# INVENTORY OF LATERITE MONUMENTS REMAIN AT PA-DA-GYI

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### **Abstract**

Invention of laterite remains at Pa-da-gyi city are studied by archaeological point of view. The Pa-da-gyi area is one of the archaeological sites in Kyauktan, Township, Yangon Region, which can give extensive laterite cultural sequence. The area has old ancient sites and a large number of archaeological remains such as religious shrines, secular structures of laterites, laterite images of Buddha, laterite foundation of stupas, sima stones, statutes of various sizes of laterite figures, animal figures, human figures of glaze, city walls of laterite, laterite moats, roads of laterite, bridges of laterite, stairs of laterite, glazed earthen-ware and potshards .... etc. Some laterite constructions are of religious purposes. This paper will emphasize on the laterite culture of Pa-dagyi area in Kyauktan Township, Yangon Region from excavation archaeological point of view.

Keywords: laterite remains, laterite culture and Pa-da-gyi area

#### Introduction

The Pa-da-gyi is located in Kyauktan Township,<sup>1</sup> Yangon Region, and it is famous as an ancient city named as Pa-Da city. Geographically, the Pa-da-gyi lies on the coastal area of Lower Myanmar where laterite soil is common everywhere. Therefore, the region is called laterite zone of Lower Myanmar. The Major laterite zone lies around the Thaton area in Mon State where the ancient city of Suvannabhimi was located. Pa-da-gyi laterite zone consists of Thanlyin and Kyauktan Townships.

Archaeological explorations were previously made by officials in olden days and excavations were followed up by the Department of Archaeology at Pa-da-gyi village in Kyauktan and Kyaik-Inn village in Thanlyin. Accordingly, excavation site no.1 and no.2 were carried out at the Pa-da-gyi relic stupa (Shwe-Hsan-Daw) and another one excavation site no.3 at Myat-Saw-Nyi-Naung stupa in Kyauktan Township and site no.4 at Kyaik-Inn village in Thanlyin Township during the last 20 years ago. These works yielded a reliable material culture such as laterite objects, ruined stupas, sima hall and construction materials of ancient laterite buildings. There are many unexcavated archaeological mounds within the area, some are unexplored and difficult to identify. In this paper, I would like to present the previous research and its observation of the material culture in their archaeological investigation.

### Methodology

This paper collected the data by using the field exploration. Inventory research methods are used to explore the laterite remains of Pa-da-gyi area. The secondary sources are collected, based on books and articles. In collecting data, some interviews were also made to the local people and officers of Ministry of Religious Affairs and Culture who are responsible for maintaining the ancient archaeological evidences of Pa-da-gyi area.

#### Archaeology Exploration and Excavation in Pa-da-gyi Area

Excavation retains its central role in fieldwork because it yields the most reliable evidence for the two main kinds of information archaeologists are interested in:

- (1) Human activities at a particular period in the past; and
- (2) Changes in those activities from period to period.

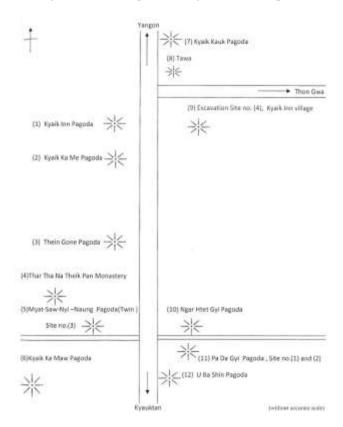
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Kyauktan Township is lied in the southern direction about 12 miles<sup>1</sup> from Thanlyin Township. Especially, Laterite culture of this area had been repaired with cement. Formerly, Pa-da-gyi old ancient city is included four townships, the name remains as Pa-da-gyi village in this area. The major laterite culture is found in four townships (former, Pa-da-gyi area) and it has been investigated for 10 years. Archaeological excavations were undertaken in these townships in 4 sites.

These sites are lied in Kyauktan Township

- (1) Site No.1 at eastern part of Pa-da-gyi hair relics pagoda,
- (2) Site No.2 at north-east of Pa-da-gyi hair relics pagoda,
- (3) Site No.3 at Myat-Saw-Nyi-Naung pagoda,
- (4) Site No.4 in Kyaik Inn village, Thanlyin Township<sup>2</sup>



**Drawing 1** Location Map view of Laterite found in the Pa-da-gyi Area.

Above these sites, excavation yielded sima, Buddha image, ruin stupa, foundation of stupa, foot stone, pedestal, brick and animal figure, other objects of such as brick and potsherds.

<sup>&</sup>lt;sup>1</sup> Report of Archaeology Department, 2004 (Report of evidence of ancient Padas country), P.2

<sup>&</sup>lt;sup>2</sup> Report of ancient Pada Country

## (1) Site No.1 hair relics stupa



**Figure 1.** (a) Laterite Buddha images housed in the site Museum, Pa-da-gyi Shwe-Hsan-Daw-Pagoda

(b) A base of Laterite Buddha image, Pa-da-gyi Pagoda Museum.

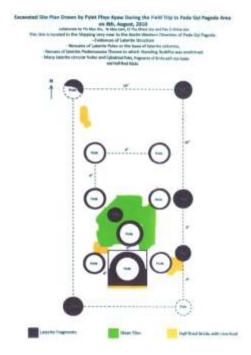
Archaeological excavation Site No.1 is situated on the eastern side of Pa-da-gyi hair relics stupa (Shwe-Hsan-Daw) far from about 65 meters in Pa-da-gyi village, Kyauktan Township. This site is laying on a small laterite hill, length 170 feet, width 100 feet. This Site No.1 excavated and found numerous laterite bricks, glazed earth-wares, burnt bricks, tile roofs, laterite Buddha image in broken condition and part of Buddha head. These objects were moved to the site museum on the platform of Pa-da-gyi pagoda. On the site there are some laterite sima stones and bricks. Moreover, four laterite brick courses were unearthed. This layer of laterite courses was assumed that laterite brick wall may be a part of sima foundation.

Nowadays, the three<sup>1</sup> Buddha images from the sites have been moved to the museum. The head of Buddha image is 1 foot and 2 inches and circumference of the neck is 2 feet. This laterite Buddha image measure 2 feet and 6 inches in its knee and 3 feet and 3 inches high. Another one measures 2 feet and 10 inches at the base, height 1 feet and 9 inches and circumference of waist is 3 feet and 2 inches. Laterite foot stones discovered on this site measures 2 feet in diameter and the height is 2 feet. This site was assumed that it was a laterite building with a roof in a shape of rectangular, four laterite courses remain in bad condition under laying the floor level.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Report of Archaeology Department, 2004 (Report of evidence of ancient Padas country), P.2

<sup>&</sup>lt;sup>2</sup> See Figure (1) (a)

#### (2) Site No.2 at north-east of Pa-da-gyi hair relic stupa





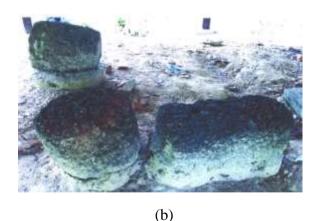
**Drawing 2** Plan Map of Pa-da-gyi excavation Site No.2

**Figure 2** A general view of Pa-da-gyi excavation Site N0.2 Kyauk -Tan Township

This Site No.2 is located on a lower platform (about 75 meters) north east of the Pa-dagyi pagoda. It is assumed that it might be a part of a Sima Hall (or) Ordination Hall, built of laterite because it is in a rectangular in shape and many sima stones of laterite blocks are found around this site. Another significant feature are post-holes to support upper structure, glazed bricks for pavement, roof-tiles and a throne or pedestal carved with laterite. Many brunt bricks are among the associated finds. The plan measure 32 feet in length, and 16 feet in width. It is high about 4 feet above the ground level.

### (3) Site No.3: Myat-Saw-Nyi-Naung Stupa





**Figure 3.** (a) Laterite block discovered in Excavation, Site No.3 Myat-Saw-Nyi-Naung Stupa (b) Laterite blocks in circular shape and hexagon shape discovered in Excavation Site

No.3 Myat-Saw-Nyi-Naung Stupa, Kyauktan

Excavation Site No.3 is located at the east of Myat-Saw-Nyi-Naung (Twin Stupas) near the junction of Kyauktan-Thanlyin and Thilawa road. This site lies besides the main stair-ways built of laterite bricks, which is facing to the east. Previously, it was a mound under the thick jungle. It is rectangular in shape and indicates fragments of laterite blocks and roof-tiles. The

Department of Archaeology excavated this site in 2005 and uncovers a rectangular structure using huge laterite blocks in its base. Some of them are rounded in shape and some are rectangular. No inscription, statutes or any images of interest, have been found except many terracotta roof-tiles. Now, the Department of Archaeology preserved this Site No.3 under shelter and prepared for site museum as an example of laterite culture heritage together with the laterite stair-way of Myat-Saw-Nyi-Naung, which lies close to this Site No.3.1

The laterite stair-way<sup>2</sup> of Myat-Saw-Nyi-Naung stupa is worth to describe in detail here and it is associated with the Site N0.3, which is an old structure of ancient Sima or Ordination Hall. It is connected with a high platform or a corridor about 200 feet in length and 40 feet in width, between the two stupas of Myat-Saw-Nyi-Naung namely Naung-Daw-Gyi and Naung-Daw-Lay. Facing to the East, stair-ways is about 80 feet in height. It has two levels intersection with a long corridor; while the lower level has 25 steps and upper level has 28 steps. The intersecting corridor is about 25 feet in length also has three terraces of laterite pavements. The stair-case is rather wide enough, about 16 feet. It was bounded with a frame in both sides with a high of 3.5 feet. Two ogre figures carved in laterite are facing to the East of the end of the stair-case. The laterite bricks using in these stairs are (19 in  $\times$  19 in) in sizes. Because it is a grand stair-way one may assume that it was not an ordinary people. It might had been arranged for the royal visits in the olden days.



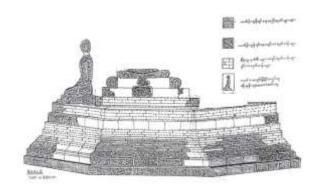
Figure 4. A broad stair-way made of Laterite brick at Myat-Saw-Nyi-Naung Stupa

The evidence of a sima hall erected beside the stair-way shows that there would be many religious buildings along the stair-way in olden days. It can also be estimated that the volume of using laterite in the stupa compound of Myat-Saw-Nyi-Naung was a great quantity. Therefore, it is a good example of laterite culture in Pa-da-gyi area.

<sup>&</sup>lt;sup>1</sup> See Figure (3) (a) and (b)

<sup>&</sup>lt;sup>2</sup> See Figure (4)

### (4) Site No.4: Kyaik Inn Village, Thanlyin Township



**Drawing 3** A Sketch of Kyaik-Inn Laterite Images, Thanlyin (Source from U Myint Aung)



**Figure 5.** A general view of Kyaik Inn excavation site

Site No.4 is located in the Thanlyin downtown area about 6 miles south of Thanlyin. It is accessible by road via Thanlyin to Kyauktan. The site lies on the slopping ground in the east of the road. It is on a wide area high ground about (5) acres square and traces of small old stupa mounds are scattered on this ground in the east. For the sake of convenience, the Department of Archaeology<sup>2</sup> chooses one of a big stupa mound for excavation. A layout of 15 grids were prepared and the excavation exposed the base and the whole old stupa built with burnt bricks mixed of laterite.

At the upmost level of grid number D2 and E2, a laterite image of sitting Buddha, very thin in shape, facing to the south-east was discovered. It is seated in Bhumisparsa Mudra (the earth touching attitude), and as large as the same human life-size. According to the villagers living near the site, it is said that this Buddha statue has been exposed on this mound many years ago. Therefore, it can safely say that this image might have been associated with the brick mound.

The third level of the mound are brick courses mixed up of burnt bricks and laterite bricks. It is realized that these brick courses form an octagonal base of a structure probably a throne or pedestal for a large statute. It has a square plan attached to it probably a vestibule facing to the North-West. The base of this brick structure measures 560 cm in length. It stood on an earthen mound about 145 cm high. Traces of burnt bricks and laterite bricks are scattered among the debris on the ground level. A laterite brick at the base measure (45 cm  $\times$  17 cm  $\times$  14 cm) while a burnt brick measure (17 cm  $\times$ 13 cm  $\times$ 16 cm) for large size . They are used for bounding with the burnt bricks to form a large octagonal shape pedestal about 130 cm in height.

During the excavation, one strange thing was discovered in the upper level of the mound. It was a semi square base of a platform on top of the octagonal shaped pedestal. It rises upward with three brick courses to form a square small pedestal again and it might be a double-pedestal for Buddha image and it is very rare.

In this process, it is also assumed that a large laterite block in human body shape fallen down to the second level might had been a main statute of this structure which is a large size Buddha statue probably set on the square base of the octagonal pedestal. The reaming sitting Buddha of life-size facing to the southeast might be the one which was placed on the same pedestal. So that the excavated mound was not a stupa but an octagonal pedestal for a large laterite Buddha statue of an unknown date.

According to the associated find of roof-tiles around the structure it can safely determine that this structure had a roof with terracotta roof-tiles it might have been arranged together with laterite figures of mythical birds, ogres and other religious objects surrounded the main statue. The excavation Site No.4 of Kyaik-Inn village in Thanlyin township show a good example of laterite culture in Thanlyin Township.

#### **Conclusion**

Laterite has been an important material for the building of permanent structures for at least a thousand years in lower Myanmar. It is believed that the art of quarrying laterite, as well as architectural forms and other cultural features, was brought to South-East Asia from India. The ancient ruins, largely built of laterite, which still stand in so many and widely scattered part of lower Myanmar, were built by Mons. In the Sittaung and Thanlwin vallies, at the south-eastern part Gulf of the Muttama on a former sea-route, are the ruins of the sixth to eleventh century city of Thaton. In the western part near Yangon, is Pa-da-gyi area which had been a Mon kingdom, native of southern Myanmar, sometime in the tenth or eleventh century approximately.

Laterite occurs as a more or less hard horizon in the subsoil in many parts of Thanlyin and Kyauktan areas and in many places, it can be quarried fairly easily. The laterite was quarried from the large excavation or "tank" and the moats, that are conspicuous features of the landscape near most of the laterite ruins such as Kyaik-Khauk pagoda, Kyaik-Inn pagoda in Thanlyin, Kyaik-Ka-Me pagoda and Pa-da-gyi, Myat-Saw-Nyi\_Naung and Kyaik-Ka-Maw pagodas in Kyautan.

Archaeological excavations at Pa-da-gyi and Kyaik-Inn (Thanlyin) proved that laterite was used for the foundation courses and the main body or mass of ancient buildings. In some cases, laterite was also used for the foundation courses and the main body or mass of ancient buildings. In some cases, laterite was also used in pagoda finials, Buddha statutes, mythical animal figures, receptacles, umbrellas and the like, for religious purposes. For secular buildings, it can be used for foot-stones, wall bricks, pavements, and drainage etc. These remains of laterite structures and art objects are scattered in the area of Thanlyin and Kyauktan where the legendary kingdom of "Sihananda City" or "Pa-da-gyi" was located. Excavations followed up after making explorations but these works were not sufficient to know the whole cultural process in the regional basic.

Ancient laterite culture was decaying in various reasons. In the absence of harder and more durable road material, laterite is a useful surfacing for roads. A natural tendency of laterite to cement slightly enables the surfacing of roads without difficulty and makes a road suitable for light traffic and easy riding. During the British colonial days of lower Myanmar, since more than one hundred years ago, modern construction of roads removed much laterite from the culture monuments for surfacing the motor road. The Kyauktyan-Thanlyin road about 12 miles in length was a good example for this kind of construction in the area. This kind of vandalism might become again in our life time. Systematic surveying and recording may be need for protection and preservation of laterite culture in the region.

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