildings. So, this area is called another Bagan that is the most famous religious area. In Pakhan region, the religious structures such as temples, stupas, monasteries, ordination halls (*Theins*), libraries (*Pi-ta-ka-taiks*), caves (*U-mins*), pyathats, image houses and other distinct buildings were built pompously. The three main types are temples, stupas and monasteries. Among then, the Pakhan-gyi wooden monasteries are the most famous one in Myanmar. This paper is base on field survey and inventory research or record of religious structures. The approach of this paper expresses the classification of religious structures. Among them, the three main types, temples, stupas and monasteries are expressed in detail studied on architecture point of view.

Keywords: Religious Architecture, Pakhan, inventory research, Stupa, Temple, Monastery

1. Introduction

Pakhan is located 17-miles north of Pakokku Township and 10-miles south of Yesagyo Township. This region is on the west bank of the Ayeyarwaddy opposite of Bagan, the most famous religious area.



(a) Map of Myanmar

(b) Map of Pakhan Area

Figure 1.1 Map of Myanmar and Pakhan Area

Pakhan has many Religious structures from Bagan era to Koung-bound era (12th Century to late 18th Century). Ancient Pakhan city was established five times. Figure (1.2) is shown in the city wall of Pakhan can be seen as very strong and massive structures at the present time.



(a) Northern City Gate (b) Western City Gate (c) Northern City Wall
Figure 1.2 City Wall of Pakhan

The following table is shown the list of founded kings and periods.

Table 1.1 The List of Founder Kings of Pakhan City

Number of Estab;	Founder King	Built Time	Period	Name
First	Danu Thiha	Sasana year 36 BC. 508	Before Bagan	Maharnagaya
Second	Sithu & Kyawswa	Myan; era. 100 AD. 738	Early Bagan	Kuthan gyi
Third	Dozishin Thihathu	Myan; era. 667 AD. 1305	Pinya	Kukhangyi
Fourth	Mingyi Swas	Myan; era. 742 AD. 1380	Innwa	Pakhan gyi
Fifth	Maha Dama	Myan; era. 1100 AD. 1738	Nyaung-yan	Pakhan gyi

Although ancient Pakhan was famous city, it becomes just a big village in Yesagyo Township, Pakokku district of Magwe division of central Myanmar. At present, there are the 360-numbers of religious structures¹ and eight village tracts in the ancient maintenance zone of Pakhangyi Archaeological Department show as figure (1.1) (b).

The ancient buildings in Pakhan Area were constructed and developed gradually step by step in progress. This progress based on their environment, culture, socio-economics and religious faith and belief. Some religious buildings are repaired and maintained by the local inhabitants, some are defaced and some are deteriorated. Sometimes local inhabitants are meddling the monuments by filling the extra objects onto the surfaces or forms of religious structures.

So, it is necessary to do about for conservation of a considerable number of our cultural heritage treasures from natural decay, vandalistic destruction or theft. It is important to preserve with proper protection. This paper is introduced to Pakhan area which was hardly recorded and studied on

¹ Recorded by Pakhan Archaeological Department.

the aspect of architecture. It also urges how to protect and preserve the religious buildings in this area.

2. Methodology

Firstly, 360-numbers of religious structures are inventoried or recorded. The typological classifications of this structure are on what?

Stupas, temples and monasteries which are the mainly types of religious buildings of Pakhan area has be listed and analyzed. It mainly emphasized on the types such as stupas, temples and monasteries.

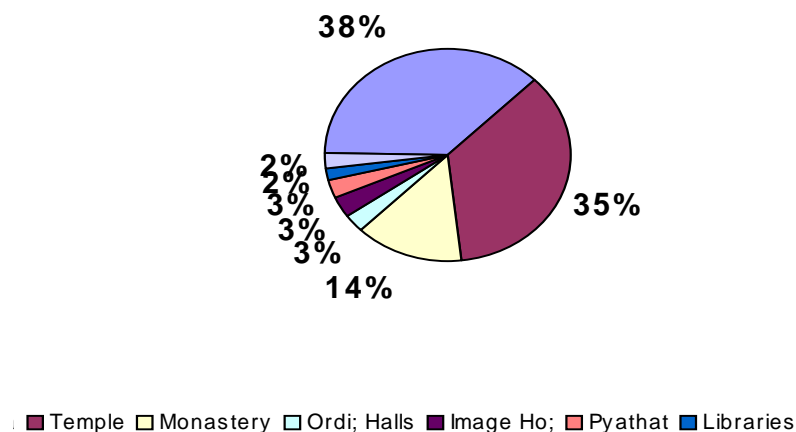
2.1 Quantitative Approach

a. *Typological Classification of Religious Structure*

The typological classifications of Religious structure are eight types. There are three main types which are stupas, temples and monasteries and others types which includes ordination halls (*Theins*), libraries (*Pi-ta-ka-taiks*), caves (*U-mins*), *pyathats* and image houses. Stupas, temples and monasteries are mostly found.

The numbers of Religious structures in pakhan area are 360. They are

- Stupa -137(38.05%)
- Image House-12(3.35%)
- Temple -126(35.00%)
- Pya-thats -10(2.80%)
- Monasteries- 50(13.90%)
- Libraries-7(1.90%)
- Ordination Halls -10(2.80%)
- Caves - 8(2.20%)



b. Description of Stupas, Temples and Monasteries

(i) Stupas

The total numbers of stupas in this area are 137 and 41-numbers are hollow spaced stupas. Stupas in Pakhan are mostly small size stupas. Most of the stupas and temples in this area have the three parts, the figure (2.1) shows, Madi, Anda or Hamika and Sakawali. Madi include plinth, terraces, circular bell rest and edge of bell shape dome. Anda or Hamika include bell shape dome and conical spire. Sakawali include bulb and umbrella. But some of stupa consisted with Plinth (*Ka-lar-kyauung*) at the portion of Madi.

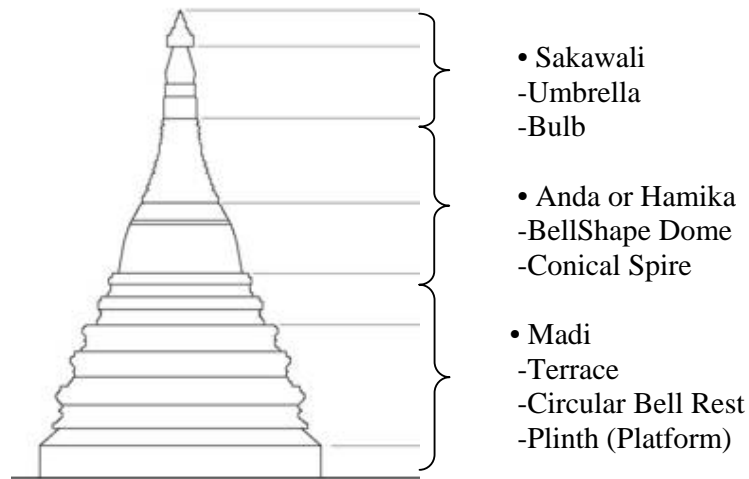


Figure2.1 Mostly found of shape in each part of Stupa

Circular bell rest shape of stupas can be founded mostly octagonal shape. Bell shapes dome of stupas are simple and well proportioned. The numbers of conical spires have ten tiers and more. It can be shown in figure (2.2) (a). Most of spreading lotuses are double-lotus. The umbrellas of stupas can be found into two different types: brick umbrella and iron umbrella.



(a) Temple (No-12)











(b) Temple (No-290)

(c) Temple (N0-105)

Figure2.2 Stupas in Pakhan Area

There are basically divided into five types of Pakhan stupas according to spatial composition and form composition–

Table2.1 Stupa Types

No	Stupa type	Plan	Figure
1.	stupa with square basement and four facades		
2.	stupa with octagonal basement and eight facades		
3.	stupa with square basement and having four stairways		
4.	stupa with circular basement and cylindrical form		
5.	Sinhalese types stupas with circular basement		

(ii) Temples

The *Gu* type of structure or *Patho* Which is contained interior spaces are called Temple. There are 126-numbers of temples are located in this area. Among them 65-numbers of temples are with Mural paintings that is show the Myanmar culture and arts and this paintings reflect the traditional style of the time².



(a) Temple (No-228) (b) Image of Temple (No-19) (c) Temple (No-165)

Figure2.3 Temples in Pakhan Area





There are also divided into three types according to entrances of Temple-

- 1) shrine room with only one entrance and an Buddha image at the end.
- 2) shrine room with three entrances and an Buddha image at the end of three cardinal points.
- 3) four entrances and a central core with Buddha image against each side of four cardinal points².

² Htet Htet Hlaing, Ma and Aye Nu Nu Oo, Ma, February 2004, M-Arch Thesis *Study on Religious Buildings in Pakhan Area*. Department of Architecture, Yangon Technological University, Myanmar.

There are basically two distinct types according to spatial composition. There are space at the central core and solid mass at the central core.

Table2.2 Temple Types

No	Temple type	Plan	Figure
1.	space at the central core		
2.	solid mass at the central core		

Most temples are built for private worship; not for public because the vestibule is very small and is not sufficient for audience. Most of temples, the exterior wall are ornamented with stucco carvings, figure (2.4) (b) and interior wall, figure (2.4) (c) and ceiling, figure (2.4) (a), are decorated with mural painting. The lighting from the entrance and apertures cannot penetrate to the interior space because of very small and narrow size of apertures. So, the lighting is darker in central shrine especially for meditation. And also, it permits the dim light in the central shrine to protect the mural painting from the bright light. The materials are mainly used bricks, size of nearly (2"x8" x16") and sometimes used sandstone.



(a) Painting on Ceiling (b) Ma-Nu-Thiha Statue (c) Painting on Walling
Figure2.4 Ma-nu-thiha sandstone statue and Mural Paintings

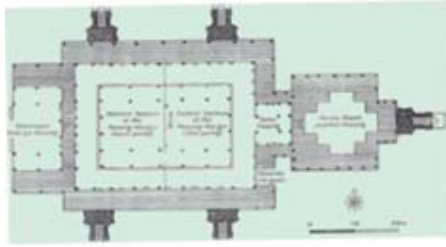
Basically, the main structural systems of temples are load bearing system. In detailed structural system, temples are used the various kind of arch and vault are used and they can be studied at the entrances, doorways, porches, niches, passages, corridors, staircase, vestibule and central shrine. Most of the vaults of the central shrine are used cloister type. Most vestibules and porches are used barrelled vault and cupola on the ceiling.

(iii) Monasteries

The monastery education influenced not only for the religion but also to the human society of Pakhan area. There are 50-numbres of monasteries are located in Pakhan area. Monasteries can be found not only timber monasteries but also brick monasteries. Most of monasteries are *Taw-Ya-Kyaung* which is far from town.

- **Wooden Monasteries in Pakhan Area**

There are fifteen numbers of wooden monasteries in this area. Pakhan-gyi and Pakhan-nge monasteries are famous among the wooden monasteries in Myanmar.



(a) Plan of Pakhan-gyi Monastery



(b) Pakhangyi Monastery



(c) Woodcarving of Ramayana epic



(e) The wall opening (or) Kela



(f) Doorway with wood carving

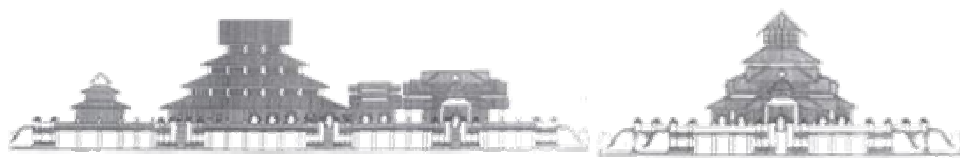


(g) Masonry Staircase

Figure 2.5 Pakhan-gyi Monastery

Pakhan-gyi monastery was built at the reign of King Min-don (1853-1878). It took two years to build and has been repaired and restored in the early 1992s. This monastery consists of hsaung-ma-gyi (reception hall), sanu-hsaung (apartment), pyathat-hsaung (shrine room) and baw-ga-hsaung (store room) attached with five masonry staircase. There are 254-numbers of pillars and the base of interior pillars of hsaung-ma-gyi attached by the wood carving of Ramayana epic. Numerous doorways framed with classic-koung-bound style. This is one of the doorways on the north side. Window frames of various sizes also show carved decoration.

Pakhan-nge monastery was built at the reign of King Min-don (1853-1878) and took eight years to build. It is the one of the largest wooden monasteries in Myanmar and supported by 332-numbers of pillars. There are 400-students or novices resided at the monastery and received religious education. Unfortunately, all that remains today are the foundation pillars and eight massive masonry staircases.



(a) Elevations of Pakhan-nge Monastery



Figure 2.6 Pakhan-nge Monastery

Pakhan-nge monastery is not only higher but also more columns than Pakhan-gyi monastery. North-south side of Pakhan-nge monastery is longer than east-west side. East-west side of Pakhan-gyi monastery is longer than north-south side.

The following table is comparison between Pakhan-gyi and Pakhan-nge wooden monasteries.

Table 2.3 Comparison between Pakhan-gyi and Pakhan-nge Wooden Monasteries

No		Pakhan-nge monastery	Pakhan-gyi monastery
1.	Donar name	U Yan Wai (Pakhan Mingyi)	U Pho Toke (Kyiwin Min)
2.	Period	(1218-1226)	(1230-1232)
3.	Construction Time	8-years	2-years
4.	Roof of Zei-ta-wun	Kon-Pyathat	Khaung-Le-Paw
5.	Roof of Sa-nu hsaung	Yon-Htet-Khaung	Yon-Htet-Khaung
6.	Roof of hsaung-ma-gyi	Khaung-Le-Paw	Khaung-Le-Paw
7.	Roof of baw-ga hsaung	Khaung-Le-Paw	Khaung-Le-Paw
8.	Length of north-south	119'-00"	82'-09"
9.	Length of east-west	250'-00"	192'-07"
10.	Area of Zei-ta-wun	1089-sqft	920-sqft
11.	Area of sanu-hsaung	957-sqft	664.71-sqft
12.	Area of Hsaung-ma-gyi	6097-sqft	3932.25-sqft
13.	Area of baw-ga hsaung	1200-sqft	605.16-sqft
14.	Area of Samyin hsaung	16263.5-sqft	7878.58-sqft
15.	Height of platform	9'-10"	6'-06"
16.	Height of pillars	120' to 160'	50'
17.	Number of pillars	332-numbers	254-numbers
18.	Circumference of pillar	6' to 7'-06"	6' to 7'-06"
19.	Staircases	8-numbers	5-numbers
20.	Total area	25606.5-sqft	14000.6-sqft

- **Brick Monasteries in Pakhan Area**

There are thirty five numbers of brick monasteries in this area. Among them the famous monasteries are Kyauk-Kar monastery, Khe-Lu monastery, Ma-taung-ta monastery, Phaung-taw-Oo, etc.



(a) Khe-lu Monastery



(b) Kyauk-kar Monastery

Figure2.7 Khe-Lu and Kyauk-kar Monastery

Most of the brick monasteries are complex monastery such as *Shwe - U-Min* monastery, *Kan-Swe-U-Min* monastery and *Pae-Taw* monastery are famous complex monasteries.

Shwe-U-Min monastery situated at northern side of Pakhan is one of the famous monasteries from Bagan period to Koung-bound period. The natural caves (*U-Min*) can be found within the compound of *Shwe-U-Min* monastery.



Figure2.8 Shwe-U-Min Monastery

Kan-Swe-U-Min monastery which is situated northern part of Pakhan was one of the famous monasteries. This complex, figure (2.10) is consisted two temples, three stupas, one ordination halls (*Theins*), two caves (*U-Mins*), and three shrines or image houses.



Figure2.9 Standing Image and Image House

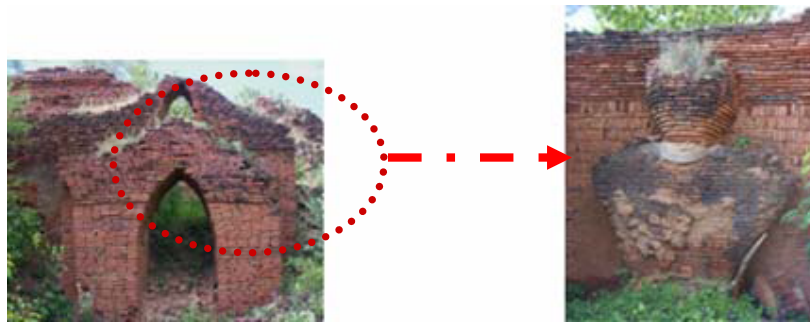


Figure 2.11 Sitting Image and Image House

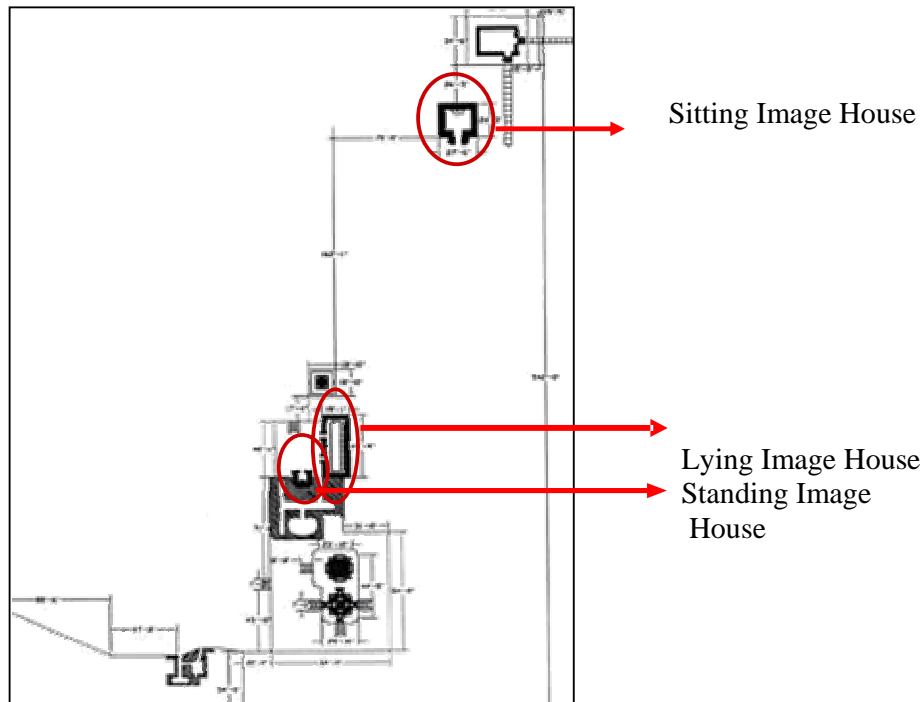


Figure 2.10 Site Plan of Kan-Swe-U-Min complex Monastery

This three shrines or image houses were individually built as standing image figure (2.9), sitting image figure (2.11) and lying image figure (2.12) within each shrine. There was not found the foundation of monastery, but other buildings exist at the present time. The brick arrangement was very well in sitting image and standing image houses and barrelled vault in lying image house. The standing image and sitting image houses are damaged and without roofing.

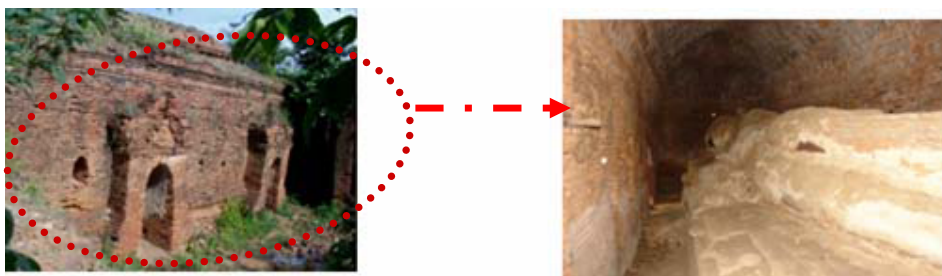


Figure 2.12 Lying Image and Image House

3. Conclusion

In Pakhan Area, there are 360-numbers of religious buildings, Stupas are 137-numbers, temples are 126-numbers, monasteries are 50-numbers, ordination halls (*Theins*) are 10-numbers, libraries (*Pi-ta-ka-taiks*) are 7-numbers, caves (*U-mins*) are 8-numbers, *pyathats* are 10-numbers and image houses are 12-numbers. Among them, stupa, temple and monastery types are mostly formed.

Stupas and temples have the three parts Madi, Anda including Hamika and Sakawali which are simple and well proportion. Most of the stupas and temples in this area are influenced with horizontal and vertical effect of shan style that is located in eastern part of Myanmar. Some are maintained by the local inhabitants, some are defaced and some are deteriorated. So, we should to do to promoted public awareness and to uplift hereditary pride. A special care is needed to protect and preserve the cultural heritage therein so as not to deteriorate due to natural disasters.

This paper expect with respect to perpetuation of cultural heritage that has existed for many years. From the Architectural point of view, the conservation of buildings should certainly be maintained as the original style or form, function, aesthetics and structure.

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