



By
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A Thesis Submitted in Partial Fulfillment of the Requirements
for Doctor of Philosophy ARCHAEOLOGY
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THE STUDY OF THE ENCASED BUDDHIST MONUMENTS AT
BAGAN: A SYSTEMATIC SURVEY AND ANALYSIS

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The starting point of this dissertation is the origins of encasement at the ancient capital of Bagan (9th to 13th CE), Myanmar. The aim is to put these Bagan monuments, primarily stupas, in the context of the origins of Buddhist encasement in India and Sri Lanka. The chronology of the technical aspects of encasement situates them within religious concepts and socio-political patronage. Stupa architecture was popularised by the Mauryan Emperor Asoka in the third century BC with encased Buddhist monuments in India and Sri Lanka in successive periods. Excavations in India and Sri Lanka have yielded further evidence of encasement through reliquaries. Against this background, the author considers that the tradition and custom of encasement started during the life of the Gotama Buddha. The primary impulse for enshrining relics of the Buddha, the Buddhist saints, and the ashes of heroic kings in stupas is for religious veneration. However, the patronage of kings and other elite groups and local communities was an essential context for supporting the building and maintenance of new structures and monastic communities. There are eighty-three encased monuments at Bagan and five different architectural typologies of the encasements: encased stupa, encased temples, encased group of stupas, encased moathtaw stupas, and encased Buddha images can be found at Bagan.

This dissertation compares the design of encased stupas in 15th to 19th century Thailand with examples from Myanmar to highlight the shared custom of encasement alongside the differences over time. Archaeological evidence of stupa encasement is plentiful, particularly in Thailand, showing variations in the design of space and patronage. In both these countries, the second or new donor sometimes left a gap between the original inner and new outer structure for patrons and pilgrims to move around the inner structure in veneration. This dissertation compares examples alongside the customs and beliefs that underpin the function and meaning of the encasement. Archaeological evidence of encasement in Thailand is complemented by the presence of relics of the Buddha, kings, amulets, and precious stones, possibly consecration deposits reviewed through the chronology, epigraphy, architecture, art styles and reliquaries of the Buddhist stupas dating from 15th to 19th centuries CE.

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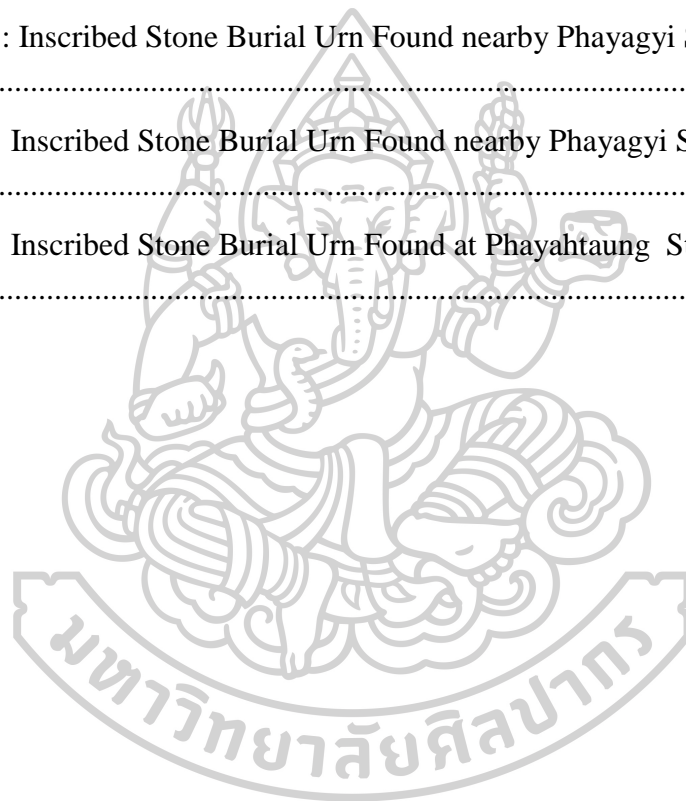
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CHAPTER 1

Introduction

Among the numerous Buddhist structures in Myanmar, the least recorded are encased Buddhist structures. Most of the encased Buddhist structures at Bagan were recorded but encased Buddhist structures have been recovered in the various parts of Myanmar. In addition, encased Buddha statues have been found at Bagan and in the Kyaukse area near Mandalay (Myo Nyunt Aung, 2021). Most examples are double encasements but a few were triple encased structures in Myanmar (Aung Kyaing (Minbu), 2017).

A number of the encased monuments have been found in the Property Zone of Bagan, inscribed on the UNESCO World Heritage List in 2019. Most of the Bagan Buddhist structures were encased between 9th to 13th centuries CE (Hudson, 2004). In Bagan, some encased structures are hollow structures, while some of them are solid structures. The bases of the encased structures at Bagan are mostly circular, octagonal, square, and rectangular in shape. Some of the encased monuments have a space or corridor between inner and outer structures, but some have no space between two of them (Pichard, 1992-2001).

Archaeological evidence indicates that encasing stupas, temples and Buddha images became a significant part of Buddhist practice or religious practice during the Bagan and post-Bagan periods. There are some epigraphic records regarding encasement through ink and stone inscriptions, the Myanmar Chronicles, the History of the Pagodas and the Great Chronicle of Ceylon (Mahavamsa Text). These demonstrate that this was a deliberate practice or religious practice, not merely a way for a builder to preserve and conserve a damaged monument but underlining how they have already been sanctified buildings. The development of this practice from circa 900-1300 CE can be seen generally in the existing chronological and spatial developments of Bagan. The architectural typologies of the encasement with Myanmar artistic works and iconography of Buddha images are an extraordinary part of the artistic heritage and material culture of Bagan. Thus, the encased structures are archaeologically very important to understand the evolution of Bagan. In saying this,

it is important to note that the art and architecture of Bagan was adapted from India and Sri Lanka, as well as the earlier Pyu, and Mon cultures of Myanmar. The multicultural background of Bagan is a significant element through which to understand the practice of encasement. As noted, relevant areas and groups include the Pyu regions of middle Myanmar, Mon regions of lower Myanmar with their prototypes in India and Sri Lanka. Archaeological evidence indicates that the main religious ideology of the encasement is to protect the relics of the Buddha enshrined and placed into the inner monument encased by the outer monument to be safer in Myanmar and other countries such as India, Sri Lanka, Thailand as well (Myo Nyunt Aung, 2021).

Bagan covers an area of about 45 square-kilometres on the eastern bank of the Ayeyarwady river in the central part of Myanmar. The total numbers of Bagan monuments were 4446 during the Bagan period. Most of the Buddhist monuments have been unfortunately damaged by natural disasters, vandalism, and age. Now there are 3822 monuments of different sizes still standing in Bagan (Aung Kyaing (Minbu), 2007). Among the Buddhist monuments at Bagan, there are eighty-three encased monuments at the ancient city of Bagan. Numerous encased Buddhist monuments have been already found in various parts of Myanmar. Normally they cannot be easily found anywhere but when subject to natural disasters, vandalism, and age, they can be unexpectedly found from the outside. When the inner stupas or inner temples have been uncovered, the original impressive and artistic works in successive periods can be studied on the exterior of the inner ones (Pichard, 1992-2001).

Archaeological and architectural evidence of the encased structures found in Myanmar indicate that some of the inner structures were built in Pyu period (9th to 10th centuries CE), while the outer structures were built in Bagan period (11th to 13th centuries CE) and post Bagan periods such as Pinya (14th century CE), Inwa (15th to 16th centuries CE), Nyaung Yan (17th century CE) and Konbaung period (18th to 19th centuries CE) (Pe Maung Tin and Luce, 1960). In Myanmar, the earliest encased structures were discovered in Pyu period, while some of the encased structures have been recovered till to 17th and 18th centuries CE and to the present day (Aung Kyaing

(Minbu), 1984). This will be seen in the documentation of examples in this dissertation.

In this dissertation, comparative case studies of the encasements in South and Southeast Asian countries like six monuments in India, five monuments in Sri Lanka, five monuments in Thailand, and twenty-two monuments in other places outside Bagan in Myanmar are described. Inscribed reliquaries and multiple layers of the reliquaries showing the religious concepts and socio-political ideas, unearthed by the archaeological excavations in India, Sri Lanka, Thailand, and Myanmar are mentioned. The concepts of encasements are described through the twenty-two epigraphic records regarding the encasements found in Myanmar.

1.1 Statements of the Problems or Significance of the Research

The stupa architecture originated as a pile burial mound, indicating the demise of Lord Buddha. Subsequently, the simple commemorative mound became religious edifice. Every Buddhists pay respect to the structure as chief emblem for cult worship. There are four categories of the stupa like Saririka, Paribhogika, Uddessika, and Dharmika as the Buddhists have adopted (Ministry of religious Affairs, 2000). The first three groups of the stupa indicate the memorial tumuli and the last one is built as an act of religious merit. The Gotama Buddha has recommended to his favourite disciple Ananda regarding erecting of the stupa for symbolising the Great Demise of four kinds of the Holy persons such as a Tathagata (Buddha), a Pacceka Buddha (Silent Buddha; Lesser Buddha), a disciple of Tathagata, and Universal monarch. The stupa architecture was extensively popularised during the reign of King Asoka in the third century BCE stimulating the tradition that he simultaneously erected 84,000 stupas over the relics of the Buddha (Geiger, 1912; Rijal, 1979).

There are some encased monuments in successive periods in the various parts of India (Mitra, 1971). For example, among the Buddhist monuments found in Kapilavastu are the twin stupas (see Figure 1) in Dhamnihawa, Nepal. Rijal (1979) suggests that the larger stupa, which may have been built in commemoration of Suddhodana, the father of Buddha was built during the N.B.P period (6th century BCE) and then the smaller stupa, dedicated to the Queen Maha devi, the mother of Buddha was built. The centre

of the larger stupa contained a mud stupa (14.53 metres in diameter and 0.91 metre high). In the second phase of construction, the mud stupa was encased by tapered bricks. During the first brick encasing, the basal diameter of the stupa was enlarged to 15.85 metres and the stupa face raised to 1.37 metres; concentric circles of tapered bricks were used up to 2.31 metres towards the top. Excavations of the two Buddhist stupas with basal diameters of 15.85 metres and 7.92 metres, which may have been probably built to commemorate the parents of the Buddha at this important site of Buddhist archaeology, were conducted by the archaeological team of the Department of Archaeology, Nepal in 1968-69 (Rijal, 1979; pp. 39-42). Author considers that these two stupas may have been one of the earliest encased stupas in ancient India.

Soni (1991) suggests that she found three varieties of the encasements in India, Thailand, and Myanmar. These encasements are a solid encasement intimately covering the original structure, an encasement enveloping the original shrine with empty space in between, and the multiple encasements without any space in between. She notes that Sanchi stupa located in India is an example of the first type. The Nakorn Pathom stupa located in central Thailand is an excellent example of the second type which is an encased stupa with empty space in between. The inner stupa is visible through a 'peep hole' in the encasement. The best example for multiple encasements of the third type is the Shwedagon stupa at Yangon, Myanmar (Soni, 1991). She also discusses another reason for such encasements may have been to safeguard the architectural integrity of the original structure. In some cases the encasement may have been veneration of the devotees, and the shape of encasement has been done with gold leaves, but these stupas were not constructed with brick and stone. She suggests that the large golden Buddha images in some places, particularly in Thailand were encased with thick plaster and thus successfully saved from the thieves and vandalism (Soni, 1991).

The idea of the encasement may have originated from ancient India and Sri Lanka. The encased Buddhist stupas can be seen in many places such as the twin stupas at Dhamnihawa, Nepal, and the Buddha's relic stupa at Vaishali, Sanchi stupa around

Vidisha, Dharmarajika stupa at Sarnath, Dhamekh stupa at Sarnath, Amaravati stupa at Amaravathi, Nandangarh Stupa at Lauriya, and Mahiyangana stupa at Mahiyangana, Thuparama stupa at Anuradha, Dakkhina stupa at Anuradha, Mirisawetiya stupa at Anuradha, Ruwanweli stupa at Anuradha. These Buddhist stupas are the earliest encased Buddhist stupas in the world. Soni (1991) notes that the encasement was stronger and more lasting than the original ones as in the case of the great stupa at Sanchi, which was encased with stone over the original brick structure. To ensure the security further, some solid pagodas comprise multiple encasements, as in the case of Shwedagon stupa at Yangon (Soni, 1991).

Archaeological and inscriptional evidence described in this dissertation shows that the Buddhist religious custom of encasing a reliquary with layer after layers of various substances to ensure the security of the precious relics can be found in the Bagan period and post-Bagan periods. This evidence is an important contribution to the understanding of the classical way the elements in the sacred reliquary were safeguarded. It testifies to the belief and custom undertaken to ensure the security of relics within reliquary vessels since the Bagan period.

This research can further contribute to understanding the impact of patronage on the building of what today are the archaeological remains of Bagan. The monuments at Bagan are generally dated according to their visual appearance taking into account any epigraphy and records of preservation and reconstruction. The detection and description of what are often hidden inner parts of the monuments brings to light a new insight into this dating. It can contribute to a revision of the chronology of the site at Bagan, continuity of patronage traditions, customs and religious beliefs, relationship between primary and secondary donors, the new temporal and spatial hypothesis in the study distribution. It can also contribute to identification the architectural typologies of encasements, the motivations of donors and the place of this custom in the ancient socio-political life of Bagan as well as religious practice such as through ink and stone inscriptions, the Great Chronicle of Ceylon (Mahavamsa Text), and Myanmar chronicles. Besides it can contribute the

development and distribution of the encasement in the South and Southeast Asian Archaeology or Buddhism Archaeology. It can also contribute regarding the development of the artistic works such as stone and brick masonry works, stucco decorations, glazed works, and iconography of the Buddha images and other figures on encasement.

This dissertation focuses on the art history and architectural evidence for the encasement of Buddhist monuments and images from *circa* the 9th to 13th centuries CE at Bagan. The research proposes a monument and image typology with the architectural forms and stylistic attributes of encasement. It also looks at the conceptual framework in relation to the epigraphy and literature of this era. The conclusion illustrates how encasement of images and monuments offers a new perspective for understanding the continuity of patronage spanning from the Pyu period to the present day of Buddhism in Myanmar.



Figure 1: The Twin Stupas, Kapilavastu, Nepal.

Note. The Twin Stupas (Dhamnihawa Stupas) may have been built in commemoration of the parents of Buddha, by J. K. Tiwari. Copyright by Jalaj Kumar Tiwari.

1.1.1 Significance of the Research in relation to published materials

As noted above the literature on encased monuments is not large. In the sections below, some of the key works are summarized. They include ones in Myanmar and in English. The most well-known book that includes encased examples entitled “Old Burma Early Pagan (three Volumes)” was written by G. H. Luce that discusses only three encased stupas which were discovered at Bagan, focusing on dating and form. These stupas are Pawdawmu stupa located southwest of Nagayon temple, Kyauk Myet Maw stupa located on the eastern bank of the Ayeyarwady river southwest of Soemngyi stupa, and the Scovell Pawdawmu stupa located to the northwest of Dhammayangyi temple. In Volume-one of Luce’s work, there are three parts with ten chapters, which included Bagan History in Part A, Iconography in Part B and Architecture in Part C. The book sections describe some renowned kings of the Bagan dynasty with the inscriptional evidence and some Myanmar chronicles, the development of Theravada Buddhism, Mahayanist and Tantric Buddhism, the scenes from the Buddha’s life, the iconography of Buddha images and the evolution of Myanmar stupas and temples, and Brahmanical gods during the Bagan period.

Luce documents the Pawdawmu stupa near Nagayon temple as the most original, and oldest encased stupa yet opened at Bagan with nothing is known of its origin. Taw Sein Ko, an archaeologist ascribed it to that 11th century or earlier (ASB, 1918, p. 19). Luce said that U Mya, an archaeologist, was right in dating it not earlier than the 11th century (Luce, 1969, p. 281). Luce describes how the pyramid in this stupa tapers to the amalaka-lotus holding the bulbous finial and that such a pyramidal top is unique at Bagan (Luce 1969, p. 281). Taw Sein Ko said that it was exposed to view when the brick casing was removed (ASB 1916, p. 27).

Luce discusses another encased stupa called Kyauk Myet Maw stupa located to the southwest of Soemngyi stupa. He said that it was opened by U Mya and it is of normal type, bell- shaped with square terraces and no harmika (relic chamber). He

considered that it is probably post Aniruddha (Anawrahta). The top of chattravali (concentric rings) has been unfortunately lost (ASI, 1930-34, p. 178, Part-1).

Luce also includes the encased stupa named Scovell's Pawdawmu, a massive small stupa, 6.55 metres in height located northwest of the Dhammayangyi temple. He said that it was discovered and opened, at his own expense, by Mr. C.E. Scovell, late Executive Engineer in charge at Bagan. He noted it is a plain square terrace base, with two recessions of the corners and many horizontal lines making a normal bell-shape, without harmika and bulbous amalaka near the top of the chattravali (Luce, 1969, p. 281). Taw Sein Ko argues that it should be ascribed to the 9th century CE. Luce contends it should be earlier than the latter part of the 11th century CE (ASB, 1919, p. 31-32). He did not mention their concept, ritual custom, inscriptional evidence, or belief of the encasement in the Bagan period, simply that it is an encased stupa.

Aung Thaw (1972) included a detailed section on encasement of the Shwedagon stupa and its traditional history in his book entitled "Historical Sites in Burma." The various historical and archaeological sites by the successive dynasties in Myanmar with their important monuments, art and architecture, epigraphic records were mentioned in this book. He described many important historical sites such as Beikthano, Halin, Srikshetra, Thaton, Bagan, Tagaung, Pegu, Dagon, Mrohaung (Mrauk-U), Ava, Sagaing, Mingon, Amarapura, and Mandalay. According to his book, it was known that some important monuments with strong evidence are encased monuments such as the Shwezigon stupa and Ngakywenadaung stupa in Bagan, the Shwezigon stupa in Tagaung and the Shwedagon stupa in Yangon. He suggests that according to the traditional history of Shwedagon stupa in Yangon, the concept and ritual custom of the encasement were found during the life time of Buddha. Thus, over the relic chamber was erected a golden pagoda encased in a silver one which in turn was encased by a series of tin, copper, lead, marble and iron pagodas. Finally the whole series of smaller pagodas were encased by a larger brick pagoda. This pagoda built by the King Okkalapa was only 8.23 metres high. King Byinnya-U of Hanthawaddy raised it to a height of 20.12 metres in 1364 CE. It was encased, enlarged, repaired and gilded by the several kings in Myanmar History. When Shinsawbu (1453-72 CE)

came to the throne at Bago, She encased and enlarged over it a still higher pagoda assuming more or less the present shape. She also gilded the Shwedagon Pagoda from bottom to top for which she offered gold matching her weight. Dhammaceti, also a pious ruler, gilded the pagoda with gold four times and set up an inscription describing the legend of the Shwedagon Pagoda in Myanmar, Mon and Pali. In 1774 CE, when Hsinbyushin of Inwa put a new hti (Umbrella) the pagoda attained its present height. The Shwedagon pagoda today is 99.36 metres high, with a square plinth. According to the history of Shwedagon Pagoda, it was encased by successive Myanmar kings (Aung Thaw, 1972, p. 112-115).

A further important book for the study of encased monuments, “Ancient Myanmar’s Stone Inscriptions (Volume One to Six)” was written by Nyein Maung, a senior research assistant (Archaeologist). This work gives a different perspective on encasement in relation to the inscriptions as original records of the process of encasement. The focus is on the name and date of the donor with valuable information on the Shwe-Moathtaw temples attributed to the distribution of relics by King Asoka. Some concepts of the encasements were included in the stone inscriptions in this book. For example, some stone inscriptions described that the relics of the Buddha are encased by the different materials of the relic caskets such as golden caskets, silver caskets, bronze caskets, sandal wood casket, and ivory casket etc. to protect and to save the relics. In Nyein Maung’s work, there are twelve stone inscriptions regarding the encasement in the successive periods in Myanmar. Besides he said that there were many inscriptions of Shwe Moathtaw stupa which might have been built by the King Asoka in the 3rd century BCE in various parts of Myanmar. His book records some epigraphic records regarding the Shwe Moathtaw stupa, one of the types of encased monuments uncovered in Myanmar. The original inscriptions of his books give the history of each monument through the original inscriptions. In this landmark work, he read and deciphered all Mon, Pali, and old Myanmar inscriptions (Nyein Maung, 1972-2013).

An additional key work for encasement is entitled “Art and Architecture of Bagan Period (In Myanmar Language)” was written by Aung Kyaing (Minbu). His works explain how encasement can be detected at existing monuments, with valuable detail

from his personal experience at Bagan over many decades. The different architectural typologies with monumental terminology in the construction of the ancient Buddhist monuments, basic constructions, ornamentations, extraordinary workmanship, and conservation of the Buddhist monuments were described in his book. According to his hypothesis, secondary donors wanted to enshrine the primary monuments through encasement. He said that all original encased monuments built during the Bagan period and their original artistic works such as mural paintings, stucco carvings, stone carvings, wood carvings, goldsmith, blacksmith, and glazed decorations ornamented on them can be observed (Aung Kyaing (Minbu), 1984, p. 157-162).

Another work of Aung Kyaing (Minbu), “The Artistic Works of Shwezigon Stupa (in Myanmar Language)” explains practically how to encase the inner stupa finial made of five metal alloys (gold, silver, bronze, lead and tin) at Shwezigon stupa built by the King Anawrahta in the 11th century CE when the earthquake occurred at Bagan in 1975. This finding is notable archaeological evidence for encasement at Shwezigon stupa, followed up with an interview by the author on the encasement of this stupa in 2015. He said here was no space between inner and outer stupas. He studied in detail first-hand the numerous artistic works decorating Shwezigon stupa. These include architecture, glazed decorations, wood carvings, bronze castings, bell inscriptions, stucco mouldings, mural paintings, stone carvings, stone inscriptions, religious lands for Shwezigon stupa, other important notes on Shwezigon stupa, the inner and outer aspects of the stupa, twelve places for gilding, the inner and outer 37 spirits, the enshrining artifacts, and other stupas and temples in the enclosure wall. It further proved that this stupa is an encased one after finding it in 1975. He also described the valuable archaeological evidence such as the glass relic casket with a Bagan period bronze Buddha image discovered in this stupa (Aung Kyaing (Minbu), 2002).

Aung Kyaing (Minbu) wrote a book named “*Votive Tablets of Myanmar (Vol. 3)*” (In Myanmar). This book offers relevant information for this dissertation in the depiction of stupas on the votive tablets and the inscriptions on them. The purpose of this book is to study and value the new findings of the terracotta votive tablets discovered in Myanmar. Most of them were uncovered at the archaeological sites of Myanmar. Most of the votive tablets described in this book are not included in previous key

books such as *Votive Tablets of Burma* Vol.1 & Vol.2 written by U Mya. Its contents are new finding of the votive tablets with inscriptions written in old Myanmar, old Mon, and Pali, bronze moulds and clay moulds producing the votive tablets. Numerous original miniature stupas above the Buddha images on the votive tablets dating Pyu to Bagan period are mentioned. These miniature stupas could be compared and researched with the encased monuments discovered in Myanmar and other Buddhist countries. Some inscriptions on them are very important for this research. After finding the moulds in Bagan, it was proved that most of them were definitely produced in the vicinity of Bagan region. Inscriptions on the votive tablets are very valuable and relevant with their name of the Kings, workmanships, dates, strong inscriptional evidences and writing systems (Aung Kyaing (Minbu), 2011).

A new book entitled "*Tamote Shwegugyi Temple*" (In Myanmar Language) was written by Aung kyaing (Minbu). This book offers a case study of image and monument encasement highlighting the changing form and iconography. He suggested that it should be a world heritage monument because Tamote Shwegugyi Temple is a fifth encased temple and consists of a third encased Buddha statue as well. Besides the extraordinary and artistic stucco carvings illustrating the scenes of the previous lives of the Buddha belonging to the Bagan period can be observed in this temple. History, Art and Architecture, inscriptions on stucco decorations of this encased temple can be researched and compared with those recovered at Bagan and other archaeological sites in Myanmar and other countries. This temple is very useful for encasement to be compared and studied. He said that this encased temple with their stucco decorations is an absolutely unique temple in Myanmar (Aung Kyaing (Minbu), 2017).

Kyawt Hmu Aung only mentioned some encased stupas at Bagan, contributing an original classification based on relic caskets and the height of the encased stupas at Bagan in her article entitled "*The Encased Stupas of Bagan.*" She described the tradition of the construction of the encased monuments at Bagan and the encasing the relic caskets made of the eight metals during the Bagan period in the context of the epigraphic records and the artistic works at Bagan. She described the inner and outer encased monuments in the middle and late Bagan periods. She discusses that the

building encased stupas became more noticeable during the late Bagan period. During that particular period, not only building encased stupas but also making relic caskets with many layers seemed to be popularly practiced. She mentioned regarding the inscription of Lemyethna temple built in 1223 CE that the donors named Anantathura couple had made offering to the temple the relic caskets encased in eight layers, such as; gold, silver, ivory, copper, glass, marble, and two other rare metals. She proved with this inscription for their traditions and customs of the encasement since Bagan times (Kyawt Hmu Aung, 2002).

The most extensive resources are eight volumes entitled "*Inventory of Monuments at Pagan*" written by Pierre Pichard. This work documents encased examples, but while Pichard gives summaries of architectural elements at the start, describes over forty encasements at Bagan the architectural typology, concept, ritual custom of the encasement are not included. The purpose of these books is to study the number of monuments at Bagan with their art and architecture, plans, artistic works and important epigraphic records. The invaluable and important facts and figures such as old photos in different directions, locations with latitude and longitude, plans, art and architecture, measurements, estimated centuries, epigraphic records, archaeological remains, remains of architectural elements, and number of the monuments are systematically described in his books. All of the eight volumes are very important and useful data for this research. Some of the encased monuments at Bagan were described in these books with the old photos before they were repaired after 1975 earthquake, average brick sizes for inner and outer stupas and the architectural typologies (Pichard, 1992-2001).

An article entitled "*Evolution of Stupas in Myanmar (1st Century AD To 19th Century AD)*" was written by Win Maung (Tampawaddy) that this article offers a chronological typology with comparisons to India as well as within the country. His focus is form and ornament. The purpose of this paper is to study the Myanmar Stupas, influences, architectural typologies and decorations. According to this paper, some of the stupas built in the Pyu period are very similar to the inner encased monuments found at Bagan and other regions. It was known that most of the early

stupas in Myanmar were influenced by India as described in this paper. Some photos and documents described in this article are very useful and applicable for this research (Win Maung (Tampawaddy), 2007).

The existing books and research papers describe a few concepts and no ritual customs and traditional beliefs. Dr. Kyawt Hmu Aung described that a stone inscription regarding the concept of the encasement can be found at Minnanthu Lemyethna temple, Bagan. These are valuable but do not assist us to understand the reasons why outer ones covering the inner ones were chosen in some areas but in other areas, donors constructed new monuments. There are some research problems such as lack of focused study on encasement at Bagan, no epigraphic records regarding the encasement mentioned by the previous scholars, a few concepts of the encasements only described by Sujata Soni, architectural typologies of the encasements not described by the previous scholars, lack of stratigraphic excavations systematically on each encasement at Bagan conducted by the Department of Archaeology and National Museum (DANM). Before the proper researches are issued, there are several restorations and renovations of the encased monuments at Bagan, therefore original evidence has been entirely lost. Some scholars previously considered that most of the encased monuments at Bagan were built between 11th to 13th centuries CE.

In this dissertation, some scholars previously considered that most of the encased monuments at Bagan were built between 11th to 13th centuries CE. The encasements make a unique, innovative, and deliberate Buddhist practice – addition to our understanding of the development of Buddhism, tangibly present in the repeated patronage of the inner structure with an outer one. After analysis of the encasements at Bagan, the encased monuments at Bagan were built between 9th to 13th centuries CE.

1.2 Objectives of the Research

The objectives of this research are as follows:

- To understand the concepts and technological developments of encasements

- To document the ritual customs and beliefs of encasements in epigraphic records
- To analyse the chronology and distribution of the encasements at Bagan
- To compare the encasements found at other archaeological sites in Myanmar, India, Sri Lanka and Thailand

The underlying conceptual framework is that these tangible and intangible attributes can be used to classify form and textual records of motivations for encasement. These can provide a new understanding of the tradition of encasement that may balance the existing descriptive literature. In a wider context, this dissertation may inform us on the ideology and expression of Buddhist religious patronage and Bagan with its high density of monuments and images and Myanmar with its unbroken tradition of Buddhism for the last two millennia (Myo Nyunt Aung, 2021).

1.3 Concepts of the Encased Buddhist Monuments

The historical concepts of encasements in religious ideology are many:

1. to make them last five thousand religious years (Nyein Maung, 1972)
2. to commemorate one of the traditional *Moathtaw* sites which may have been built by King Asoka
3. to facilitate their worship and to meditate in front of the inner *Moathtaw stupas*
4. to move around the inner stupas and to observe architectural ornamentations on both stupas
5. to make larger and more elaborate than the previous donors (Nyein Maung, 1982)
6. to enable a new builder, to manifest their meritorious deeds
7. to protect from the natural disasters and vandalism
8. to attain merit for the good deeds of protecting the inner monuments to enshrine the relic of the Buddha donated by the primary donors

9. to enshrine the inner stupas encased by the outer stupas built by the secondary donors including relatives of the original donor as noted above (Bo Kay, 1981; Cooler, 2002).

Most of these concepts of encasement can be found from the epigraphic records such as stone inscriptions, ink inscriptions, the Mahavamsa text (The Great Chronicle of Ceylon Text) and some books and articles regarding Buddhism written by international scholars, Myanmar chronicles, the history of the encased stupas and temples, and oral history (Myo Nyunt Aung, 2021).

Reliquaries are further primary materials for this study. There were some reliquaries recovered at Lokananda stupa dating to the 11th century CE and in the vicinity of Bagan. After the earthquake in 1975, numerous reliquaries were found at Htilominlo temple, Shwezigon stupa and some other monuments at Bagan. Some of the relic caskets made of various substances were displayed in the showroom and storage of the Bagan Archaeological Museum (BAM). Some stone inscriptions dating to the Bagan period and post-Bagan period described the reliquaries such as how to enshrine and place the relics of the Buddha with their concepts. Strong inscriptional evidence that there were their concepts, beliefs and ritual customs of the encasement for the relics of the Buddha since Bagan times is also important to note (Nyein Maung, 1972).

1.4 Scope of the Research

The dissertation draws upon examples from various parts of Myanmar and neighbouring countries: India, Sri Lanka, and Thailand as background, but the core of the study is the Ancient City of Bagan. The boundaries of this area correspond to the Property and Buffer Zone of the Bagan World Heritage site inscribed by the UNESCO in 2019. The area of property zone is 5005.49 ha and the area of buffer zone is 18146.83 ha. Total area of the scope for this research is 23152.32 ha or 89.39 square-miles or 231.52 square-kilometres. Bagan is situated on the eastern bank of Ayeyarwady river in the central part of Myanmar. In this dissertation, there are eighty three encased monuments at Bagan and twenty-two Buddhist monuments comparing case studies of other archaeological sites in Myanmar, six monuments in India, five

monuments in Sri Lanka, and five monuments in Thailand. Bagan World Heritage site is located both Mandalay and Magway regions including Tant Kyi area on the western site of Ayeyarwady river.

There are three areas - Town settlement area (white boundary colour), Property zone area (red colour), and Buffer zone area (yellow colour) - on this DANM map of Bagan (see Figure 2). Among the encased monuments at Bagan, eighty two monuments are located in the Property zone area, while one monument called Shwe Moathaw stupa (No.194) is located in the Buffer zone area.

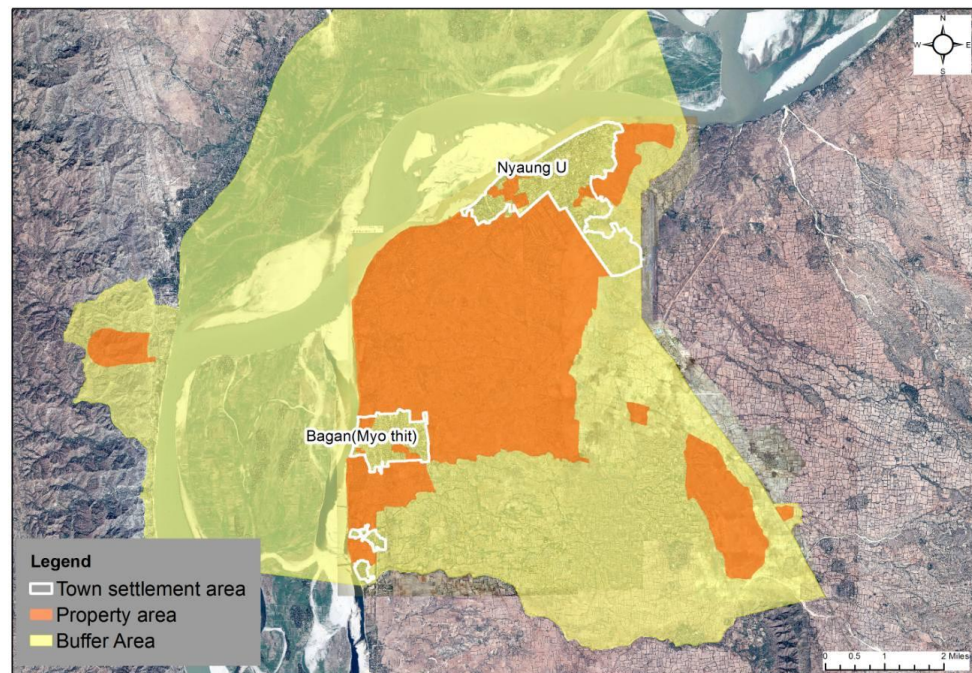


Figure 2: Map showing the property, buffer, and town settlement areas at Bagan
Note. This map is shown with three colours for three areas. It was drawn by DANM.

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1.5 Research Hypothesis

The concepts, ritual customs, and traditional beliefs regarding encasements may have first come from India and Sri Lanka as the Buddha attained Enlightenment in India and Buddhism was first developed in Sri Lanka after the demise of the Buddha. The encased Buddha images were recovered at Bagan and in the vicinity of Tamoat region around Kyaukse area. Why did they not destroy the previous Buddha images when they built the outer structures with the outer Buddha images? It seems probable that, if there are the inner and outer Buddha images in the temple, previously there was an original inner temple and an inner Buddha image. When it was damaged by the natural disasters or vandalism or age, the secondary donor did not want to destroy the inner Buddha image to be free from curses as noted below in inscriptions that destruction of the image consigns the person to hells or other dangers. The secondary donor only constructed an outer temple with an outer Buddha image covering the inner Buddha image that still remains in situ in this outer temple but the original inner temple may have totally disappeared or damaged. A number of stone inscriptions in Myanmar described that their curses and prayers are always added underneath the sentences commemorating the donations (Nyein Maung, 1972-2013). Such statements lauded future generations if they had the good sense to take care of the donor's meritorious deeds. The statements also promised such do-gooders that they would acquire additional merit, be reborn in the celestial realms, and even come to be in the presence of Maitreya (Mettaya), the next Buddha, and finally to attain Nibbana. If someone destroyed the donors' meritorious deeds, they would go to hell. Sometimes they mentioned the name of the hells on the stone inscriptions. Most of the secondary donors wanted to encase the primary ones to last five thousand religious years and to acquire merit by enshrining the original ones. In the Bagan period, people believed that they will acquire merit by reconstruction, enshrining and encasing of the Buddhist structures. U Aung Kyaing (Minbu), archaeologist was interviewed regarding the encasement of donation between the primary and secondary donors. Among the encased Buddhist structures in Myanmar, by traditions and in some inscriptions, it is known that most of the donors of the encased structures had familial relationships with earlier donors and subsequent renovators. The earlier donors may

have mostly been as secondary donors of their brother, uncle, father, grandfather, and great grandfather (Aung Kyaing (Minbu), 1984, pp. 157-162; Myo Nyunt Aung, 2015).

1.6 Research Methodology

The methodology of the research includes archaeological observation and study, and interview. The archaeological remains of the encased monuments at the ancient city of Bagan were studied and measured and their photographs taken. The architectural drawings of important architecture in encasement were made. These drawings are the AutoCAD plans of the encased structures and mapped showing the encasements at Bagan. Other maps show the encasements in Myanmar, in India, in Sri Lanka, and in Thailand were included in this dissertation. Archaeologists, architects, sculptors, Buddhist monks, local people, and Pagoda Trustee lay and monastic members were also interviewed for this study.

Thus, the research will combine archaeological study, architectural and art historical study, epigraphic records regarding the encasement and anthropological approaches. The research methodology will focus on the quantitative and qualitative data analysis. The primary sources such as the encased monuments with architectural decorations, patronage, rituals, and secondary sources such as former research papers and books in studying this research will be used. The encased Buddha images will be analysed with the iconographic features. This research will therefore also study the inscriptional - epigraphic records to recover some traces in the surviving historical record.

1.6.1 Data collection

Among the number of Buddhist structures at Bagan, there are eighty-three encased Buddhist structures including three encased Buddha images discovered at Bagan. According to the *Inventory of Monuments at Pagan* in eight volumes written by Pierre Pichard, each encased monument has an original number and some have the original names and additional names and numbers. The encased structures have been grouped into eight areas at Bagan, named by the nearest village at Bagan. The eight areas at Bagan were used to give each example a serial number in Chapter 4. The areas are

Nyaung Oo, Wetkyi-in, Taungbi, Old Bagan, Myinkaba, Thiripyitsaya, Minnanthu & Phwasaw and Tantkyi. The five types of encased structures are shown with the different colours on the maps.

1.6.2 Archaeological Survey

The research area at Bagan which covers an area of about 89.39-square-miles or 231.52 square-kilometres Mandalay and Magway regions in the central part of Myanmar. The total numbers of Bagan monuments were by tradition 4446 in the Bagan period. A number of monuments at Bagan had been destroyed by natural disaster, seasonal effects, long life span, rain water, vegetation, animals and insect effects, architectural style, wind attack, and vandalism. Now there are 3822 monuments of various sizes still surviving in Bagan. The mural paintings, the stucco decorations, the stone carvings, the gold smiths, the silver smiths, the brass smiths, the black smiths, the masonry works, the wood carvings, the terracotta plaques and the glazed ornaments of Bagan period can be observed on the Buddhist structures at Bagan. All these structures were conserved and restored by the Department of Archaeology and National Museum (DANM), the Ministry of Religious Affairs and Culture (MRAC), Myanmar (Myo Nyunt Aung, 2018).

In the colonial period (1826-1948), the Burma Epigraphic Office was founded in 1902 and the Department of Archaeology was opened in 1954. Since colonial times, some of the ruined Buddhist monuments have been conserved and restored by the Epigraphic Office (ASI, 1902-1936; ASB, 1906-1926). The archaeological conservation and excavation works in Bagan during colonial times mainly involved the making the access roads to the monuments, repairs and restorations of damaged portions, and removing and clearing the debris inside the compound of the temples. About 48 monuments were declared as “protected ancient monuments” by notification during colonial times (ASB, 1906-1926). Before Independence in Myanmar, more attention was paid to epigraphic research than archaeological conservation and excavation (Nyunt Han, 1989).

During the colonial era, archaeological conservation for six encased monuments at Bagan was carried out by the Burma Epigraphic Office. These monuments are 1.

Kyauk Myet Maw stupa (No.1158), 2. Pawdawmu stupa (No.1193) near Nagayon temple, 3. Sacovell Padawmu stupa (No.1690) near Dhammayangyi temple, 4. No.1905 to the northeast of Minochantha stupa, 5. No.1631 and 6. No.1632 to the northwest of Gawdawpalin temple. The damaged outer stupas of four encased monuments (No.1193, No.1690, No.1631 and No.1632) were removed by the Archaeological Survey of Burma (ASB) to see the inner stupas with decorative motifs (Luce, 1969).

Aung Kyaing (Minbu) (2008) notes that after Independence the aims and functions of the Department of Archaeology (DOA) became broader. The excavation at Pyu ancient cities and contemporary sites, conservation of ancient monuments, collecting and deciphering lithic inscriptions, collecting antiquities and preservation of mural paintings became important activities of the DOA. An average of fifteen monuments per year at Bagan were only conserved and restored by the DOA from 1948 CE to 1996 CE (Aung Kyaing (Minbu), 2008). In 1966 CE, the major conservation works of DOA were handed over to the Public Work Cooperation. The conservation works carried out in Bagan before the 1975 CE earthquake was so routine. These routine works included general inspection of the monuments, filling and grouting cracks of the walls inside or outside the temples, topping cracks on the terraces of the temples, repairing some portions by replacing with new bricks, restoring the damaged corner stupas and sikhara of the temples, the enclosure walls, and clearing the debris accumulated inside or at the entrance of the temples (Nyunt Han, 1989).

Aung Kyaing (Minbu) underlines that most of the Bagan monuments including the encased Buddhist monuments have suffered from severe earthquakes and most of the slim stupas, the small corner stupas, and the parts of the sikhara (square tower) collapsed in 1975. After the earthquake occurred in 1975, an advisory committee included twenty members including scholars, archaeologists, architects, engineers and technicians was constituted by the Government of Union of Myanmar for the conservation and restoration works of Bagan Buddhist monuments. And then a special team of construction co-operation was urgently formed by the advisory committee to conserve and restore the monuments in danger at Bagan. At the same time, the conservation team from the DOA repaired the small temples which were badly

damaged, including grouting cracks, reconstructing vaults to preserve the original mural paintings and stucco carvings, edging for the valuable plaster carvings, pointing between brick joints and fixing R.C.C angle blocks in the corners to prevent from further damage in the next earthquake. Thus, some endangered ancient monuments were restored before they were totally collapsed. Aung Kyaing (Minbu) notes that after the earthquake in 1975, six encased monuments (Ngakywenadaung stupa, Shwezigon stupa, No.1905, No.1612, No.2132, and No.2133) were repaired by the DOA. According to the advice of the advisory committee, three iron bars were bound around the glazed body of Ngakywenadaung stupa to safeguard against subsequent earthquakes. This meant it was not necessary to dig to insert the iron bars in the ground, as the beautiful glazed surface could be destroyed if this was done. Another example is the upper part above the concentric rings of Shwezigon stupa that was damaged in 1975. At that time, when the outer finial which was made of the five metal alloyed was opened, the inner finial can be seen from the outside. Its damaged portions were repaired by the Pagoda Trustee of this stupa. The surviving outer stupas which are very low in height of No.1612, No. 2132, and No.2133 were removed to see the views of the inner stupas by the DOA. The outer and inner stupas of No. 1905 were repaired by pointing the brick joints, edging at the edge of the original stucco carvings, and the replacement of the brick works at the damaged portions after the earthquake in 1975. Conservation and restoration works from 1975 to 1980 completed one hundred twenty-three monuments (Aung Kyaing (Minbu), 2008).

Soe Soe Lin (2016) suggests that a number of the encased monuments at Bagan have been restored and reconstructed by the Department of Archaeology and National Museum (DANM) with the public donations, NGOs, INGOs, foreigners and the governmental budgets from 1996 to 2012. Most Myanmar people are the Buddhists so that they would like to reconstruct all Buddhist monuments with the completed decorations as original style (Soe Soe Lin, 2016). After 1995, most of the encased monuments at Bagan have been conserved and restored by the DANM.

After 2012, archaeological conservation works of Bagan monuments were only allowed by the DANM in order to maintain the integrity and authenticity of Bagan ancient monuments. A number of the structures at Bagan including encasement were

treated in various ways. These included digitally recorded and drawn, with consolidation of a walling and carving, strengthening with RCC belts, grouting into the cracks, binding with steel rods, water proofing on roofs and terraces with consideration of evaporation. Other works provided a tie beam around the terraces, pointed, edged and re-plastered. The drainage systems were repaired with replacement of brick/stone masonry work, landscaping, road and communication (Myo Nyunt Aung, 2018).

Unfortunately a severe earthquake was occurred in Bagan on 24 August 2016 and 389 monuments at Bagan were affected. An Advisory Team and Technical Expert Team were urgently formed by the Ministry of Religious Affairs and Culture. Scholars from DANM, UNESCO Consultants, professors from MTU (Mandalay Technological University) and YTU (Yangon Technological University), architects from AMA (Association for Myanmar Architects), engineers from MES (Myanmar Engineer Society), president of BHT (Bagan Heritage Trust), members of the National Earthquake Committee and officers from the Department of Metrology and Hydrology were participated in this team (Myo Nyunt Aung, 2018).

Soe Soe Lin of the DANM notes that after the earthquake in 2016 additional works undertaken by DANM focused on the emergency response. Areas included roofing for protection from rain water, removing debris, site cleaning, providing scaffoldings, belting the cracked monuments, topping the cracks on upper parts of the monuments, propping with wooden buttresses as a temporary support any inclined walls. With the help of UNESCO Consultants, local communities and volunteers, the Rapid Condition Assessment Cards were implemented to record elements with Structure Condition Assessment Cards and Decoration Condition Assessment Cards in 2016 (Soe Soe Lin, 2016). Among them, severe damage was identified at sixteen encased monuments at Bagan with archaeological conservation works of these totally completed by the DANM in 2019.

1.7 Classification

There are two main types of monuments at Bagan. The first is solid stupas to enshrine the relics of the Buddha and Venerated persons (saints) and to commemorate sacred

places. The second type is hollow to house the image of the Buddha with interior mural paintings and stucco decorations on the exterior walls. Mostly hollow examples were constructed with radiating arches for the roofs, gate houses, corridors, vestibules and doorways. There are straight arches at the doorways, entrances of monasteries, at the windows and at the entrances of cells in some temples. Corbelled arches were used in small rooms, stair-cases, and doorways (Aung Kyaing (Minbu), 1984).

The bases of solid type are generally circular, square, octagonal or rectangular in shape, while the bases of the hollow types are mostly square and rectangular. The upper bell-shaped portions rest on the three terraces and upper concentric rings for umbrellas, the lotus portion and ended with the finial (*Ahtut*). Among the temple or hollow types built in the Bagan period, there are normally two different types of bases such as Kalasa pot shape (urn profiled pot shape) and throne shape with panels to put terracotta or glazed plaques. The base of the temples in Kalasa pot shape like Nagayon, Apeyadana temples, can be mostly found at Bagan in the early 11th century CE, while the base of the temples in throne shape with panels like Sulamani, Htilominlo temples, can be mostly seen in the 12th and 13th centuries CE. The architecture is complex, with thirty-two varieties of ancient monuments within the main two types found in Bagan.

1.7.1 Type of the Encased Monuments

There are eighty-three encased Buddhist monuments discovered at the Ancient City of Bagan classified here into five types. Some of them are solid, while some are hollow. Most of these structures are encased between the 9th to 13th centuries CE. According to the epigraphic records and the recorded history of monuments, the name of donors including the social classes and the exact years when they are built have been included in this dissertation with the description of each example. Some encased stupas which are older inner stupas with original decorative arts were covered by the larger outer stupas with surviving original architectural decorations, while some of the older stupas were covered by the larger outer temples. Some encased temples which are the older inner temples were covered by the outer temples, while some of them which are the older inner temples were encased by the larger stupas. Some of them are

encased moathtaw stupas which are believed to be built by the King Asoka in the 3rd century BCE (Geiger, 1912; Bokay, 1981). Most moathtaw stupas consist of a circumambulatory corridor but some of have no corridors. In Bagan, all moathtaw stupas comprise a circumambulatory corridor to be worshipped, meditated, moved around the inner and outer ones. A number of moathtaw stupas found in various parts of Myanmar have no corridors but some of them have each corridor. There are also epigraphic records on the moathtaw stupas in some regions in Myanmar. Another distinctive type of encasement is where two or three small stupas built close to each other are encased and covered by a larger stupa on the same plinth in later times. This type of encasement can be only found at Bagan with the exception of one example at Sintgu village in Nyaung Oo District. There are three encased Buddha images found at Bagan. There was no space between two Buddha images. The iconography, the space between the inner and outer Buddha images, the conservation measure, the original portion and the estimated date of the encasements will be described in detail in Chapter 4.

1.7.2 Style and Dating of the Encased Monuments

The style and dating of the encased monuments at the Ancient City of Bagan are assessed in this dissertation according to architectural typologies and elements, epigraphic records, decorative art, associated wares, comparative methods. The style of encasement shows influences from India, Sri Lanka as well as local first millennium CE Pyu, and Mon cultures. Some reflect Northern Indian styles, others southern Indian and a few, Central Indian styles. Some are very similar to Sri Lankan styles (Sinhalese styles), while others closer to Pyu and Mon styles. There are over one hundred Buddhist structures at Bagan adapted from Sinhalese types with some encased structures at Bagan included in the Sinhalese type. Lu Pe Win notes that most of the encased Buddha images reflect the influences of the Pala-sena and Gupta styles of India and that the principal stylistic influence of Bagan monuments can be traced to North-Eastern India (Lu Pe Win, 1955).

Hudson has previously discussed the earliest dating of Bagan using Carbon-14. He concluded that most of the encasements including the Buddha images at Bagan were

built between 11th to 13th centuries CE but a few of them were built between 9th to 10th centuries (Hudson, 2004). When there was no inscription, the author estimated centuries for the encased monuments according to the architectural typology and art history. If there were epigraphic records on encasement, the author described the exact dates of the encased structures when they were built and the exact donors.

1.7.3 Spatial Pattern of the Encased Monuments

Mostly the encasements at Bagan have no space between two monuments or images but a few of them are separated by a space. In Bagan, the few inner encased stupas are very low in high and small in size. When the secondary donors wanted to build the larger structures, there was a space left between two of them to save the bricks. In Kyauk Myet Maw stupa (No.1158), there was a distinctive use of bricks in the space between the inner and outer, a unique architectural example. The brick masonry does not fill the space between inner and outer stupas but the brick square blocks are like radiating walls (0.91 meter in length and 2.74 meters in height). The distance between the two radiating walls is around 1.8 meters. All these square brick blocks made buttresses around the inner stupa when it was encased and enlarged by the outer stupa. Some of the damaged radiating walls between two are visible from the outside. This Kyauk Myet Maw (No.1158) also shows Pyu influences because the concentric rings of the inner stupa were distinctive architecture. These rings are very higher than the rings of other stupas at Bagan. The shape of conical spire is not similar to the Bagan period stupas. These rings are not proportionate to its dome, not like a stupa built in the Bagan period. In addition, the finger-marked bricks may have been used on inner stupa because of numerous these bricks found around the stupa. The outer stupa is surmounted with an elongated bell-shaped dome built during the early 11th century CE. As noted earlier, the concept of the secondary donor is to protect the inner stupa, which may have enshrined relics of the Buddha or other treasures. Most of the inner stupas at Bagan could be seen through the ‘treasure holes’, which have for many years been dug by treasure seekers. Some treasure seekers have not only dug into the outer stupas but also into the inner stupas (Aung Kyaing (Minbu), 1984).

A notable example of encasement is monument No.1182 to the southeast of Nagayon temple. There is a space at this monument using a circumambulatory corridor (1.5 meters in width) between the inner and outer temples. If you look from the outside, it seems that the inner temple was enclosed by its precinct. As the concept of the secondary donor is to enlarge and elaborate the inner temple with in this case, the inner one was encased by the outer one with the concentric spatial pattern. Inside the inner temple can be worshipped and the decorative art of the outer temple like stucco decorations and stone perforated windows can be viewed. This stylistic influences reflect Mon architecture at this unique and extraordinary temple at Bagan (Pichard, Vol-5, 1995). In this temple like Mon influenced temples, numerous niches to house Buddha images, curvilinear roof, stone perforated windows, square tower, and cloister vault over the central shrine can be found.

There are three moathtaw stupas, which may have been built by King Asoka in Bagan as noted earlier. They have spatial patterns such as the circumambulatory corridor between inner stupas and outer temples. Mostly they have no space between two of them, with numerous moathtaw stupas found in the various parts of Myanmar. The secondary donors would like to enshrine the inner ones built by the primary donors (Cooler, 2002). The concept of the secondary donor is to protect the inner stupa, which may have enshrined the relic of the Buddha or treasures. Architectural typologies of the encasements at Bagan indicate that mostly the outer stupas are concentrically built around the encased stupas, but a few of them are not concentrically around the encased stupas and mostly the outer temples are also symmetrically built around the inner temples, but a few of the outer temples are not symmetrically around the inner temples.

1.7.4 Interpretation and Synthesis

Most encased Buddhist structures are very difficult to find easily or clearly in Myanmar. When the outer structures were unexpectedly damaged by the natural disasters, vandalism, and age, the inner stupas can be clearly visible from the outside. Archaeological and architectural evidence documents that these structures are encasements in Myanmar. Traditionally it was documented that it was an encased

structure for some encasements in Myanmar, but some encasements are noted in the epigraphic records even though the inner stupas cannot be visible through the outside. In Bagan, archaeological evidence indicates that there were numerous treasure holes on encasements so that most of them can be clearly visible through the treasure holes. Sometimes nobody knows that is the encased structure, but when the severe earthquake occurred at Bagan, the inner structures with original architectural decorations appeared after the earthquake can be entirely found. To document this, experienced archaeologists, archaeological engineers, architects and Pagoda trustee members, and elderly men regarding the encased structures in various regions were interviewed. The traditions regarding the encasements have been assessed, along with Myanmar chronicles, and history of the structures, and epigraphic records such as stone inscriptions, ink inscriptions. Archaeological and architectural evidence, art historical studies, epigraphic records, and traditions have proven to be very important for the clear identification of encasements in Myanmar. Taking all these types of evidence together has enabled the identification in this work of what is or is not an encased monument.

1.8 Definitions

1.8.1 Encased Monuments

Encased monuments or structures mean that an older smaller inner stupa or temple has been encased by a younger larger outer stupa or temple so called an encased stupa or encased temple. A second encased group of stupas can be only found at Bagan. In this type, two or three stupas located on the same plinth or platform, are encased by a larger stupa in later times. Another type is the encased moathtaw stupas, encased and covered by the secondary donors subsequently. Inscriptional evidence in the Bagan period and post Bagan period called as mahtaw, muhtaw, and moathtaw stupas in this type. Moathtaw may have probably derived from moatti in Pali that means escape or nirvana (Hoke Sein, 1954). There are two kinds of moathtaw stupas in Myanmar. Epigraphic records mentioned that one kind of moathtaw stupa may have been probably built by King Asoka, while another kind may have been built by King

Alaungsithu or Narapatisithu or other kings in the Bagan period. There are three encased moathtaw stupas with the corridors between inner and outer structures at Bagan. Numerous encased moathtaw stupas can be found in the various parts of Myanmar.

1.8.2 Encased Buddha Images

Likewise, the encased Buddha images mean the older smaller inner Buddha images that are encased by a younger outer larger Buddha images donated by the secondary donors in later periods. Some Buddha images are two encasements of the Buddha images, while some are three or five encasements of the Buddha images found in Myanmar. The encased Buddha images can be only found at Bagan and Kyaukse regions in Myanmar. All these types, structures and images, can be called encased monuments.

1.9 Delimitation and Limitation of the Research

The core of the study of the encased monument is only the ancient city of Bagan in the central part of Myanmar. The boundaries of this research area correspond to the Property and Buffer Zone of the UNESCO World Heritage List for Bagan. The dissertation nonetheless draws upon examples of encased structures from throughout Myanmar and neighbouring countries to compare to the encasement at Bagan. The encased structures in Myanmar were recovered in many areas including Salin, Minbu, Lai Gaing, Seik Phyu, Taungdwingyi, Pauk, Myaing, Pakhangyi, Pakokku, Yesagyo, and Hti Lin in Magway region, Anein, Halin, and Shwebo in Sagaing region, Tamote in the Kyaukse region, Sint Kaing, Myin Saing, Kyaukse, and Tagaung in Mandalay region, Srikshetra in Bago region, Mrauk U in Rakhine state, Mwe Daw Kaku, Shwe Intein, Alodawpauk in Shan state, Kaung Hmu Lon stupa, Putao in Kachin state, Pathein in Ayeyarwady region and Shwedagon stupa in Yangon region (Myo Nyunt Aung, 2022). The encased structures in these regions are mostly encased moathtaw stupas, but others are simply encased stupas. Some comparative encased stupas found in neighbouring countries such as India, Sri Lanka, and Thailand are described in this work: six encased monuments in India, five encased monuments in Sri Lanka, five

encased monuments in Thailand, and twenty-two encased monuments in other regions in Myanmar in order to contrast with the encased monuments at Bagan. Their concepts, ritual customs, and beliefs of the encasement in these regions in detail will be mentioned in the Chapter-3. The comparative studies of the encasement including art and archaeology, architecture, iconographic features in these regions will be also described in this chapter.

1.10 Summary

Among the numerous Buddhist structures in Myanmar, the least recorded are encased Buddhist structures. The encased Buddhist monuments are not only found at Bagan, but also the encased Buddha images have been found. Some encased Buddha images are also found at Kyaukse area in upper Myanmar. Most examples are double encasements, but a few were triple encased structures in Myanmar.

In this chapter, a number of the encased monuments at Bagan have been found in the Property Zone of Bagan, inscribed on the UNESCO World Heritage List in 2019. Most of the Bagan Buddhist structures were built between 9th to 13th centuries CE. In Bagan, some encased structures are hollow structures (temples), while some of them are solid structures (stupas). The bases of the encased structures at Bagan are mostly circular, octagonal, square, and rectangular in shape. Some of the encased structures have a space or corridor between inner and outer structures, but some have no space between two of them.

Archaeological evidence mentions that encasing stupas, temples and Buddha images became a significant part of Buddhist practice or religious practice during the Bagan and post-Bagan periods. There are some epigraphic records regarding encasement through ink and stone inscriptions, the Myanmar Chronicles, the History of the Pagodas and the Great Chronicle of Ceylon (Mahavamsa Text). These demonstrate that this was a deliberate practice or religious practice, not merely a way for a builder to preserve and conserve a damaged monument but underlining how they have already been sanctified buildings.

In this chapter, statements of the problems or significance of the research, objectives of the research, concepts of the encased Buddhist structures, scope of the research, research hypothesis, research methodology, classifications and definitions of the encased Buddhist monuments, delimitation and limitation of the research are described in detail. The objectives of this dissertation are to understand the concepts and technological developments of encasements, to document the ritual customs and beliefs of encasements in epigraphic records, to analyse the chronology and distribution of the encasements at Bagan, and to compare the encasements found at other archaeological sites in Myanmar, India, Sri Lanka and Thailand. In this chapter, Soni mentioned that she found three varieties of the encasements in India, Thailand, and Myanmar. These encasements are a solid encasement intimately covering the original structure, an encasement enveloping the original shrine with empty space in between, and the multiple encasements without any space in between. The idea of the encasement may have originated from ancient India and Sri Lanka. Previous works of the encasements conducted by renowned scholars like G.H. Luce, Aung Thaw, Nyein Maung, Aung Kyaing (Minbu), Sujata Soni, Pirre Pichard, Win Maung (Tampawaddy), Kyawt Hmu Aung are described in this chapter.

The existing books and research papers describe a few concepts and no ritual customs and traditional beliefs. Dr. Kyawt Hmu Aung described that a stone inscription regarding the concept of the encasement can be found at Minnanthu Lemyethna temple, Bagan. These are valuable but do not assist us to understand the reasons why outer ones covering the inner ones were chosen in some areas but in other areas, donors constructed new monuments. Comparative concepts, beliefs and ritual customs in other countries such as India, Sri Lanka, and Thailand are relevant as well and so are included in this study. Finally to note that according to Myanmar chronicles and inscriptional evidence, many primary donors and secondary donors were relatives. The core of the study of the encased monument is only the ancient city of Bagan in the central part of Myanmar. The boundaries of this research area correspond to the Property and Buffer Zone of the UNESCO World Heritage List for Bagan.

CHAPTER 2

Bagan: Geography, History, and Monuments

This chapter provides an overview of Bagan, reviewing the geography, history and monuments. As a background, the sections are descriptive and general, purposely not making critical comments. In the next chapter the encased monuments are described, and so are not mentioned in this chapter.

2.1 Geography and Landscape of Bagan

Bagan is situated along the eastern bank of Ayeyarwady river, Mandalay region in the central part of Myanmar. The geographical coordinates of the central point at Bagan are 21.1667 North and 94.8844 East. The Bagan area is located in the wide valley of the Ayeyarwady river in Upper Myanmar, bounded by the higher mountain ranges of Bago Yoma in the east and Rakhine Yoma in the west. Bagan is an extensive cultural landscape naturally framed with the river and hills; the boundary of Bagan is marked at four corners by the duplicate tooth relic stupas built by the King Anawrahta (1044-1077 CE), who founded the first Myanmar nation during the Bagan period. Bagan, which was a centre of economic, socio-political and cultural contacts with other regions, was the centre of the largest Buddhist empire in the medieval world. The annual rainfall in this region ranges 500_ 600 mm during the wet period of the monsoon season from June to October. The lowest recorded temperature is 11.4 C and the highest is 45.0 C in Bagan. There are two hills called Tuyin hill running in a north to south direction located in the southeast, and Tantkyi hill in the northwest, which is located on the western side of the Ayeyarwady river flanking Bagan on the west. At the southern end of Tuyin hill, there is Gwegyo hill, 300 metres in height, geologically belonging to the Lower Pegu group. Mt. Popa which is an extinct volcano, is located around 40 km away to the southeast of Bagan (Win Kyaing, 2006).

The geological stratigraphy in Bagan area is formed of a sandy matrix with different sizes of fossil woods, conglomerate, quartz and slate pebbles and other materials. It is called an ironstone hardpan matrix (Terra & Movius, 1943). This natural bed-soil was very important for all Buddhist structures at Bagan because the ironstone hardpan had a good resistance for the many earthquakes in the region. The architects from the

Bagan period knew very well the hardness of bed soil in their area as a better foundation for their religious structures. Win Kyaing (2006) suggests that there are the basal and red gravel, Nyaungu Red Earth, Pagan Silt and other alluvium and Aeolian deposits in the Pleistocene deposits around Bagan.

In the Bagan area, there are four types of soils such as Red Brown Savanna, Dark Compact Savanna, Meadow Alluvial, and Tuff Primitive. Among them, the first one is the most widespread and the fourth one is the second most widespread (Thin Thin Oo, 2003). Win Kyaing (2006) documents two large streams, the In-daing Chaung (stream) in the northeast and the Ye-oh zin Chaung (stream) in the south identified as the natural boundary for the ancient city of Bagan. The Shwe Chaung, Myinkaba Chaung, and Ye-oh zin Chaung and their tributary courses directly come from the Tuyin Hill to the southeast of Bagan and flow down to the Ayeyarwady river.

In Bagan, there are various natural and man-made hydraulic works dated to the Bagan period: large reservoirs with bended embankment, tanks with front filter-tanks, inn-kans, brick tanks, ritual tanks, channels, drainages, canals, moat and others (Win Kyaing, 2016). There are five epigraphic records describing water managements in the Bagan period. They are Mya Kan Inscription (1086 CE), Alan Pagan Inscription (1086 CE), Anantathura Inscription (1223 CE), Ami Phwasaw Inscription (1265 CE), and Princess Asao Pa (1276 CE) (Nyein Maung, 1972-1982, Vol 1-3).

Dry-crops such as sesame, beans, water-melon, cucumber, groundnut, maze, green gram, pigeon pea are mainly cultivated on the Bagan plain. Native trees include tamarind, toddy palm, mango, coconut, neem, euphorbia, jujube, catch, acacia tree and thorny bushes. Vegetables and rice are also grown on lowlands of Bagan such as on Kyun-mye (alluvial island) and Le-mye (rice land) found adjacent to the river (Hudson, 2004).

Archaeological and inscriptional evidence indicates that during the Bagan period the economic backbone of Bagan was the Kyaukse area northeast of Bagan in the Mandalay region and the Minbu area on the western bank of the Ayeyarwady river in the Magway region. Luce gives the name of eleven centres of Kyaukse area as they appeared in the inscriptional evidence. They are Pinle, Myitmana, Myittha,

Myingondaing, Yamon, Panan, Mekkhaya, Tapyetha, Thindaung, Tamothso and Hkanlu. They were commonly called the “Eleven Myittha Khariums.” The six economic centres in the Minbu area were called the “six Minbu Khariums.” They are Sagu, Salin, Le Kaing, Mapinsaya, Phaung Lin, and Kyabin (Luce, 1969). These Khariums were turned into agricultural lands producing not less than 76 different crops and fruits. The main sources of water supply for irrigations are the rivers like Ayeyarwady, Samon, Duhtawaddy, Zawgyi, and Panlong. These Khariums (now it was called districts) were the main suppliers of food and sources of revenue for Bagan during the Bagan period. Agriculture was main economy of Bagan and cultivation was the general practice of the farmers in Myanmar in this period. The irrigated lands were found throughout the kingdom, with King Anawrahta building dams, reservoirs and canals and also repairing the old reservoirs (Luce, 1969; Aung Thaw, 1972).

2.2 History of Bagan

2.2.1 History from Chronicles

According to Myanmar chronicles, the literary name of Bagan was Arimaddana-pura which means “crushing of enemies”. Pyusawhti, the third king of the Bagan dynasty, conquered four great beasts in the vicinity of the city. Bo Kay (1981) discusses that the name of Bagan was derived from Pyugama. From Pyugama it was changed to Pyugam and then to Pugam. Later it has been pronounced as Bagan. At that time, it was also called Paukkan. The Pyu were the inhabitants who originally lived in Myanmar since ancient times. According to these scholars, the Bagan period lasted 1262 years from 107 to 1369 CE (Pe Maung Tin and Luce, 1960; Bo Kay, 1981).

Aung Kyaing (Minbu) (2014) documents Myanmar chronicles that describe how King Thamudarit, a nephew of King Thupannyanagaraseinda of Sriksetra, marched to find new land to settle around the 2nd century CE. He and his parties tried to settle around Laeway near Nay Pyi Taw, but they were unexpectedly fought by the local people. When they searched for a new place to settle, the elephants with their followers halted. The king asked the situation of the place, where they arrived. Then they saw a small Buddhist stupa, one of the eighty-four thousand stupas, which may have been

built by the King Asoka. They found a stream with water flowing year-round around the small stupa. Thamudarit said that this place was very suitable for drinking and using water around the stream. Therefore he settled on that spot and built a city wall and moat near the stupa named Yanaungmyin. This city was subsequently called as Yanaungmyin near Nay Pyi Taw. When king Thamudarit and his parties lived at Yanaungmyin, some people suffered from malaria and died. Therefore they moved to Yonhlotkyun, 12 kilometres to the east of Bagan. This site was his first palace site after he became the leader of the nineteen villages of Pyu people from the Bagan region (Aung Kyaing (Minbu), 2014).

These 19 villages in the vicinity of Bagan are Nyaung U, Nagabo, Nagakyit (now known as Wetkyi-in), Mankyi-gyi (now Bagan), Tute (now known as Sadai), Kyauksaga, Kokke-thein (now known as Gagye), Nyaung Wun (now known as Tetma), Ahnuradha (now known as Myinkaba), Tansaung-kyun, Ywa-moan (now Letpanchibaw), Kyinlo, Kokko, Taungba, Myaykhe twin (now known as Myaythin-twin), Tha-yetya, Ohn-mya, Yonhlotkyun (now known as Ku-ywa), Ywasaik (now known as Phwasaw where Queen Phwasaw lived). People are still living in eleven of those villages. These villages are Sadai, Nyaung U, Nagakyit (now known as Wetkyi-in), Gagye, Nyaung Wun, Ahnuradha, Ywa-moan, Taungba, Myaykhe twin, Ohn Mya and Ywasaik (Win Maung (Tampawaddy), 2001; Aung Kyaing (Minbu), 2007).

The Bagan Dynasty started with King Thamudarit (Appendix-C) by organizing the nineteen Pyu villages located around Yonhlotkyun, an island surrounded by a creek flowing from Mt. Popa into the Ayeyarwady river. The first palace was built by the King Thamudarit in “Yonhlotkyun” located to the east of Turintaung mountain range and six kings ruled there for about 237 years. During the reign of King Thin-li gyaung in 4th century CE (Appendix-C), the palace was transferred to the second palace site named “Thiripyitsaya”. From King Thin-li gyaung to King Thaik-taing, altogether five kings ruled there till to 6th century CE for about 172 years. The 12th King Thaik-taing (Appendix-C) transferred his palace site to “Tampawaddy”, near Phwasaw village and twenty-two kings ruled there till to 9th century CE for about 333 years. The 34th King Pyinbya (Appendix-C) finally moved his palace to the existing palace site in 849 CE and built a city wall and moat. In this palace site, twenty-two kings

also ruled for about 520 years. The excavated sites of King Anawrahta and King Kyansittha were also located inside the existing city wall (Aung Kyaing (Minbu), 2007). According to the Glass Palace Chronicle (1960), the area of Bagan can be defined as land of victory. During the reign of King Thamudarit, there were four great enemies of the Kingdom; the great bird, the great boar, the great tiger and the flying squirrel. There were altogether 55 kings who ruled in Bagan; the first Myanmar nation is recorded in the reign of King Anawrahta, the 42nd king of Bagan dynasty. During his reign, he had four great heroes who were recognized for their bravery and strength. They are Kyansittha: the heroic Lancer, Nga Htwe Yuu: heroic Climber, Nga Lon Letpe: heroic Harrower and Nyaung Oo Phi: heroic Swimmer. When the insurgents of the Jun races (maybe Cambodia) invaded Hamsawady (in the Mon region) King Usapegu asked King Anawrahta for assistance. The Glass Palace Chronicle (1960) records that King Anawrahta sent four heroes. They conquered enemies in Pegu. Therefore, King Usapegu sent his own princess named Mani Sandar to the King Anawrahta, together with the four heroes. Among the Kings in Bagan Dynasty, the successors of King Anawrahta, Kings like Kyansittha, Alaungsithu, Narapatisithu, Htilominlo and Kyaswa were celebrated for their devotedness to Theravada Buddhism and the supremacy of power. During the reign of King Anawrahta, he conducted many works of merit and unified the first Myanmar nation with seeming outstanding success. He translated the text of the Tripitaka (three baskets) of the Buddhist scriptures (Pe Maung Tin & Luce, 1960).

Some Myanmar chronicles such as Satiya Kahta and Zabu Dipa U Saung Kyan recorded that King Thamudarit founded the first walled city site at Kyauksaga (near Thiripyitsaya) located to the east of Lokananda stupa. The traces of the stone walls at Bagan support these accounts (Myo Nyunt Aung, 2005). Win Maung (Tampawaddy) suggests that both the inner and outer walls can be found in some places, which may have been parts of its inner and outer walls. This area enclosed by the Kyauksaga stone walls, is much greater than the palace site of Yonhlutkyun and roughly equal to that of Bagan city wall built by King Pyinbya in 9th century CE. Therefore, the earliest city site of Bagan might have been Kyauksaga as chronicles state. He discusses that the Yonhlutkyun palace might have been used only for the King's council assembling

the 19 village headmen to form the first unified urban settlement on the Bagan region. This palace might have been a camp only (Win Maung (Tampawaddy), 2016). According to the Myanmar chronicles such as the Great Chronicle by U Kala, the new Chronicle by U Tun Nyo (Twin Thin Min Gyi) and the Glass Palace Chronicle by a panel of royal scholars during the reign of King Bagyidaw in the 19th century CE, there were four palace sites at Bagan.

Myanmar chronicles describe that King Anawrahta and his successors founded administrative divisions like Tampadipa, Thunapranta, Kanbawza, Yawnaka and Ramanya. There was an administrative hierarchy, with districts, towns, village-tracts, villages and quarters. King Anawrahta organized a number of provinces and small kingdoms and with remarkable success. He undertook the first integration among the peoples in Myanmar in his reign. There were four armed forces such as the infantry, the cavalry, the elephantry, and the navy in order to prevent invaders coming from other countries during the Bagan period. Bagan Kings united and organized the country; to the north up to the Shwe Li river, to the east up to the Than Lwin river and beyond, to the south up to isthmus of Kra, and to the west up to Western Yoma and beyond it (Nyein Maung, pp. 65-69, Vol-1). They carried out and organized armed forces on levy system which required every town and village to raise a levy for the defence of their kingdom and comprised towns that Settlements were managed according to their ratio of population such as Thaug-Pyut town (ten thousand people), Htaung Pyut town (one thousand people), Yar Pyut town (one hundred people) and Sai Pyut town (10 people) in order to fight the enemies and insurgents during the Bagan period. They administered a proportional number of soldiers to provide, if necessary, urgently for the defence. King Anawrahta constructed 43 outposts in the strategic areas on the edge of the Shan Plateau to protect the kingdom. People have been still living some of the outposts from the Bagan period up to now. Archaeological remains of thirty-three fortresses still survive today as villages. The kings of the Bagan dynasty instituted a notable awareness of law-and-order restoration in their kingdom. The Royal Order of King Kya Swa (1234-1250 CE) removed the crimes and keep law and order and ‘the judiciary and legislative power’

systematically administered in the Bagan period (Pe Maung Tin and Luce, 1960; Luce, 1969).

Bagan people believed in naturalism and nat (spirit) worship before the king Anawrahta's reign in the Bagan period. They worshipped the sun, moon, serpent, and nat figures then they believed Mahayana Buddhism in this period. But King Anawrahta did not appreciate the characteristics and behaviours of Ari monks and Mahayana Buddhism. When the Mon monk named Shin Araham came to Bagan, he met King Anawrahta. King Anawrahta was very pleased with the Theravada Buddhism after teachings by Shin Araham. Then he entirely converted people from Mahayana to Theravada Buddhism. Most people believed Theravada Buddhism influenced in Myanmar from that time onwards. After the arrival of Shin Araham, Theravada Buddhism was developed and flourished in Bagan. According to his guidelines, the three pitakas of Buddhist scriptures were brought from Thaton by King Anawrahta. Then Bagan people including royals constructed a number of Buddhist structures with generosity from the early Bagan period onwards. The doctrine and literature of Buddhism were in this way distributed all over the country. In summary, King Anawrahta introduced Theravada Buddhism to Bagan during the Bagan period (Pe Maung Tin and Luce, 1960; Than Tun, 1978).

Bagan was also situated in the centre for communication between Assam, India and Yunnan, China. King Anawrahta constructed many dams: Kindar dam, Nganaing thin dam, Pyaung-pyar dam and Gume dam on the Pan laung river and Nwa-tet dam, Kywun-say dam and Gudaw dam on the Mekkhayar river for the agriculture of Myanmar. In his reign, there were "eighty lakhs of pai" or fourteen million paddy fields, around the Kyaukse area. King Anawrahta also built the Aima dam in order to get the water for the paddy fields in the districts of Sagu, Salin, Kyapin, Mapinsara, Legaing and Phaunglin in the Minbu region. He also built a big dam between two mountain ranges in Maddhayar, north of Mandalay. King Anawrahta and his son King Kyansittha dug numerous water tanks and wells in Myanmar in order to get drinking water for the people and animals (Aung Kyaing (Minbu), 2014). Rice and vegetables were available in the Bagan market. Bundles of trade goods were mostly carried by bullock carts, horses, horse cart or elephants. The rice was supported to Bagan from

the 11 districts from the Kyaukse region and six districts from the Minbu region (Luce, 1969). During the Bagan period the kings encouraged internal and external trade and the standardization of weights and measures were made. The tradition and practice of taxation can be seen in measures of Bagan period (Pe Maung Tin and Luce, 1960; Than Tun, 1978).

Bagan traded with Bamaw and Moemait in northern Myanmar, Pegu and delta area, to the south, and Rakhine, Vesali, Patikara, Manipur and Assam to the west during the Bagan period. Myanmar chronicles said that there is evidence of external relations with India, China and Sri Lanka. A Sri Lankan King Vijayabhahu asked King Anawrahta for military assistance. King Vijayabhahu sent a replica of the tooth relic of Buddha from Kandi for his gratitude. King Anawrahta built four stupas to enshrine it on the four corners of the Bagan area. Sri Lanka and Myanmar are Buddhist countries. They had a relationship since the venerable Ashin Buddhagotta went to Sri Lanka to copy and translate the Buddhist scriptures in the 5th century CE. In the 12th century CE, Ashin Uttarajiva brought a novice named Sapada to Sri Lanka. Sapada was ordained on the river Kalayani. After 10 years Sapada returned to Bagan with four Buddhist monks. These Buddhist monks are one from Cambodia, one from southern India, one from Sri Lanka, and one from eastern India. This was significant because these monks were seen to be of a more authentic or pure religious lineage. Sapada constructed two Sinhalese-typed stupas based on the original stupa at Anuradhapura in Sri Lanka. These stupas are situated near Hgnet Pyit Taung area to the southeast of Nyaung U.

During the reign of King Kyansittha, he sent missions to China for facilitating overland trade with Yunnan. King Kyansittha was also the first Myanmar king to undertake the restoration of the Mahabodhi Temple, where the Buddha attained enlightenment in India (Chit Thein, 1965).

In addition, according to the Glass Palace Chronicle, King Narathu married an Indian princess named Pethidar in the 12th century CE. The Patikara prince also frequently came to Bagan to trade goods from Patikara in Bangladesh (Pe Maung Tin and Luce, 1960; Luce, 1969).

The chronicle sources provide valuable data on Bagan, although not always able to be verified historically. They are significant because of the way they preserve memory of past events and places. They are not comprehensive, some events were excluded, so they need to be understood together with the historical accounts and the material culture, the monuments, and structures of Bagan. These are described in the sections below along with history recorded from inscriptions and foreign accounts.

2.2.2 History from Inscriptions and Foreign Accounts

2.2.2.1 History from Inscriptions

Originally stone inscriptions were erected in the inscribed houses, which can be mostly seen at the religious Buddhist structures at Bagan to document generous donations during the Bagan period. Some of them unfortunately are now gone due to natural disasters, vandalism and age. As described below, they include evidence regarding the history of Bagan in the region. Inscriptions on stone carvings, stucco carvings, palm leaves, lead, terracotta plaques, glazes, bricks, mural paintings, cloth paintings, wooden sculptures and ink inscriptions on walls were produced by the Bagan people but the information is not always the same (Moore, 2023). For example, Bagan was named as Arimaddana in the Myazedi inscription dating in 1113 CE. In fact, the classical name of Bagan was mentioned as Arimaddana pura in most inscribed stones during the Bagan period. According to the Myanmar chronicles (Appendix-C), there are fifty-five kings who ruled over Bagan dynasty, fourteen kings from Anawrahta (1044-1077 CE) to Sawmunnit (1325-1369 CE) were described in the stone inscriptions of Bagan period (Nyein Maung, 1972-1983).

The names of the Bagan districts are recorded on the stone inscription from Sulamani temple. Village-tracts such as Hlahtwe taik, Nyanthar taik, Tamakha taik and Moaksochone taik are also mentioned on the stone inscriptions of the Bagan period. The names of the quarters such as Ahmana, Thitmati, Myinkaba, Thiripyitsaya, Wetkyi-in, Nyuang Oo, and Ngnet Pyit Taung are recorded in some stone inscriptions as well. During the time of King Kyaswa, in the 13th century CE, a stone pillar was said to have been erected in each village which consisted of fifty houses or more. On every Sabbath day, a holy man wearing white clothes always read the rules against theft and evil-doing. Today twenty-one of these inscribed stones still survive in

Myanmar (Nyein Maung, 1982, pp. 111-141).

Most of the plants growing at Bagan plain are described in the Lemyethna Anantathuya stone inscription, the Manuha stone inscription, on the reverse side of some votive tablets and some inscribed stones during the Bagan period (Nyein Maung, 1972; Mya, 1961). According to the biography of King Kyansittha's stone inscription, the Bagan people were very wealthy and the toys of children were made of gold and silver; copper sheets were used for the roofs of the houses (Chit Thein, 1965).

There were two dams (large lakes) at the bottom of Turin Hill, to the southeast of Bagan, dug by King Kyansittha for agricultural purposes in the 11th century CE. He also erected two inscribed stones in Mon language named Mya Kan and Alan Bagan to mark the donation of large tanks (Chit Thein, 1965).

According to the inscribed stone from Dhammayazaka stupa in the 12th century CE (Nyein Maung, 1972, pp. 65-68), the constructed and completed dates, the name of the stupa, the name of the country, the area of the kingdom (Myanmar), the number of soldiers, offering of slaves and lands for the maintenance of the stupa, the number of the guardians of the city and the costs of construction not only for the stupa but also for the whole complex including the monasteries around the stupa are described. The area of Myanmar proclaimed on the inscription extended from Tagaung, Usauk and Nyaungbingyi near the Yunnan border, south to Tennaserim, Dawai, Dagan and Salingale, in the north part of Malayu (Malaysia). An inscribed stone from Lemyethna monastic complex (Nyein Maung, 1972, pp. 151-163, Vol-1) described the offering the slaves, enshrining the relics in the encased caskets, construction of the religious buildings like Mahathera's monastery, Dhamasala, ordination hall, rest house, Pitakattaik, Kudi, water tank and water well.

Such monastic complexes as Shin Araham, Sinphyu Shin, Shwenanyindaw, and Sutaungpyi testify to the monastic education at Bagan. These monastic complexes became the higher learning centers for Buddhist studies and also centers of basic education. Some inscribed stones from these complexes in the Bagan period also

described some of the offerings in a similar manner (Luce, 1969; Aung Kyaing (Minbu), 1984).

Inscriptional evidence indicates that there were many problems to solve concerning land in Bagan. These were judged by the *Thinphama* or the *Kannyayin* of the village. Sometime the king acted as judge. There were plaintiffs, culprits and witnesses in the Bagan period. They had to put a pot of holy Buddhist relics on their heads, just like holding the Bible in taking an oath nowadays (Than Tun, 2005, pp. 87-99).

Some stone inscriptions mention that there were numerous ethnic groups in the Bagan Empire. Nine different languages such as Myanmar, Pyu, Chinese, Sanskrit, Mon, Tamil, Siamese, Pali and Shan were documented in the records during the Bagan period. These languages can be found on stone slabs, gold sheets, palm-leaf, on terracotta votive tablets, on glazed terracotta, on glazed stone, lead, silver sheet, and stucco. Kings and royal families, ministers, senior army officers such as generals, warriors, mayors, headmen of the towns and headmen of the villages for the administrative people can be studied in the most inscribed stones of the Bagan period (Than Tun, 2002).

During the Bagan period, there are distinctive social groups such as monks, wealthy persons, royal families, persons in the service of the king or state, merchants, farmers and commoners. About 4,108 monks led by Shin Araham are recorded in King Kyansittha's stone inscription regarding the construction of a royal palace. Artisans who were involved in painting, bronze casting, wood turning, masons, blacksmiths, and gold and silver smiths were documented in the inscribed stones. Other workers included *kuharthe*, who do the laundry, *thanyin* who carry the palanquins of royal families, *patter*, the makers and collectors of cotton & wool, *hintha* who gather firewood, the *Tasee* who helps to hold between the plaster and the brick wall, *hlethe* bullock cart driver, *yanthe* the cloth weaver, *uyintha* the gardener, and fifteen kinds of slaves, including monastery, pagoda, and house slaves (Luce, 1969; Than Tun, 1978).

According to the epigraphic records, curses and prayers are always recorded to protect their meritorious deeds such as not to destroy or not to remove the precious jewellery enshrined together with relics of Buddha or Buddhist saints (*Arahants*). Those who

destroyed were regularly cursed in the inscriptions. Donors always prayed with thanks to the people who repaired their meritorious deeds such as digging wells, water tanks, monasteries, dhamasalas, libraries and ordination halls wishing them to obtain Nirvana or to stop Samsara (the circle of life). Bagan people were very generous in offering their properties. Some inscribed stones recorded that some people offered their own compound and their houses in order to build the temple and dhamasala (Nyein Maung, 1972-1983).

According to the inscribed stone of the construction of royal palace erected by King Kyansittha, building began in 1101 CE and was completed in 1102 CE. He erected four stone inscription pillars to inform people how he built the new palace. King Kyansittha called his palace Rajasthan pukam, meaning palace of Bagan. In the same inscription he also called it Rajasthan jeyabhum, meaning palace of the land of victory. Kyaw Nyein (1989) documents that Kyansittha's new palace was clearly constructed with five pavilions namely with a Great Pavilion in the centre and four minor pavilions located at the corners. The palace faced to the north, towards the Ayeyarwady river. This is also similar to the Mon custom of facing the front of the house to the north. King Kyansittha's palace consists of four main buildings: the Throne Room, the Audience Hall, the Antechamber and the Coronation Pavilion, surrounded by four minor pavilions for ablutions which were connected by an ambulatory corridor. All these buildings were erected on posts. The decorative features of the Throne Room and Audience Hall included figures of dancers, drummers, lions between lionesses at the corners, arch jambs framed with heads of elephants, leogryphs, capricorns and lotus bulbs and flowers and fruit. Brahmans and astrologers, as well as Burmans versed in house building are frequently described in the text. There were Brahmans who were thambyin whose status was not lower than that of ministers; also there were Kalan who were clearly junior in rank to the thambyin, pandits, scholars whose knowledge made them influential in the palace (Chit Thein, 1965; Kyaw Nyein, 1989).

According to the inscribed stones erected at Buddhist monuments during the Bagan period, Bagan people believed that to have erected religious buildings could fulfill their wishes. These wishes when they built monasteries included attaining Nirvana,

omniscience, to halt the Samsara (continuing circle of life), to meet the future Buddha, Maitteya, to attain Nirvana together with the future Buddha, Maitteya, to support the four properties such as monastery, robe, swan (food) and medicine (Nyein Maung, 1972-1983; Aung Kyaing (Minbu), 1984).

In Thetkyamuni temple, on significant element is the mural paintings with ink inscriptions. These depict the scenes in the life of King Asoka mentioning constructing eighty-four thousand stupas (Pahtos) on Jambudipa, worshipping a stupa by Emperor Asoka, and his daughter named Sanghamitta who brought and transplanted a sapling of the original Bodhi-tree from Bodha-gaya to Ceylon (Sri Lanka). According to the Manuha stone inscription in the 11th century CE, he built the Manuha temple on land called Sri Zeyabhum (Victorious Land) to the northeast of Lokananda, the place of the old harbour where King Anawrahta had received a replica of the tooth relic donated by King Ceylon (Nyein Maung, 1972, pp. 322-323; Aung Kyaing (Minbu), 2007).

2.2.2.2 Foreign Accounts

In this section, Henry Yule in 1855, Emil Forchhammer in 1891, Taw Sein Ko in 1917, Charles Duroiselle in 1937, Gordon Hannington Luce in 1969, Elizabeth Moore in 1998, and Bob Hudsan in 2004, described as the foreign accounts regarding the history, art and architecture, religion, and archaeology of the general overviews of Bagan.

In 1855, Henry Yule (1968) journeyed to Upper Myanmar, leaving a valuable record of the remains and way of life. He was an author of 'A Narrative of the Mission sent by the Governor General of India to the Court of Ava in 1855', with notices of the country, government, and people. He documented some important discoveries among the ruins at Bagan and recorded that twenty-one kings reigned in regular succession from the middle of the ninth to the end of the thirteenth century. The following section follows his account. During the reign of Anawrahta, Buddhism was established in its present shape as the religion of the country under the guidance of Shin Arahan (a Mon monk) in 997 CE. He accepted that the history of the destruction of Pagan has been related by Colonel Burney from the Burmese chronicles. Yule

(1968) describes the principal types of temples at Pagan as very different from other scholars and architects. He was struck by the extent of the Pagan ruins over a space about 12.87 Kilometres in length along the river, and probably averaging 3.22 Kilometres in breadth. Pagan stands on the river side within the decayed ramparts of the ancient city, near the middle length of this space. He 'feels scarcely able' to form any estimate regarding the number of the temples at Bagan. He 'should not guess them' at less than eight hundred, or perhaps a thousand. He outlines that all kinds and forms are to be found among them: the bell-shaped pyramid of dead brick-work in all its varieties; the same, raised over a square or octagonal cell containing an image of the Buddha; 'the bluff knob'-like dome of the Ceylon Dagobas (Sinhalese type), with the square cap which seems to have characterised the most ancient Buddhist chaityas, as represented in the sculptures at Sanchi, and in the ancient model pagodas found near Buddhist remains in India; the fantastic Bo-phyra, or Pumpkin Pagoda. But the predominant form is the vaulted temple. Three at least of the great temples, and a few of the smaller ones of this kind, have been from time to time repaired, and are still more or less frequented by worshippers. He notes that Ananda is one of the most remarkable of the great temples. Major Phayre mentioned another probable origin of the name of this temple, viz. from the Sanskrit Anemia, the endless. Another great temple close at hand is called Thatbyinnyu, the omniscient. It is stated to have been built in the reign of Alaungsithu, grandson of the king who erected the Ananda, about the year of 1100 CE. The Gawdawpalin is the third and last of the greater temples which have been kept in repair. It dates from the reign of Narapatisithu, about 1160 CE. All these three buildings have been kept in repair, and one other important temple within the city walls has also been kept in repair. About three quarters of a mile south-east of the ancient city is the great temple of Dhammayangyi. This temple, which dates from the reign of Kala-Kya Min (the king dethroned by foreigners), about 1153 CE, in its general arrangement resembles the Ananda more closely than any other, and covers about the same area. Between Pahtothamya and Thatbyinnyu, an almost shapeless ruin, instead of an arched doorway, has a massive stone lintel, now broken. The sculptures remain; two inside, and several framed in panels on the exterior. The figures have nearly all four arms and have a very Hindu character; one of them also in its action strongly resembles the usual Hindu images of the monkey-god Hanuman,

but the head is defaced. Henry Yule drew the plans and sections of three greater temples such as Ananda, Thatbyinnyu, and Gawdawpalin temples with measurements by himself and also drawings of the architectural details of remains at Pagan. The northeast view of Gawdawpalin temple, the southeast view of Dhammayangyi temple and the northeast view of Pahtothisya temple were drawn by Yule (Yule, 1968, pp. 30-54).

Dr. Emil Forchhammer was a German-born Swiss Professor of Pali at Rangoon College, Myanmar. He collected Pali and Talaing manuscripts which he put in the Bernard Free Library in Rangoon. He also was a government archaeologist as well as a first director for the Archaeological Survey of Burma from 1883-1889. He wrote a book named Pagan 1. The Kyaukku Temple in 1891. In his book, Forchhammer (1891) documents that the history of Pagan is essentially a 'history of religion.' The memory of Bagan Kings like Anawrahta, Kyansittha, Narapatisithu, and Kyawswa lived in the Ananda, Shwezigon, Gawdawpalin, and Kyaukku temples. Pagan received hospitably the scattered remains of some Buddhists from all parts of India. He said that it was the most celebrated centre for Buddhist religious life from the 10th to 13th centuries CE and learning in Indo-China. Fraternities from Ceylon (Sri Lanka), from the conquered Hamsavati (Pegu), from Siam (Thailand), Camboja (Cambodia) and Nepal and China, visited in Pagan and, as they brought the religious views with them from their various homes, sectarian strife soon became rife in Pagan, and King Narapatisithu assigned to each fraternity or sect different quarters where they lived in his reign. Forchhammer (1891) recorded that this area around the Kyaukku temple is the northernmost point of Pagan. Here the Burmese priests of the school lived after they had been excommunicated by the zealous Talaing (Mon) priest Chapada (Sapada), who had returned from Ceylon, where he received the Upasampada ordination from the priests of the Mahavihara. Sapada and his followers then renounced community with the Pagan priests and formed a sect of their own (1182 CE). King Narapatisithu patronized this sect, and it attained to great influence and numerical strength at the capital. He accepts that Sapada and his followers resided Hngetpyittaung area, which was essentially the quarter of the Sinhalese sect (Sihala sanga). The Talaing fraternities, who differed from Sapada lived to the south and east

of Shwezigon stupa. The Camboja and other sanghas lived to the south of Ananda temple. This area is known as the cradle of Pali-Burmese literature with many other treatises written by the industrious monks who resided here in the 11th and 12th centuries CE. History asserts that the Pagan King Narapatisithu occasionally visited the Kyaukgu Umin (Cave) in his royal boat. He built Kyaukgu temple over the place where his boat moored on the bank to commemorate his visits in 1188 CE (Forchhammer, 1891, pp. 1-3).

Taw Sein Ko was born in Moulmein (Mawlamyine) in 1864. He was the son of a Burmese Chinese father. He was a Burma's first recorded archaeologist appointed by King George V in 1903. He was the position of Government Archaeologist as a Superintendent of the Archaeological Survey. He was the founder of Bagan Archaeological Museum near Ananda temple at Bagan in 1904 and he wrote the Archaeological Notes on Pagan in 1917. In this book, Taw Sein Ko (1917) noted that all conceivable forms of Burmese architecture are found at Pagan. The 'architectural energy' of the Burmese Kings lasted for about a thousand years from the 3rd to 13th centuries CE and was most active from the 11th to 13th centuries after his conquest of the Talaing Kingdom of Thaton by King Anawrahta. He called the Ngakywenadaung stupa one of the oldest of the stupas, a tuber-shaped pagoda 'of no pretentious dimensions', built of green enameled bricks, and crowned with what looks like a small domed chamber thereby bespeaking its Chinese origin. The Singhalese influence is reflected in the Sapada Pagoda, which was built, in the 12th century CE, by Sapada, a native of Bassein (Patheingyi), who was ordained a Buddhist monk in Ceylon (Sri Lanka), and who founded a sect at Pagan. Architects from the Dekkhan (Deccan) were evidently employed in the construction of the temples erected in the 11th century CE, by Manuha, the captive King of the Talaings, and Kyansittha, the reputed son of Anawrahta. The pose, contour and drapery of the images of the Buddha and the figures sculptured on stone are distinctly South Indian. This is the case as well as the structures, like the Nagayon and the Ananda, which are square edifices with porches, and are provided with vaulted chambers and corridor passages, in which 'a subdued light gleams from above'. Taw Sein Ko (1917) describes that the most interesting class of buildings is, however, that to which the Shwesandaw and

Shwezigon belong. They are solid domes with sharp pinnacles, in which the types of the Indian Stupa, of the Singhalese Dagoba (stupa), and of other 'cognate structures,' in China, are found combined. There are also cave temples constructed after Indian models, built against the precipitous sides of ravines, of which the Kyaukgu is the prototype. They were intended to be a combined residence and temple and served their purpose well in the 'torrid' climate of Pagan. Of the square temples of Pagan, the Ananda and Thatbyinnyu are distinctive types. Ananda temple was built by Kyansittha in 1091 CE dating a little later than the Norman conquest of England. Gothic arches and stone sculptures of exquisite workmanship representing scenes in Gautama Buddha's life, and terracotta tiles representing scenes in the previous lives of the Buddha can be found in this temple. It enshrines the images of the four Buddhas of the present world-cycle, and also a portrait statue of Kyansittha, its builder. Its plan which is in the form of a Greek cross, and its architecture, are unique and extraordinary representing the best specimen of Indian art. The term Thatbyinnyu signifies omniscience, which is one of the attributes of the Buddha, was given to a temple modelled after temples in Northern India built by King Alaungsithu in 1144 CE. It comprises five storeys: the first and second were used as the residence of monks; images were kept on the third; the fourth was used as a library; and on the fifth was constructed a pagoda containing holy relics. The building is thus a combination of a stupa and vihara and is a deviation from modern custom (Taw Sein Ko, 1917, pp. 35-36).

Charles Duroiselle was a professor of Pali at the University of Rangoon. He also worked as a superintendent, Archaeological Survey of Burma from 1912 to 1940. He archaeologically excavated numerous monuments at Pagan. He wrote a book named *Memoirs of the Archaeological Survey of India No.56, The Ananda Temple at Pagan* in 1937. In this book, Duroiselle (1937) describes that although Myanmar people overran most parts of Myanmar at one time or other, their only permanent kingdom centred around the Ayeyarwady-Chindwin confluence, which is the navel of the country. Most of the successive capital was at Pagan, the earliest major capital, 1044-1287 CE, that their architecture reached zenith. He documents that sufficient general descriptions of the religious Buddhist monuments at Pagan begin with Yule's mission

to the Court of Ava in 1855. He discusses that the Ananda, well-known and perhaps loveliest of all, has some monographs all to itself. The Ananda was built in 1090 by the King Kyansittha. He recorded that not only thirty-three fine illustrations are deeply artistic and fantastic but also the sum of recent knowledge. Pagan architecture is adapted from India origin even though it has an 'added grace which is peculiarly Burmese (Myanmar)': the pointed vousoir arch (radiating arch), everywhere such a feature here, is of Gupta provenance. As for the Ananda temple itself, Myanmar chronicles said that its prototype was some India temple whose monks visited King Kyansittha in his reign. He discusses that the Paharpur temple in north Bengal, excavated by K.N. Dikshit in 1925-28, may be similar to the Ananda temple and indeed in several other respects Paharpur might have been a link connecting India with Burma, Cambodia and Java (Duroiselle, 1937).

Dr. Gordon Hannington Luce was an eminent scholar of Myanmar history. In 1912, Luce was appointed as a lecturer in English Literature at Government College, Rangoon, later a constituent college of the University of Rangoon. He wrote books and articles on a wide variety of subjects regarding particularly the history, art and architecture, and languages of Myanmar. In his book named *Old Burma-Early Pagan*, Luce (1969) discussed that some Pyu refugees are said to have resided around Pagan, a group of small villages on the eastern bank of the Ayeyarwady river, 290 kilometres north of Sri Ksetra (Pyay). Pagan is in the Dry Zone of Central Burma, below the mouth of the Chindwin, at the point where the Ayeyarwady, after flowing in a south-westerly direction from Mandalay, turns finally south towards the sea. He said that Halin, the Pyu capital in the north, and Mi-chen, the chief Mon city in the south, were sacked by Nan-chao, the imperial lords of Yang-chu-mieh (Ta-li) on the high plateau of Western Yunnan in 832 and 835 CE. The dominant peoples of Nan-chao were probably Lolo, speaking languages closely akin to Burmese. The Burmans, then subject to Nan-chao, and forced to 'fight Nan-chao's battles' from Cheng-tu to Hanoi, took their chance to break away, and descend upon the hot malarious plains. He accepted that the Myanmar occupied the two irrigated rice-granaries of the Dry Zone: Kyaukse (129 kilometres to the north-east of Pagan) and Minbu (97 kilometres to the south of it). They called them respectively the Eleven and Six Kharuins (Districts). He

said that they built the walls of Pagan in 850. It was then the advance-centre, rather than the capital, of Tambadipa, the first kingdom of the Burmans in Central Burma (Luce, 1969, p. 3, Vol 1).

Dr. Elizabeth Howard Moore is an Emeritus Professor of the Art and Archaeology of South East Asia, School of Oriental and African Studies (SOAS), Department of History of Art & Archaeology, London. She has extensively published on the archaeology of Myanmar, Thailand and Cambodia and contributed to the Department of Archaeology with the UNESCO nomination dossiers for the Pyu Ancient Cities and Bagan in 2014 and 2019 respectively. Many of her publications on Myanmar focus on the ancient and living heritage, as seen in her recent book *Wider Bagan, Ancient and Living Buddhist Traditions* with contributing authors U Win Maung (Tampawaddy) and U Win Kyaing (2023). This was also the case in her earlier chapter on religious architecture contributed to a book named Myanmar Style: Art, Architecture and Design of Burma. In this book, Moore (1998) described Bagan as a living city, a complex urban area, a royal capital as well as a center of religious education. It was a 'clear demonstration' of pious donation and merit making. From the curves of the stupas, sikharas and vaulted arches to the peaks of the umbrellas or hti reaching heavenwards, they 'endure as a testimony to the living tradition of Buddhism in contemporary Myanmar (Moore, 1998, p. 35).

Dr. Bob Hudson is an Australian archaeologist known for his research in Myanmar and he was an adviser to UNESCO & Myanmar Ministry of Religious Affairs & Culture, Bagan, Mrauk-U & Pyu Ancient Cities World Heritage Bids. He investigated the role of strategic resources in the rise and fall of the Kingdom of Bagan from the 9th -14th centuries CE, Myanmar with National Geographic Society Project. In his thesis, Hudson (2004) notes that during the Song Dynasty (960-1279 CE) missions to the Song court from the P'u-kan kingdom in 1004 and 1106 CE are recorded in the *Zhu fan shi* or Description of Foreign Peoples of 1225 CE. He said that there is a record of missions from Bagan and Dali, including the presentation of gifts and Buddhist scriptures, to the Southern Song court in 1136 CE. He notes that the name Pagan appears for the first time in Chinese records in 1178 CE and in inscription of

1278 CE that describes an incursion by the Bagan army into Yunnan. From the Yuan Dynasty (1279-1368 CE) the *Collection of Literary Works of the Yuan* (1334 CE) comprises a detailed account of the wars between the Yuan and the Burmans in the period 1271-1301 CE (Hudson, 2004).

2.2.3 Archaeological Data

Archaeological excavations at Bagan started from the colonial period onwards. The earliest excavation works were systematically undertaken by the Archaeological Survey of India and Archaeological Survey of Burma in 1903. After independence in 1948, when the Department of Archaeology in Myanmar was officially opened, archaeological excavations have been annually continuously conducted by the Department of Archaeology (DOA) for the important archaeological sites in Myanmar. The sections below are from the Bagan nomination dossier, the Archaeological Survey of Burma and the working inventory and internal reports of the DOA and DANM. They summarise the chronology of excavations in and around Bagan, and reflect a combination of research interests and works carried out as part of regular maintenance as well as rescue operations in response to monument deterioration.

The sites were excavated by the ASI, ASB, DOA, and DANM with the numerous archaeological finds discovered them around Bagan. They range from Neolithic settlements at Letpanchibaw, the Bagan palace Sites, unexcavated brick mounds, some of the 19 Pyu founding village sites around Bagan. There are also other ancient monument sites in the vicinity of Bagan, have been archaeologically investigated (Bagan Nomination Dossier, 2017-18). Some examples are given below. They are cited in chronological sequence, showing the varied works and changing interests of the DOA officers. They begin in 1903:

A brick mound located near Sutaungpyi pagoda, Taungbi village was excavated by Taw Sein Ko, Superintendent Archaeologist, Archaeological Survey of Burma in 1903-04 (ASB, 1903-04). A relic chamber (L-1.06 metres x B-1.06 metres x D-1.06 metres), and terracotta votive tablets with Sanskrit inscription of *Ye dhamma* were

uncovered in this site. A brick mound located at Kyinlo village, one of the 19 Pyu villages to the southeast of Nyaung Oo was excavated by Taw Sein Ko in 1906-07 CE. A sandstone Buddha Image, a bronze Buddha Image, two terracotta votive tablets, and three iron implements were unearthed in this site. All of them are datable to the 11th CE (ASB, 1906-07).

During this time, the discovery at west Petleik revealed an inner passage way, large sized terracotta plaques of 550 Jatakas both important finds for Buddhist iconography of Bagan, and a fragment of stone inscription in Mon language were unearthed at the excavation of west Petleik temple, Thiripyitsaya village conducted by Taw Sein Ko in 1907-08 (ASB, 1907-08). Two terracotta votive plaques and a number of fragments of terracotta plaques were found at the base of Shwesandaw stupa to the southeast of Bagan city wall by Charles Duroiselle in 1912-13 (ASB, 1912-13).

More works followed in the following years:

1. A ruined relic chamber which might have been destroyed by the 'treasure hunters', an earthenware pot with the traces of gold on them, a seated and headless image of Buddha were uncovered at the excavation of a brick mound located near Taungba village around the first Bagan palace site undertaken by Charles Duroiselle in 1914-15 (ASB, 1914-15).
2. A number of terracotta votive tablets with Pali in Devanagari scripts and archaic Myanmar scripts datable to the 10th to 11th centuries CE were found at the excavated mound of Maung Chit Sa' field to the east of Ananda temple undertaken by Charles Duroiselle in 1925-26 (ASB, 1925-26).
3. A number of votive tablets, a few bones, a stone Buddha image of 11th century CE, votive tablet of King Aniruddha (Anawrahta) with Pali legend in Myanmar characters, another with Pali and Sanskrit mixed, a votive tablet with six lines of Pyu script in reverse, a gilded bronze statue of Boddhisattva were found at the passage of second terrace on the west side of Shwesandaw stupa, conducted by Charles Duroiselle in 1926-27 (ASB, 1926-27).
4. A brick mound located near Thayambu temple to the west of Shwesandaw stupa excavated by Charles Duroiselle in 1926-27 yielded an enclosed room

with portico with stone slab floor, underneath of it was bluish ash floor with earthen vessel fragments, charred bones with rust nail and iron objects, urns containing bones which seemed as Pyu burial system and finds (ASB, 1926-27).

5. A brick mound located near Min O Chantha stupa excavated by Charles Duroiselle in 1926-27 yielded a headless of Buddha image, ashes, charred bones, fragments of pottery urns, pieces of iron below pavement and wall. A brick mound in the field of Maung Chit Sa to the east of Ananda temple excavated by Charles Duroiselle in 1926-27 yielded the traces of two walls from north to south, relic chamber, two bronze Buddha images, 'hundreds' of votive tablets, and some of them with the inscriptions of Myanmar characters regarding the various fruits, flowers, herbs using in the Bagan period (ASB, 1926-27).
6. A brick mound located about 30.48 metres to the east of Ananda temple excavated by Charles Duroiselle 1927-28 yielded a brick hall (22.86 metres EW x 15.24 metres NS) with 2.13 metres high, a brick Buddha statue in *bhumisparsa* posture on the pedestal, a stone slab and a miniature stupa, a relic chamber found with many fragments of terracotta votive tablets with the writing of 12th century CE (ASB, 1927-28).
7. Thirty-six mounds located around Thiripyitsaya village excavated by U Mya in 1930-31 yielded many small temples and stupas (ASB, 1930-31).
8. Twenty-three mounds located around Myinpagan (Myinkaba) excavated by U Mya in 1931-32 yielded the ruined temples and stupas (ASB, 1931-32).

After World War II further explorations were made by the department officers such as the renowned U Bo Kay, U Myint Aung, U Aung Thaw and U Aung Kyaing. As earlier the works were varied in time and place:

Blue and yellow beads of glass and terracotta votive tablets with two lines of Mon inscriptions were unearthed at the excavation of Paung Ku Gon stupa carried out by U Bo Kay and U Myint Aung, Research Officers in 1961-62 (ASB, 1961-62). The terracotta votive tablets with Mon language and the limestone figures of *Keinnara* and

Keinnayi were unearthed at the excavation of Paung Ku Gon to the west of Aggatae stupa carried out by U Aung Thaw and U Myint Aung in 1962- 63 (ASB, 1962-63).

A monastic complex with 42 rooms similar to that of Somingyi brick monastic building, staircase in the south portion, and inscriptions on the fragments of Andagu (dolomite) plaque were found at the excavation of Shinyetahtaung monastery to the north of Myinkaba village conducted by U Aung Kyaing, Conservation Assistant of the DOA in 1968-69 (DOA, 1968-69).

An ancient habitation site which is the successive cultural phases from the Neolithic to historic period was excavated by U Myint Aung, Research Officer of the DOA in 1971-72 at Letpanchibaw village, one of the early settlements of nineteen villages of Bagan origin. A number of Neolithic implements were unearthed in this site (DOA, 1971-72). Earrings, terracotta beads, disc, iron pieces, potsherds, stone tools, bone tools, stone awls, fishhooks, animal bones, decorated potsherds with geometric design had been also found in this site excavated by U Nyein Lwin, Research Officer of the DOA in 2001-02 (DOA, 2001-02).

Part of the eastern walls, platforms, eastern moated areas, an old gateway, fragments of bones and teeth, earthenware, earrings from a small corridor in city wall, decorated potshards, iron spearheads, stone balls, clay pipes, fragments of terracotta votive tablets, beads, liberation jar were unearthed at the excavation of the city wall and moat at Bagan conducted by the DOA in 1989-90 (DOA, 1989-90).

Chronicle traditions said that King Pyinbya's palace and city wall at Bagan were built in the 9th century CE. The palace of King Pyinbya located near Atwinzigon stupa (No.1639) inside the Bagan city wall was excavated by U Nay Naing Tun, Research Officer of the DOA in 2001-02. The excavated area is 40 by 20 metres outside the south wall of the Atwinzigon complex. Brick walls and floors, terracotta beads, potsherds, earthen and iron vessels, potteries, oil lamps, two iron spear heads, clay pipes, bronze bells were unearthed in this excavation (DOA, 2001-02; Hudson, 2004).

The fourth palace site called Kyansittha palace site inside the Bagan city wall was excavated by the DOA from 1990 to 1994. Traditions said that twenty-two kings ruled

in this palace. The Kyansittha's inscriptions mention that are ceremonies for a many-pillared palace with a central pavilion surrounded by four more pavilions and a separate ablution building. Great attention was paid to the ritual washing and decoration of the pillars in this palace. The rituals comprised monks, Brahmins and astrologers. According to the documents of the new royal palace constructed by King Kyansittha, Mon carrying ceremonial vessels, and Myanmar carrying swords were described in this stone inscriptions (Kyaw Nyein, 1989; Hudson, 2004).

The Anawrahta Palace site to the west of Kyansittha palace was excavated by the DANM in 2003. Two large brick buildings, two small brick buildings, an 85 metre long brick wall stretching south and north, and two 40-metre long brick wall stretching east and west were unearthed. Finds included brick floors, posts, and the drain of Bagan period. The site was assumed to be the west gatehouse of the palace of King Anawratha, with varied finds: earthen pots and broken earthen pots, fifty-three earthen pots, seventy-three earthen ear-plugs, unearthed utensils including earthen potsherds and earthen beads, earthen vessels, decorated potsherds, charcoals, bone pieces, terracotta beads, iron pieces, inscribed bricks, white amber beads, pipes, bronze weights, pillar holes, earrings, potteries, soak pits, toys, lead plates, iron nails, storage jars, liberation jars, oil lamps, burial urns and bones, terracotta votive tablets, and terracotta ring wells were unearthed in this site (DOA, 2003; Hudson, 2004).

Kyauksaga palace site located to the north of Saytanagyi stupa was excavated by the author in 2005. There were only two test pits at the southwestern corner of the inner walls of Kyauksaga palace to know on average the foundation and height of the inner walls. The first test pit measuring 13.72 metres x 13.72 metres x 0.76 metre and the second test pit measuring 1.98 metres x 1.98 metres x 0.60 metre were excavated. The first one on the western inner wall and the second one on the southern inner wall are located at the Kyauksaga palace site. Sandstones and wood fossils were mostly used for the construction materials of the inner walls. The average height of the walls is around 0.91 metre to 1.5 metres and the average foundation is at least 0.30 metre only. The area of inner walls is about 30.15 acre (DOA, 2005).

Hudson documents excavations at Yon Hlut Kyun in 1999-2000 conducted by Hudson and U Nyein Lwin. It is located on the eastern hinterland of Bagan. In this site, there was no above ground structure visible. The excavation program resulted in two discoveries, an abandoned habitation site and a three-sided 60 by 60 metre rectangular structure made from sun-dried or low-fired brick with remnants of roof tiles, iron nails, a pivot-stone from a doorway and earthenware pottery fragments that included ritual sprinkler pots. No carbon was found in a context that would justify radiocarbon dating (Hudson, Nyein Lwin & Win Maung (Tampawaddy), 2001; Hudson, 2004).

The Otein Taung (pottery hill) mounds at Bagan were excavated by Hudson and U Nyein Lwin between 1999-2001, with the aim of positively identifying the area as an earthenware production site, commencing a program of pottery characterisation and analysis and obtaining samples for radiocarbon dating. The Otein Taung site is located to the southeast of Sulamani temple. It consists of two mounds 500 metres apart, covered with dense layers of fragmented pottery, with scatters of potsherds visible around and between the mounds. The western mound is 90 metres by 35 metres, and more than 7 metres high. The eastern mound is L-shaped. Each side is about 80 metres long, at least 25 metres wide and 6 metres high at the highest point. On the eastern mound two holes presumably dug by 'people in search of saleable items' revealed larger pottery fragments than had survived on the surface. The mounds at Otein Taung were situated on the edges of a village that was producing earthenware. Direct evidence of early occupation and economic activity within the main monument zone at Bagan is provided by the Otein Taung excavations. Radiocarbon dates indicate that earthenware production was underway perhaps in the 8th century, and more certainly in the 9th, and continued in the same location at least until the 14th century (Hudson, Nyein Lwin & Win Maung, 2001; Hudson, 2004).

Setkutaik or Pitakattaik (Library), one of the stone structures at Bagan datable to the 11th century CE at the bottom of Turin Hill was excavated by U Myint Soe Aung, Assistant Director of the DOA in 2006-07 (DOA, 2006-07). In this site, its inner rooms of the plans and the bottom of the building can be clearly seen after the excavation.

Potteries, earthen wares, soak pit, toys, lead plates, iron nails, storage jars, liberation jars, pillar holes, oil lamps, burial urns and bones, terracotta votive tablets, and terracotta rings dating 11th century CE were unearthed at the excavation of King Anawrahta palace located to its western parts, undertaken by U Ko Ko Aung, Assistant Director of the DANM in 2011-12 (DANM, 2011-12).

2.3 Monuments at Bagan

While the previous sections have summarized existing literature, internal reports as well as publications, in this section, the author describes the monuments relevant to this dissertation. Where appropriate the encased monument distribution research areas such as Area-7 used in this dissertation are noted.

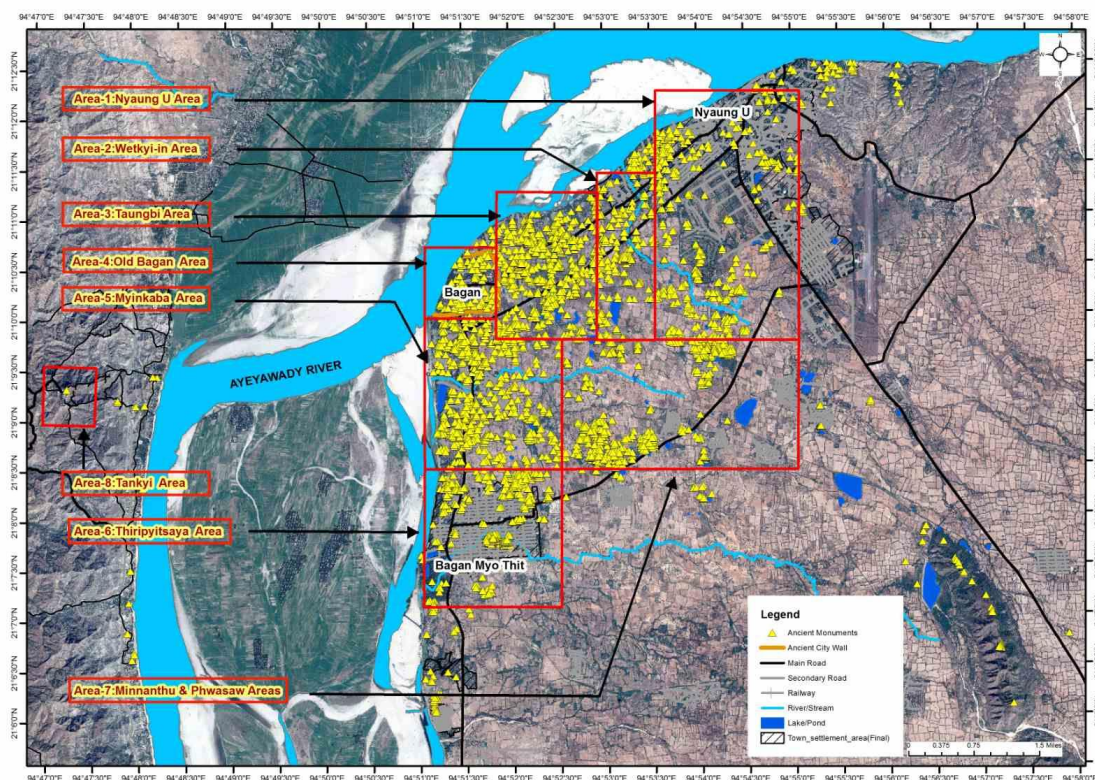


Figure 3: Map Showing the Distribution of Monuments at Bagan with Eight Areas

Note. There are important eight areas at Bagan on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

2.3.1 Distribution of the monuments at Bagan

There are numerous Buddhist structures still surviving at Bagan (see Figure 3), Mandalay region in central Myanmar. Most of them were built between the 11th to 13th centuries CE at Bagan and a few of them were built before 11th century. According to the inscribed stones, Myanmar chronicles, architectural typologies, and history of the religious structures, most of the bigger sizes of the monuments at Bagan, were built by Kings and most of the medium sizes were built by ministers, generals, princes and princesses, and wealthy persons. The smaller sizes were mostly built by the common persons. The various sizes of the monuments are illustrated by the remains in the Minnanthu and Phwasaw areas (Area-7). Most religious buildings with inscriptional evidence, decorated with the mural paintings were built in the 13th century CE. Each Buddhist monument has a walled enclosure like a residential fence, and often they are situated very close together. They include numerous monastic complexes and single monasteries in this site. There are around one hundred religious Buddhist monuments inside the city wall and moat, where the last palace site is located at the old Bagan area (Area-4). The larger and medium size monuments are found in this area. The medium and smaller sizes are most common in the Thiripyitsaya area. The medium sizes are mostly found in the Taungbi area (Area-3), Wetkyi-in area (Area-2), and Myinkaba area (Area-5). A number of encased structures can be found in the Taungbi area while there are only a few built in the Bagan period at the Tantkyi area on the western side of the Ayeyarwady river. Traditions, however, said that the important monument called Tant Kyi Taung stupa, situated in this area, is triple encased. A number of Umins (Caves), used as meditation cells, due to the topography were mostly found in the Nyaung U area (Area-1). One of the largest sandstone buildings called Kyaukgu Umin (Cave temple) built in the early Bagan period is located around 3.22 kilometres to the east of Nyaung U area. A few Buddhist structures and two large lakes with two inscribed stones in Mon languages, built in the Bagan period can be found at the sandstone Turintaung Hill area on the southeastern end of Bagan. Stone stupas, stone lakes, and stone library are also found in this site. Sandstone raw material sites producing in the Bagan period were found at the bottom of the Turintaung Hill, where the chisel marks could be clearly seen. Many

stone objects such as stone blocks, inscribed stones, stone sculptures, and stone gutters were produced in this site (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001).

According to the epigraphic records and Myanmar chronicles, there are a number of Buddhist structures at Bagan built in the post Bagan periods such as Pinya, Inwa, Nyaungyan, and Yadanabon periods. Examples of Buddhist structures which have been built in the post Bagan period, can be viewed in the Nyaung U area (Area-1).

There are also Buddhist structures built in the Bagan period in various parts of Myanmar. Sites include Srikshetra, Beikthano, Kyaukse, Minbu, Magway, Pakhan Ngai in Chauk, Nahtogyi, Yesagyo, Htilin, Gantgaw and Twante and others. A cluster of the Buddhist monuments built in the Bagan period is located around '48' kilometres to the south of Bagan at Salay in Chauk township, around '80' kilometres at Sar Lai in Chauk township. Further examples are located '193' kilometres to the south of Bagan at Myingun in Magway township and around '241' kilometres to the south of Bagan at Kyundaw in Michaungye township. All these Buddhist structures are located on the eastern side of Ayeyarwady River in the Magway region and show how these regions relate to the Bagan dynasty, reflecting patronage and economic prosperity during the Bagan period.

The temples are of many types; some are surmounted with a Mahabodhi-shaped sikhara with inscribed stones showing they were built in the 12th and 13th centuries CE. Besides there are monuments built in the post Bagan periods at Inwa, Nyaungyan, Konbaung and Yadanabon periods. There are 101-monuments belonging to the Bagan period at Salay (DOA, 1969a) and three monuments of the Bagan period at Pakhan Ngai. There are 41-monuments belonging to the Bagan period at Sar Lai (DOA, 1969b). There are 23-monuments at Myingun (DOA, 1969d) and 23-monuments at Kyundaw (DOA, 1969c), datable to the Bagan period. Inventories of the monuments at Salay, Pakhan Ngai, Sar Lai, Myingun, and Kyundaw have been entirely completed by the Department of Archaeology and National Museum.

2.3.2 Types of the Monuments at Bagan

In Bagan there are mainly two monument types. The first is solid to enshrine the relic of Buddha and Buddhist saints or *arahants*. The second is a hollow type to house the Buddha image for veneration, decorated with mural paintings on the interior walls and stucco decorations on the exterior walls. Mostly they are brick buildings in the Bagan period but a few of them are the stone buildings. There are nine stone structures in Bagan region (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001, Vol 1-8). These stone structures with the inventory numbers of Pichard are as follows:

1. Shwezigon stupa (No.1), one of the tooth relic stupas at Bagan
2. Kyaukgu Umin (No.154), 3.22 kilometres to the east of Nyaung Oo
3. Nanpaya temple (No.1239) south of Manuha temple
4. Setkutaik library (No.2241) at the foot of Turintaung Hill
5. Muwa stupa (No.934) southwest of Dhamarazaka stupa
6. Two bell pillars (No.1598) of Thatbyinnyu temple, located inside the Thatbyinnyu monastery
7. Three ruined structures (No.2229, No.2230, No.2235) on Turintaung Hill

The solid type

Some bases of the solid stupas are circular or square in shape, while others are pentagonal or octagonal. The upper bell-shaped portions rest on three or five receding terraces and above *chattravali* chattravally (concentric rings) for umbrellas, upturned and downturned lotuses and ending with finial (ahtut). Some solid stupas had hollow corridors to reduce the weight and save the bricks. Satanagyi stupa, illustrating the hollow corridor with a central vaulted room, and some other stupas could be viewed at Bagan.

The hollow type

Some bases of the hollow typed structures are mostly square or rectangular in shape, while a few of them are circular or pentagonal in shape. In hollow structures at Bagan, there are two different types of the bases: a Kalasa pot shape (urn profile) and throne

shape with panels clearly seen in profile. The radiating arches (see Figure 38) at the roofs, the gate houses, the corridors, the vestibules and the doorways are common for the hollow types. 'Common features include straight arches (see Figure 38) at the doorways and the entrances of the monasteries, the windows of the temples and monasteries, the gateways of the enclosure walls, and the entrances of cells'. In contrast, corbelled arches (see Figure 38) are seen at small rooms, staircases, corner stupas, and doorways (Aung Kyaing (Minbu), 1984; Kyaw Latt, 2010).

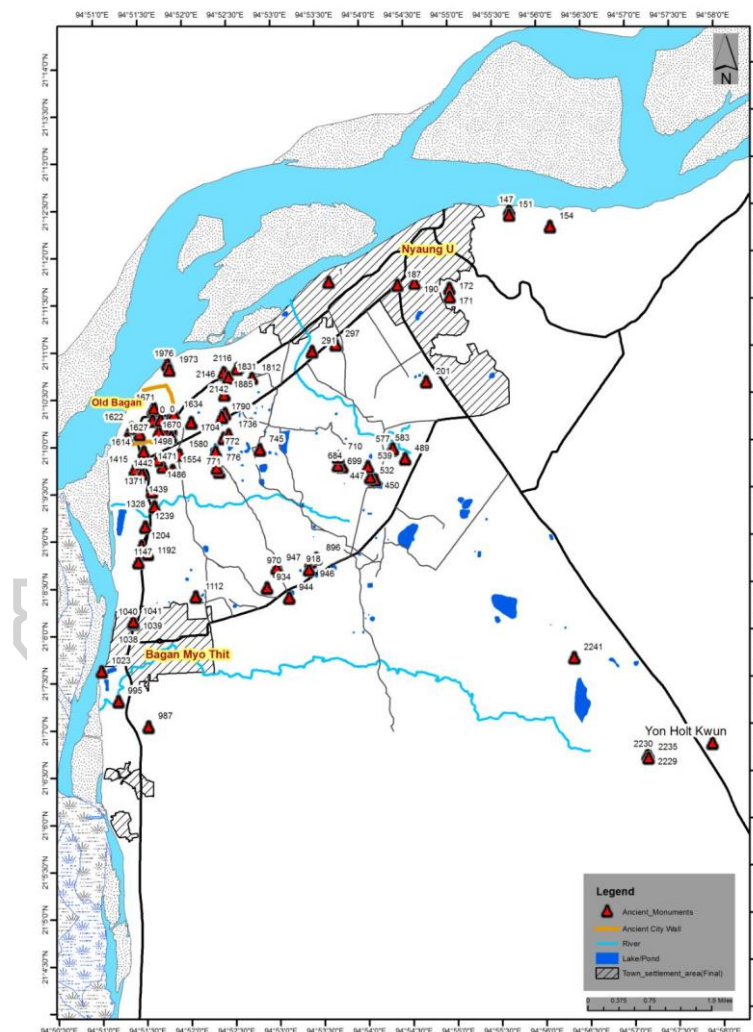


Figure 4: Map Showing the Different Types of Monuments at Bagan Note. There are different types of the monuments found at Bagan on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

There are thirty-two varieties of ancient monuments of the main two types seen at Bagan (see Figure 4) listed below with their inventory numbers and illustrated in the figures.

Solid types are as follows:

1. Stupas surmounted with bulbous and cylindrical shape (stupa No.1973 to the west of Taungbi village (see Figure 5), Paukpinya stupa (No.1614), and four rows of the Pyu stupas (see Figure 6), No.1038, No.1039, No.1040, No.1041)
2. Stupas with circular base (stupa No.2146 to the northwest of Einyakyaung Ngamyethna temple (see Figure 7), Myatheintan stupa in Thuhtekan village, No.944)
3. Stupas with square base (Shwezigon stupa (No.1), Mingalazedi stupa (No.1439) (see Figure 8), and Mahazedi stupa, No.1602)
4. Stupas with pentagonal base (Dhammayazaka stupa (No.947) (see Figure 9), stupa No.1671 in the precinct of Mahabodhi temple)
5. Stupas with octagonal base (e.g. Myinkaba stupa (No.1328), Inn stupa (No.772) (see Figure 10), and Lawkananda stupa, No.1023)
6. Sinhalese-typed stupas (e.g. Sapada stupa (No.187), Sapadaw stupa (No.190), and Saytanagyi stupa (see Figure 11), No.987)

Hollow types are as follows:

7. Four-storeyed temples (e.g. Thatbyinnyu temple (No.1597) (see Figure 12), Gawdawpalin temple, No.1622)
8. Three-storeyed temples (e.g. Thitsawaddy temple (No.918) (see Figure 13), Ywahaunggyi temple (1791), Htilominlo temple, No.1812)
9. Two-storeyed temples (e.g. Gudawthit temple (No.1486), Nwapyagu temple (No.1498) (see Figure 14), and Tayokepyay temple, No.539)
10. One-storeyed temples (e.g. Ananda temple (No.2171), Dhammayangyi temple (No.771) (see Figure 15), and Nagayon temple, No.1192)

11. Temples surmounted with bell-shaped stupa (e.g. Kondawgyi temple (No.151), Nandamannya temple (No.577), and Thayambu temple (see Figure 16), No.1554)
12. Temples surmounted with sikhara (e.g. Thetkyamuni temple (No.147), Lokahteikpann temple (No.1580) (see Figure 17), and Theinmazi temple, No.1471)
13. Temple surmounted with Mahabodhi-shaped sikhara (e.g. Mahabodhi temple (No.1670) (see Figure 18), Thirigubyauk temple (No.995) to the south of Thiripyitsaya, Gubyaukgyi temple near Wetkyi-in, No.298)
14. Temples surmounted with Sinhalese-typed stupas (e.g. Sinhalese typed temple (No.2116) to the north of Upalithein, Hsin Khan temple (No.1790) to the west of Ywahaunggyi temple (see Figure 19), and Sinhalese temple (No.1885) to the southwest of Htilominlo temple)
15. Pentagonal temples (e.g. Einyakyaung Ngamyethna temple (No.1831) (see Figure 20), Shwekoncha temple (No.1976), and temple No.1504 to the north of Lokahteikpann temple)
16. Cave temples (e.g. Thamiwhet Umin (No.172) (see Figure 21), and Hmyatha Umin, No.171)
17. Cave monasteries (e.g. South Kyansittha Umin (No.297) to the south of Wetkyi-in Gubyaukgyi temple, Nandamannya Umin (No.583) (see Figure 22), and Tatthe Umin, No.201)
18. Single Monasteries (e.g. A monastery (No.776) to the northwest of Dhammayangyi temple (see Figure 23), A monastery (No.1442) to the northeast of Mingalazedi stupa, Bome Monastery near Wetkyi-in village, No.291)
19. Numerous cell monasteries built in the walled enclosure (No.745 (see Figure 24) to the north of Sulamani temple)
20. Monastic complexes (e.g. Lemyethna complex (No.447-532) (see Figure 25), Sutaungpyi complex (No.896-946), Sinphyushin complex (No.684-710), and Shwenanyindaw complex, No.1704-1736)

21. Monasteries with multiple cells around the main hall (e.g. Tarmani monastery (No.1112), Somingyi monastery (No.1147) (see Figure 26), and Shinye Tahtaung monastery (No.1371) to the north of Myinkaba village)
22. Brick pavilions with tiered roofs (e.g. Tuyin pahto Kyaung (pavilion) (No.489), pavilion (No.73) to the south of Shwezigon stupa (see Figure 27), and pavilion (No.1415) to the north of Mingalazedi stupa)
23. Ordination halls (e.g. Ordination hall (No.450) in the Lemyethna monastic complex (see Figure 28) and Ordination hall (No.909) in the Sutaungpyi monastic complex)
24. Libraries (e.g. Pitakattaik to the north of Thatbyinnyu temple (No.1587) (see Figure 29), and Setkutaik (No.2241) at the bottom of Turintaung Hill))
25. Image houses (e.g. Thandawgya temple (No.1592), and image house (No.1570) (see Figure 30) to the west of Shwesandaw stupa)
26. Brick buildings surrounded with wooden structures (e.g. Htaung Palo temple to the east of Taungbi village (see Figure 31), temple No. 2142 to the northwest of Einyakyaung Ngamyethna temple)
27. Wooden palaces with brick foundation (e.g. King Anawrahta's palace, King Kyansittha's palace (No.1590) (see Figure 32), and Yunhlutkyun palace)
28. City walls with gateways (e.g. Bagan city wall with gateway (No.1634), where the last palace is located (see Figure 33), Kyauksaga palace city walls to the south of New Bagan)
29. Inscribed houses or sheds (e.g. No.699 inside the Sinphyushin monastic complex (see Figure 34), No.970 inside the precinct of Dhammayazaka stupa)
30. Guardian shrines (guardhouses) (e.g. No.1627 inside the Bagan Archaeological Museum, monuments (No.1594, No.1595) (see Figure 35) to the northeast of Thatbyinnyu temple)
31. Bell Pillars (e.g. two bell pillars in sandstone (No.1598) (see Figure 36), located to the southeast of Thatbyinnyu temple)

32. Rest Houses (e.g. No.1204 (see Figure 37) to the east of Apeyadana temple)

2.3.3 Previous Work on the monuments at Bagan

The books entitled *Old Burma Early Bagan* (three volumes) were written by G. H. Luce in 1969. Luce (1969) discusses in detail over sixty monuments with their architecture, iconography, epigraphic records and artistic works at Bagan. He studies the architectural typologies of the monuments at Bagan. He classifies only fifteen architectural typologies with their photos and plans. They are stupas, temples, brick monasteries, pavilions, chapter houses, libraries, halls for preaching, rest houses, almsgiving houses, store houses, schools, bell pillars, shed, causeways, and caves. He describes iconography of the Buddha statues, where they were found in the temples such as Bhumisparśa mudra, Dharmacakra mudra, Pralambanasana mudra, Dhyana mudra, Vitarka mudra, and Abhaya mudra. He studies in detailed mural paintings with ink inscriptions in old Mon and Myanmar such as five fifty jataka stories, twenty-eight former Buddhas, eight principal scenes of the Buddha, seven sites of the Buddha, horoscopes of the Buddha, and section and plan of the Mt. Meru where the Buddha preached. He documents the various sizes of the terracotta votive tablets with their inscriptions, and the glazed plaques with inscriptions at Ananda temple, Shwezigon stupa, Mingalazedi stupa, and Dhammayazaka stupa. He documents the terracotta plaques with their inscriptions at East Petleik and West Petleik. He reads numerous stone inscriptions in the Bagan temples built during the Bagan period. He also reads a number of ink inscriptions on the interior walls of temples at Bagan. He describes and differentiates between the Mahayana, the Theravada, the Tantric Saivism and the Hinduism at Bagan. He describes some monuments regarding their Indian influences such as Ananda temple, Thatbyinnyu temple, and Gawdawpalin temple, and Sinhalese influences such as Sapada stupa, Sapadaw stupa, and Saytanagyi stupa. He notes that Bagan people could properly construct reservoirs, tanks, and wells for using water and agriculture in the Bagan period. He studies and compares the detailed epigraphic records with Pyu, Pali, Sanskrit, old Mon, and old Myanmar written in the monuments at Bagan. He identifies Buddha statues,

Bodhisattva figures, and Brahmanical gods where they are unearthed in the monuments at Bagan and compares the excavated finds at other areas like Beikthano, Halin, and Srikshetra (Luce, 1969).

The book named *Bagan (Art and Architecture of Old Burma)* was written by Paul Strachan in 1989. Strachan (1989) discusses and categorizes the three groups with the periods such as the Early Period (c.850-1120), the Middle Period (c.1100-1170), and the Late Period (c.1170-1300) at Bagan. In the Late Period, he describes and differentiates two circles: Inner Circle Monuments and Outer Circle Monuments at Bagan plain. He discusses totally the seventy-seven monuments at Bagan with the different views of the photos and plans. There are twenty-two monuments in the early period, eight monuments in the middle period, and forty-seven monuments in the late period, described in detail in his book.

He mentions each of the monuments with exact locations, the name of the monuments and the donors, the Myanmar chronicles and the epigraphic dates, the estimated dates, the inscriptional evidence, the number of the monuments, the size of the monuments, the orientation of the monuments, the name of the vaults and arches using in these temples and the typologies of the monuments with their art and architecture in detail with influences of India, China, Sri Lanka, and Dwaravati (Strachan, 1989).

Strachan (1989) assesses each of the monuments regarding the development of the Myanmar artistic works during the Bagan period such as the mural paintings, the stone carvings, the stucco carvings, the wood carvings, the glazed decorations, the goldsmiths, the blacksmiths, and the silversmiths. He discusses and identifies the Pyu terracotta votive tablets and Bagan terracotta votive tablets, the dolomite plaques, the iconography of the Buddha images, the crowned Buddha images, the Bodhisattva images, the Dvarapala figures (Guardian nats), Mogallana and Sariputta, Gavampati, the so-called Fat Monk, the Brahma and Indra and other deities of Brahmanic origin with their weapons. He summarised comments of Henry Yule in 1855 regarding the encased monuments at Bagan. Henry Yule documents that when the stupa was re-encased at a later date by another outer one, it may be surmised that a descendant may have been responsible for the re-encasement of an ancestors' earlier work of

dedications were constructed not only for the salvation of the donor, but also wife and family, and as in contemporary Burma the descendants of a donor continue to maintain and offer to that dedication (Yule, 1968; Strachan, 1989).

There are '8' volumes entitled "Inventory of Monuments at Pagan" carried out by Pierre Pichard, a world recognized architect published by UNESCO, Paris, France from 1992 to 2001. Pichard (1992-2001) describes and inventories 2834 monuments at Bagan. He classifies the typology of the monuments such as stupas, temples, monasteries, and underground structures. He further classifies in detail temple types such as central shrine temples, temples with a solid core, temples with central shrine and corridor, single-storeyed temples, two-storeyed temples, three-storeyed temples, and four-storeyed temples. According to the largest external dimension of the ground plan, he documents and classifies the sizes of the monuments such as small (less than 12 metres), medium (from 12 to 25 metres), large (from 25 to 50 metres), and very large (more than 50 metres). He documents the plan of the monuments with major features like shrine, solid core, corridor, entrance hall, forepart of each storey with their principal dimensions. He also describes number of storeys on each monument and when applicable, site features: boundary wall, gate and relationship with another monument. He documents upper parts regarding the number and shape of the tiered terraces from bottom to top, type of crowning such as tower, dome, and spire. Main materials were documented on each monument: stone and brick, as well as the average brick sizes. Also noted are types of vaults (see Figure 38): cloister vault, barrel vault, corbelled cloister vault and diaphragm vault, and type of arches: voussoired arch, flat arch, corbelled arch and relieving arch. Dates of the previous repairs with the references to earlier publications for some monuments were also given. He documents the number and type of the principal Buddha images, surviving of the estimated percentage of original decorative features such as mural paintings, stucco mouldings, and glazed plaques. He describes the epigraphic records like stone inscriptions, ink inscriptions if available and the estimated construction period on each monument at Bagan (Pichard, 1992-2001, Vol 1-8).

The PhD thesis for Sydney University entitled "The Origins of Bagan. The archaeological landscape of Upper Burma to AD 1300" was written by Bob Hudson in

2004. An article named “The Origins of Bagan: New Dates and Old Inhabitants” was written by Hudson, Nyein Lwin, and Win Maung (Tampawaddy). Hudson (2004) surveys the four pagodas located in the eastern hinterland area of Bagan. They are Hti Ta Hsaung pagoda, Taungba pagoda, a ruined pagoda, and Gu Gyaung pagoda. The Phaya Hti Saung or Hti Ta Hsaung pagoda (E 94.9581° N 21.1329°) located one kilometre to the northwest of Taungba village, is the major monument extant in the eastern hinterland area of Bagan. This stupa-topped temple is reputed to enshrine relics of the monk, Shin Arahan, who is credited with being mentor to King Anawratha. It was most recently restored in 1985 and is an active religious site with an attached monastery (Hudson, Nyein Lwin & Win Maung (Tampawaddy), 2001).

1. A small pagoda (E 94.9681° N 21.1193°) called Taungba pagoda is located on the southern side of Taungba village. According to an ink inscription inside, it was restored in October 1907, on a Tuesday, a day after the full moon. There is evidence to support local opinion that it was originally a structure built in the Bagan period. Part of a sandstone capsule or container, possibly a reliquary, was found among brick debris nearby, in a depression formed by a disused in-ground water tank. This site is recorded on the 1945 British Army Survey map 84 K/16 as a monastery, but the small pagoda and its wall still remains (Hudson, Nyein Lwin & Win Maung (Tampawaddy), 2001).
2. There is a mound like a ruined pagoda located about 300 metres to the west of the earthenware deposits. It is 15 metres in diameter, 2.5 metres high, with a hollow on top suggestive of past efforts to recover relics. There are pieces of worked sandstone among the debris. It fits the description of a mound near Taungba village which comprised a robbed sandstone relic chamber (ASB, 1915, p. 12-13; Hudson, Nyein Lwin & Win Maung (Tampawaddy), 2001).
3. Gu Gyaung pagoda is located near Mye Thindwin village. There is also a brick foundation of a rectangular structure, 8 by 10 metres. The complex sits on a brick platform, 26 by 22 metres, which appears to have remnants of an enclosure wall. Temple doorways open to the east, north and south. The temple appears to have been a vaulted chamber, with no central pillar. He documents that a sandstone spire about a metre high, with seven multi-tiered

umbrellas was found here, and is now displayed in the Bagan Archaeological Museum. A broken sandstone marker, possibly a sima stone denoting a monastery, survived at the site. He discusses regarding the brick sizes at Gu Gyaung cluster from Yonhlut and bricks from 12th to 14th centuries CE and the conservation of the Gu Gyaung pagoda (Hudson, Nyein Lwin & Win Maung (Tampawaddy), 2001, p. 15).

Hudson (2004) documents in detail temple No.996 called Pawdawmu temple located to the northeast of Thiri Gubyauk temple. He describes that it is an encased temple attributed to 11th century with the donor named King Sawlu, son of King Anawrahta, the terracotta votive tables with the title of King Sawlu, the artistic stucco mouldings like Naga or snake figure and bilu or ogre head, the finger-marked bricks, the bricks with circular figurative stamps, Myanmar letters called Ka Gyi (ka) and Ga Nge (Ga) and floral designs on bricks. He also documents the brick and plaster Buddha images in the niches of its temple. He documents that these images with parts of its building were partially excavated and conserved from the Department of Archaeology from the 1995 to 2002. He noted the detailed plan and photos with the different directions of its temple (Hudson, 2004).

Hudson (2004) discusses the radiocarbon dates for the city walls and the excavated palace site of King Kyansittha who carried out by Grave and Barbetti in 2001. He notes this does not support the traditional histories that the Pyinbya palace and the walls were built in the mid-9th century and according to the stone inscription erected by King Kyansittha, the palace of King Kyansittha was built in the 11th century CE. According to the modified Inventory of Monuments at Pagan by Pichard, he includes a table showing the number of the structures and epigraphic dates by century. A second table shows the quantity of the monuments with the size such as small, medium, large, and very large from 11th to 14th centuries CE. He notes that the greatest number of buildings and associated epigraphic dates are in the 13th century according to present attributions of their founding. The increasing rate of survival of epigraphy from the 13th century onward, however, may be a 'phenomenon of time'. In terms of resources used, the expenditure of economic energy on construction

trebled between the 11th and 12th centuries, then doubled again in the 13th century. During the 14th century, when Bagan is supposed to have gone into decline, resource allocation to construction still exceeded 11th century levels (Hudson, 2004). According to the Inventory of Monuments at Pagan, he describes the eighty-six monuments with the table showing the number of the monuments, the name of the monuments, the epigraphic dates: stone inscriptions, ink inscriptions, the type of the monuments: temples, stupas, monasteries, and inscribed houses and the size of the monuments: small, medium, large, and very large. He also discusses and lists the eleven monuments built in the period before the mid 11th century with the inscriptional evidence and the suggestion of the scholars such as Duroiselle, Luce, Pichard, Michael Aung-Thwin, and Nyein Maung. Besides he describes eight more “very large” buildings which do represent a substantial expenditure of resources with the dates and the donors (Hudson, 2004).

He designates the forty-four monuments with the table showing monuments at Bagan attributed to the 11th century by the Inventory of Monuments. Inventory number, name, type, size, specific comments from Inventory of Monuments, Luce attribution and comments from Old Burma- Early Pagan, Volume 1, are included in this table (Hudson, 2004).

The book entitled ‘Ancient Bagan, Buddhist Plain of Merit’ was written by Donald M. Stadtner in 2005. In his book, Stadtner (2005) discusses thirty-five monuments belonging to the Bagan period at Bagan in detail. He describes the five groups located in the Bagan plain such as the walled city and Ananda temple, the southern group, the northern group, the central group, and the eastern group. The eleven monuments in the walled city and Ananda temple, the eleven monuments in the southern group, the five monuments in the northern group, the four monuments in the central group, and the four monuments in the eastern group are included in his book (Stadtner, 2005).

Each of the selected monuments describes the history, the religion, the materials for construction, the architecture, the decorated motifs such as the mural paintings and sculptures, the stone carvings, the goldsmith and blacksmith works, stucco carvings, the wood carvings, the glazed plaques and the glaze decorations. He suggests the

locations with the surroundings, the exact dates with the epigraphic records available, the estimated dates with the architectural evidence, the legendary and traditional records, and the dates for repairs in the post Bagan period and later times (Stadtner, 2005). He includes only one photo of an encased stupa named Kyauk Myet Hmaw stupa at Bagan in his book. He did not mention the typologies and concepts of the encasements (Stadtner, 2005).

Stadtner (2005) considers that east Petleik and west Petleik temples of the 11th century CE are unique monuments for the unglazed terracotta tiles illustrating the previous lives of the Buddha with the numbers and the name of the stories. He also describes the mural paintings in detail depicting the scenes of the stories of the Buddha lives, some selected Jataka stories of the previous lives of the Buddha, the eight major events of the Buddha, the prophecy of the former Buddhas at Lokahteikpann, Nandamannya, Gubuaukgyi (Wetkyi-in), Gubyaugyi (Myinkaba), and Payathonzu temples. He documents the glazed plaques and glazed decorations at Shwezigon, Dhammayazaka, Mingalazedi, Somyingyi stupas and Ananda, Tayoke Pye, Shwegugyi, Sulamani, Htilominlo temples. He records the stone buildings and stone carvings at Kyaukgy Umin, Nanpaya temple, and Shwezigon stupa. He describes the wood carvings and wooden sculptures at Shwezigon, Ananda, and Shwegugyi. Overall, he considers the art and architecture of Bagan in relation to influences of South Asia such as Pala, Gupta and Sri Lanka (Stadtner, 2005).

2.3.4 Chronology of the Monuments at Bagan

There are five successive periods constructing the Buddhist monuments at Bagan plain. The chronology of the monuments at Bagan can be categorized as the pre-Bagan period (ca. 2nd to 10th centuries CE), the early Bagan period (ca. 11th to 12th centuries CE), the middle Bagan period (ca. 12th to 13th centuries CE), the late Bagan period (ca. 13th to 14th centuries CE), and the post-Bagan period (ca. 14th to 20th centuries CE). Most of them are the brick buildings still surviving at Bagan with nine buildings only built with sandstone brought from the Turin Hill to the southeast of Bagan.

2.3.4.1 The pre-Bagan period (ca. 2nd to 10th centuries CE)

According to the Myanmar chronicles, it was believed that Bagan was founded by the King Thamudarit in 2nd century CE. There are some few Buddhist monuments constructed in the pre-Bagan period from the King Thamudarit (107-152 CE) to King Sokkate (992-1017 CE) (Appendix-C). The Buddhist monuments built at Bagan during this period are Buphaya, Ngakyewnaung, Paukinya, two encased stupas to the northwest of Gawdawpalin temple, a stupa on the west side of Taungbi village, a row of four stupas on the north of Thiripyitsaya village, and some inner stupas of the encased monuments at Bagan. All of them are the solid types, bulbous and cylindrical shape with circular bases. They had plain conical spires or no concentric rings (Chattra Vallies) and no corner stupas. Some inner encased stupas are cylindrical shape, while some are bulbous in shape. Most during this period are very low in height and small in size. The hollow types of the Buddhist temples cannot be found at Bagan at this time. The terraces of the stupas are decorated with the crenellated parapets and the lotus floral patterns in a row of four stupas. Glazed ceramic bricks were used on the whole surface of the inner stupa of Ngakyewnaung which is one of the encased stupas at Bagan. The bases of the stupas built in this period are always circular in shape (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001).

2.3.4.2 The Early Bagan Period (ca. 11th to 12th centuries CE)

The donors of the Buddhist monuments built during the early Bagan period are mostly King Anawrahta (1044-1077 CE), Sawlu (1077-1084 CE), and Kyansittha (1084-1113 CE) (Appendix-C) and other royal families. In this period, the stupas are mostly built with the octagonal bases, the elongated bell-shaped dome, the waist-band on the bell-shaped dome, the two or three octagonal terraces with the flight of the steps, the conical spires, and the top finials. Most of the conical spires are built with the sloping, flat, and moulding concentric rings in shape alternately. At the top finials, there are the open inverted lotus petals, the close inverted lotus petals, a row of bosses, and banana bud or Khaye Thi. In this period, however, some stupas with the circular bases and square bases can be also found at Bagan.

During the early Bagan period, one-storeyed temples are only built with one entrance, two lateral porches, perforated windows in bricks or sandstones to get the dim lights, the curvilinear roofs, the 'gloomy' corridors, the central shrines, the niches to house the Buddha images on the interior walls, the mural paintings on the interior walls, the stucco decorations on the exterior walls, the unglazed terracotta plaques and the glazed ceramic decorations on the exterior walls (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001).

There are three or four apertures or dormer windows over the central shrines to get the lights onto the faces of the Buddha images inside the temples built in the early Bagan period. Most of the temples in this period are surmounted with the sikhara or stupa. The three or five niches to house the Buddha images are always seen on the four surfaces of the sikharas or square towers. There are niches to house the guardian nats or spirits at the entrance of the stupas and temples. There are solid corner stupas and hollow corner stupas on the upper parts of the monuments. The bases of the temples in this period are mostly built the Kalasa pot shape (urn profile pot shape), but a few of them had the throne shape bases. The epigraphic records such as stone inscriptions, ink inscriptions, and inscriptions on the terracotta votive tablets can be found in the early Bagan period. Besides a few of the Sinhalese typed stupas like East Petleik and West Petleik can be found at Bagan. Most of the temples in this period are built with the rectangular or square bases in shape. The monastic complexes, the monasteries with multiple cells and the single monasteries can be found at Bagan during the early Bagan period. These structures are Tarmani monastic complex, Shin Araham Monastery with the preaching hall (Picard, 1992-2001; Myo Nyunt, 1999).

2.3.4.3 The Middle Bagan Period (ca. 12th to 13th centuries CE)

The donors of the Buddhist monuments built during the middle Bagan period are mostly King Alaungsithu (1113-1167 CE), Narathu (1167-1170 CE), Naratheinkha (1170-73 CE), Narapatisithu (1174-1211 CE) (Appendix-C), elite like ministers, generals, prince, princesses and rich people. Most of them had epigraphic records, but some of them had no inscripational evidence in this period. According to the architectural typologies, the decorative motifs, the archaeological findings, and the

iconography of the Buddha images, the estimated dates between the 12th to 13th centuries CE can be given. In this period, the stupas, temples, and monasteries such as single monasteries, monasteries with the multiple cells can be found at Bagan. The terraces of the stupas are higher than the stupas built in the early Bagan period. Apart from the one-storeyed temples, there are two-storeyed temples, three-storeyed temples, and four-storeyed temples with the corner stupas during this period. The flat terraces with the crenellated parapets and stone gutters, more bright light inside the corridors, the staircases to climb up to the upper parts, the mural paintings on the interior walls and stucco carvings on the exterior walls, the glazed ceramic decorations on earthenware. Some temples have central pillars, while some of them have no central pillars. There are mostly inaccessible square terraces in some temples at Bagan, but a few of them consist of the accessible square terraces in this period. Originally, there are the wooden main doors, lateral doors and windows with stone sockets at the bottom and iron rings on the upper walls in these temples. Some of them with their wooden traces are still in situ. The pentagonal stupas and temples, the Sinhalese-typed stupas and temples in this period can be also found at Bagan. The conical spires of the temples are mostly built with the flat and moulding concentric rings alternately, but the conical spires of the Sinhalese-typed monuments are only built with the flat concentric rings. The ratio between the bases of the stupas in length and the height of the stupas are about 1:1 in this period (Soe Soe Lin, 2010).

2.3.4.4 The Late Bagan Period (ca. 13th to 14th centuries CE)

The donors of the Buddhist monuments at Bagan built in the late Bagan period are King Htilominlo (1211-1234 CE), Kyaswa (1234-1250 CE), Uzana (1250-55 CE), Narathihapate (1255-1287 CE), Kyawswa (1287-1298 CE), Sawhnit (1298-1325 CE), and Sawmunnit (1325-1369 CE) (Appendix-C), royal families and common people. During this period, there are a number of the epigraphic records in these temples, but some of the stone inscriptions disappeared in the Konbaung period. The terraces of some stupas in this period are mostly higher than the stupas built in the previous periods. Most of them are built on the plinth. Some of the plinths in Penanthagu Group (No.1481, No.1483) at Bagan consist of the two or three rooms like a basement. In Bagan, there are many groups of monuments with the enclosure walls

built in this period. There are stupas with two or three terraces, the encased monuments, the temples surmounted with sikhara or square tower, the temples surmounted with bell-shaped stupas, the temples surmounted with Mahabodhi-shaped stupas, the pentagonal monuments, the Sinhalese-typed monuments, the monastic complexes, the monasteries with the multiple cells and a number of single monasteries at Bagan plain. There are many encased monuments built during the late Bagan period. Apart from the one-storeyed temple, there are the two-storeyed temples and three-storeyed temple with corner stupas in this period. The ratio between the length of the main bodies and the height of the temples are about 1:1.7 in this period (Soe Soe Lin, 2010). Most of the stupas have square bases, while the temple bases are mostly square and rectangular but the Sinhalese-typed stupas or temples have circular bases. Most of the temples have central pillars, but some of them have no central pillars. The cloister and cupola vaults are always used instead of the central pillars in some temples at Bagan. The conical spires of the stupas comprise the flat and moulding concentric rings alternately, but the conical spires of the Sinhalese-typed stupas are only flat rings in shape (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001).

2.3.4.5 The Post-Bagan Period (ca. 14th to 20th Centuries CE)

After the fall of Bagan dynasty, there are Pinya (1313-1364 CE), Inwa (Ava) (1364-1555 CE), Taungoo (1486-1752 CE), Nyaungyan (1599-1752 CE), Konbaung (1752-1885 CE), Yadanabon (1853-1885 CE) periods in Myanmar. The classical art and architecture gradually declines until the late 17th and early 18th centuries CE when the traditional art was revived by the royal patronage from the later capitals of Inwa and Amarapura (Aung Thaw, 1972). During the post-Bagan period, they constructed stupas, temples, monastic complexes, single monasteries and the underground cave monasteries. There were numerous Buddhist monuments and the meritorious deeds at Bagan, donated by later Myanmar kings with the epigraphic records.

The Pinya monuments include Hsin Phyu Shin monastic complex donated by the King Thihathu during Pinya period, Moe Hnyin Shwe Kyaung Monastery, Shin Uttama Kyaw Kyaung Oo stupa, and Mya Taung monastery donated by the King Moe Hnyin. The Nyaungyan examples are the gilding of Shwezigon stupa from bottom to

top finial and the two bronze bells with three languages such as Pyu, Mon, and Myanmar donated by the King Bayintnaung, the Pitakattaik (Library) at Taungbi village with the ink inscription dated 1068 ME (1706 CE) in the Nyaungyan period, Hmansi Temple (No.889) in Nyaungyan period.

There are in the Konbaung period Yadana Mitsu temple, Upali Thein (Ordination Hall) and Kamma Kyaung Oo temple. Also are the Yan Aung Myin temple donated by the King Alaungphaya to the northeast of the Shwezigon stupa during the early Konbaung period, the crowning the umbrella (Hti) at Shwezigon stupa with the stone inscriptions housed in the inscribed house decorated with mural paintings on the interior walls, donated by the King Hsin Phyu Shin, the second son of King Alaungphaya, Konbaung period, Badon temple located near the eastern causeway of Shwezigon stupa and Ananda Okkyaung monastery donated during the reign of King Bodaw. The Mya Thein Tan temple built by Minkyi U Yan Way and a brick pavilion was built by the Queen Kye Myin during the reign of King Mindon, Yadanabon period, and Razamuni stupa located to the east of Thatbyinnyu temple donated by the last King Thibaw during the Yadanabon period.

There are a number of the Buddhist monuments with the epigraphic records built in the vicinity of the Shwezigon stupa at Bagan during the post-Bagan period (Picard, 1992-2001; Myo Nyunt, 2007). After the Bagan period, the Kings and royal families from the successive periods renovated and restored the meritorious deeds of their predecessors and reconstructed the new Buddhist monuments. The art and architecture of the post-Bagan period such as the brick masonry works, the stucco carvings, the stone carvings, the glazed decorations, and the wood carvings can be seen on some monuments at Bagan. Their workmanship of art and architecture are very different with those from the Bagan period. The art and architecture of Bagan period are the prototypes of the post-Bagan period. There are some colonial buildings at Nyaung Oo located around 6-km to the northeast of Bagan and Sint Ku located around 25-km to the south of Bagan. Bagan Town Land Records (Bagan Myo Sittan) documents that these buildings have been used as the religious buildings, governmental office buildings and residential buildings during the colonial period. The bases of these buildings are mostly square or rectangular in shape with the flat

roofs and their main doors, lateral doors, and windows are mostly used with the gothic arches. According to the list of the colonial buildings conducted by the DANM (2019), there are totally sixty-five colonial buildings: twenty religious buildings, five governmental office buildings, and forty residential buildings at Bagan-Nyaung Oo area, Mandalay region.

2.4 Summary

This chapter has reviewed Bagan, one of the large Buddhist empires in the medieval world, a centre of the main economic, socio-political and cultural contacts with other regions during the Bagan period. The Bagan region has a good natural bed soil called ironstone hardpan, which has a strong resistance for earthquakes and provided a solid foundation for religious structures built in this plain. Inscriptional evidence indicates that vegetables and rice are mostly cultivated on lowlands of Bagan like Kyun-mye (alluvial island) and Le-mye (rice land) are also found less adjacent area of river (Hudson, 2004). Archaeological and inscriptional evidence documents that the economic backbone of Bagan was the eleven districts of the Kyaukse area in the Mandalay region and the six districts of Minbu area in the Magway region during the Bagan period. There are a number of dams, reservoirs, water tanks and canals built by the successive Bagan Kings using the agriculture and water management in this period. Myanmar chronicles describe that Bagan was called as Arimaddana-pura which means crushing of enemies and the Bagan period lasted 1262 years from 107 to 1369 CE. Numerous epigraphic records also mentioned that the classical name of Bagan was also called as Arimaddana-pura.

Epigraphic evidence recorded the development of Buddhism, artistic works and artisans, name of the quarters, towns, districts, administration and political affairs, economics, religious affairs, agricultural systems and cultivated crops, external relationships, internal and external trades, beliefs and customs, and construction generously the religious Buddhist monuments including the royal palaces.

Henry Yule in 1855, Emil Forchhammer in 1891, Taw Sein Ko in 1917, Charles Duroiselle in 1937, Gordon Hannington Luce in 1969, Elizabeth Moore in 1998, and Bob Hudson in 2004, are documented as foreign accounts concerning history and culture, architecture, religion, and inscriptional evidence of Bagan empire. Henry Yule drew the plans and sections of three distinguished temples such as Ananda, Thatbyinnyu, and Gawdawpalin temples including measurements by himself in 1855. *Duroiselle (1937) noted that the general description of the monuments at Bagan started with Yule's mission to the Court of Ava in 1855.*

Archaeological excavations and conservations at Bagan monuments and mounds were carried out by the Archaeological Survey of India (ASI), Archaeological Survey of Burma (ASB), Department of Archaeology (DOA), and Department of Archaeology and National Museum (DANM) from the colonial times to till now. Distributions of monuments at Bagan and other areas like Salay, Salai, Myingun, Kyundaw, Srikshetra, Beikthano, Kyaukse, Minbu, Magway, Pakhan Ngai in Chauk, Nahtogyi, Yesagy, Htilin, Gantgaw and Twante etc. can be found in Myanmar and thirty-two different architectural typologies of the monuments at Bagan have been categorized in detail. This chapter has reviewed the previous works on the Bagan Buddhist monument about the culture, history, architecture, archaeology, art and iconography, and typologies by the Gordon Hannington Luce in 1969, Paul Strachan in 1989, Pierre Pichard in 1992-2001, Bob Hudson in 2004, Donald M. Stadtner in 2005. They also described a few encasements at Bagan in their books but the concepts, epigraphic records, and typologies are not included. In this chapter, the chronology of the monuments at Bagan can be categorized as the pre-Bagan period (ca. 2nd to 10th centuries CE), the early Bagan period (ca. 11th to 12th centuries CE), the middle Bagan period (ca. 12th to 13th centuries CE), the late Bagan period (ca. 13th to 14th centuries CE), and the post-Bagan period (ca. 14th to 20th centuries CE).



Figure 5: No.1973, Stupa surmounted with cylindrical shape, 9th century CE
Note. This stupa which has the circular base, is located to the west of Taungbi village.



Figure 6: Four rows of the Pyu stupas surmounted with bulbous shape (No.1038, No.1039, No.1040, and No.1041), 9th century CE
Note. These Pyu stupas with circular bases, are located to the north of Thiripyitsaya village.



Figure 7 : No.2146, Stupa with circular base, 11th century CE

Note. This Stupa is situated to the northwest of Einyakyaung Ngamyethna Temple



Figure 8 : Mingalazedi Stupa (No.1439), Stupa with square base, 13th century CE
Note. It is located to the north of Myinkaba village.



Figure 9: Dhammayazaka Stupa (No.947), Stupa with pentagonal base, 12th century CE

Note. It is one of the largest pentagonal stupas at Bagan.



Figure 10: Inn Stupa (No.772), Stupa with octagonal base, 11th century CE

Note. It is situated to the northwest of Dhammayangyi Temple.



Figure 11: Saytanagyi Stupa (No.987), Sinhalese-typed Stupa, 13th century CE
Note. It is one of the largest Sinhalese-typed Stupa at Bagan.



Figure 12: Thatbyinnyu Temple (No.1597), Four-storeyed Temple, 12th century CE
Note. It is the highest Temple at Bagan. It consists of the seven terraces.



Figure 13: Thitsawaddy Temple (No.918), Three-storeyed Temple, 13th century CE
Note. It is located to the west of west Phwasaw Village.



Figure 14: Nwapyagu Temple (No.1498), Two-storeyed Temple, 13th century CE
Note. It is located to the south of Minyeingon Temple in old Bagan area.



Figure 15: Dhammayangyi Temple (No.771), One-storeyed Temple, 12th century CE
Note. It is the largest Temple at Bagan.



Figure 16: Thayambu Temple (No.1554), Temple surmounted with bell-shaped Stupa, 13th century CE
Note. It is located to the southeast of Lokaoakshaung Temple.



Figure 17: Lokahteikpann Temple (No.1580), Temple surmounted with sikhara, 12th century CE

Note. It is located to the north of Shwesandaw Stupa at Bagan.



Figure 18: Mahabodhi Temple (No.1670), Temple surmounted with Mahabodhi-shaped sikhara, 13th century CE

Note. It is located inside the Bagan city wall. It is the largest Temple surmounted with Mahabodhi-shaped sikhara at Bagan.



Figure 19: Hsin Khan Temple (No.1790), Temple surmounted with Sinhalese-typed Stupa, 13th century CE
 Note. It is located to the west of Ywahaunggyi Temple.



Figure 20: Einyakyaung Ngamyethna Temple (No.1831), Pentagonal Temple, 13th century CE
 Note. It is situated to the northwest of Htilominlo Temple.



Figure 21: Thamiwhet Umin (No.172), Cave Temple, 13th century CE
Note. It is situated to the southeast of Ngetpyittaung Umin



Figure 22: Nandamannya Umin (No.583), Cave Monastery, 13th century CE
Note. It is located to the north of Minnanthu Village.



Figure 23: No.776, Single Monastery, 12th century CE
 Note. It is located to the northwest of Dhammayangyi Temple.

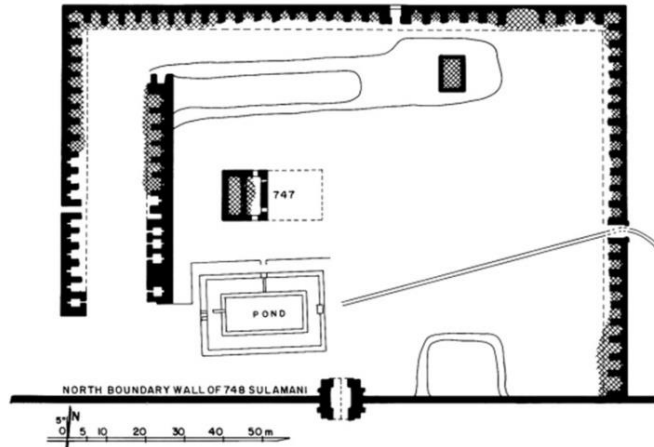


Figure 24: No.745, Multiple Cell Monastery built in a walled enclosure, 12th century CE
 Note. It is a unique large monastery located to the north of Sulamani Temple. From Inventory of Monuments at Pagan. United Nations Educational, Scientific and Cultural Organization (UNESCO), p. 292, Vol-3, by P. Pichard. Copyright 1994 by Pierre Pichard.

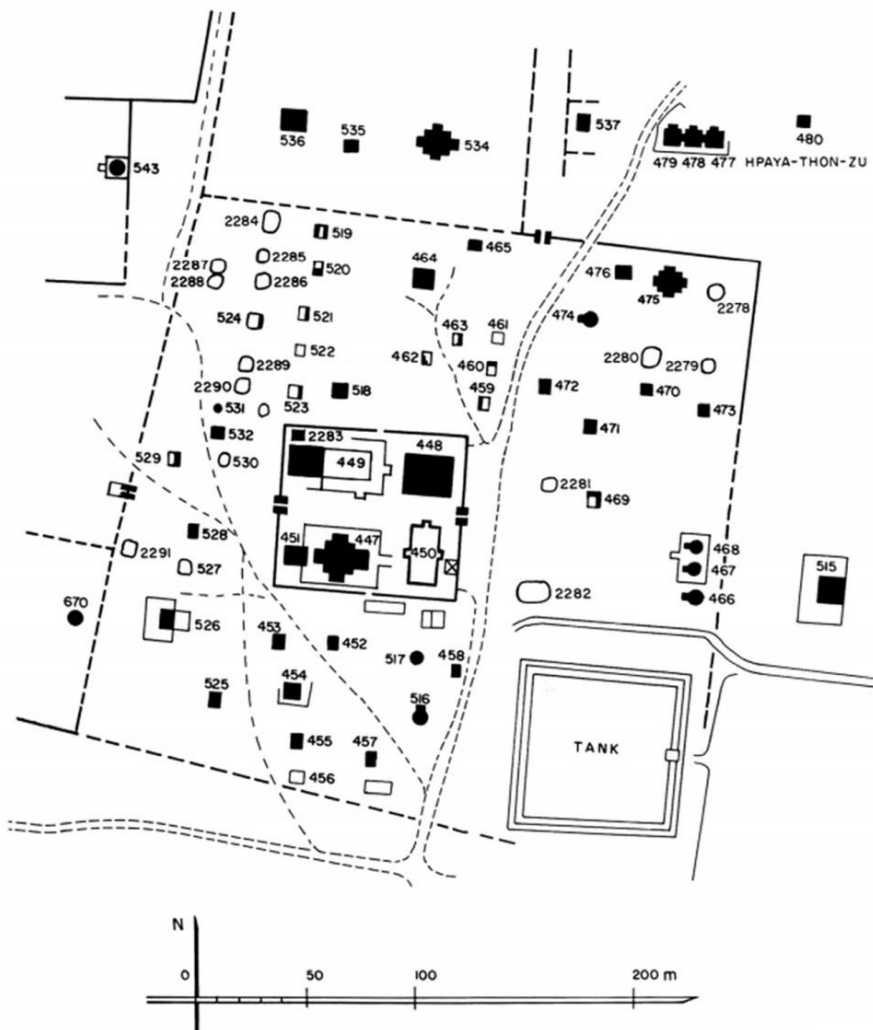


Figure 25: Lemyethna Monastic Complex (No.447-No.532), 13th century CE
Note. It is situated to the north of Minnanthu Village. From Inventory of Monuments
 at Pagan. United Nations Educational, Scientific and Cultural Organization
 (UNESCO), p. 247, Vol-2, by P. Pichard. Copyright 1993 by Pierre Pichard.



Figure 26: Somingyi Monastery (No.1147), Monastery with multiple cells around the main hall, 12th century CE
Note. It is located to the south of Somingyi Stupa, south of Myinkaba Village.



Figure 27: No.73, Brick pavilion with tiered roofs, 13th century CE
Note. It is located to the south of Shwezigon Stupa.



Figure 28: Lemyethna Ordination Hall (No.450), 13th century CE
Note. It is situated inside the Lemyethna Monastic Complex.



Figure 29: Pitakattaik (No.1587), Library, 11th century CE
Note. It is situated to the north of Thatbyinnyu Temple.

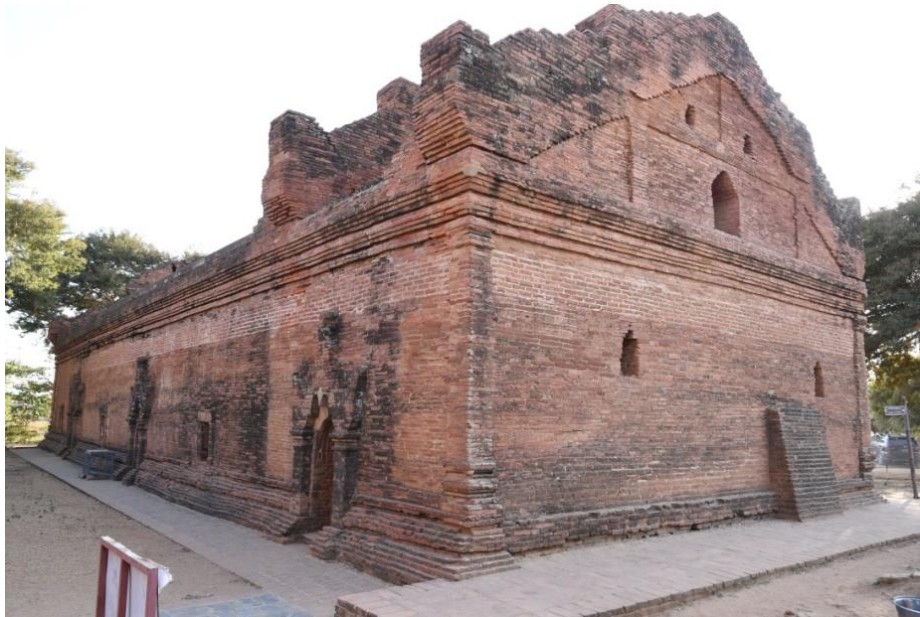


Figure 30: Shinbinthalyaung Temple (No.1570), Image House, 11th century CE
 Note. It is located to the west of Shwesandaw Stupa.



Figure 31: Htaung Palo Temple, Brick building surrounded with wooden structures,
 13th century CE
 Note. It is located to the east of Taungbi Village.

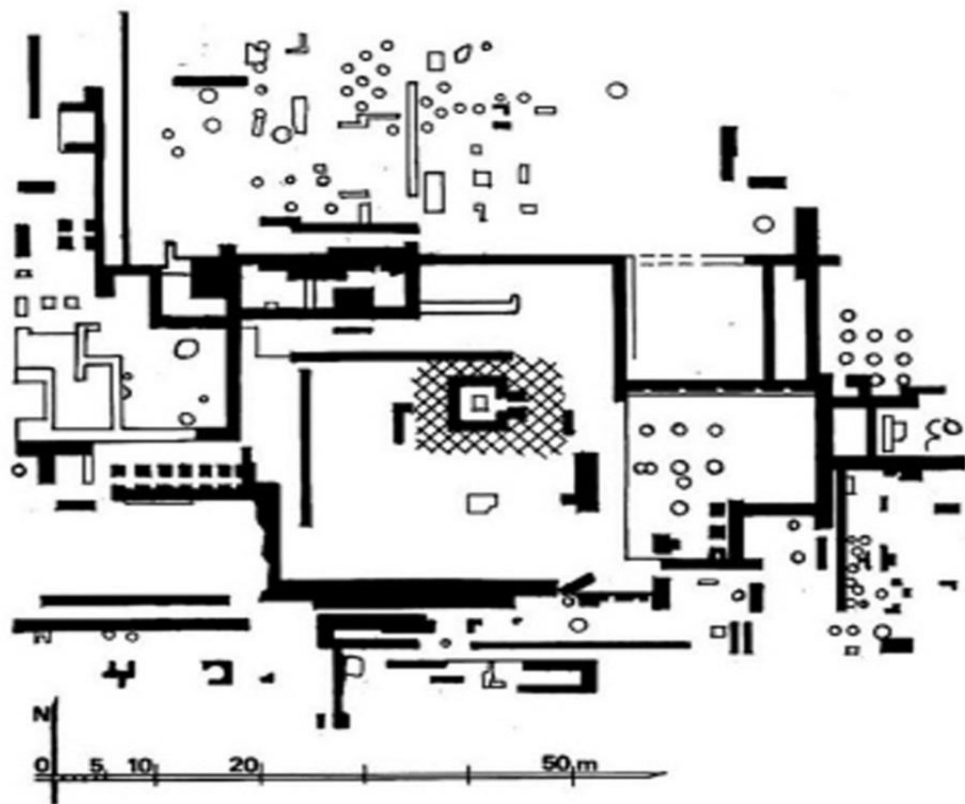


Figure 32: Kyansittha Palace Site (No.1590), Wooden Palace with brick foundation, 11th century CE

Note. It is located to the northwest of Shwegugyi Temple. From Inventory of Monuments at Pagan. United Nations Educational, Scientific and Cultural Organization (UNESCO), p. 218, Vol-6, by P. Pichard. Copyright 1996 by Pierre Pichard.



Figure 33: Tharaba Gateway (No.1634), City wall with gateway, 9th century CE
 Note. It is one of the twelve gateways still surviving in this city wall at Bagan.



Figure 34: Inscribed House (No.699), 13th century CE
 Note. It is situated inside the Sinphyushin monastic complex.



Figure 35: Guardian Shrine (No.1594), 11th century CE
 Note. It is located to the northeast of Thatbyinnyu Temple.



Figure 36: Bell Pillars (No.1598), 12th century CE
 Note. It is located inside the Thatbyinnyu monastery, southeast of Thatbyinnyu Temple.



Figure 37: Natkyi Temple (No.1204), Rest House, 11th century CE
Note. It is located to the east of Apeyadana Temple

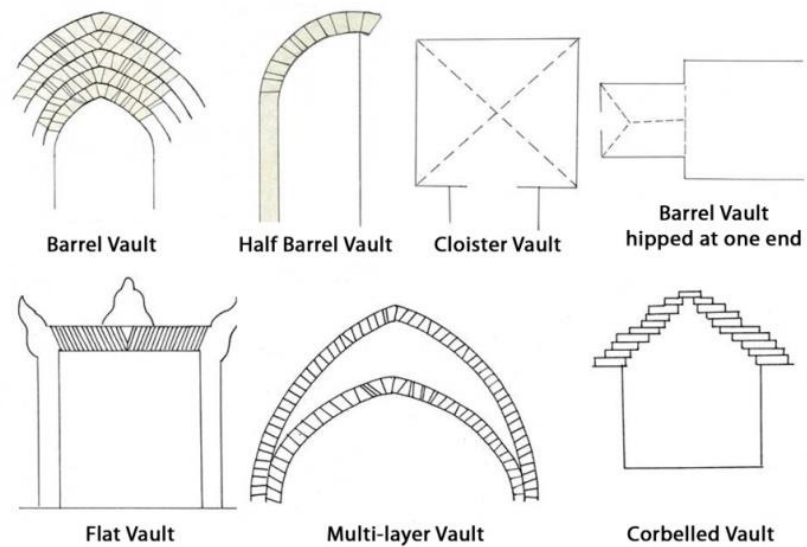


Figure 38: Various kinds of vaults using during the Bagan period, 9th to 13th centuries CE

Note. These kinds of vaults can be found at the Bagan monuments.

CHAPTER 3

The Encased Buddhist Monuments in India, Sri Lanka, Thailand and Places outside Bagan in Myanmar

This chapter reviews the evidence for encased monuments, comparing India, Sri Lanka, Thailand and places outside Bagan in Myanmar. This comparison provides the chronological and stylistic context within which to assess the encased monuments at Bagan in the following chapter. Given the focus of this dissertation on the encased monuments at Bagan, this comparison is weighted towards Myanmar with twenty-two short illustrations versus six in India and five in each Sri Lanka and Thailand. As will be seen, the amount and type of evidence varies greatly between each country, but together they testify to the presence of encased monuments and their chronological development across the region.

The earliest examples of encasement are of stupas in India where stupa architecture was renowned during the reign of King Asoka in third century BCE. However, there are encased Buddhist monuments in both India and Sri Lanka during successive periods. Excavations in India and Sri Lanka have yielded further evidence of encasement through reliquaries. Archaeological excavations in India and Sri Lanka show that there are a number of reliquaries for the relics of the Buddha, discovered at the centre and floor of the stupas (Mitra, 1971). These containers have multiple layers diminishing to the innermost layer, discovered in these countries. Some of them are inscribed reliquaries found in India. There are also significant twin encased stupas built during the lifetime of the Buddha at the birthplace of the Buddha in Kapilavastu. Against this background, The tradition and custom of encasement started during the life of the Gotama Buddha. The chronology of the technical aspects of encasement situates them within religious concepts and socio-political patronage. Furthermore, the origins of encasement at the ancient capital of Bagan (9th to 13th CE), Myanmar, where encased monuments date to *circa* the mid first millennium CE, the practice of encased monuments was distributed in various parts of Myanmar. These are best viewed in the context of the origins of Buddhist encasement in India and Sri Lanka. From the evidence, the cult of stupa encasement at Bagan has derived from progenitors in the older Buddhist contexts of India and Sri Lanka.

The erecting of 84,000 stupas is said to have been disseminated globally with the heritage of King Asoka thought to have reached the renowned Buddhist capital in Central Myanmar during the 9th to 13th centuries CE. There, many monuments of were encased, with the inner structures dated stylistically to *circa* the middle of first millennium CE. In the Thetkyamuni temple, for example, an ink inscription (13th century CE) notes that King Asoka built 84,000 stupas in Jambudipa Island including Myanmar in 3rd century BC (Bo Kay, 1974). Myanmar chronicles and traditions said that there are many meritorious deeds regarding the King Asoka in various parts of Myanmar. Some stone inscriptions found in Myanmar from the Bagan period and post Bagan periods record that King Asoka built the 84,000 moathtaw stupas on the Jambudipa Island (Nyein Maung, 1972-2013, Vol-1-6). However, none of these inner remains have been dated, making comparisons elsewhere essential. Archaeological excavations indicate that some of the inner encased stupas in India, Sri Lanka, Thailand, and Myanmar are not in the past thought necessary to conserve and preserve entirely, but the secondary donors would like to encase and enlarge them by the outer stupas in later times. According to the archaeological excavations in India and Sri Lanka, Thailand, and Myanmar, epigraphic records, royal chronicles, history of the stupas, it was known that there are the relics of the Buddha and Buddhist saints, the ashes of the Kings and royal families enshrined inside the inner stupas. Subsequently the successive kings in the different periods have encased and enlarged the original stupas to protect the relics of the Buddha and Buddhist saints and valuable objects by covering with secondary stupas.

In Thailand, according to the archaeological and historical evidence, there are also some encased monuments built in the Dvaravati, Sukhothai, Lanna, Ayutthaya periods from the mid first millennium CE to the late eighteenth century. Archaeological evidence of stupa encasement is plentiful in various parts of Thailand. Some of the encased stupas have a gallery path between inner and outer stupas, but some have no gap. Where a stupa has fractured on the outside, a small stupa has sometimes been exposed within the body of a larger one. In fact, in some places in Thailand, a series of stupas encasing each other like onion rings has been exposed (Byrne, 1995, pp. 266-279).

The following sections give examples of these different types and places of encasement. Supporting information on the dating and construction are given where available. This differs from monument to monument, so some sections contain more information about the encasement. The aim is to document concisely the chronology and technical aspects of encasement to compare with the examples at Bagan in the next chapter.

3.1 The Encased Buddhist Monuments in India

There are some encased Buddhist monuments in India with archaeological and inscriptional evidence from various periods, such as Maurya (322-185 BCE), Sunga (185-73 BCE), Kushana (30-375 CE), Gupta (320-550 CE) and Pala (750-1162 CE) (Mitra, 1971; Soni, 1991). Historically, the Chinese pilgrims Fa-Hien and Hiuen-Tsiang recorded numerous commemorative stupas built to symbolise the events of Prince Siddhatha's life. In India, archaeological excavations indicate that most of the relics of the Buddha with the reliquaries were always unearthed in the centre of the stupas on the platform. In this dissertation, case studies of the encased stupas in India (see Figure 39) (Table 1) comprise Buddha relic stupa in Vaishali, Sanchi stupa, Dharmarajika stupa, Dhamekh stupa, Amaravati stupa, and Nandangarh stupa. The relics of the Buddha with the reliquaries have mostly been discovered at the centre of the stupas, on the floors or platforms in India and Sri Lanka, as possibly consecrated deposits (Revire, 2015, p. 183). Inscribed reliquaries have been found at Piprahwa stupa located in Siddharthnagar district, Uttar Pradesh province, and a great stupa at Bhattiprolu village situated in Guntur district, Andhra Pradesh state, India. According to the inscribed reliquaries, it recorded that the relics of the Buddha are enshrined in these reliquaries.

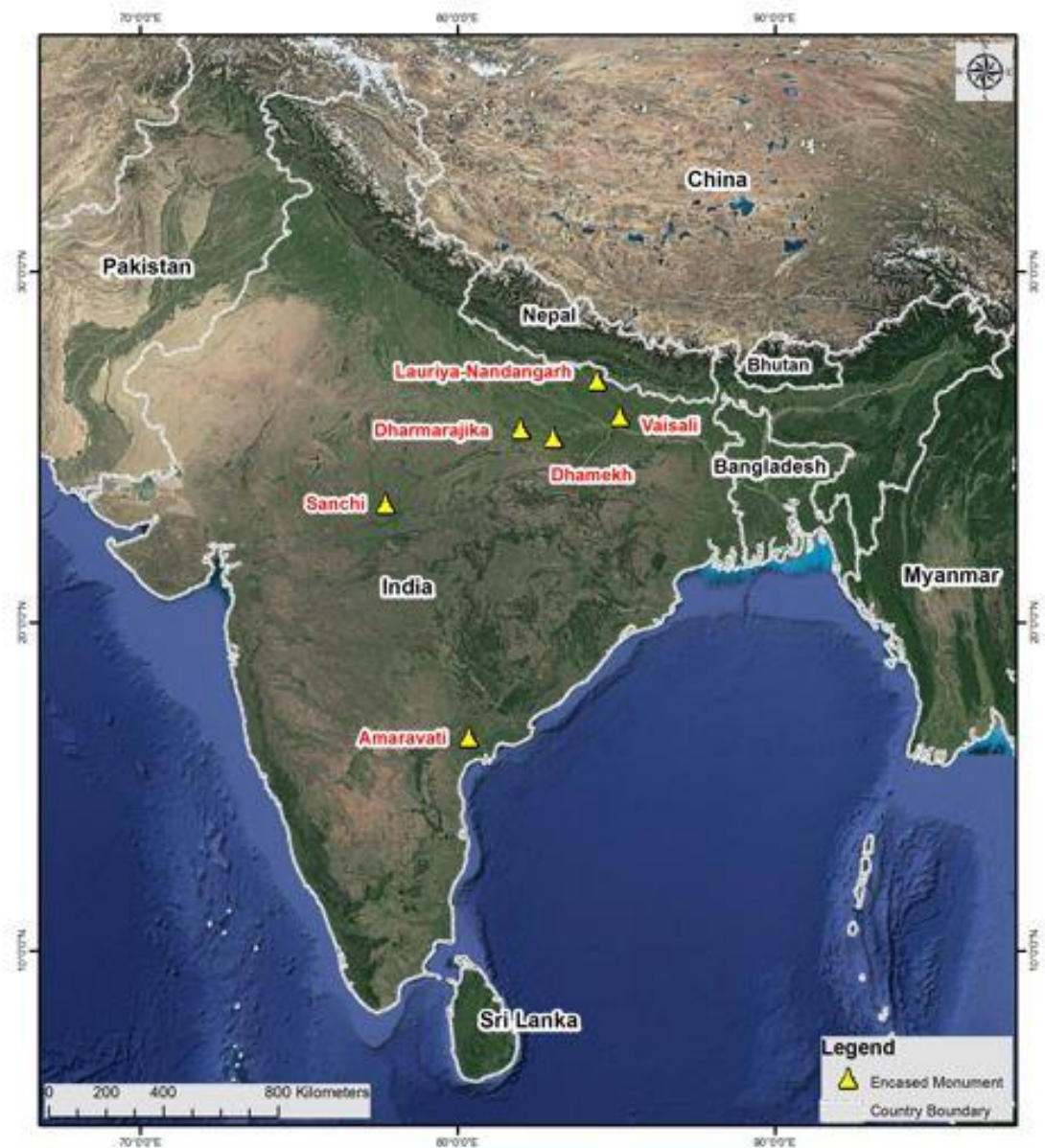


Figure 39: Map Showing the Encased Monuments in India

Note. Six encased monuments in India are described on this map. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Department of Archaeology and National Museum, Taungdwingyi, Myanmar.

3.1.1 Buddha Relic Stupa at Vaishali

Vaishali is situated at Basarth village, Vaishali district, Mithila region, Bihar. Vaishali, the capital of the *Lichchhavi* clan, was one of the largest cities during the life of the Buddha (Mitra, 1972, pp. 73-75). Vaishali was excavated by T. Bloch and D.V Spooner of the ASI in 1903-04 and 1913-14, when the seals engraved with the

name of the city as Vaishali were unearthed. A Buddha relic stupa at Vaishali was excavated by Dr. A.S. Altekar in 1957-58 (*Kumar, 1986, p. 36*). Mitra suggests that an unpretentious mud stupa (see Figure 40) was built in the pre-Mauryan age and originally it was 7.5 metres in diameter and was encased four times, increasing the diameter over 12 metres. The first encasement was undertaken in brickwork during Mauryan times. The fourth stupa was in the form of a buttress to support the third stupa. In the centre of the original stupa, there was a soapstone relic-casket containing a small quantity of ashy earth, a piece of gold leaf, two glass beads, a small conch, and a copper punch-marked coin. There are ayaka-like projections at four directions in this stupa. According to the finding of a relic-casket inside the centre of the stupa, the excavator surmised that this was the stupa built by the *Lichchhavis* over their share of the body-relic of the Buddha, which were opened by King Asoka for redistribution of the relic-contents (Mitra 1971, pp. 73-75; ASI, 1996, p. 89). According to the Buddhist texts the *Lichchhavis* built a stupa over their share of the relics of Buddha to the northwest of the city. This supports the conclusion that the original stupa was built in the pre-Mauryan period and there were four enlargements in this stupa from then onwards.



Figure 40: Buddha Relic Stupa at Vaishali, Bihar, India

Note. Four enlargements can be seen in this stupa, by K. Zaw. Copyright 2022 by Khin Zaw.

3.1.2 Sanchi Stupa

Sanchi stupa (see Figure 41) is situated *circa* 9 kilometres to the southwest of Vidisha between Bina and Bhopal junctions of the Central Railway in Raisen district, Madhya Pradesh state in India. It is one of the Buddhist sites, with a continuous construction sequence from the third century BCE to the twelfth century CE. Four other Buddhist sites such as Sonari, Satdhara, Morel khurd and Andher, *circa* 10 kilometres from Sanchi stupa, were also firstly documented by Alexander Cunningham in 1854 (Shaw, 2009). The inscribed reliquaries from Sanchi Stupa 2 and the four other Bhilsa Tope sites describe a useful point for assessing how these sites and the surrounding landscape were perceived in ancient times. These inscriptions on reliquaries indicate that all these sites were related to a group of Hemavata teachers led by an individual named Gotiputa. The Hemavatas appear to have reached in Vidisha in the second century BCE (Sunga period) and they settled over the older sites of Sanchi and Satdhara and established new centres at Sonari, Morel khurd and Andher (Mitra, 1971, pp. 96-99; Mitra, 2001).

Mitra suggests that Sanchi was a well-developed settlement with temples, stupas and monasteries from the Mauryan to the medieval ages. The main stupa is one of the earliest encased stupas in India. The original nucleus of stupa-1, attributed to Asoka, was a low brick structure, almost half the diameter of the present stupa. The original stupa which built of large bricks, was much damaged when it was excavated. It was probably hemispherical dome with a terrace at the base, enclosed by a wooden railing, and a stone umbrella at the summit found from the site. The Asokan pillar is located at its original place near the southern gateway. The original brick stupa was encased by a larger stone stupa and was enlarged to its present dimensions (36.6 metres in diameter and 16.46 metres in height) in the Sunga period. A fragmented umbrella bearing the characteristic Mauryan polish with concentric bands having radiating ribs, made of chunar stone was unearthed in this site. It may have been probably used for the original stupa (Mitra, 2001; Shaw, 2009).

Stupas enshrining the relics of Sariputta and Mahamoggallana, chief disciples of the Buddha, were found stupa-3 at Sanchi and stupa-2 at Satdhara. According to the

inscribed reliquaries, the relics of the Hemavatas were also enshrined in these stupas at Sonari, Satdhara, Morel khurd and Andher (Mitra, 1971, pp. 96-99; Mitra, 2001; Shaw, et al. 2009). Many subsequent donors protected the enshrined relics by encasing and enlarging the original stupas. According to archaeological excavations by Alexander Cunningham, the inscribed reliquaries found at the Bhilsa Tope sites were found at the centre of the stupas. A reliquary was not only used to put the relics, but also the two or more reliquaries were used for safety in the stupas at these sites, indicating the original Sanchi stupa built in the Maurya period was encased in the Sunga period (Mitra, 1971, pp. 96-99).



Figure 41: Sanchi Stupa, Raisen District, Madhya Pradesh State, India

Note. The elevation of the stupa is seen here, by V. Singh. Copyright 2022 by Virender Singh.

3.1.3 Dharmarajika Stupa

Dharmarajika stupa (see Figure 42) is situated at Sarnath where the Buddha first preached the Law after attaining the enlightenment. Sarnath, located at Varanasi district, Uttar Pradesh state, 6.44 kilometres to the north of Varanasi, represents the site of the ancient Rishipatana or Mrigadava. It is one of the four holiest places of the Buddhism and developed as one of the greatest Buddhist establishments of India. Majumdar suggests that excavations at the site undertaken between 1904 and 1928, yielded numerous temples, stupas and monasteries, the earliest attributable to the time of Asoka. Dharmarajika stupa was pulled down by Jagat Singh's workmen in 1794. A large round stone box with a green marble reliquary was discovered inside a stone box, at a depth of 8.25 metres from the top inside it. Mr. Duncan, the Resident of Banaras at the time, published an account of this discovery in 1798. The fuller archaeological excavations at Sarnath were undertaken by Sir Alexander Cunningham in 1835-36. Other excavations were begun by Sir John Marshall, Director General of Archaeology in 1907 and he excavated a large area of the northern and southern portions of the site at Sarnath during the two seasons (*Majumdar, 1947*). The central part of the brick Dharmarajika stupa was a hemispherical dome with a low terrace at the base probably built by King Asoka. Excavations revealed six successive encasements of the original stupa. The original structure built by Asoka was 13.49 metres in diameter with bricks 49.5 x 36.8 x 6.4 centimetres and others slightly wedge-shaped 41.9 x 31.7 x 8.8 centimetres in size. The first enlargement was encased in the Kushan period (30-375 CE) with bricks measuring 38.1 x 26.2 x 7 centimetres in size. The second enlargement was built in the fifth or sixth century CE (Gupta period) with the addition of circumambulatory path (*pradakshinapatha*), nearly 4.88 metres in width, around the stupa and encompassed by a solid outer wall, 1.35 metres in height, constructed by four doorways in the four directions. The *pradakshinapatha* was filled up in the third enlargement in the 7th century CE and access to the stupa was provided by four stone staircases. The next two additions were built in the 9th to 11th centuries CE (Pala period). The sixth encased stupa was conducted when the monastery of Kumara devi was built in the twelfth century (Pala period). A monolithic railing bearing a Mauryan inscription and polish, found near the

stupa, may have formed its *harmika*. The inscribed Asokan pillar with the celebrated lion-capital, was discovered nearby the stupa. According to the archaeological excavations at this stupa, the original stupa was encased in successive periods such as Kushan, Gupta, and Pala periods in India (Agrawala, 1984, pp. 17-18; ASI, 1996, pp. 92-93; Mitra, et al. 1971, pp. 66-69). The circumambulatory paths were constructed as a hollow temple in the second and third enlargements and four stone staircases were built in the 7th century CE.



Figure 42: Dharmarajika Stupa at Sarnath, Varanasi District, Uttar Pradesh State, India

Note. Six encasements can be seen in this stupa, by S. Prasad. Copyright 2022 by Sarjun Prasad.

3.1.4 Dhamekh Stupa

Dhamekh stupa (see Figure 43) is located at Sarnath, Varanasi district, Uttar Pradesh state in India. The most impressive stupa at Sarnath is the Dhamekh stupa, a cylindrical tower, 28.50 metres in diameter at base and 42.06 metres in height

including the foundations. It is a solid structure with the drum of stonework and the upper part of brickwork. There are the eight arched projections, each with a niche housing a Buddha statue on the stone drum. Agrawala suggests that its exterior is decorated with a variety of motifs including the fine scroll works, decorated and geometrical patterns and a luxuriant creeper, combining human and animal figures in the Gupta period. In this stupa, an inscribed stone slab with the Buddhist creed *ye dhamma hetu-prabhava* etc., dating in characters of the 6th or 7th century CE was unearthed at a depth of 91 centimetres from the top. Below the stonework of the drum, the large sizes of bricks, which may have been used to the earlier ruined structure were found at a depth of 53.53 metres from the top. The fuller excavations at Sarnath were undertaken by Sir Alexander Cunningham in 1835-36. According to the archaeological excavations conducted by Cunningham, there are remains of an earlier stupa of Mauryan bricks and the original stupa was built in mud and brick. This might have been the stupa built by King Asoka to mark the spot where the Buddha preached his law for the first time to the five monks. No bodily relics were found in the centre of the stupa. The original stupa was encased in the Gupta period. As the record shows, it is one of the significant encased stupas at Sarnath in India (Agrawala, 1984, p. 11; ASI, 1996, pp. 92-93; Mitra, et al. 1971, pp. 66-69).





Figure 43: Dhamekh Stupa at Sarnath, Varanasi District, Uttar Pradesh State, India
Note. There are the eight arched projections on the stone drum in this stupa, by S. Prasad. Copyright 2022 by Sarjun Prasad.

3.1.5 Amaravati Stupa

Amaravati stupa (Figure 44) is situated at *Amaravathi* village, Palnadu *district*, Andhra Pradesh state in India. It is one of the largest stupas in India and is popularly renowned as Mahachaitya or Great stupa of Amaravati. Amaravati was built in the 3rd-2nd centuries BCE and encased and enlarged in the 1st-4th centuries CE under the Satavahana and Ikshvaku patronage (*Shimada, 2013*). It was a centre of religious activities till the 14th century CE. The unexcavated mound was discovered in 1796 and after one year later, a British army officer named Colin Mackenzie recorded the documents of this stupa (*ASI, 1996, pp. 104-105*).

This stupa was one of the largest stupas in Andhra Pradesh state with a diameter of 48.5 metres and a height of 27 metres. Mitra suggests that it consists of a circular vedika or drum in brick with projecting rectangular Ayaka platforms in four cardinal

directions. Five Ayaka pillars may have been built on each platform representing the five principal scenes in the life of the Buddha: the nativity, the great renunciation, the enlightenment, the first sermon and the demise. The drum and Ayaka platforms were decorated with sculptured slabs. A gold reliquary with six gold flowers and a piece of bone inside the earthen vessel were unearthed in the walled enclosure of the stupa. Seven crystal and ivory relic caskets, some of which contain bone-pieces, pearls, precious stones and gold flowers were found at all the four-Ayaka platforms. A hemispherical dome was built over the circular drum and scenes from the life of Buddha, Jataka stories, animal motifs, and floral decorations are carved on the light green limestone. It was surrounded by a great railing made of high pillars and the railings were completely ornamented with narrative reliefs and detailed decorations. Its outer stone railing is 58.5 metres in diameter and about 4 metres in height. There was a gateway at each of the cardinal points and between the railing and the drum there was a circumambulatory corridor. All the sculptures have been removed from the site, although a few broken pillars survive in this stupa (Mitra, 1971, pp. 200-204; ASI, 1996, pp. 104-105). Originally there may have been relics encased by many layered reliquaries at Amaravati stupa. Archaeological excavations indicates that a golden, seven crystal and an ivory relic casket which may have enshrined the relics, were fortunately recovered illustrating the concept of the encasement using many layered reliquaries to protect the relics in this stupa.



Figure 44 Amaravati stupa at Amaravathi village, Palnadu District, Andhra Pradesh State, India

Note. The elevation of the round stupa can be seen in this photograph, by V. Singh.

Copyright 2022 by Virender Singh.

3.1.6 Nandangarh Stupa

The village of Lauriya is located about 25.75 kilometres to the northwest of Bettiah in the Champaran district, Bihar state. It was called Lauriya-Nandangarh by archaeologists and the name of Lauriya has been documented on the inscribed pillars of Asoka in this site. There are the fifteen stupa-mounds at Lauriya-Nandangarh, which have in three rows, one in east-west alignment and the other two north-south and parallel to each other, the Asokan pillar erecting near the two eastern mounds of the east-west row. Four of them were excavated in 1904-07. The excavated mound 24.99 metres in high, known as Nandangarh is located about 1.6 kilometres to the southwest of the pillar of Asoka (Leeuw, 1956; Mitra, 1971, pp. 83-85). There is a large brick stupa (see Figure 45) reared up on multiple polygonal terraces with numerous re-extrant angles. It is the earliest example of a form of the terraced stupa in India (ASI, 1996, pp. 88-89). During a later restoration of the stupa, new circular walls in terraces with three processional paths were constructed around the basement-terrace and the first two terraces above the latter. There is the top of the complete

small stupa, 3.66 metres high with a polygonal base exposed at a depth of 10.67 metres from the top in the core of the outer stupa. While there were no relics inside the inner stupa, there was a tiny copper casket, containing the long strip of a birch-bark manuscript datable about the fourth century CE and the few words can be deciphered as a Buddhist text (Mitra, 1971, pp. 83-85). A small stupa (see Figure 46) was discovered inside the mound of Nandangarh and Majumdar suggests that it is datable in the second century BCE (Sunga period). Ghosh suggests that the objects found in the core of the mound are datable in the second and first centuries BCE and the structure belongs to the first century BCE (Leeuw, 1956). In Nandangarh stupa, the inner small stupa containing a copper relic casket, is located at the centre of the outer stupa.

In contrast, some Buddhist stupas at Bagan have space or corridor between inner and outer stupas, while some have no space or corridor between two of them (Pichard, 1992-2001, Vol-1-8). In India and Sri Lanka, some stupas consist of no space between two of the stupas but some stupas have spaces or corridors (Mitra, 1971) to be moved around and to be worshipped the inner stupas between two of them. The relics of the Buddha are mostly enshrined at the different parts of the Buddhist monuments like finial, sikhara, concentric rings, Buddha images in Bagan, Myanmar (Aung Kyaing, 1984). One relic chamber was discovered at the centre of the floor in Saytanagyi stupa, the largest Sinhalese-typed stupas at Bagan like India and Sri Lanka.

The Shwe Kon Cha temple stone inscription (Nyein Maung 1972, pp. 143-151, Vol-1) dated 1141 CE, located at Bagan, was described that the relics of the Buddha protected by the miniature stupas in a reliquary are similar to a stupa encasement. The Anantathuya Couple stone inscription (Nyein Maung, 1972, pp. 151-163, Vol-1) dated 1223 CE inside the Minnanthu Lemyethna monastic complex at Bagan, also described that the concept of encasement is to protect the relics of the Buddha since Bagan times. Archaeological and inscriptional evidence at Bagan indicate that there are numerous reliquaries and miniature stupas made of various materials to put relics of the Buddha, Buddhist saints and valuables in the Bagan period. Archaeological excavations in India show that there are also a number of reliquaries to placing the relic of the Buddha, discovered at the centre and floor of the stupas (Mitra, 1971).



Figure 45: Nandangarh Stupa, Champaran District, Bihar State, India

Note. The earliest example of a form of the terraced stupa in India can be seen in this photograph, by J.K. Tiwari. Copyright 2022 by Jalaj Kumar Tiwari.

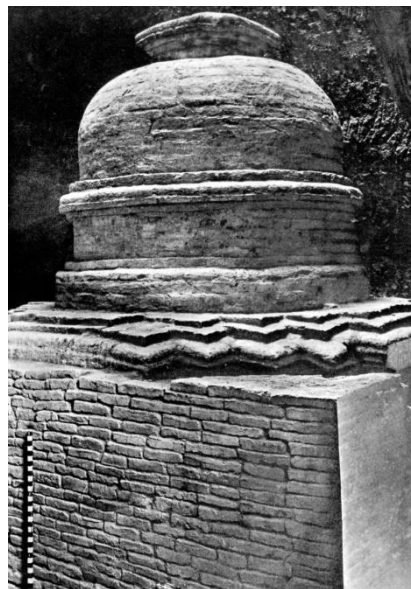


Figure 46: Inner Stupa of Nandangarh Stupa

Note. Inner stupa with polygonal-shaped base can be seen here. From Buddhist Monuments. Sahitya Samsad, Photo.41, by D. Mitra. Copyright 1971 by Debala Mitra.

Table 1: Comparative Case Studies of the Encased Monuments in India







Serial No.	Name of Monuments	Location	Date of the first establishment	Characteristics of the original stupa	Date of encasement	Characteristics of encased stupa	Enshrined objects	Photos of Monuments
1	Buddha Relic Stupa	Capital of the Lichchhavi District Vaishali, Bihar State	Pre-Mauryan age, built by the Lichchhavis	A mud stupa of unpretentious size. It originally was 7.5 m in diameter.	The first encasement during Mauryan times	Four encasements	Relic of the Buddha with a soapstone relic-casket	
2	Sanchi Stupa	circa 9 km southwest of Vidisha in District Raisen, Madhya Pradesh State	Reign of King Asoka in the third century BCE.	A low brick structure, almost half the diameter of the present stupa. Presumably, it was hemispherical dome with a terrace at the base, enclosed by a railing, and a stone umbrella at the top.	Maurya period to Sunga period	Two encasements	Stupas containing the relics of Sariputta and Mahamoggallana were found stupa 3 at Sanchi and stupa 2 at Satdhara.	
3	Dharmarajika Stupa	Sarnath, located at District Varanasi, Uttar Pradesh State	Reign of King Asoka in the third century BCE.	A hemispherical dome with a low terrace at the base, 13.49 m in diameter.	Kushan (30-375 CE), Gupta, and Pala periods.	Six encasements; first in Kushan, second in Gupta, third in 7th century, next two additions, sixth, and last in Pala period	Large round stone box with a green marble relic-casket was found inside a stone box	
4	Dhamekh Stupa	Sarnath, located at District Varanasi, Uttar Pradesh State	Reign of King Asoka in the third century BCE.	The original stupa was built in mud and brick.	It was encased in the Gupta period.	Remains of an earlier stupas of Mauryan bricks were found.	No bodily relics were found inside the inner stupa.	
5	Amaravati Stupa	Amaravathi village, Palnadu District Andhra Pradesh State	the 3rd-2nd centuries BCE.	It has a brick circular vedika or drum with projecting rectangular Ayaka platforms.	It was encased in the 1st -4th centuries under the Satavahana and Ikshvaku patronage.	There was a circumambulatory passageway between the railing and the drum.	A golden, seven crystal and ivory relic caskets, which may have enshrined the relics, were fortunately found.	
6	Nandangarh Stupa	The village of Lauriya, called Lauriya-Nandangarh, District West Champaran, Bihar State	The first/second century BCE (Sunga period).	The original small stupa was found at a depth of 10.67 m from the top, in the core of the outer stupa. Both of them are made of bricks.	It may have encased in the first century BCE.	A tiny copper casket, inside which there was long strip of a birch-bark manuscript of about the 4th century CE, was found.	No relics were found in the encased stupa.	

Table 2: Coordinates of the Case Studies of the Encased Monuments in India

No	Name of Monuments	Township / District	State	Latitude	Longitude
1	Buddha Relic Stupa	Vaishali District	Bihar State	N: 25.990°	E: 85.130°
2	Sanchi Stupa	Raisen District	Madhya Pradesh State	N: 23.480°	E: 77.738°
3	Dharmarajika Stupa	Varanasi District	Uttar Pradesh State	N: 25.378°	E: 83.028°
4	Dhamekh Stupa	Varanasi District	Uttar Pradesh State	N: 25.380°	E: 83.024°
5	Amaravati Stupa	Palnadu District	Andhra Pradesh State	N: 16.574°	E: 80.359°
6	Nandangarh Stupa	West Champaran	Bihar State	N: 26.997°	E: 84.408°

3.2 The Encased Buddhist Monuments in Sri Lanka

Examples of encased stupas constructed in the Anuradhapura period and also some monasteries (Viharayas) belonging 18th century CE had the original murals showing the Mahiyangana stupa encasement are found in Sri Lanka. Dr. Samerchai suggests that the mural paintings for example (see Figure 47 and Figure 48) can be found at Hindagala Viharaya (18th century CE), and Sunandarama Viharaya (18th century CE) in Sri Lanka. Archaeological evidence indicates that most of the dagabas (stupas) in Sri Lanka enshrined the relics of the Buddha, the ashes of the celebrated and heroic kings, and the ashes of the chief abbots (monks). Sinhalese *dagaba* which derives from *dhatugarbha* in Pali and Sanskrit, means a dome-shaped structure enshrining the relics of the Buddha or Buddhist saint. For example, the Kujjatissa Pabbata is a small stupa. It consists of the graceful guardstones and Makharas at the south and east entrances. This structure is datable to about the 8th century CE, but probably built on earlier site. This stupa situated outside the south gate of the city, was a place where the ashes of the Elara were buried by King Duthagamani (Ministry of Cultural Affairs, 1981, p. 21).

Professor Paranavitana has archaeologically excavated the Dakkhina stupa in 1948 and recorded a layer of ashes and charcoals in the centre of the dagaba. He suggested that it was a small stupa built over the ashes of the heroic King Duthagamani. Archaeological evidence indicates that some of the stupas in Sri Lanka have been built over the ashes of the heroic Kings (Fernando, 1965, pp. 55-56). Case studies of Sinhalese encased stupas in Sri Lanka (see Figure 49) (Table 3) consist of Mahiyangana, Thuparama, Dakkhina, Mirisawetiya, and Ruwanweli stupas.



Figure 47: Mural of Mahiyangana Stupa from Hindagala Viharaya (18th century CE), Sri Lanka

Note. Multiple encasements can be seen in this painting, by S. Poolsuwan. Copyright 2018 by Samerchai Poolsuwan.



Figure 48: Mural of Mahiyangana Stupa from Sunandarama Viharaya (18th century CE), Sri Lanka

Note. Ogres are worshipping the encased Mahiyangana Stupa, by S. Poolsuwan. Copyright 2018 by Samerchai Poolsuwan.

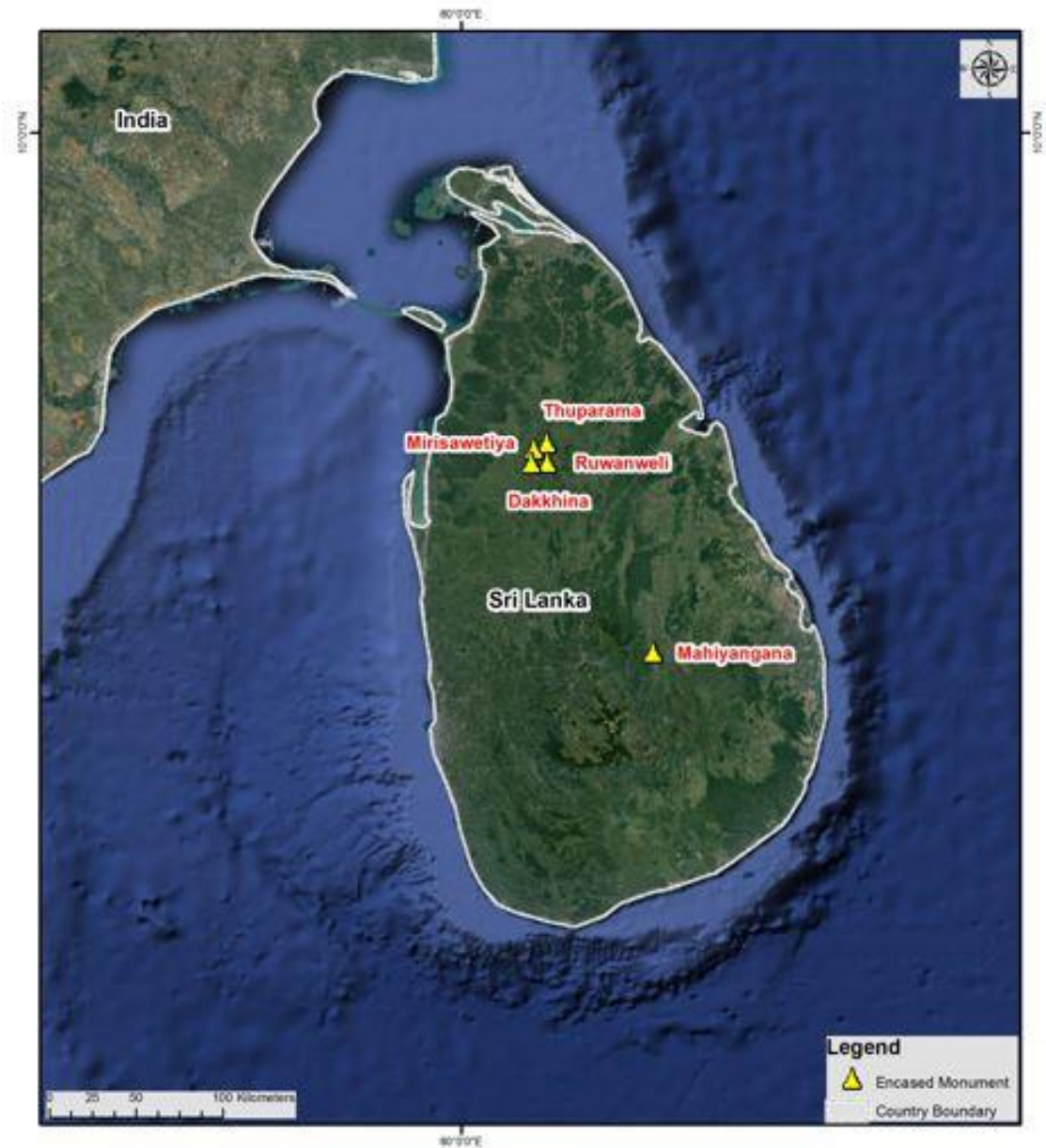


Figure 49: Map Showing the Encased Monuments in Sri Lanka
 Note. There are five encased monuments in Sri Lanka on this map. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Department of Archaeology and National Museum, Taungdwingyi, Myanmar.

3.2.1 Mahiyangana Stupa

Mahiyangana Stupa (see Figure 50) is an ancient Buddhist stupa situated in Mahiyangana, Badulla district, Uva province, Sri Lanka. According to the ancient chronicles in Sri Lanka including the Mahavamsa text, the Gotama Buddha firstly visited to this site in Sri Lanka after the Buddha attained enlightenment (Geiger, 1912; Ratnasinghe, 2002). According to the Mahavamsa, the ogres inhabited in this island at that time and the Buddha preached and delivered them the *Dhamma*. A chief of the ogres named Saman attained Sotapanna (stream winner) after the Buddha delivered him the Buddha's discourse when the Buddha arrived there and he requested to the Buddha to get a symbol or token of remembrance. The Buddha offered him a handful of hair from his head and then Saman enshrined it in a stupa, 3 metres in height. According to the legend, it was the first stupa in Sri Lanka during the life of the Buddha. After the demise of the Buddha in 543 BC, an Arahant named Sarabhu brought the Lord Buddha's larynx, which had been recovered from the funeral pyre. This relic was also enshrined within the same stupa, and it was encased and enlarged by him to a height of 5.5 metres. The son of Devanampiyatissa's (207-197 BCE) brother Uddhaculabhaya also encased this stupa. Several kings renovated and enlarged this stupa including Dutthagamani (101-77 BCE), who enlarged it 37 metres in high (Geiger, 1912; Ratnasinghe, 2002). This history establishes that it is the earliest encased stupa in Sri Lanka. The Mahavamsa chronicle describes that there are multiple encasements in this stupa.



Figure 50: Mahiyangana Stupa in Mahiyangana, Badulla district, Uva province, Sri Lanka

Note. The elevation of the stupa can be seen in this photograph, by A. Oakkahta.

Copyright 2022 by Ashin Oakkahta.

3.2.2 Thuparama Stupa

Thuparama stupa (see Figure 51) is situated in the Mahamewnava Gardens of Anuradhapura, Sri Lanka and it was built after the Mahinda Thera (Buddhist monk), son of King Asoka, had arrived in Sri Lanka. Mahinda introduced Theravada Buddhism and stupa worship to Sri Lanka. It was constructed during the reign of King Devanampiya Tissa (247-207 BCE) (*Gunawardena, 2003, p. 290*). Stone columns around the stupa suggest that there was a *Vatadage* with a conical wooden roof and the stupa in the center. Mahinda Thera, the first Buddhist missionary in Ceylon (Sri Lanka), advised King Devanampiya Tissa to construct a stupa enshrining the bodily relics of the Buddha. The King sent a novice named Sumana who had accompanied the missionary to Emperor Asoka located at Pataliputra in India with a request some relics of the Buddha for enshrinement in a stupa and brought back the right collarbone of the Buddha, His alms-bowl and other relics. The alms-bowl and other relics are enshrined at Mihintale, a mountain peak near Anuradhapura, and the collarbone was

brought to the House of Great Sacrifice, a pre-Buddhist shrine built by the King Pandukhabhaya. At a later time, a proper chamber was built to enshrine the relics, and the stupa was built up over this foundation. It was called the Thupa as it was the only dagaba in this country. It was originally similar to a heap of paddy, the earliest design of dagaba and later, King Tissa built a vihara (monastery) around it (Fernando, 1965, pp. 11-12; Ministry of Cultural Affairs, 1981, p. 20).

During the reign of King Agbo II (608-618 CE) it was completely damaged; he may have probably encased and enlarged this stupa. The King restored as a vatadage, which was a dagaba preserved by conical roof during his reign. There are three concentric circles of columns with ornamental capitals rising towards the centre of the platform, which originally had wooden rafters supporting a roof. The present construction of the stupa was built in 1862 CE and several renovations by successive kings may have encased and enlarged this stupa. The present stupa was built on a circular platform measuring 50.14 metres in diameter and 3.44 metres in height from the ground level (Fernando, 1965, pp. 11-12; Ministry of Cultural Affairs, 1981, p. 20).





Figure 51: Thuparama Stupa in the Mahamevnava Gardens of Anuradhapura, Sri Lanka

Note. Stone columns around the stupa can be seen in this photograph, by A. Oakkahta. Copyright 2022 by Ashin Oakkahta.

3.2.3 Dakkhina Stupa

Dakkhina stupa (see Figure 52) is situated beside the Kurunegala road in Anuradhapura, is a large circular brick structure with the remains of the Dakkhina Thupa, or Southern Dagaba (*Bauddha Samskr̥tika Madhyasthanaya*, 2000, p. 18). It was excavated by Professor Paranavitana in 1948 and it has been conserved and preserved after the excavation. An inscription describes that it was built by the General Uttiya in the reign of King Vattagamini Abhaya (c. 89-77 BCE). The Dakkhina stupa consists of a vihara where the 300 Buddhist monks led by Uttiyatissa, lived. There is an ambitious and learned monk from the Dakkhina Vihara called Kohontissa, who founded the Jetavana monastery and the first inhabitants of the Jetavana were all Dakkhina Vihara monks. Archaeological excavation indicates that this stupa was an enlargement of the earlier construction that was built over the ashes of Duthagamani (161-137 BCE). Traces of charcoal and ashes were found in the

centre of the stupa. It is probably an unfinished stupa lying close to Sri Mahabodhi. Until recently this site was mistakenly identified as tomb of Elara, but it was identified as the Dakkhina stupa by professor Paranavitana. According to the chronicles, Professor Paranavitana also believed that this place was where that remains of the heroic King Duthagamani were cremated. Originally it was a small stupa which contained the remains of the king and encased and enlarged later (Fernando, 1965, pp. 55-56; Ministry of Cultural Affairs, 1981, pp. 42-43).

In the area between the south *vahalkada* (frontispiece) and on the west of this stupa there were several stones on the paving which described Brahmi inscriptions datable palaeographically to about the third century BCE (Paranavitana, 2001, pp. 161-172). These inscriptions on the stones bore the name Dakinivihara, which occurs more than twelve times in the record. It was recovered from the ground between the southern and western *vahalkadas* of the stupa. There are the largest of all Brahmi inscriptions discovered in this area, spreading over sixteen contiguous stones, measuring 14.02 metres by 2.13 metres. Kanitthatissa built a refectory at this shrine and provided a road to it in the second century. He also enlarged and encased this stupa to its present size. In the third century, Gothabhaya built a Chapter House here (Fernando, 1965, pp. 55-56).

Professor Paranavitana who researched the evidence in the *Mahavamsa* and *Saddhamaratnavaliya* suggests that the *Kammamalaka* (Chapter House) for the community of monks at Anuradhapura was at this site. He considered that as King Duthagamani wished to be buried at the site of the *Kammamalaka*, and that there was a layer of charcoal at the bottom of the stupa, that King Duthagamani was cremated here. The foundation of the present stupa is of solid brick work and has a thickness of 3.96 metres and the terrace was probably square sided (113.39 metres per side) (Fernando, 1965, pp. 55-56; Ministry of Cultural Affairs, 1981, pp. 42-43).



Figure 52: Dakkhina stupa situated beside the Kurunegala road in Anuradhapura, Sri Lanka

Note. A large circular brick structure can be seen in this stupa, by L.Handalin.
Copyright 2022 by Lilian Handalin.

3.2.4 Mirisawetiya Stupa

Mirisawetiya stupa (see Figure 53) is situated along old Puttalam Road in Anuradhapura, Sri Lanka. According to the *Mahavamsa* (Geiger 1912), it was built by King Duthagamani during his reign (161-137 BCE). The original structure of Mirisawetiya is believed to be one of the most ancient stupas in Sri Lanka. The most popular stories said that King Duthagamani forgot to serve a food made of chilli (*miris*) for the Buddhist priests, before he ate it and so it was named as Mirisawetiya for a symbol of apology of the priests. According to another story, Mirisawetiya is the name of an ancient village where the stupa was constructed. The *Mahavamsa* records (Geiger, 1912) that King Duthagamani built it in gratitude for his victory over King Elara in 158 BCE. He decided to build a stupa over the sacred relics and he founded a *vihara* (monastery) (Fernando, 1965, p. 54). He built it in three years, the largest stupa in Sri Lanka in its day. The King was inspired by the success of this stupa, with a hundred thousand *bhikkhus* and ninety thousand *bhikkhunis* at the consecration of the

monastery. The Mirisawetiya had one of the finest *vahalkadas* in ancient Sri Lankan history. The Mirisawetiya *vihara* around the stupa is extensive and pleasant to walk through. There are some grand columns, the chapter-house of the Mirisawetiya to the northwest of the stupa and its refectory is located to the north of the stupa. The restoration of the stupa was undertaken by the Buddhist society in the 20th century (Ministry of Cultural Affairs, 1981, pp. 41-42). The current diameter of this stupa at base is 51 metres and its height about 61 metres in earlier times. Gajabahu I (112-134 CE) encased and enlarged this stupa and donated its monastery. This stupa has been repeatedly changed in its design but the bulk of the monument is fairly well preserved (Fernando, 1965, p. 54). These records confirm it is one of the ancient encased stupas in Sri Lanka.



Figure 53: Mirisawetiya Stupa Situated along old Puttalam Road in Anuradhapura, Sri Lanka

Note. The elevation of the stupa can be seen in the photograph, by A. Oakkahta.
Copyright 2022 by Ashin Oakkahta.

3.2.5 Ruwanweli Stupa

Ruwanweli stupa (see Figure 54) is a hemispherical dome which is built over the bodily remains of the Buddha. It was also called the Mahathupa or Great Thupa. According to the Mahavamsa its construction was prophesied by Mahinda, when King Tissa erected a tall stone pillar on the place for the future building (Geiger, 1912). The heroic King Duthagamani, in fulfillment of the prophecy, decided to build a Great stupa on the site and it was erected by King Duthagamani in 140 BCE. When only partially completed, Duthagamani passed away leaving the responsibility of concluding the work to his brother King Saddatissa (137-119 BCE). The original stupa was about 55 metres in height and renovated and enlarged by many kings so is now 103 metres in height with a circumference of 290 metres. The scenes from the life of the Buddha were painted on the walls of the chamber, and the sacred relics were solemnly sealed inside the chamber (Ministry of Cultural Affairs, 1981, pp. 13-16)

A reliquary from eastern *Vahalkada* and some relic caskets from southern *Vahalkada* were recovered at Ruwanweli Dagaba and some gem beads in a small glass case were found during excavations (Fernando, 1965, pp. 9-10). According to the *Mahavamsa* (Geiger, 1912), this stupa was renovated after the original stupa has been built. Archaeological evidence also indicates that the original stupa may have been encased and enlarged by other Kings in later times. Author assumes that according to the differences between original and present heights, it was proved that the original inner stupa may have been enlarged by the larger stupa.



Figure 54: Ruwanweli stupa in Anuradhapura, Sri Lanka

Note. The elevation of the stupa with a walled enclosure can be seen here, by A. Oukkahta. Copyright 2022 by Ashin Oukkahta.

Table 3: Comparative Case Studies of the Encased Monuments in Sri Lanka






Serial No.	Name of Monuments	Location	Date of the first establishment	Characteristics of the original stupa	Date of encasement	Characteristics of encased stupa	Enshrined Objects	Photos of Monuments
1	Mahiyangana Dagaba	Mahiyangana, Badulla District, Uva Province.	During the life of the Buddha	It is one of the earliest encased stupas in Sri Lanka. It is 3 m in height.	Arahant named Sarabhu enlarged this stupa in the 543 BCE. The son of Devanampiyatissa's (207-197 BCE) brother Uddhaculabhaya encased again. Several Kings including Dutthagamani (101-77 BCE) enlarged and encased this stupa.	Multiple encasements	Hair and Larynx relics of the Buddha	
2	Thuparama Dagaba	In the Mahamevna Gardens of Anuradhapura	Reign of King Devanampiya Tissa (247-207 BCE) parallel to King Asoka' period, India.	a paddy-heap form	During the reign of King Agbo II (608-618 CE), he may have enlarged. It was fully restored in the 19th century.	The typical bell-shaped stupa was built on a circular platform.	The right collarbone of the Buddha	
3	Dakkhina Dagaba	Beside the Kurunegala road in Anuradhapura	Founded by the General Uttiya in the reign of King Vattagamini Abhaya (c.89-77 BCE).	probably a small one	Kanithatissa encased this Dagaba in the second century.	Traces of charcoal and ashes were found in the centre of the Dagaba. This stupa was an enlargement of the earlier construction.	Ashes of King Duthagamani	
4	Mirisawetiya Dagaba	Along old Puttalam Road in Anuradhapura	King Duthagamani during his reign (161-137 BCE)	The first large scale <i>thupa</i> and the largest stupa in Sri Lanka in its day.	Gajabahu (112-134 CE)	The diameter of this dagaba at base at present is 51 m and its height in earlier times about 61 m.	Relics of the Buddha	
5	Ruwanweli Dagaba	Anuradhapura	King Duthagamani in 140 BCE.	Originally it was about 55 m in height.	The original dagaba may have been encased and enlarged in later times.	The relic chamber was built on the platform in the centre of dagaba.	The bodily remains of the Buddha	

Table 4: Coordinates of the Case Studies of the Encased Monuments in Sri Lanka

No	Name of Monuments	Township / District	State	Latitude	Longitude
1	Mahiyangana Stupa	Badulla District	Uva Province	N: 7.322°	E: 80.990°
2	Thuparama Stupa	Anuradhapura District	North Central Province	N: 8.355°	E: 80.396°
3	Dakkhina Stupa	Anuradhapura District	North Central Province	N: 8.337°	E: 80.392°
4	Mirisawetiya Stupa	Anuradhapura District	North Central Province	N: 8.345°	E: 80.388°
5	Ruwanweli Stupa	Anuradhapura District	North Central Province	N: 8.350°	E: 80.396°

3.3 The Encased Buddhist Monuments in Thailand

There are many encased Buddhist structures in various parts of Thailand. Five distinctive examples (see Figure 55) (Table 5) located in central and northern Thailand are described. These stupas are Phra Pathom stupa dating to *circa* 3rd century BCE, Wat Pa Kaeo dating to the 14th century CE, Wat Phra Si Sanphet with eight miniature reliquary-type stupas dating to the 15th century CE, Wat Phra That Chae Haeng built in the 14th century CE, and Wat Phra That Hariphunchai datable to the 9th century CE. Therefore, these examples range from the central plain in the south to Ayutthaya and the hills of Lanna. With respect to time, they also vary from the late first millennium BCE to the 15th century CE. Although they all serve a common function, each has a distinctive design and history reflecting the combination of local materials, designs and varied stylistic influences (Myo Nyunt Aung, 2022).

These stupas, and many others, were periodically encased by new donors. These secondary donors enshrined the earlier structures, protecting and adding more images of the Buddha, jewelry, golden objects and gold leaf, and amulets. Denis Byrne suggested that the placing of gold leaf on Buddha images, stupas, temple doorways, and other sacred structures is one of the most common devotional and merit-making acts performed in Thailand. The perceived radiant and sacred power of these objects is seen to be simultaneously honoured and enhanced by gilding. In 1990, Byrne noted two encasements in which the original condition of the stucco skin on the inner stupa in the San Pa Tong area near Lampun in the northern Thailand had been retained. He suggests that they were not in need of repair at the time, but they were encased. Moreover, he recorded that the inside of a fractured stupa located at Wat Klang Muang, Lampun had the stucco surface of an inner encased monument clearly seen in profile at the centre of the outer stupa. Covering stupas with layers of brick,

resurfacing them with stucco or cement, or sheathing them with copper are all variations of encasement found in Thailand (Byrne, 1995, pp. 266-279). Wat Maha That Chalieng (see Figure 56), which is one of the ruins of Si Satchanalai-Chaliang, Sukhothai province, Thailand, is an encased Buddhist temple. The finial of the inner stupa (see Figure 57) can be viewed from the outside, and there is a space between the finial of the inner stupa and the outer monument. Wat Athi Tinkaeo (see Figure 58), Chiang San is another renowned encased stupa in Thailand. Here, there is a space around the finial, but not the main part of the stupa, which has no gap between of the inner and outer structures. In this stupa, it may be that the inner stupa was not seriously in need of repair before it was encased by the outer stupa.

In Thailand, although there are a number of the encased monuments which have been the subject of archaeological research, only a few are visible. This is also the case with Buddha images that have been re-coated so that the inner layers are not visible, although there are some inscriptions regarding encasements in the form of stone inscriptions, royal chronicles, and local oral histories that provide some insight. The author has selected only five encased Buddhist stupas in Thailand with concrete archaeological and inscriptional evidence plus an exact history of the stupas (Myo Nyunt Aung, 2022).





Figure 55: Map Showing the Encased Monuments in Thailand

Note. Five encased monuments in Thailand are described on this map. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Department of Archaeology and National Museum, Taungdwingyi, Myanmar.



Figure 56: Wat Maha That Chalieng, Sukhothai Province, Thailand

Note. This figure of Wat Maha That Chalieng, Sukhothai Province shows the general elevation, by K. Kirdsiri. Copyright 2022 by Krengkrai Kirdsiri.



Figure 57: The Finial of the Inner Stupa at Wat Maha That Chalieng, Sukhothai Province, Thailand

Note. The finial of the inner stupa is seen within the outer stupa, by K. Kirdsiri. Copyright 2022 by Krengkrai Kirdsiri.



Figure 58: Wat Athi Tinkaeo, Chiang Saen, Thailand

Note. The inner and outer stupas can be clearly seen from the outside, by K. Kirdsiri.

Copyright 2022 by Krengkrai Kirdsiri.

3.3.1 Phra Pathom Stupa

The Phra Pathom stupa (see Figure 59) is situated at Mueang Nakhon Pathom district, Nakhon Pathom province in central Thailand, located about 60 kilometres to the west of Bangkok. It is traditionally recognized as being home to the earliest Buddhist stupa in Thailand, with the name, Phra Pathom chedi, meaning ‘Holy chedi of the beginning’. Due to sedimentation from the Chao Phraya River, the land in this area has progressed southward; so, while thought to have originally been on the coast, this is no longer the case. When the local river dried up, the city was abandoned and was eventually overgrown by forest, with its inhabitants moving to the nearby town of Nakhon Chai Si. During the 19th century CE, the city was again inhabited. There have been numerous restorations in this stupa. The Phra Pathom Stupa consists of a stupa with four viharas, one having a standing Sukhothai style image of the Buddha that is eight metres in height (Miksic, 2007, p. 295). Some accounts compare the form of the stupa to Sanchi, and attribute the stupa to the third century BCE Asoka, identifying it

as part of his wider propagation across Asia. In the 19th century, King Mongkut, Rama IV, when he was a prince and a monk, went on pilgrimage to the stupa numerous times. At that time it had fallen into decay, so he resolved to restore it. When he acceded to the throne, he therefore instructed that it be restored by building an enormous chedi as a protective cover over the existing one. The name Phra Pathom chedi is credited to Rama IV (Paul, 1988). An early 20th century mural painting (see Figure 60) completed during the sixth reign of the Bangkok period shows a gap between the inner and outer stupa, although this, plus the idea that a hole once existed allowing pilgrims to glimpse ('peep') through to venerate the inner stupa, are popular legends bolstered by another version of the stupa's history that dates back to when it was called Phra Thom chedi, a 'Great Sacred Stupa of Suvarnabhumi'. At that time, it was in a poor state of repair and overgrown by forest, with its encasement ordered by Mongkut after he ascended the throne in 1851. While the stupa certainly had been previously renovated, in 1854 CE, the restoration of the ruined stupa, popularly seen to be 'magically charged' by the relics it contained, was undertaken. Given that the new stupa was reportedly three times the size of the earlier one, the bricks and stucco of the restored stupa physically contacted with the fabric of the ruin, countering the modern murals depicting a space between the two noted above (Byrne, 1995). After seventeen years, the chedi's reconstruction was completed in the reign of Rama V, in 1870. The original stupa (39 metres in height) was traditionally modelled after the great stupa at Sanchi, while the present stupa, which is about 127 metres in height, is one of the tallest stupas in the world, reflecting Sinhalese influence according to inscriptions (Paul, 1988). Soni noted that it is an example of encasement enveloping the original shrine with a space, fulfilling King Mongkut's wish to protect the relics (Soni, 1991). The author assumes that prior to King Rama IV restoring the stupa, Phra Pathom stupa at that time was surmounted by prang inspired by a Khmer prasat. After King Rama IV's encasement, there was a gallery path (see Figure 61) between the older and encased outer stupas. According to the drawing of Phra Pathom stupa (see Figure 62), it was probably first built around the 4th century, in the Suwannabhumi period. It was likely encased for the first time during the Dvaravati period, around the 10th century, and for the second time in the 15th century before being encased a third time during the reign of King Rama IV, in the 19th century (Myo Nyunt Aung, 2022).

In contrast to the Phra Pathom Stupa, according to the legend, there are three so-called ‘moathtaw stupas’ that may have been built by King Asoka in Bagan (Bo Kay, 1984). Like Phra Pathom, there is a space between the two stupas at Bagan, but these three stupas are much smaller. In Myanmar, some moathtaw stupas have a ritual space between the two stupas, while others have none; these numerous traditions are described in epigraphy and historical evidence of patronage by successive Myanmar kings from the Bagan to Yadanabon periods (Nyein Maung, 1972-2013).



Figure 59 Phra Pathom Stupa, Nakhon Pathom Province, Thailand
Note. The profile of the stupa is seen in this photograph, by K. Kirdsiri. Copyright
2022 by Krengkrai Kirdsiri.



Figure 60 Mural Painting of Phra Pathom Stupa in the Early 20 Century CE

Note. This painting shows the inner structure of the stupa. From Facts and Fiction: [The Myth of Suvāṇṇabhūmi Through the Thai and Burmese Looking Glass]. TRaNS: Trans –Regional and –National Studies of Southeast Asia, 6 (2) (July), p. 176, by N. Revire. Copyright 2018 by Nicolas Revire.

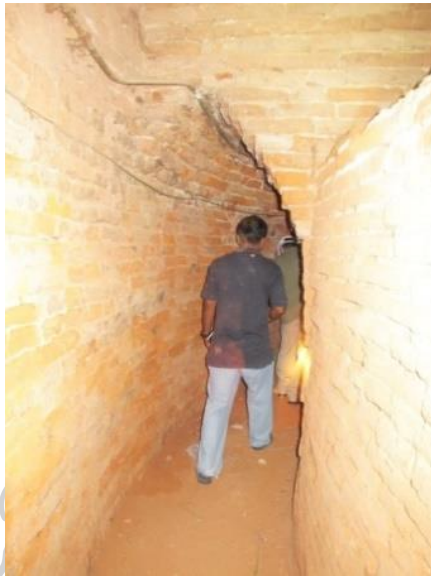


Figure 61 A Gallery Path Between the Older and Encased Outer Stupas at Phra Pathom Stupa

Note. The photograph shows the inner corridor. From Phāp phāinai ‘ong phra pathom čhēdī pen bun tā čhing čhing [Inner corridor of Phra Pathom Stupa], by Thaihitz, 2019, July 18 (<https://thaihitz.com>). Copyright 2019 by Thaihitz.

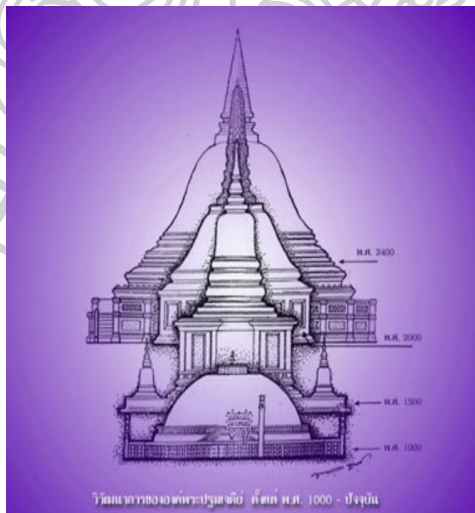


Figure 62 Drawing of Phra Pathom Stupa

Note. The drawing depicts the inner layers of the stupa. From Phāp phāinai ‘ong phra pathomčhēdī pen bun tā čhing čhing [Inner corridor of Phra Pathom Stupa], by Thaihitz, 2019, July 18 (<https://thaihitz.com>). Copyright 2019 by Thaihitz.

3.3.2 Wat Pa Kaeo

Wat Pa Kaeo (see Figure 63) is located to the southeast of Ayutthaya, north from Bangkok. According to legend, this temple was originally constructed by King U Thong (1350-69 CE), who founded Ayutthaya (Cushman, 2006, pp. 9-10). According to the Royal Chronicles of Ayutthaya, the King arranged for the cremation of two princes known as Chao Keo and Chao Thai. After cremation of their remains, the king constructed a temple named Wat Pa Kaeo, and a stupa and an assembly hall were built in their memory. During the reign of King Naresuan (1590-1605 CE) a large stupa was constructed in this temple to commemorate the King's auspicious victory over the Burmese crown prince in a battle including elephants. The stupa was called Phra Chedi Chaya Mongkhon, similar to the current name of the temple (Cushman, 2006, p. 31). It has been previously called Wat Pa Kaeo, Wat Chao Phraya Thai. After King Naresuan had encased and enlarged the temple and the principal chedi, the chedi was presumably given its new name, Wat Yai Chai Mongkhon - The Great Temple of Auspicious Victory (Myo Nyunt Aung, 2022).

Wat Pa Kaeo is located in a part of the ancient city known as Ayodhya. It is believed that this was the site of the ancient city of Dvaravati before King U Thong founded Ayutthaya in 1351. In earlier times, the site had been surrounded by a large moat. Traces of an ancient canal located to the east and west of the temple run parallel to Khlong Khao San, also towards the Pa Sak River. Traces of a seeming ancient reservoir have also been found at the southwestern side of the monastery. It is believed that Wat Pa Kaeo was built on a former Khmer temple complex. According to the history regarding the Khmer temple, there is the large moat which represented, for the Khmer, the oceans that surround the world. The temple was the residence of Buddhist monks who were ordained and trained in Ceylon (Sri Lanka), and who mainly practiced meditation. It was highly renowned as the monastery of the Supreme Patriarch (Vandenberg, 2016).

Wat Pa Kaeo is situated outside the city to the east. Although it housed a forest-dwelling order during the reign of King U Thong, its architectural layout corresponds to that of a town-dwelling order, like Wat Maha That. It is divided into Buddhavas,

or public areas, and Sanghavas, or private areas for monasteries. The Buddhavas comprise with a walled enclosure and the bell-shaped stupa was the main architectural feature of the complex, enclosed by a gallery enclosure and aligned with an ordination hall and a vihara on the east-west axis. The temple was likely surrounded by moats to the north, east, and south. The current bell-shaped stupa with Sinhalese inspiration was encased by King Naresuan (1590-1605 CE) in the second period of Ayutthaya architecture, and it enlarged the former one built by King U Thong. During the second period, an ordination hall was often located to the front or east of the stupa and a vihara was situated and faced to the rear or the west (Myo Nyunt Aung, 2022). The Sinhalese style, with the bell-shaped stupa, came in Ayutthaya via Sukhothai during the reign of King Borommatrailokkanat (1448-1488 CE), who shifted the capital to Pitsanulok, the former late-Sukhothai capital. To the northeast of the temple, there are ruins of an assembly hall oriented north-south that house a huge recumbent Buddha statue built during the reign of King Naresuan. There are also remains of two large square pavilions to the east of the stupa housing large Buddha statues, probably originally constructed with curved pyramidal roofs (Krairiksh, 1992).

Wat Pa Kaeo is one of the landmarks of the ancient city of Ayutthaya, and it is a very tall chedi in this area, but it is not a solid stupa; it has a shrine room and a secret cavity beneath the stupa in this chedi. There are smaller stupas at the corners around the bell-shaped principal chedi, which is built on a square base. The reliquary chamber where the relics are enshrined is visible inside the dome. The shrine room (see Figure 64) and secret cavity (see Figure 65) may have been built during the reign of the King U Thong (Myo Nyunt Aung, 2022). A second octagonal pedestal above the base was built to accommodate the bell-shaped dome. A rectangular gallery, which is enclosed by an outer wall, surrounds the main chedi. There are over twenty satellite chedis of various sizes around the monastic structures which enshrine the ashes of former sponsors of this temple, and smaller assembly halls. Stairs are located on the eastern side of its chedi, towards the first terrace, and continue inwards to the dome (Vandenberg, 2016). This stupa is 60 metres in height, with a huge square base. Clarence Aasen has suggested that this temple demonstrates similarities to the Myanmar style (Aasen, 1998).

Another significant Myanmar encased stupa is Shwezigon stupa at Makkhaya (see Figure 79), near Kyaukse. A stone inscription dating 1325 CE in this stupa documents that King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to make the structure larger and more elaborate, attaining 53.50 metres in diameter (Moe, 2008). According to the stone inscriptions, King Uzana encased and enlarged a number of stupas during his reign, regularly recording the diameters of the outer stupas. In Shwezigon stupa at Makkhaya (see Figure 79), for example, archaeological evidence confirms that there is no space between inner and outer stupas. The Nan Oo stupa stone inscription, dating 1329 CE, also describes that King Uzana enlarged and encased a previous small stupa, reaching 47.09 metres in diameter, named Nan Oo stupa (see Figure 80) at Myinsaing around Mandalay region (Nan Oo Stupa Stone Inscription, 2007). The original stone inscription was transliterated and translated by Dr. Maung Maung Lay (Retired Professor of the Department of Myanmar, University of Mandalay) and party in 2007. He was interviewed by the author on 20 October 2021. Another interview also took place with U Aung Kyaing, former Deputy Director General of the DANM, Mandalay, on 15 July 2007, during which he documented that the inner stupa had been clearly visible from a treasure hole on the northwest side of the upper part before repair. The absence of space between the inner and outer stupas was confirmed during its repair in 2004; neither a shrine room nor a secret cavity have, to date, been found in these stupas. Both are solid stupas. While Wat Pa Kaeo is not solid, these three stupas are classified as encased monuments. The bases of Shwezigon (see Figure 79) and Nan Oo stupas (see Figure 80) are square in shape with four corner stupas; the base of Wat Pa Kaeo is also square with four corner stupas. In this case, the design without, a gap, is seen both at Makkhaya and Nan Oo stupas in Central Myanmar. But exceptionally, a shrine room and secret cavity have been found at Wat Pa Kaeo in Central Thailand (Myo Nyunt Aung, 2022).



Figure 63: Wat Pa Kaeo (Wat Yai Chai Mongkhon), Ayuthaya, Thailand
Note. The stupa with a staircase is seen in this photograph, by K. Kirdsiri. Copyright 2022 by Krengkrai Kirdsiri.

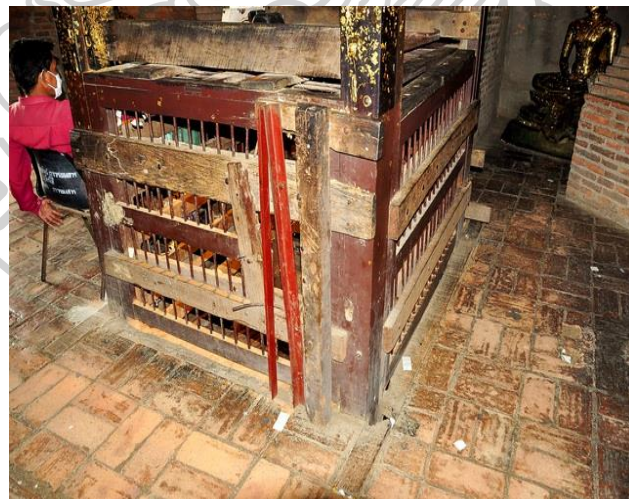


Figure 64 The Shrine Room Beneath the Stupa at Wat Pa Kaeo, Ayuthaya
Note. The photograph shows the inner shrine room. From Ruang ni mi chue wa: Wat Yai Chaiyamongkhon [The Story of Wat Yai Chai Mongkhon] [Video], by TNN24, 2018, January 20
 (<https://www.youtube.com/watch?v=ARI6suLmaLk>). Copyright 2018 by TNN24.



Figure 65 The Secret Cavity Beneath the Stupa at Wat Pa Kaeo, Ayuthaya

Note. The photograph shows the lower cavity. From Ruang ni mi chue wa: Wat Yai Chaiyamongkhon [The Story of Wat Yai Chai Mongkhon] [Video], by TNN24, 2018, January 20 (<https://www.youtube.com/watch?v=ARI6suLmaLk>). Copyright 2018 by TNN24.

3.3.3 Wat Phra Si Sanphet

Wat Phra Si Sanphet (see Figure 66) is located in Pratu Chai subdistrict, Phra Nakorn Si Ayutthaya district, Ayutthaya province. This temple is not only a significant historical site, but is also considered to be a spiritual center as it was a royal monastery for a long time. Wat Phra Si Sanphet is situated within the royal Palace grounds and it was exclusively used by members of the royalties. Because there are no monks residing there, when the Wat is used for royal ceremonies, the presiding monks have to be invited. The monastic structures are aligned on an east-west oriented axis, while the main structures comprise three stupas (Krairiksh, 1992, pp. 11-26) with their mandapas, the prasat, and the royal vihara or chapel presiding over all. The three stupas are built on a high platform with the later-constructed mandapas (square structures with a spire) situated at the eastern side of each stupa. The elevated platform is surrounded by a walled gallery, running from the west side of the royal chapel towards the eastern portico of the prasat, a cruciform structure. On both sides of the royal chapel are minor vihara, aligned north to south (Krairiksh, 1992, pp. 11-26). On the north side stands the Vihara Phra Lokanat (the Vihara of the Protector of the World) with the Vihara Phra Palelai (the Vihara of the Parileyyaka Buddha) on the

south. A parallel north-south alignment is formed by the ordination hall (Vihara Phra Palelai) and the Sala Chom Thong (east of Vihara Phra Lokanat). The bell tower is situated nearly in the axis, in front of the royal chapel (Vandenberg, 2016).

In 1492 CE, the first chedi on the eastern side was constructed by King Ramathibodi II (1491-1529 CE) (Cushman, 2006, pp. 18-19) to enshrine the ashes of his father, King Borommatrailokanat (1448-1463 CE). The second chedi, which is currently the middle one, was constructed at the same time as the first to enshrine the ashes of his elder brother, King Borommaracha III (1463-1488 CE). The two chedis are lined up on an east-west oriented axis. After eight years, a royal vihara was constructed in the same alignment with the chedis. After 40 years, the third (western) chedi was constructed by King Boromracha IV (1529-1533 CE) to enshrine the remains of his father, King Ramathibodi II (Cushman, 2006, p. 20). All three bell-shaped chedis were constructed on a rectangular platform and were built in the Sukhothai style derived from the Srivijayan stupa, characterized by superimposed pedestals. The stupika on the roof of the porch may have derived from Khmer architecture. The porches each have a niche in which standing Buddha images were placed on three sides. The porch on the eastern side gave access to the small sacred chamber in the interior of the chedi in which consecrated objects, the King's ashes, were contained (Krairiksh, 1992, pp. 11-26). The chedis of Wat Phra Si Sanphet demonstrate the beginning of a new architectural style, influenced by Sukhothai art, that abandons the prang-styled construction of the Early Ayutthaya period. The Royal Chronicles of Ayutthaya mention that King Borommakot ordered the complete renovation of Wat Phra Sri Sanphet in 1742.

The first chedi (the eastern chedi) was excavated by the Fine Arts Department, Thailand in 1932. During the archaeological excavations, a stupika comprising the eight smaller stupas, was unearthed. The outermost stupa had disintegrated, while the other seven stupas are now exhibited at the Chao Sam Phraya Museum. The stone stupika, when opened, yielded the seven layers of the miniature stupas, which were made of tin alloy, iron, gilt bronze, silver, gold, and crystal, likely to have contained the relics of the deceased king (Vandenberg, 2016). Archaeological excavations were undertaken to protect the buried objects from illegal excavation. The excavations

unearthed a square cavity beneath a smaller stupa in the eastern chedi, showing that the eastern chedi is one of the encasements at Wat Phra Si Sanphet. Although the excavation report does not mention any space between inner and outer stupas, the author assumes there was none. The cavity's walls were lined with metallic plates made of a tin alloy painted over with figures of disciples holding lotuses in their folded hands in attitudes of adoration believed to date to the construction of the chedi. Most of these paintings were badly damaged. In the cavity itself were a number of votive tablets of various sizes of Buddha images made of bronze, tin alloy, gold, silver, crystal and precious stones. All these objects were heaped around the stone miniature stupa within which the artefacts were discovered (Vandenberg, 2016). The sizes of the miniature stupas diminish to the innermost stupa. These documents indicate that there was an elaborate concept of the eight encased miniature stupas in this stupa, as well as the eastern encased chedi, during the Ayutthaya period, illustrating both the protection of the relics of the Buddha and ashes of kings beneath an encased stupa at the Wat Phra Si Sanphet, Ayutthaya province.

Some archaeological excavations in India and Sri Lanka have unearthed relic caskets such as a large round stone box with a green marble relic-casket inside recovered in Dharmarajika stupa, a copper relic casket found in Nandangarh stupa, a soapstone relic casket found in a stupa at Vaishali, and gold, and seven crystal and ivory relic caskets found in Amaravati stupa (Mitra, 1971). Relic caskets have also been found in Ruwanweli Dagaba. All of these relic caskets were found at the centre and bottom of the stupas in these countries, clearly to protect the relics and ashes from natural disasters and vandalism. These multiple layers of the reliquaries, which were made of various materials, are the concepts of the stupa encasements in these countries. Scenes from the life of the Buddha were painted on the walls of the chamber, and the sacred relics were solemnly sealed inside the chamber in Ruwanweli Dagaba, Sri Lanka (Ministry of Cultural Affairs, 1981, pp. 13-16). The paintings illustrating the disciples holding the lotus flowers can be seen in the cavity at the Wat Phra Si Sanphet, Ayutthaya (Myo Nyunt Aung, 2022).

Contrasting examples are seen in Myanmar stupas; one such example is the Shwe Kon Cha temple stone inscription (see Figure 317) dated 1141 CE at Bagan. This

describes how the grandson of King Kyansittha donated and enshrined gold, silver, copper, stone Buddha images and other rare material Buddha images in this temple. In this temple, it also records the placement and enshrinement of the relics of the Buddha in the two golden *patho* (miniature stupas), two silver *patho*, four sandalwood *patho*, two ivory *patho*, two cinnabar *patho*, five orpiment *patho*, and five stone *patho*, together with three golden umbrellas and nine white umbrellas inside the reliquary (Nyein Maung, 1972, Vol-1, pp. 143-151). This highlights how relic encasement was used to protect the security of the relics in a manner like a stupa encasement with Buddha images made of different raw materials and sizes enshrined in the relic chambers of some temples at Bagan that resemble the various substances enshrined at Wat Phra Si Sanphet, Ayuthaya, Thailand (Myo Nyunt Aung, 2022).

This custom is also seen in the Anantathuya Couple stone inscription (see Figure 318) located at the Minnanthu Lemyethna temple, dating to 1223 CE at Bagan, where it recorded that donors enshrined the relics of the Buddha encased by eight layers of relic caskets made of various materials such as sandalwood, glass, red sandalwood, gold, silver, gold with jewellery, ivory, and copper. The relic caskets were put in the stone *patho* (miniature stupa) (Nyein Maung, 1972, Vol-1, pp. 151-163). As with the Shwe Kon Cha, the Anantathuya Couple stone inscription shows the continuous practice of encasement to protect the relics of the Buddha since the Bagan era. The relics of the Buddha are enshrined and encased by the multiple layers of reliquaries and miniature stupas made of the various substances in the Bagan stupas comparable to the archaeological evidence at Wat Phra Si Sanphet, Ayutthaya of eight encased miniature stupas. The sizes of the miniature stupas and reliquaries found at Wat Phra Si Sanphet, Ayutthaya, Thailand, diminish to the innermost stupa and reliquary. In comparing these with the sizes of the miniature stupas and reliquaries found at Bagan, Myanmar, a similar pattern of diminishing to the innermost stupa and reliquary is seen from the author's field observations and documentary research (Myo Nyunt Aung, 2022).



Figure 66: Wat Phra Si Sanphet, Ayutthaya, Thailand
Note. The eastern stupa, middle stupa, and western stupa built on a rectangular platform at Wat Phra Si Sanphet are seen in this photograph, by K. Kirdsiri. Copyright 2022 by Krengkrai Kirdsiri.

3.3.4 Wat Phra That Chae Haeng

Wat Phra That Chae Haeng (see Figure 67) is situated on a low hill to the southeast of Nan province. It is considered the most sacred shrine of Nan province and the center of the local veneration. It is situated about 750 metres from the Nan River and 180 kilometres to the east of Chiang Mai. The wat consists of the two emerald colored stained glass decorations laid on a pedestal in both sides of the structure, and, inside, a beautiful altar with three large sculptures of the seated Buddha, with the largest being

in the center. The wall behind is black with sparkling golden lotus flowers. It was founded in 1357 CE by Chao Phraya Kan Muang. There is a square pavilion located inside the inner walled enclosure that is distinctive to Wat Phra That Chae Haeng (Amranand & Warren, 2000).

According to an official record at the court of Nan written in 1894 CE, the first stupa was constructed on a hill, and seven relics of the Buddha with twenty gold and twenty silver amulets were enshrined in this stupa to cover a pit. During a period of 489, the stupa was twice reduced to ruins similar in size to an anthill. In 1421 CE, the new governor constructed a 12 metre high stupa and encased the remains of the first stupa. After eight years, the second stupa was encased by a new structure (20 metres in diameter, 34 metres in height) erected by a new governor. However, the stupa's encasement was not always a response to ruin, with major restorations undertaken in 1429, 1560, 1611, 1629, 1795 and 1820; it was also re-surfaced with gold leaf in 1625 CE. In 1611, the dismantling and reconstruction of the top half of the stupa, which erected more than 46 metres, was conducted. The chronicle says that, in 1615, it was gilded, consuming about 2 kilograms of gold leaf (Byrne, 1995, pp. 266-281). This stupa is currently covered with copper sheets, also a substitute for gold. Minor stupa restorations often entail the application of a fresh skin of stucco or cement. The chronicle also indicates that relics of the Buddha, and gold and silver amulets were enshrined inside the first stupa and upon multiple encasements, highlighting the role of patronage in protecting the enshrined relics of the Buddha and amulets. Although there were the detailed records of dates and the relics deposited, however, it had no records detailing whether a space was left between the inner and outer structures (Myo Nyunt Aung, 2022).

In contrast, the records of the Shwedagon stupa (see Figure 98) in Myanmar describe multiple encasements layer by layer without any space in between (Soni, 1991). In this regard, the encasements are similar to Wat Phra That Chae Haeng in Thailand. The history of Shwedagon stupa also records that the sacred hairs brought by the two brothers, Taphussa and Bhallika from Okkala (Yangon), are enshrined in the relic chamber. It was further encased and gilded by several subsequent Myanmar Kings. The present stupa is 99.36 metres in height with a square plinth (Aung Thaw, 1972).

There have been multiple encasements and several restorations, plus a re-gilding of the entire structure, like Wat Phra That Chae Haeng in Thailand. The evidence of size and height suggests that, like the Shwedagon, Wat Phra That Chae Haeng may have had no space between successive encasements (Myo Nyunt Aung, 2022).



Figure 67 Wat Phra That Chae Haeng, Nan Province in Northern Thailand
 Note. The elevation of the stupa is seen here, by K. Kirdsiri. Copyright 2022 by Krengrai Kirdsiri.

3.3.5 Wat Phra That Hariphunchai

Wat Phra That Hariphunchai (see Figure 68), a massive Buddhist temple complex with numerous monuments dating from various periods, is located near Mae Kuang river in the centre of Lamphun in northern Thailand, about 28 kilometres to the southeast of Chiang Mai. Lamphun is one of the oldest cities in Thailand and the Hariphunchai king is said to have built a stupa there in the 9th century CE and enshrined a hair of the Buddha. Wat Phra That Hariphunchai, in a Lanna style, was built on the earlier Mon stupa (Gray & Ridout, 1995, p. 244).

The present complex was founded by Hariphunchai King Athitayarai in 1044 CE. The most inner stupa was encased and enlarged in 1443 CE, and comprises repousse Buddha statues on bell-shaped stupa dating from the early Lanna classic period (Stratton, 2004, p. 60). The Suwanna stupa, with a height of 46 metres and located in the northwest of the compound, was built in 1418 CE. In 1443 CE, this temple was encased and enlarged by King Tilokaraja of Lanna Kingdom, Chiang Mai (Gray & Ridout, 1995, p. 244). There are numerous Lanna style structures that were built in the middle of the 15th century CE. There is also a Lanna Buddha image of the 15th century CE housed in *wihan*. A library with a staircase featuring naga images, built in 19th century CE, can also be found here (Amranand & Warren, 2000). These records confirm the continued patronage of the main stupa, one of the most prominent encased stupas in Lamphun.

The design is the masterpiece of King Tilokaraja of Chiang Mai, who combined the Bagan style and Sinhalese bell-shaped architecture to create a unique Lanna style. The shape of the outer base is square with three projections on each corner, and the shape of the inner base may have been circular. Bagan style design consists of square terraces with two or three projections and numerous cornices, while Sinhalese style features the bell-shaped dome and square crowning block, with projections between the finial and its bell-shaped dome (Myo Nyunt Aung, 2022).

In contrast, the design of the encasement is very similar to Sutaungpyi temple (No.289) (see Figure 116), one of the encased stupas at Bagan, Myanmar. The outer base at Sutaungpyi temple (see Figure 115) is square with two projections, while the inner base may have been circular. The original inner stupa of Wat Phra That Hariphunchai was built in the 9th century CE, while the outer stupa was built in 1443 CE. The architectural typologies in the Bagan period indicate that the inner stupa of Sutaungpyi temple may date to the 9th century CE, while outer stupa was built in the 13th century CE (Pichard, 1993, Vol-2, p. 47) with no space between them because both, including joints, are visible from the outside. Another two encasements in the San Pa Tong area and at Wat Klang Muang, Lampun area, Thailand have no gap between the two stupas, with the inner stupas visible from the outside (Byrne, 1995, pp. 266-279). In addition, Sinhalese-encased stupas of this era in Sri Lanka mostly

have no space between the two stupas. In Wat Phra That Hariphunchai, in part based on Sri Lankan customs, there likewise appears to have had no space between the inner and outer stupas (Myo Nyunt Aung, 2022).



Figure 68: Wat Phra That Hariphunchai, Lamphun Province in Northern Thailand
Note. The elevation of the stupa with projections is seen here, by K. Kirdsiri.
Copyright 2022 by Krengkrai Kirdsiri.

Table 5: Comparative Case Studies of the Encased Monuments in Thailand






Serial No.	Name of Monuments	Location	Date of the first establishment	Characteristics of the original stupa	Date of Encasement	Characteristics of the encased stupa	Enshrined Objects	Photos of Monuments
1	Phra Pathom Stupa	Mueang Nakhon Pathom District, Nakhon Pathom Province	3 rd century BCE	The original stupa 39 m in height, modelled after Sanchi stupa	Dvaravati period, 15 th century CE, 19 th century CE	Three Encasements	Relics of the Buddha	
2	Wat Pa Kaeo	Phra Nakhon Si Ayutthaya District, Ayutthaya Province	Built by King U Thong in the 14th century CE	It housed a forest-dwelling order during the reign of King U Thong.	King Naresuan (1590-1605 CE) in the second period of Ayutthaya architecture	Originally it has a shrine room and a secret cavity beneath the stupa.	The interment of the remains of two princes known as Chao Keo and Chao Thai.	
3	Wat Phra Si Sanphet	Phra Nakhon Si Ayutthaya District, Ayutthaya Province	Built by King Ramathibodi II in 1492	the older one may have been the multi-storied prasat type	King Borommakot encased and renovated in 1742	The cavity's walls were lined with metallic plates made of a tin alloy	A stupika comprising the eight miniature stupas likely to have contained the relics of the deceased king	
4	Wat Phra That Chae Haeng	Phu Piang District, Nan Province	Founded by Chao Phraya Kan Muang in 1357 CE	The most sacred shrine of Nan Province	The new governor encased and renovated in 1421 CE.	Multiple Encasements	Seven relics of the Buddha with twenty gold and twenty silver amulets	
5	Wat Phra That Hariphunchai	Mueang Lamphun District, Lamphun Province	Hariphunchai king is said to have built a stupa in the 9 th century CE	Mon earlier stupa	King Tilokaraja of Lanna Kingdom enlarged this temple in 1443 CE.	Repousse Buddha statues on bell-shaped stupa dating the early Lanna classic period	Hair of the Buddha	

Table 6: Coordinates of the Case Studies of the Encased Monuments in Thailand

No	Name of Monuments	Township / District	State	Latitude	Longitude
1	Phra Pathom Stupa	Mueang Nakhon	Nakhon Pathom Province	N: 13.819°	E: 100.060°
2	Wat Pa Kaeo	Phra Nakhon Si	Ayutthaya Province	N: 14.345°	E: 100.592°
3	Wat Phra Si Sanphet	Phra Nakhon Si	Ayutthaya Province	N: 14.355°	E: 100.558°
4	Wat Phra That Chae Haeng	Phu Piang District	Nan Province	N: 18.758°	E: 100.791°
5	Wat Phra That Hariphunchai	Mueang Lamphun	Lamphun Province	N: 18.577°	E: 99.007°

3.4 The Encased Buddhist Monuments at Other Places outside Bagan in Myanmar

The encased Buddhist monuments including the encased Buddha images have been found in various parts of Myanmar. These encased structures were mostly found in six regions being Magway, Sagaing, Mandalay, Bago, Ayeyarwady and Yangon and three states including Rakhine, Shan, Kachin in Myanmar (see Figure 69). The largest concentration of encased Buddhist temples and images is around Kyaukse area, perhaps a reflection of its crossroads location. Most of them are the encased moathtaw stupas, but other encasements are commonly encased stupas in these areas in Myanmar. The encased group of stupas, one of the architectural typologies of encasements, was found at Sintgu village, Nyaung Oo district, Mandalay region. In these regions, some encased monuments include the inscriptional evidence, but some had only the Myanmar chronicles, rather than the exact chronological history of the monuments and the traditions. Some of them can be clearly visible from the outside

when these encased structures have been damaged by the natural disasters, vandalism, and age (Myo Nyunt Aung, 2015). In this dissertation, the twenty-two encased structures located in four regions (Magway, Sagaing, Mandalay, Yangon) and two states (Shan and Kachin) in Myanmar, are only described. In this section, there are three encased monuments, which are recently currently encased by the outer structures. These encased structures are Moatsotaung stupa in Magway region, Lekyun Setkyar Diparaung stupa in Sagaing region, Tein Lei Alotawpyi temple in Mandalay region. These are strong evidence of the current Buddhist practice of stupa encasement remaining in Myanmar. Two or three encasements have been found on each site in these regions, but the author will describe the important encased monuments with their peculiarities and elaborateness. A few can be seen from the outside, while some of them cannot be seen from the outside. The encased Buddhist monuments with the archaeological, architectural, and historical evidence and where they exist, stone inscriptions in situ regarding the encasement, are included here. The tradition and history of stupas said that there are over nine moathtaw stupas, which might have been built by King Asoka, located at Pakokku district, Magway region. Finally, to note that among the encased structures in Myanmar, the history of the stupas recorded that some of donors of inner and outer structures are relatives. As in the previous sections, each encasement is summarized with the available information to highlight the chronology and technical aspects. This is drawn from the author's survey and interviews with local historians and a range of chronicles rather than systematic excavation given their sacred character in the Buddhist culture of Myanmar. Dating is thus often difficult so that the examples are arranged randomly rather than chronologically or from north to south. This is further complicated by the ongoing popularity of encasement seen in Myanmar more than other places included in this study. They do, however, begin with the examples attributed to King Asoka and then move to other types.

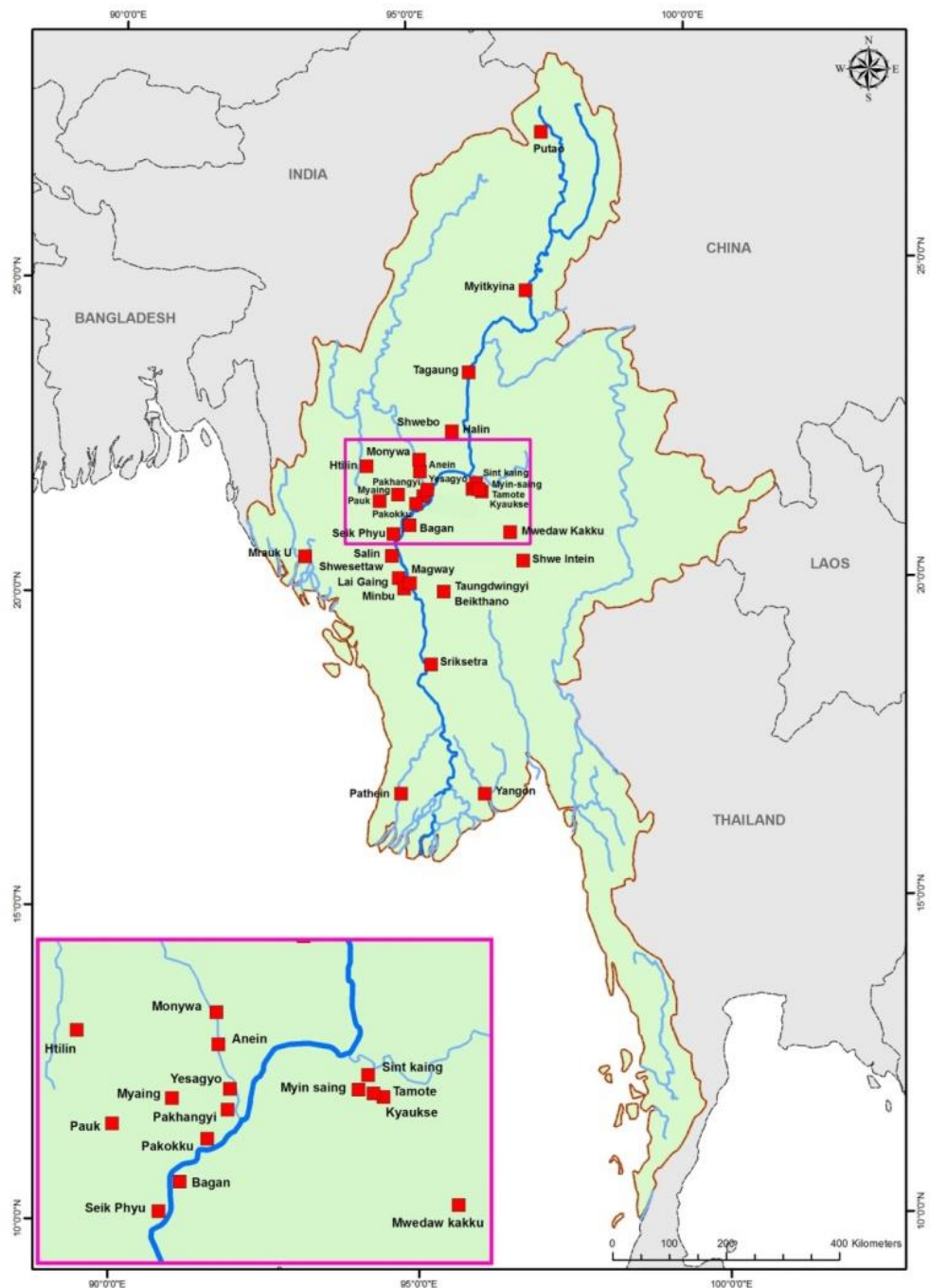


Figure 69: Map Showing the Encased Monuments in Various Districts of Myanmar
Note. Encased Monuments are located six Regions and three States in Myanmar. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Research and Training Section, Department of Archaeology and National Museum, Taungdwingyi. Copyright by the Author.

3.4.1 Kaung Hmu Lon Stupa

Kaung Hmu Lon stupa (see Figure 70) is situated on the eastern bank of Malikka River, Kaung Hmu Lon village, Machanbaw township, Putao district, Kachin state in the northern end of Myanmar. It lies 1813.73 kilometres to the north of Yangon, 19.31 kilometres to the north of Machanbaw, and 16.09 kilometres to the east of Putao. This stupa was built on a circular mound named Hinthagon and was also called as Shwe Sutmin stupa. It is 32.92 metres in height, 41.15 metres in circumference of base, and 96.16 metres in circumference for the pedestal. A suspension bridge measuring 213.36 metres in length and 2.74 metres in breadth has been opened near the stupa on 28 November 2010. There is a traditional rhyme regarding the famous Buddhist stupas in Myanmar. It says that three stupas - Kaung Hmu Lon in upper part, Shwezigon in middle part, and Shwedagon in lower part - are the most renowned stupas in Myanmar because of the relics contained and are the most distinguished, encased Buddhist stupas in Myanmar. For Kaung Hmu Lon stupa, according to the legend, it is believed that original inner stupa is one of the stupas which may have been built by King Asoka. According to the history, three relics of the Buddha are enshrined in the original stupa. In this place, King of Sambur, one of the previous lives of the Buddha lived and died on this mound. So King Asoka selected to build the stupa and enshrined the relic of the Buddha in this stupa. The bell-shaped stupa was built on the cylindrical base. There are two terraces with twelve niches on each terrace to house the Buddha images. There are four shrine halls with four entrances to house the four Buddha images representing the Buddha of the present world cycle who had already attained enlightenment. These four Buddha images are Kakusandha in the east, Konagamana in the north, Kassapa in the west, and Gotama in the south in this stupa. According to the History of the Kaung Hmu Lon stupa, Sawbwa Sao Lwan Nwe (Shan Chief of former times) may have encased and restored the original stupa around the 3rd century BC. Swabwa Sao Kyan Main Hein Hauk may have enlarged and restored this stupa measuring 4.11 metres in height and he enshrined a golden brick 1 viss in weight in the stupa during his reign. Mannay Sawbwa restored again it to 12.34 metres in height. In 1818, Lonekyain Sawbwa Sao Pha Mya Aung enlarged this stupa measuring 22.86 metres in height. In 1878, Loatkhon Sawbwa Sao Phakhan

Saing encased and enlarged again it. In his reign, he has encased 45.72 centimetres between two stupas and 29.26 metres in height. In 1955, Sawbwa Sao Phaman has again restored measuring 26.06 metres in height. Finally, it has been encased and enlarged till to 32.92 metres in height in 2002 (Myat Min Hlaing, 2003). The recorded history of this stupa indicates that there may have eight encasements for this stupa to protect the original relics of the Buddha. The original inner stupa cannot be viewed from the outside now.



Figure 70 Kaung Hmu Lon Stupa in Putao District, Kachin State in the northern end of Myanmar

Note. Two terraces with twelve niches on each terrace to house the Buddha images can be seen in this stupa.

3.4.2 Tamote Shinpin Shwegugyi Temple

Tamote Shinpin Shwegugyi temple (see Figure 71 & 72) is situated at the ancient city of Tamote, Kyaukse District, Mandalay Region. Tradition said that there was a small stupa which may have built by the King Asoka in 3rd century BCE and it was encased by the King Anawrahta in 11th century CE as one-storeyed building. In the 12th

century CE, King Narapatisithu encased, renovated and built the two- storeyed temple decorated with the beautiful stucco carvings. There are some extraordinary stucco works which are the unique workmanships still left in this temple. The inner temple which was renovated and built by the successive Kings in Bagan period, was encased by the King Uzana in 14th century CE (Pinya period). The outer monument is a huge stupa type, which is similar to the Shwezigon stupa at Bagan. In 1915, the small stupa, which is 6.40 metres in height was built by U San Htwar on a ruined stupa during the colonial times. In 1993, the northern entrance of the inner two-storeyed temple dating in Bagan period was recovered by the monk named U Sandawbatha. After the removal of the outer stupa in the Pinya period, the inner temple with the artistic and excellent stucco decorations belonging to the Bagan period, appeared in 2009 (Win Maung, 2001; Aung Kyaing, 2017). Many valuable artifacts such as a dolomite plaque, terracotta votive tablets, encased Buddha statues, the inscriptions on stucco plaques, a number of stucco figurines and five-fifty jataka plaques illustrating the scenes from the previous lives of Buddha in stucco have been unearthed at a unique site of Tamote Shwegugyi temple in Myanmar. In this temple, the triple encased Buddha images can be found, with the fifth encasements visible if there was an Asoka's stupa, which is the most inner stupa. The author considers that it is one of the most beautiful, elaborate encased temples in Myanmar. The excavated finds and the archaeological remains indicates that Tamote Shwegugyi temple had been encased and repaired many times in successive Myanmar kings in Bagan period and Pinya period. According to the iconography of Buddha Images in Bagan period, it was known that the first inner Buddha image belongs to early 11th century CE and the secondary Buddha image belongs to late 11th century CE, while the third one belongs to late 12th century CE (see Figure 73) (Win Maung, 2001). Archaeological evidence confirms that it is a unique encased monument with three encasements of the Buddha images dating from early 11th to late 12th centuries CE.



Figure 71: Tamote Shinpin Shwegugyi Temple (Front View) at the Ancient City of Tamote, Kyaukse District, Mandalay Region
 Note. The original unique stucco decorations in Bagan period can be seen here.

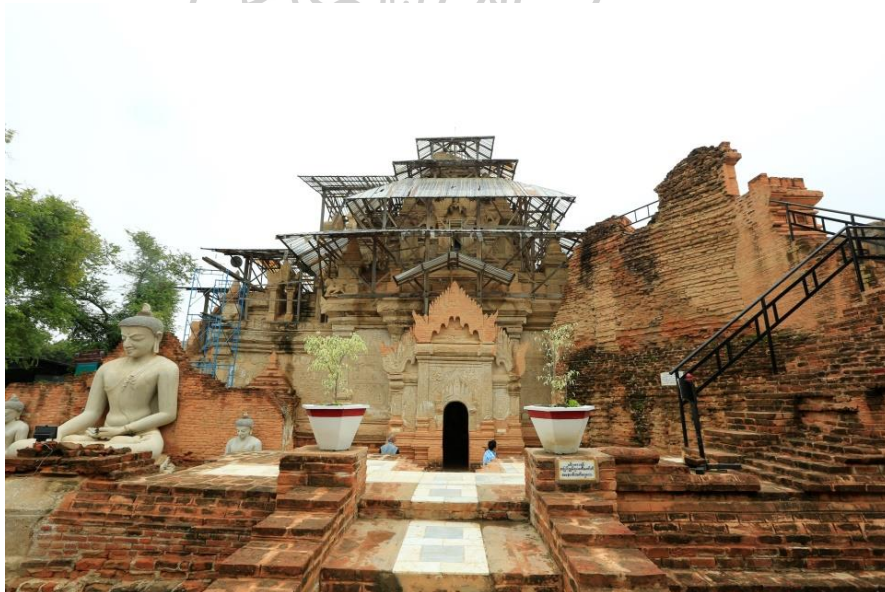


Figure 72: Tamote Shinpin Shwegugyi Temple (Side View) with outer monument at the Ancient City of Tamote, Kyaukse District, Mandalay Region
 Note. The original unique stucco decorations with outer monument in Bagan period can be seen here.



Figure 73: Three Encasements of the Buddha Images from Tamote Shinpin Shwegugyi Temple

Note. The different iconography of the encased Buddha images in Bagan period can be seen in this temple.

3.4.3 Shinpin Shwe Sutthwa Temple

Shinpin Shwe Sutthwa temple (see Figure 74) is located near Nyaung Shwe village, 8 kilometres to the west of Kyaukse district, Mandalay region. Tradition said that it is encased and it is one of the Moathtaw Zedis which may have built by King Asoka. This Moathtaw stupa was subsequently encased by larger stupas built by the successive Myanmar Kings so that there was a fifth encased Buddha statue in this temple. The original stupa was firstly encased by King Anawrahta (1044-1077 CE). The most inner one belongs to Bagan period, while the rest Buddha images were encased by the successive donors in post Bagan period such as Pinya, Inwa, Nyaungyan, and Konbaung period (see Figure 75 & 76) (Moe (Kyaukse), 2009). They did not want to remove the previous Buddha images so that all of these images were subsequently encased by each donor. The author assumes that if there are five encasements of the Buddha images (see Figure 74) in this temple, the most outer temple may have been the fifth encased temple. It is one of the renowned encased temples in Myanmar though it is a medium size temple around Kyaukse area.



Figure 74: Shinpin Shwe Sutthwa Temple in Kyaukse District, Mandalay Region
Note. Five encasements of the Buddha images can be seen in this stupa.

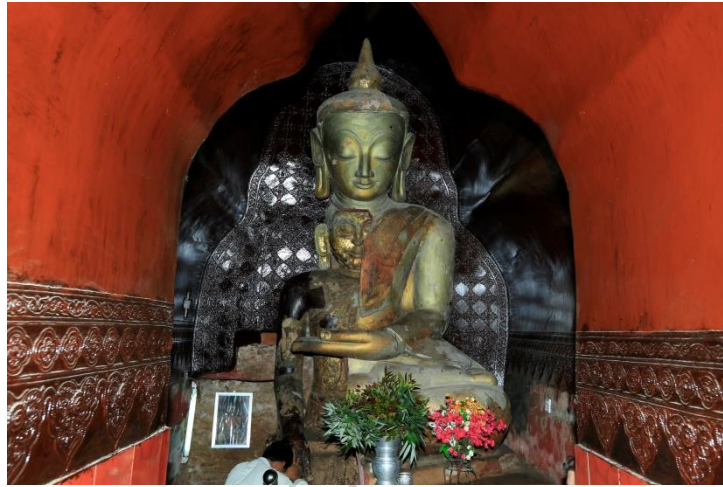


Figure 75: Encased Buddha Images found at Shinpin Shwe Sutthwa Temple

Note. Two encasements of the Buddha images in post Bagan period can be seen here.

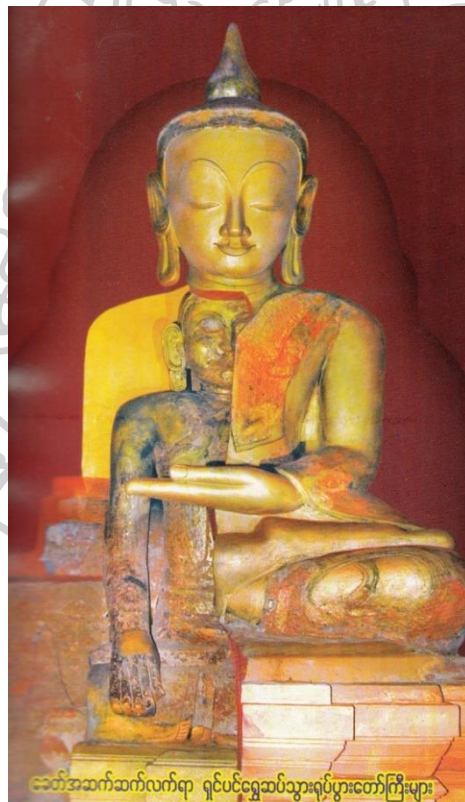


Figure 76: Encased Buddha Images found at Shinpin Shwe Sutthwa Temple

Note. Two encasements of the Buddha images in post Bagan period can be seen here.

3.4.4 Tein Lei Alotawpyi Temple

Tein Lei Alotawpyi temple (see Figure 78) is situated at the complex of Yadana Thein monastery on Webu road, Phaung Ywa-Ywa Thit Ward, Kyaukse district, Mandalay region and lies to the north of Shwe Tha Lyaing Mountain. According to the original Mon stone inscription, an original temple (see Figure 77) measuring 6.7 x 6.7 metres, which was originally called Ko Ahton Tein Lei temple, faces to the north and the outer temple measuring 11.28 x 11.28 metres, which was currently encased and enlarged by the chief monk named U Kaylartha, consists of a circumambulatory corridor 2.4 metres in breadth. According to the Mon stone inscription translated by Naing Ba Shein (Mon Scholar) on 21 December 2018, the inner temple and Vada Ordination Hall were built by the monk named Ashin Uttarajiva in the 12th century CE. Both of these buildings are located in the compound of Yadana Thein Kyaung monastery. An original Mon stone inscription was inscribed by the Ashin Uttarajiva during this period. The author interviewed the monk named Ashin Kaylatha in this monastery regarding the encasement on 11 September 2021; he said he would like to build what is currently the outer temple to be larger and more elaborate and renowned than the original inner one. This temple, one of the current encasements found in Myanmar, supports that the traditional custom of the stupa encasement still remains until now.



Figure 77: Original Inner Stupa of Ko Ahton Tein Lei Temple at Kyaukse, Mandalay Region

Note. Current encasement under construction can be seen in this stupa.



Figure 78 Tein Lei Alotawpyi Temple in the complex of Yadana Thein Monastery, Kyaukse District, Mandalay Region

Note. The elevation of the current stupa encasement can be seen here.

3.4.5 Shwezigon Stupa

Shwezigon stupa (see Figure 79), which is located at the ancient city of Makkhaya, Aebya village, Sint Kaing township, Kyaukse district, Mandalay region, is one of the encased stupas in Pinya period (14th century CE). Tradition said that it may have been copied from the Shwezigon stupa, one of the encased stupas at Bagan and the Shwezigon stupa at Pinya. It is very similar to those stupas and there are likewise three receding terraces surmounted with the bell-shaped dome in this stupa. Originally there were the glazed plaques illustrating the previous lives of the Buddha with the name of the stories, but most of them are stored at the monastery near the stupa so only a few of them still survive in situ. There is an original stone inscription regarding the history of this stupa, which was found at the northern entrance of Mingyi Yannaung Gu (cave) to the southwest of Shwezigon stupa on 23 April 2008. Firstly, this stone inscription was translated by U Win Maung (Tampawaddy). According to the Makkhaya Shwezigon stupa stone inscription, it recorded that the secondary donor named King Uzana would like to build larger than the inner stupa named Moathtaw stupa, which may have been built by the King Asoka. The outer stupa which has 46.63 metres in diameter at the base has been built by the King Uzana in 1325 CE. The inscription describes that in order to last five thousand religious years, he donated twenty-seven pes of land (1 pes = 1.75 acre), forty slaves for this stupa and four-fifty pes of land for a monastery near the stupa. In 1354 CE, Taung Kyaung Nan Twin Mahahte (King Uzana as a monk) donated one thousand five hundred toddy-palm trees for this stupa, monastery, Thein Phaya (Ordination Hall), and west monastery (Mingyi Yannaung Gu) in order to offer for food and light of the meritorious deeds. Finally he prayed to be a Buddha, mentioning in the inscribed stone (Moe (Kyaukse), 2008). The outer stupa has been restored in later times so that the inner stupa cannot be viewed from the outside. Lastly it was restored in 2009 and is currently 60.96 metres in length on each side at the base and 41.76 metres in height. Inscriptional evidence indicates that this stupa is one of the important encased stupas in Myanmar. It also proves that the secondary donor's concept and aim is to be larger than the original one.



Figure 79 Shwezigon Stupa at the Ancient City of Makkhaya, Kyaukse District, Mandalay Region

Note. Three receding terraces with staircases and corner stupas can be seen in this stupa.

3.4.6 Nan Oo stupa

Nan Oo stupa (see Figure 80) is located at the ancient city of Myinsaing, Kyaukse district, Mandalay region. It is the most renowned and huge encased stupa with inscriptional evidence in this region. An original stone inscription regarding the history of this stupa was found about 182.88 metres to the east of the stupa in 1987. Tradition said that the inner stupa may have been built by the King Athin Khaya, an uncle of King Uzana during the Pinya period. Finally it was restored around 2004 and before restoration, an original inner stupa could be clearly viewed from the treasure hole on the western side of the upper part. Now this stone inscription was housed inside an inscription shed to the east of the stupa since 1988. There are three receding terraces surmounted with the bell-shaped dome. The shape of the stupa is also very similar to the Shwezigon stupa at Bagan. Firstly, the original stone inscription was

transliterated and translated by Dr. Maung Maung Lay (Retired Professor of the Department of Myanmar, University of Mandalay) and party in 2010. He has been interviewed regarding the Nan Oo stupa stone inscription on 20 October 2021. According to the stone inscription, the outer stupa was built and encased by the King Uzana in 1329 CE in order to be larger than the original smaller one donated by the first donor. Originally the outer stupa which has 47.09 metres in diameter at the base has been built by the King Uzana. In order to last five thousand religious years, he donated the many pes of land (1- pe = 1.75 acre) and the slaves for this stupa. During this period, there are other stupas such as Kyettin stupa, Taung Phyu stupa, Lettheshe stupa, Taungshay stupa, and Taung Myauk stupa around Nan Oo stupa. The stone inscription describes that individuals also donated slaves, lands, toddy-palm trees, banana plants for these stupas (Nan Oo Stupa Stone Inscription, 2007). U Aung Kyaing, former Deputy Director General of the DANM, Mandalay, was interviewed regarding the encasement of this stupa on 15 July 2007. The inner stupa was at that time clearly visible from the treasure hole on the northwest side of the upper part before restoration. It was entirely restored with the public donations and the supervision of the DANM in 2004 and the renovation works including the crowning the umbrella was totally completed in 2009. Around the terraces of the outer stupa, there are, set in panels, glazed plaques illustrating the scenes from the previous lives of the Buddha. Some of the plaques still remain and most of them have been entirely disappeared in this stupa. There are three receding terraces surmounted with the bell-shaped dome. Epigraphic records indicate that the secondary donor would like to build a larger one than an original inner stupa, making it one of the distinguishable encased stupas in Myanmar. According to the tradition and history of this stupa, it is thought that the donors between inner and outer stupas may have been relatives.



Figure 80 Nan Oo stupa at the Ancient City of Myinsaing, Kyaukse District, Mandalay Region

Note. Three receding terraces with staircases and corner stupas can be seen here.

3.4.7 Phaya Thonzu Stupas

Phaya Thonzu stupas (three stupas) (see Figure 81) are located at Sintgu village, Nyaung Oo district and lie 25.75 kilometres to the south of Bagan. Sintgu village is one of the 19 Pyu villages which founded at Bagan in the 107 CE (Aung Kyaing (Minbu), 2007). A few monuments built in the Bagan period can be found in this site. Local people said that after the removal of the collapsed larger stupa, three small stupas dating to the Bagan period were uncovered in 1960 and some people called them Pawdawmu stupas which mean new appeared stupas. Tradition said that these three stupas were built by three sisters and before the removal of the outer stupa, the larger outer stupa was called Phaya Thonzu (three stupas) by the local people. It was said that this was a wonderful thing for their villagers. Tradition said that according to the dream of the monk named U Kaythaya at Sintgu monastery, the outer stupa had been removed over seventy years ago. Among the three stupas, the northern stupa is a

square base in shape (3 x 3 metres), while the southern two stupas are the circular base in shape. Each stupa is 3 metres in diameter and the distance between each stupa only 0.6 metre in length (Myo Nyunt Aung, 2015). All of these stupas have the original shapes still remaining in this group and it is an example of the encased group of stupas. Three stupas are located on the same plinth and they are encased by a larger single stupa. These stupas include one of the five types of encasements only found at Bagan. Tradition said that donors of three inner stupas are sisters and that the donors between inner and outer stupas may have also been relatives.



Figure 81 Phaya Thonzu Stupas (Three Stupas) at Sintgu Village, Nyaung Oo District, Mandalay Region
Note. Original inner three stupas in Bagan period can be seen here.

3.4.8 Lekyun Setkyar Diparaung Stupa

Lekyun Setkyar Diparaung stupa (see Figure 82) is situated about 2.5 kilometres to the west of Shwebo, Mingon village, Shwebo township, Shwebo district, Sagaing region and lies on the road from Shwebo to Seikkhon. It is located inside the southeast of the Kyaung Taik Gyi monastery to the west of Mingon village. This stupa is one of the current encasements in Myanmar. The original stupa belongs to the Nyaungyan period and it has been encased and enlarged by U Thein Win, Thuzar ward from Shwebo in 2015. The present outer stupa is 12 metres in diameter and the square

plinth with a staircase is 15 metres on each side and 1.8 metres in height. There are three receding terraces surmounted with the bell-shaped dome. Both of the inner and outer stupas are circular in shape. The author interviewed with U Thein Win, the donor of the outer stupa, regarding this inner stupa and encasement of the outer stupa on 28 September 2020. U Thein Win said that according to the instruction of U Sandar Thiri, a well-known hermit of this region, he always said that when you have a chance to repair a Buddhist stupa, you never destroy the older stupas. You need to encase and enlarge to the older ones. If there are the relics of Buddha and monks, and any valuable things inside the inner stupa, it means that you have entirely enshrined and protected all of them when you have encased and enlarged the original stupa. U Thein Win explained that when he got an opportunity to repair a stupa, he successfully completed and encased this inner stupa within six months. Thus he follows and retains the traditional belief and custom of the encasement so that in this area, the current encasement can be found.



Figure 82 Lekyun Setkyar Diparaung Stupa, Shwebo District, Sagaing Region
 Note. Current encasement of the outer stupa can be seen here.

3.4.9 Khemar Thiwun Stupa (No.088)

Khemar Thiwun stupa (No.088) (see Figure 83) is situated inside the Khemar Thiwun Monastery to the west of the inscription shed of the DANM at Halin, Wetlet township, Shwebo district, Sagaing region. It is a medium size stupa with a height of 10.69 metres. According to the architectural typologies, the inner stupa belongs to the Nyaungyan period, while the outer stupa dates to the Konbaung period. There are three receding terraces surmounted with the bell-shaped dome, which was based on the square plinth. The upper shrine faced to the east on third terrace. Four lion statues are made at the corners of the plinth and Kalasa pots (urn profile pots) are at the corner of the first and second terraces. Four satellite stupas can be seen at the corner of the third terrace (DANM, 2016b). The inner stupa can be clearly seen from the outside, when the upper parts of the outer stupa including the stairway were damaged before restoration. Finally, it was restored in 2012 before Halin Cultural Heritage Sites was inscribed as a World Heritage Site. Archaeological evidence confirms that it is one of the encased stupas built in the post Bagan Nyaungyan and Konbaung periods in this region.



Figure 83 Khemar Thiwun stupa (No.088) inside the Khemar Thiwun Monastery at Halin, Wetlet Township, Shwebo District, Sagaing Region

Note. Encasement in Konbaung period can be seen at Halin.

3.4.10 Thonpanhla Stupa (No. AN-041)

Thonpanhla stupa (No. AN-041) (see Figure 84) is situated to the southeast of Anein village, Chaung U township, Monywa district, Sagaing region. Tradition said that the most inner stupa may have been built by King Asoka in 218 BCE as one of the eighty-four thousand stupas on the Jambudipa Island. The inner stupa has been encased by the second stupa in 1186 CE (Bagan period). It was encased and restored by King Zeyatheinkha, son of King Narapatisithu and Queen Veluwaddy. The third stupa was built by the King Swasawke and Queen Atuladevi from Kamnein village (Thonpanhla village) in 1368 CE. King Swasawke had three names such as Amyint Min (King), Taramonphya Min, and Mingyi Swasawke. There are three receding terraces with four stairways on each cardinal point to be climbed. This stupa has been damaged two times by the severe earthquakes occurred in 1948 and 2016. It was been restored in 1977 and in 2004 by the Department of Archaeology (DANM, 2016a). The base of the stupa is 27.43 metres by 26.52 metres in length and 31.39 metres in height. Nowadays, the inner stupas are not visible from the outside. According to the history of the stupa, Like Tantkyitaung stupa at Bagan, it is one of the triple encased stupas in Myanmar.





Figure 84: Thonpanhla stupa (No.AN-041) at Anein village, Chaung U Township, Monywa District, Sagaing Region

Note. Inner stupa cannot be seen from the outside.

3.4.11 Monument No. AN-036

Monument No.AN-036 (see Figure 85) is situated to the northwest of Thonpanhla stupa and to the southeast of Anein village, Chaung U township, Monywa district, Sagaing region. The inner stupa can be clearly visible from the outside now. There are only two encased stupas at Anein village. The inner stupa may have a circular base about 1.8 metres in diameter. The base of outer stupa is octagonal in shape. It is 14.55 metres in circumference and is 2.74 metres in height. Architectural typologies indicate that the outer stupa belongs to the Konbaung period, while the inner stupa might be belonging to the Nyaungyan period. When the outer stupa was damaged by the earthquake, the inner stupa can be clearly seen from the outside (DANM, 2016a). Two terraces and a few of the original plaster carvings in outer stupa remain at this stupa and it was restored as edgings, pointings, and substituting the brick works by the

DANM in 2012. An inventory of Anein region has been officially carried out by the DANM, but it has not been published yet. In this area, it was found that Monument No.036 is a beautiful and distinguished encasement among the monuments at Anein.



Figure 85: Monument No.AN-036 at Anein Village, Chaung U Township, Monywa District, Sagaing Region

Note. Inner stupa can be clearly visible in this photograph.

3.4.12 Shinpin Minpu Stupa

Shinpin Minpu stupa (see Figure 86) is situated at No.4 Ward, Minbu township, Magway region and lies in the northern part of Minbu. According to the history of Shin Minpu stupa or Ma Minpu stupa, tradition said that Salay Min Khwe (Salay Ngakhwe) came to Minbu as a boatman before he was a King and he met with Mai Minpu, a fortune-teller or astrologer lived in Minbu. She predicted to him that he would be a king. Fortunately, he became a 36th king of the Bagan dynasty. King Salay Ngakhwe (905-915 CE) had promised her that if I will be a King, I will present to you the five elephants loaded with treasures. She requested to the King that she would like to build a stupa at Minbu, which was formerly called Zeyarhla village. She built a stupa in this village and she generously enshrined the five elephants loaded with treasures in (Myat Min Hlaing, 2012, pp. 124-125). U Kyaw Sein Win, renowned

author from Minbu region, was interviewed regarding the encasement of this stupa on 5th October 2020. He found an inner stupa from the two treasure holes on the eastern side of the outer stupa on bell-shaped dome and the top finial. According to the architectural typology during that period, the base of the inner stupa might have been circular in shape surmounted with bulbous-shaped dome. Tradition said that it may have been encased by the present stupa during the Nyaungyan period. The outer stupa is originally circular in shape. There are four receding terraces with four stairways to be climbed. The octagonal base of the present stupa is 128 metres in circumference, 42.52 metres in diameter, and 49.38 metres in height. The finger-marked bricks were unearthed at the Wutkyin Pagoda or a burial urn stupa of Shin Minpu about 15 metres to the west of Shin Minpu stupa. These bricks indicate that Shin Minpu stupa may have been built during the early Bagan period. Finally, it was restored and renovated including the crowning the umbrella with public donations in 2006. Thus the evidence strongly confirms this stupa as a renowned encased stupa at Minbu in Magway region.

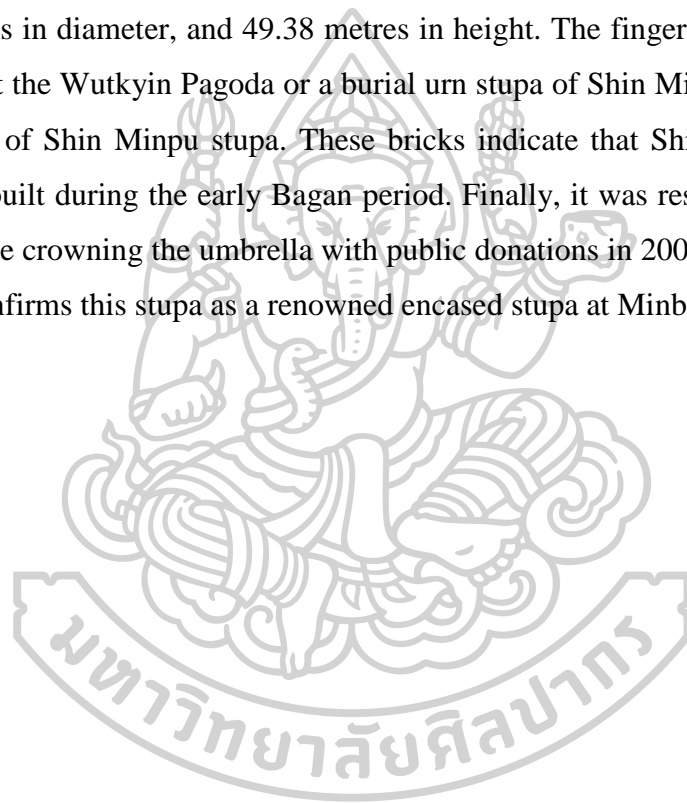




Figure 86 Shinpin Minpu Stupa in Minbu Township, Magway Region
Note. Four receding terraces with four stairways can be seen here.

3.4.13 Moatsotaung Stupa

Moatsotaung stupa (see Figure 87) is located at Thissa Banda Hill where the Buddha placed two footprints in Mann Shwesettaw phaya (stupa), Minbu township, Magway region. It was said that the Buddha came to Thunapranta Yawnaka Taing (Sagu, Magway region) around 610 BCE together with Shin Sariputara, Shin Moggalana, Shin Ananda, Shin Konna Dhana, Shin Maha Punna, and 500 monks. The Buddha placed the left footprint on the platform at the bank of Nammada river (Mann Chaung) with the supplication of Nammada, king of the dragons that live in the river. This footprint was known as lower footprint in Myanmar. Besides, the Buddha left another footprint on the emerald platform of Makula hill with the supplication of Thissa Banda (hermit). It was known as the upper footprint in Myanmar. Makula hill was also known as Thissa Banda hill (Myat Min Hlaing, 2003, pp. 71-72). Traditions said that there are five original moathtaw stupas, which may have been built by the King Asoka in the 3rd century BCE. They are Thissa Dipaka stupa, Moatsotaung stupa, Tanttawoo stupa, Taungpanoo stupa, and Taungpanya stupa. Thissa Dipaka stupa and Moatsotaung stupa are located on the Thissa Banda hill and other three stupas are located to the west of Nammada river or Mann Chaung (Yin Khe Maung Maung, 1940, p. 133). All of these stupas are the encased stupas and most of them may have been subsequently encased and enlarged by the successive Myanmar kings in later periods. When the outer Moatsotaung stupa was unfortunately damaged by the natural disasters, some cracks appeared on the surface of the outer stupa. When it was archaeologically restored by the Pagoda Trustee of Shwesettaw phaya (stupa) in 2021 in order to be substituting the brick masonry works, an upper part of an original inner stupa (see Figure 88) measuring 0.61 metre in diameter and 0.30 metre in height wonderfully appeared. Now the inner stupa has been encased by the outer stupa in 2021. The outer stupa is 5.94 metres in diameter and 8.23 metres in height. Former outer stupa is 7.92 metres in height. According to the preserving the traditional belief and custom of the encasement by the Pagoda Trustee of this stupa, it was found that it is one of the current encasements in Myanmar. It was proved that there was Buddhist practice of the stupa encasement till now in this area.



Figure 87: Moatsotaung Stupa at Thissa Banda Hill, Minbu Township, Magway Region

Note. Current encasement of the outer stupa can be seen here.



Figure 88: Original Inner Stupa of Moatsotaung Stupa (Under Construction)

Note. Finial of the inner stupa can be seen here (before current encasement)

3.4.14 Kyaungdawya Stupa

Kyaungdawya stupa (see Figure 90) is situated at Laigaing, Pwint Phyu township, Minbu district, Magway region. It was said that it is a renowned place where the Buddha stayed and preached the seven days at the sandalwood monastery. This stupa is very close to the Mann Shwesehtaw stupa where the Buddha left the two footprints about 37 kilometres from the Kyaungdawya stupa. According to the history of this stupa, the Buddha and five hundred Arahantas came to the sandalwood monastery to preach the Dhamma to the disciples around 610 BCE. After seven days, the Buddha with the Arhantas left the place and Arahanta Maha Punna only stayed continuously in this monastery. He built the Thelamaya stupa at the site of Buddha's throne and put the four posts to mark the site of the monastery. During the Bagan period, King Alaungsithu (1113-1167 CE) came and visited to this site and built a stupa, enshrining a smaller one built by the Maha Punna at the sandalwood monastery site. He also built a stupa at Rahu corner, one at Sunday corner, one at Tuesday corner, one at Saturday corner and 108 satellite stupas around the main stupa. The 108 satellite stupas mean that originally there were 108 halls or chambers for the Buddha and Arahantas in this monastery (Myat Min Hlaing, 2003, pp. 71-72). A replica model of the inner stupa (see Figure 89) measuring about 91.44 centimetres in diameter and about 121.92 centimetres in height, is located nearby the main stupa. This model which was circular base in shape surmounted with cylindrical dome may have been built during the reign of King Alaungsithu. Successive kings in Myanmar including King Mindon and King Thibaw renovated and restored this stupa in later times. The history of Kyaungdawya stupa indicates that the enshrining and encasing the inner stupa by the outer stupa is confirmed during this period with concrete evidence in this model of the stupa in Kyaungdawya stupa. The author assumes that it may have been made as a replica when the original stupa was encased and enlarged by the outer stupa during the Bagan period.



Figure 89: A replica model of the inner stupa called Thelamaya Zedi traditionally built in the Bagan period
 Note. The inner stupa surmounted with cylindrical shape can be seen in this stupa.



Figure 90: Kyaungdawya Stupa at Laigaing, Pwint Phyu Township, Minbu District, Magway Region
 Note. The elevation of the gilded stupa with 108 satellite stupas can be seen here.

3.4.15 Aung Myin Zeya Rakhine Stupa

Aung Myin Zeya Rakhine stupa (see Figure 91) is situated at Shwe Kyarin (1) Ward, Taungdwingyi township, Magway region. According to the History of Taungdwingyi, this stupa was originally built by the King Min Pyaung and Queen Rakhine Princess Numarlar Yadanadevi in 830 CE. It was completed within six months including the crowning the iron umbrella. Original stupa is 228.60 metres in circumference and 54.86 metres in height and original umbrella is 4.11 metres in diameter and 10.97 metres in height. History of the stupa said that the relics of the Buddha and the gold equaling to the weight of the King and Queen (donors) illustrating the figures of the seven sites of the Buddha are enshrined inside the stupa. After 429 years, it was damaged and was repaired by the king Thihapate who can produce the silver and Queen Saw Pale in 1278 CE. After 620 years, it was again collapsed and was repaired by the monk named U Lar Ba from Mataungta monastery with public donations in 1898 CE. After 3 years, according to the records of the measurements of the encased stupa during that period, U Aung Kyaw Soe, a criminal officer with the public donations may have encased this stupa measuring 228.60 metres in circumference and 71.78 metres in height in 1931 (Nya Na, 1999, pp. 86-91; Thinkhaya, 1963, pp. 145-150). Finally, it was again repaired in 1999 and renovation works including the crowning the umbrella, were entirely completed in 2013. There are the five receding square terraces surmounted with bell-shaped dome stupas as well as a disproportionate small stupa and four stairways to be climbed. There are four satellite stupas on each terrace in this stupa. The main stupa on the upper part consists of four shrine halls to house the Buddha images and a circumambulatory corridor to walk around. The history of the stupa with original measurements and the architectural typology with their enormous terraces surmounted by a disproportionately smaller stupa indicate that it is one of the renowned and very large encased stupas in this region.



Figure 91 Aung Myin Zeya Rakhine Stupa at Shwe Kyarin (1) Ward, Taungdwingyi Township, Magway Region

Note. The disproportionately small stupa over the five terraces can be seen here.

3.4.16 Shwe Sawlu Lemyethna Stupa

Shwe Sawlu Lemyethna stupa (see Figure 92) is located at Hpaung Lin village, Salin township, Minbu district, Magway region on the west bank of the Ayayarwady river. During the Bagan period, Phaung Lin southeast of Salin was one of the places in Minbu region, known to have produced a rich rice yield. There are the well-known six districts such as Sagu, Salin, Gyapin, Hpaung Lin, Lai Gaing, and Mapinsara, which were listed in inscriptions as the rich rice granaries of Minbu region in the Bagan period (Luce, 1969). Nowadays, there continue to be abundant paddy fields in this village. Shwe Sawlu Lemyethna stupa was also called Shwe Moathtaw stupa or Shwetha Cetipyan stupa. There are three receding square terraces surmounted with a bell-shaped dome and four satellite stupas on the third terrace. According to the Parabaik (writing tablet made of paper) named the Cetiyapakathani Text copied by U Khin Soe from Hpaung Lin, this region was the place where the King of the Goats, the King of the Deer, and the King of the Buffalo, the previous lives of the Buddha, lived around this area. The original inner stupa is one of the eighty-four thousand stupas, which might have been built by the King Asoka in 3rd century BCE and the

seven relics of the Buddha are enshrined in this stupa. The original inner one is 2.29 metres in height and it has been encased and enshrined by King Sawlu (1077-1084 CE), son of King Anawrahta (1044-1077 CE). Successive Myanmar kings and individual donors may have encased, enlarged, and renovated this stupa and it was lastly restored and renovated in 2017. According to the stone inscription of King Bodaw Phaya in 1785 CE, King Sawlu built a stupa with four arch-pediments, an ordination hall, and a monastery on Theinga Pabadha hill and donated lands and slaves in order to offer the rice and light for this stupa in 1078 CE. King Inwa Thadoeminphya and Taung Nan Queen donated again the lands and slaves for this stupa in 1364 CE. King Bodaw Phaya also donated this stupa for rice and built a stupa named Tantkyitaw stupa at Hpaung Lin and enshrined the relic of the Buddha in it in 1785 CE (Aung Kyaing, 2018). This stone inscription is No.414 erected inside the western stone inscription shed at Mahamyatmuni temple, Mandalay. The present stupa is 24.46 metres in height and 17.98 metres in length on each base. Inscriptional and historical evidence indicates that this stupa is one of the renowned encased moathtaw stupas in Myanmar, but the original inner one cannot be viewed from the outside. The shape of inner base may have been circular, while the shape of outer base is square with three projections.



Figure 92: Shwe Sawlu Lemyethna Stupa at Phaung Lin, Salin Township, Magway Region

Note. Three receding square terraces with the four arch-pediments and the four satellite stupas on third terrace can be seen here.

3.4.17 Buddhagon Shwe Moathtaw Stupa

Buddhagon Shwe Moathtaw stupa (see Figure 93) is situated at No.1 Ward, Pakokku township, Pakokku district, Magway region and lies on the western bank of Ayeyarwady river. According to the local 'History of Buddhagon Shwe Moathtaw stupa', it may have been built by the King Asoka in the 3rd century BCE. It is one of the eighty-four thousand stupas on the Jambudipa Island with the relics of the Buddha enshrined inside the stupa by him. The original stupa is 1.49 metres in height. Secondly, King Salay Ngakhwe (906-915 CE) may have encased and restored this stupa. He is one of the fifty-five kings in Bagan Dynasty during the early Bagan period. Originally he also built a brick pavilion and there are meditation cells at the lower level. Tradition said that the outer shrine hall surmounted with a stupa was built by the King Inwa Pahtama Mingaung (1402-1421 CE), the third King of Inwa Dynasty, to protect and cover the inner stupa (Thet Lwin, 2000; Pandita, 2013). The inner stupa including the pedestal is 2.6 metres in height and 2.6 metres in circumference and the pedestal is 0.61 m in height. The outer shrine hall is 19.81 metres in height and 8.53 metres in length on each base. The original inner stupa can be visible under the outer shrine hall to be worshipped. Successive individual donors may have restored including the gold gildings on stupa in later times. Tradition said that formerly there was an original stone inscription of Shwe Moathtaw stupa to the southwest of this stupa and now this stone inscription was entirely encased by a small stupa donated by the monk named U Paik Htwe over one hundred years ago (Myat Min Hlaing, 2003). The historical evidence has made it is one of the renowned encased stupas in this area. This stupa is very similar architecturally to three moathtaw encased stupas found at Bagan. These have a circumambulatory corridor between inner and outer structures to enable worship and movement around.



Figure 93 Buddhagon Shwe Moathtaw Stupa at No.1 Ward, Pakokku District, Magway Region

Note. Inner moathtaw stupa with a circumambulatory corridor can be seen here.

3.4.18 Shwe Moathtaw Lemyethna Stupa

Shwe Moathtaw Lemyethna Stupa (see Figure 94) is situated at Yesagyo township, Pakokku district, Magway region. According to the History of this stupa at Yesagyo, it is one of the five encasements in Myanmar. The most inner stupa is one of the eighty-four thousand stupas, which might have been built by the King Asoka in the 3rd century BCE and the original inner stupa is 2.29 metres in height. Secondly, the most inner stupa has been entirely encased by the King Narapatisihu (1174-1211 CE), one of the fifty-five kings who ruled in Bagan Dynasty and the second stupa is 3.20 metres in height, also erected in his reign. He was the 48th King of the Bagan Empire and encased, enlarged, and restored the numerous Moathtaw stupas built by the Asoka in the various parts of Myanmar. Later, the second stupa was encased and enlarged by the King Mohnyin Thado (1426-1439 CE) who came to power after overthrowing King Kale Kye-Taung Nyo and his queen Shin Bo Me in 1426 CE during the Inwa

period. He patronised the encasing of older stupas, the restorations and renovations of some Buddhist monuments and the constructions of the monasteries in his reign. The third encasing stupa built by King Mohnyin Thado is 4.11 metres in height. The third stupa may have covered by the shrine hall (Ghandhakudi) to protect the three inner stupas during the Nyaungyan period. Tradition said that it was built by King Thalun (1584-1648 CE) or King Alaungphaya (U Aung Zeya) (1752-1760 CE), founder of Konbaung period. King Thalun is the 8th King of the Toungoo Dynasty and he is a fourth donor of Shwe Umin Monastic Complex at Pakhangyi near Yesagyo. During his 19-year reign, King Thalun carried out many administrative reforms and rebuilt the economy of the kingdom. In this period, the shrine hall is originally 12.34 metres in height. This shrine hall was encased and restored by the U Wara Thambodhi, a well-known monk in the vicinity of Yesagyo region with the public donations and it is 20.57 metres in height (Ayethika, Shain, and Sein Toe, 1986). The present inner stupa with square base is 1.62 metres in length on each base and there are four niches to house the Buddha images in Bhumisparsha mudra above the pedestal. The most inner stupa can be seen from the four sets of binoculars installed on bell shaped dome and arranged by the Pagoda Trustee of this stupa. According to the Iconography of Buddha image, these Buddha images may belong to the Nyaungyan period. This historical evidence confirms that it is a rare example of a five-time encasement in Myanmar.

Like Tamote Shwegugyi temple and Shinpin Shwe Sutthwa temple located around the Kyaukse area, there are five encasements at Shwe Moathtaw Lemyethna stupa in Yesagyo. The most inner one can be viewed from the four binoculars, but even though the local histories explain that the most inner moathtaw encased stupas from these temples can be seen, this is no longer the case, so difficult to claim it was ever visible. It is hoped that new finds may one day be made.



Figure 94 Shwe Moathtaw Lemyethna Stupa at Yesagy Township, Pakokku District, Magway Region

Note. The most inner stupa can by tradition be visible from the four binoculars in this photograph.

3.4.19 Mwedaw Kakku Group of Stupas

Mwedaw Kakku Group of stupas (see Figure 95) are situated in Mwedaw village, Kakku village-tract, Kyauktalone Gyi township, Taunggyi district at the southern Shan state. In this group, there are five different names such as Kakku Mwedaw (1893 CE), Shwewetkuu, Shwewetgu, Thettu, and Shwegugyi Phaya (1793 CE) for these stupas (Khon Rama, 2000). There are two large stupas named Sutaungpyi and Phaungdawsike stupas flanked by two thousand five hundred forty-eight smaller stupas in this complex. Tradition said that originally there is a moathtaw stupa, which was entirely encased and enlarged by the Sutaungpyi stupa in later times. It is one of the 84,000 stupas, which may have been built by the King Asoka in the 3rd century BCE and Phaungdawsike stupa in the complex was built by the King Alaungsithu (1113-1167 CE) in the Bagan period. This place lies near a border post and it was so called Kakku Pagoda. It was also said that the stupa was so named as it was dedicated to Kakkusandha who first attained the enlightenment in the present world (Khon Rama, 2000; Myat Min Hlaing, 2003). There are also two old bells with inscriptions donated in 1793 CE and 1893 CE. Tradition has it that most of them were built by the Shan Sawbwa chiefs. Some of them have been conserved and restored, while a few were encased by the successive Shan Sawbwa, but no encased stupas can be viewed from the outside because all monuments have been entirely encased and renovated in later times. According to the architectural typologies with inscriptional evidence, the numerous small stupas have been built in successive periods such as Bagan, Inwa, Pinya, Nyaungyan, Konbaung, and Yadanabon. According to the bell inscriptions of 1793 CE, the donors of the constructions, restorations, renovations, and encasements of the stupas are from Kakku, Nyaung Shwe, Dabet, Naungkhe, Naungmon, Nankhoat, Banyin, Thansaing, and four Inn villages. The bell inscriptions mentioned in 1893 CE that the places of the donors for these stupas came from the twenty-two villages in the Shan and Mon state (Khon Rama, 2000). Historical and the bell inscriptional evidence confirm that a moathtaw stupa subsequently encased by Sutaungpyi stupa is one of the encased moathtaw stupas in the Shan state, Myanmar. There are numerous encased moathtaw stupas in the various parts of Myanmar. Some

have no space between the two stupas, while some have a corridor between two of them, but there is no space in this stupa.



Figure 95 Mwedaw Kakku Group of Stupas in Kyauktalone Gyi Township, Taunggyi District at the Southern Shan State
 Note. Inner moathtaw stupa cannot be visible from the outside.

3.4.20 Shwe Intein Group of Stupas

Shwe Intein group of stupas (see Figure 96) are situated to the west of Inle Lake, Intein village, Nyaung Shwe township, Kalaw District at the southern Shan state. It is situated 35.41 kilometres at the junction of the Taunglaylone and 38.62 kilometres from Aung Pan township. There are one thousand fifty-four small satellite stupas found in this complex. It has long causeways measuring 720.55 metres with 403 teak-posts. There is a stone inscription donated and inscribed by the King Bodaw Phaya in 1785 CE. According to this stone inscription, the history of Shwe Intein stupa describes that originally the most inner stupa may have been built by King Asoka in the 3rd century BCE and the relics of the Buddha are enshrined inside the stupa. The

original historical stupa was encased by the King Anawrahta (1044-1077 CE) during the Bagan period; he donated the lands and slaves for this stupa. Besides subsequently the successive Myanmar Kings like King Narapatisithu (1174-1211 CE), Min Khaung (1400-1421 CE), Mohnyin Thado (1426-1439 CE), Minye Kyawswa (1439-1442 CE), and King Hsin Phyu Shin(1763-1776 CE) repaired and renovated these stupas. King Bodaw Phaya defines the boundary of Shwe Intein stupa and donated the five hundred slaves to ensure its upkeep. The most inner stupa cannot be viewed from the outside as it has been successively renovated in later times. Inscriptional evidence thus describes that the main stupa is one of the encased moathtaw stupas in the Shan state.



Figure 96 Shwe Intein group of Stupas at Intein Village, Nyaung Shwe Township, Kalaw District at the Southern Shan State

Note. Inner moathtaw stupa is not be visible from the outside.

3.4.21 Alodawpauk Stupa

Alodawpauk stupa (see Figure 97) is situated in the Inle Lake at Nampan village, Nyaung Shwe township, Kalaw district in the southern Shan state. According to the history of this stupa, it is one of the renowned encased moathtaw stupas, which may have been built by the King Asoka and it was called as Inn Phaya (stupa). King Anawrahta eventually arrived at Inle and he encased and restored the original small stupa during his reign. He enshrined the eight relics of the Buddha inside the stupa. When King Alaungsithu visited this site, he saw the Alodawpauk stupa. He made a vow on the jewelled bowl and in the bowl appeared the relics of the Buddha. King Alaungsithu again restored this stupa enshrining the jewelled bowl, a stone obtained from the clouds, a stone obtained from the ivories, a pear worth a hundred worth a hundred thousand, four golden Buddha images, and seven silver Buddha images. During his reign, this stupa was called as Yadana stupa or Phala Hmauk stupa (down-turned bowl stupa). King Narapatisithu also restored this stupa enshrining eight golden Buddha images, the fifteen silver Buddha images and some jewels. Successive kings restored and removed them numerous times. Some scholars said that King Sawmonnit gilded the stupa from bottom to top and named it Alodawpauk stupa (Myat Min Hlaing, 2003, pp.143-144). One of inner stupas can be clearly seen from the outside of the stupa now. The outer stupa consists of the circumambulatory corridor to be worshipped and moved around the stupa.

Like Mwedaw Kakku and Shwe Intein stupas it is also one of the encased moathtaw stupas in the Shan state. There are epigraphic records such as bell inscriptions and stone inscriptions at Mwedaw Kaku and Shwe Intein stupas, but Alodawpauk stupa had no epigraphic records. In this stupa, there are only archaeological evidence and history of the stupa; the most inner stupa cannot be seen from the outside, but part of the inner structure built by one of the successive kings can be clearly visible from the outside in this stupa.



Figure 97 Alodawpauk Stupa in the Inle Lake, Nyaung Shwe Township, Kalaw District in the Southern Shan State

Note. The outer stupa consists of the circumambulatory corridor to be worshipped and moved around the stupa.

3.4.22 Shwedagon Stupa

Shwedagon stupa is situated in Dagon township, Western district, Yangon region. After his conquest of Lower Myanmar in 1755, King Alaungphaya renamed the small old town of Dagon as Yangon (end of strife) and founded a new city on the old site. The history of Yangon is closely associated with that of the Shwedagon stupa (see Figure 98).

Legend

The place was known as Okkala some five hundred years before the Christian era. According to legend, Taphussa and Bhallika from Okkala went to India on a trading venture (Chit Thein, 1965). They met the Buddha under the sacred Bo tree and offered Him honey cakes. The Buddha bestowed on them eight sacred hairs from His head. Arriving at Okkala they were greeted by King Okkalapa who held a great festival in honour of the sacred relics. With the help of Indra, King of gods, a site on the Theinguttara Hill was selected to lay the foundation of a pagoda for enshrining the

relics. On excavation of the site, relics of the three preceding of the Buddhas, namely the staff, the water-dipper and the lower garment were earthed. These were buried again with the sacred hairs brought by the two brothers. When the relics were examined before placing in the vault, the casket was miraculously found to contain the original number of eight hairs (Chit Thein, 1965). Aung Thaw (1972) suggests that over the relic chamber was erected a golden pagoda enclosed in a silver one which in turn was enclosed by a series of tin, copper, lead, marble and iron pagodas. Finally, the whole series of smaller pagodas were encased by a brick pagoda. This pagoda built by King Okkalapa was only 8.23 metre high. According to the legend, there was the traditional custom and belief of the encasement during the reign of King Okkalapa. Being a rare example during the lifetime of the Buddha, the Shwedagon encasement in the history of this stupa is unique.

Historical Records

King Byinnya-U of Hanthawaddy raised it to a height of 20 metres in 1364 CE. It was encased, enlarged, repaired and gilded by several kings in Myanmar history. When Shinsawbu (1453-72 CE) came to the throne at Bago, she encased over it a still higher pagoda assuming more or less the present shape. She also gilded Shwedagon Pagoda from bottom to top for which she offered gold equal to her weight. Dhammaceti, also a pious ruler, gilded the pagoda with gold four times and set up an inscription telling the legend of the Shwedagon Pagoda in Myanmar, Mon and Pali. In 1774 AD, when Hsinbyushin of Inwa raised a new hti (umbrella) the pagoda attained its present height (Aung Thaw, 1972).

Present Appearance

The Shwedagon pagoda today is 99.36 metres in height, with a square plinth. The base is surrounded by 64 smaller pagodas with four larger ones in the centre of each side. Historical and inscriptional evidence indicates that Shwedagon stupa was encased by successive Myanmar kings. The encasements of the Shwedagon stupa in Myanmar are similar to Wat Phra That Chae Haeng (see Figure 66) in Thailand. The history of Shwedagon stupa describes that eight sacred hairs of the Buddha are enshrined inside the most inner stupa, while an official record at the court of Nan

written in 1894 CE mentions that seven relics of the Buddha with twenty gold and twenty silver amulets were enshrined in Wat Phra That Chae Haeng to cover a pit. In Shwedagon stupa, the original stupa was encased and gilded by successive Kings, while the original stupa was encased and gilded by successive governors in Wat Phra That Chae Haeng, Thailand. There are multiple encasements both stupas testifying to the connections between these two places.



Figure 98 Shwedagon Stupa, Yangon, Myanmar

Note. The elevation of the stupa with numerous projections and satellite stupas can be seen here.

Table 7 : Comparative Case Studies of the Encased Monuments at Other Places outside Bagan in Myanmar

Serial No.	Name of Monuments	Location	Date of the first establishment	Characteristics of the original Stupa	Date of encasement	Characteristics of the encased stupa	Enshrined Objects
1	Kaung Hmu Lon Stupa	Machanbaw Township, Putao District, Kachin State	3 rd century BCE	This stupa was built on the circular mound named Hintha Gon.	Firstly Sawbwa Sao Lwan Nwe may have encased around 3 rd century BCE.	Multiple Encasements	Three Relics of the Buddha
2	Tamote Shinpin Shwegugyi Temple	Kyaukse District, Mandalay Region	3 rd century BCE	Excellent stucco decorations in the Bagan period	It was firstly encased and enlarged by King Anawrahta.	Fifth encasements	Relics of the Buddha
3	Shinpin Shwe Suttwa Temple	Nyaung Shwe village, Kyaukse District, Mandalay Region.	3 rd century BCE	The most inner stupa may have been built by King Asoka.	It was firstly encased and enlarged by King Anawrahta.	Sixth Encasements and Fifth Encased Buddha Image can be found.	Relics of the Buddha
4	Tein Lei Alotawpyi Temple	Phaung Ywa-Ywa Thit Ward, Kyaukse District, Mandalay Region	Ashin Uttarajiva in the 12 th century CE	There is an original stone inscription written in Mon.	It was firstly encased by the chief monk named U Kaylartha in 2018.	Current Encasement	It was originally called Ko Ahton Tein Lei Temple in the Bagan period.
5	Shwezigon Stupa at Makkhaya	Aebya Village, Sint Kaing Township, Kyaukse District, Mandalay Region	3 rd century BCE	The original stupa cannot be viewed from the outside.	It was encased by King Uzana in 1325 CE.	Moathtaw Stupa may have been built by King Asoka.	Relics of the Buddha
6	Nan Oo stupa at Myinsaing	Kyaukse District, Mandalay region	King Athin Khaya during the Pinya period	The inner stupa can be clearly seen from the treasure hole.	Encased by the King Uzana in 1329 CE	The primary and secondary donors are relatives in this stupa	
7	Phaya Thonzu Stupas	Sintgu Village, Nyaung Oo District, Mandalay Region.	Three sisters built in the Bagan period.	Three inner stupas were built on the same platform.	The outer stupa may have been built during the Bagan period.	The primary and secondary donors may have been relatives here.	
8	Lekyun Setkyar Diparaung Stupa	Mingon Village, Shwebo District, Sagaing Region	Nyaungyan period	The original stupa cannot be viewed from the outside.	The original stupa was enlarged and encased by U Thein Win, Shwebo.	Current Encasement can be found at Shwebo.	
9	Khemar Thiwun Stupa (No.088)	Halin Village, Wetlet Township, Shwebo District, Sagaing Region	Nyaungyan period	The inner stupa can be clearly seen from the outside.	It may have been encased by the Konbaung period.	The upper shrine faced to the east on third terrace	
10	Thonpanhla Stupa (No.AN-041)	Anein Village, Chaung U Township, Monywa District, Sagaing Region	3 rd century BCE	The original stupa is not visible from the outside.	It was firstly encased by King Zeyatheinkha in 1186 CE.	Three encasements	Relics of the Buddha
11	No.AN-036	Anein Village, Chaung U Township, Monywa District, Sagaing Region	Nyaungyan period	The original stupa can be clearly seen from the outside.	It may have been encased by the Konbaung period.	The shape of inner base may have been circular.	



Serial No.	Name of Monuments	Location	Date of the first establishment	Characteristics of the original Stupa	Date of encasement	Characteristics of the encased stupa	Enshrined Objects
12	Shinpin Minpu Stupa	Minbu Township, Minbu District, Magway Region	Early Bagan period (Pyu period)	The inner stupa was clearly visible from the eastern before being repaired.	It may have been encased by the Nyaungyan period.	The shape of inner base may have been circular.	The five elephants loaded with treasures
13	Moatsotaung Stupa	Minbu Township, Minbu District, Magway Region	3rd century BCE	The most inner stupa was not visible from the outside.	It was encased by the successive Myanmar Kings	Current encasement can be seen in this area.	Relics of the Buddha
14	Kyaungdawya Stupa	Pwint Phyu Township, Minbu District, Magway Region	Around 610 BCE	The most inner stupa called Thelamaya stupa built by Maha Punna.	It was firstly encased by King Alongsithu in the Bagan period.	A replica model of the inner stupa can be seen nearby the main stupa.	
15	Aung Myin Zeya Rakhine Stupa,	Taungdingyi Townsh, Magway District, Magway Region	King Min Pyaung an Queen Rakhine Princess in 830 CE	The original stupa cannot be viewed from the outside.	It was firstly repaired King Thihapate and Queen Saw Pale in 1278 CE.	A disproportionately small stupa can be terraces.	Relics of the Buddha and the seven sites of the Buddha in gold
16	Shwe Sawlu Lemyethna Stupa	Hpaung Lin Village, Salin Township, Minbu District, Magway Region	3rd century BCE	The most inner stupa was not visible from the outside.	It was firstly enlarged and encased by King Sawlu in 1078 CE.	The shape of inner base may have been circular.	Seven relics of the Buddha
17	Buddhagon Shwe Moathtaw Stupa	Pakokku Township, Pakokku District, Magway Region	3rd century BCE	The gilded inner stupa with a corridor can be seen in this stupa.	It was firstly encased by King Salay Ngakhwe	It is one of the eighty-four thousand stupas built by King Asoka.	Relic of the Buddha
18	Shwe Moathtaw Lemyethna Stupa	Yesagyo Township, Pakokku District, Magway Region	3rd century BCE	The most inner stupa can be visible through four binoculars.	It was firstly encased by King Narapatisithu.	Multiple encasements or five encasements	Relic of the Buddha
19	Mwedaw Kaku Group of Stupas	Mwedaw village, Kyauktalone Gyi Township, Taunggyi District, Shan State	3rd century BCE	The most inner stupa cannot be seen from the outside.	It may have been encased by a larger stupa during the Bagan period.	It is one of the eighty-four thousand stupas built by King Asoka.	Relics of the Buddha
20	Shwe Intein Group of Stupas	Intein Village, Nyaung Shwe Township, Kalaw District, Shan State	3rd century BCE	The most inner stupa cannot be seen from the outside.	It was firstly encased by King Anawrahta in his reign.	Multiple encasements	Relics of the Buddha
21	Alodawpauk Stupa	Nampan Village, Nyaung Shwe Township, Kalaw District, Shan State	3rd century BCE	The most inner stupa cannot be seen from the outside.	It was firstly encased by King Anawrahta in his reign.	Part of an encased stupa can be seen from the outside.	Eight relics of the Buddha
22	Shwedagon Stupa	Dagon Township, Western District, Yangon Region	Around 6th century BCE	The most inner stupa cannot be seen from the outside.	It was firstly encased by King Okkalapa.	Multiple encasements	Eight sacred hair of the Buddha



Table 8: Coordinates of the Case Studies of the Encased Monuments at Other Places outside Bagan in Myanmar

Serial No.	Name of Monument	Township	District	Region/State	Latitude	Longitude
1	Kaung Hmu Lon Stupa	Machanbaw Township	Putao District	Kachin State	N: 27.386°	E: 97.529°
2	Tamote Shinpin Shwegugyi Temple	Kyaukse Township	Kyaukse District	Mandalay Region	N: 21.642°	E: 96.055°
3	Shinpin Shwe Sutthwa Temple	Kyaukse Township	Kyaukse District	Mandalay Region	N: 21.640°	E: 96.078°
4	Tein Lei Alotawpyi Temple	Kyaukse Township	Kyaukse District	Mandalay Region	N: 21.607°	E: 96.1412°
5	Shwezigon Stupa	Sint Kaing Township	Kyaukse District	Mandalay Region	N: 21.765°	E: 96.138°
6	Nan Oo Stupa	Kyaukse Township	Kyaukse District	Mandalay Region	N: 21.599°	E: 96.200°
7	Phaya Thonzu Stupas	Nyaung Oo Township	Nyaung Oo District	Mandalay Region	N: 20.949°	E: 94.861°
8	Lekyun Setkyar Diparaung Stupa	Shwebo Township	Shwebo District	Sagaing Region	N: 22.557°	E: 95.669°
9	Khemar Thiwun Stupa (No.088)	Wetlet Township	Shwebo District	Sagaing Region	N: 22.268°	E: 95.488°
10	Thonpanhla Stupa (AN-041)	Chaung U Township	Monywa district	Sagaing Region	N: 21.823°	E: 95.180°
11	Monument No. AN-036	Chaung U Township	Monywa district	Sagaing Region	N: 21.824°	E: 95.179°
12	Shinpin Minpu Stupa	Minbu Township	Minbu District	Magway Region	N: 20.192°	E: 94.876°
13	Moatsotaung Stupa	Minbu Township	Minbu District	Magway Region	N: 20.098°	E: 94.527°
14	Kyaungdawya Stupa	Pwint Phyu Township	Minbu District	Magway Region	N: 20.364°	E: 94.767°
15	Aung Myin Zeya Rakhine Stupa	Taungdwingyi Township	Magway District	Magway Region	N: 20.004°	E: 95.538°
16	Shwe Sawlu Lemyethna Stupa	Salin Township	Minbu District	Magway Region	N: 20.515°	E: 94.744°
17	Buddhagon Shwe Moathtaw Stupa	Pakokku Township	Pakokku District	Magway Region	N: 21.336°	E: 95.108°
18	Shwe Moathtaw Lemyethna Stupa	Yesagyo Township	Pakokku District	Magway Region	N: 21.637°	E: 95.243°
19	Mwedaw Kakku Group of Stupas	Kyauktalone Gyi Township	Taunggyi District	Shan State	N: 20.445°	E: 97.138°
20	Shwe Intein group of Stupas	Nyaung Shwe Township	Kalaw District	Shan State	N: 20.458°	E: 96.838°
21	Alodawpauk Stupa	Nyaung Shwe Township	Kalaw District	Shan State	N: 20.460°	E: 96.905°
22	Shwedagon Stupa	Dagon Township	Western District	Yangon Region	N: 16.798°	E: 96.150°

3.5 Summary

In this chapter, six encased monuments in India, five encased monuments in Sri Lanka, five encased monuments in Thailand, and twenty-two encased monuments at other places outside Bagan in Myanmar are described with architectural and archaeological evidence, epigraphic records, chronicles and exact history of the monuments.

The origins of encasement at the ancient capital of Bagan (9th to 13th CE), Myanmar where encased monuments date to *circa* the mid first millennium CE is in the context of the origins of Buddhist encasement in India and Sri Lanka. Stupa architecture was popularised by the Mauryan Emperor Asoka in the third century BC with encased Buddhist monuments in India and Sri Lanka in successive periods. Excavations in India and Sri Lanka have yielded further evidence of encasement through reliquaries. The primary impulse for enshrining relics of the Buddha, the Buddhist saints, and the ashes of heroic kings in stupas is for religious veneration. The earliest Buddhist monuments in India are attributable to King Asoka, who attempted his energies and the resources of his empire for the propagation of Buddhism. He patronised three principal types of monuments: pillars, stupas, and rock-cut caves built in various

Buddhist sites in ancient India. Krishna Deva suggests that the stupa originated as a piled-up burial-tumulus and constituted the most characteristic monument of Buddhism (ASI 1996, pp. 85-88). Most of the Buddhist stupas in India and Sri Lanka in the early periods are circular hemispherical domes. Inscribed reliquaries record the name of Buddha Gotama, the chief disciples of the Buddha like Shin Sariputta and Shin Mahamoggallana, the name of monks like a group of Hemavata teachers led by an individual named Gotiputa and the name of the heroic Kings like Elara, Duthagamani in Sri Lanka (Fernando, 1965; Mitra, 1971; Ministry of Cultural Affairs, Sri Lanka 1981).

According to the archaeological excavations in India and Sri Lanka, most of the reliquaries were found at the centre of the stupas, in the midst of the relic chamber and buried at the bottom of the stupas or the platforms. The original stupas, mud and brick structures, were usually built in the pre-Asokan times and Asokan period. The inner stupas in the Mauryan period are built most frequently of mud which deteriorated easily; others were brick structures. In later times, subsequent donors out of concern for damage and disappearance of the original mud structures, encased and enlarged with stones or bricks to strengthen and enlarge, often five or six times by the subsequent kings.

According to the written references in Thailand, encasements of different periods used materials like brick, stone, stucco, and gold, and miniature stupas made of stone, iron, tin alloy, gold, silver, gilt bronze and crystal. Thai records describe the shapes and measurements of the enshrined relics in the reliquaries. The relics of the Buddha, the ashes of kings and royal families, numerous amulets of gold, silver and other materials, votive tablets, all sizes of Buddha images made of various substances, miniature stupas, and reliquaries made of different materials are mostly enshrined in the chedis (Byrne, 1995, pp. 226-281). In Thailand, according to the archaeological and historical evidence, there are also some encased monuments built in the Dvaravati, Sukhothai, Lanna, Ayutthaya periods. Archaeological evidence of stupa encasement is plentiful in various parts of Thailand. The relics of the Buddha in the inner chambers included votive tablets, some gold and silver amulets, and small

images enshrined as consecrated deposits at the time of stupa construction. Among the encased monuments at places in Myanmar other than Bagan, three current encasements are found Mandalay, Sagaing, and Magway regions. These show that the cult of stupa encasement still survives in Myanmar. In addition, inscriptional evidence and chronicles record that primary and secondary donors are relatives.

Inscribed reliquaries and multiple layers of the reliquaries have been unearthed by the archaeological excavations in India, Sri Lanka, Thailand, and Myanmar and religious concepts and socio-political ideas can be also found through these reliquaries discovered in these regions.

In contrast, the inner stupas are mostly discovered at the centre of the outer stupas in India and Sri Lanka and some inner stupas are encased by the centre of the outer stupas in Thailand. Some of the inner ones are located at the centre, at the corner, and in the wall at Bagan, Myanmar. Some inner ones are visible, while some are invisible in India, Sri Lanka, Thailand, and Myanmar. The bases of the outer stupas are mostly circular in shape in India and Sri Lanka, while the bases of the outer stupas are circular, square, and rectangular in shape in Thailand and the bases of the outer stupas are circular, square, rectangular, and octagonal in shape in Myanmar

Archaeological excavations and explorations in India, Sri Lanka, Thailand, Myanmar, the relics of the Buddha, Buddhist saints, and heroic kings were enshrined at the centre and floor of the stupas in India and Sri Lanka and the relics of the Buddha, and the ashes of heroic kings were enshrined at the stupas in Thailand. The shrine room and secret cavity beneath the stupa were found at Wat Pa Kaeo, while the square cavity was found at Wat Phra Si Sanphet, Ayutthaya, Thailand.

The relics of the Buddha were mostly enshrined at the different parts of the Buddhist monuments like finial, sikhara, concentric rings, Buddha images in Bagan, Myanmar (Aung Kyaing, 1984). One relic chamber was discovered at the centre of the floor in Saytanagyi stupa, the largest Sinhalese-typed stupas at Bagan like India and Sri Lanka.

Inscribed reliquaries showing the socio-political ideas were discovered at Sanchi, Satdhara, and four Bhilsa topes in India, while the ashes of the heroic kings and princes enshrined and buried in

the Buddhist monuments in Sri Lanka, Thailand. Multiple layers of the reliquaries showing the religious concepts and concepts of the encasements were also recovered in India, Sri Lanka, Thailand, Myanmar, diminishing to the innermost layer.



CHAPTER 4

The Encased Buddhist Monuments at Bagan

In this chapter, the encased Buddhist monuments at Bagan are divided into eight areas (see Figure 99): Nyaung Oo, Wetkyi-in, Taungbi, Old Bagan, Myinkaba, Thiripyitsaya, Minnanthu and Phwasaw, Tant Kyi areas. Eighty-three encased monuments can be found in these areas within the inscribed UNESCO site of Bagan. There are five different architectural typologies of the encasements at Bagan shown in a table with the areas listed by number, number of monuments, type of encasements, hollow and solid types of inner and outer structures, shapes of inner and outer bases, and estimated periods of inner and outer structures. In this chapter, the relevant Myanmar chronicles, epigraphic records, recorded history of monuments, average brick sizes, surviving artistic decorations such as stucco, mural, glaze, stone, and wood, evidence of encasements, and history of conservation measures are noted. Main measurements of inner and outer structures can be found on each plan of eighty-three encased monuments at Bagan. The analysis of the brick sizes using on Bagan monuments will be described in the chapter-5. Among the eighty-three encased monuments at Bagan, there are sixty symmetrical encased monuments and twenty-two non-symmetrical monuments. In this chapter, there are only inner and outer structures on each plan. In some encased structures at Bagan, the bases of the outer structures can be clearly seen from the outside, but the bases of inner structures can be invisible from the outside. Normally some visible parts of the outer structures are shown with black lines, while some invisible parts of the inner structures are shown with dotted red lines and visible parts of the inner structures are simply used with red lines only and the platforms and walled enclosures are used with blue lines on each plan. If the outer structures can be clearly seen from the outside, the inner structures are used with dotted red lines but if the inner structures can be clearly seen, the outer structures are shown with dotted red lines on some plans. The five kinds of encased monuments differ in each of the eight areas, as seen by the different colours on the maps using in this dissertation. These are: red showing the encased stupas, yellow for the encased temples, green for the encased group of stupas, violet for the encased

moathtaw stupas, and light blue colour for the encased Buddha images are used on the maps below (see Figure 99).

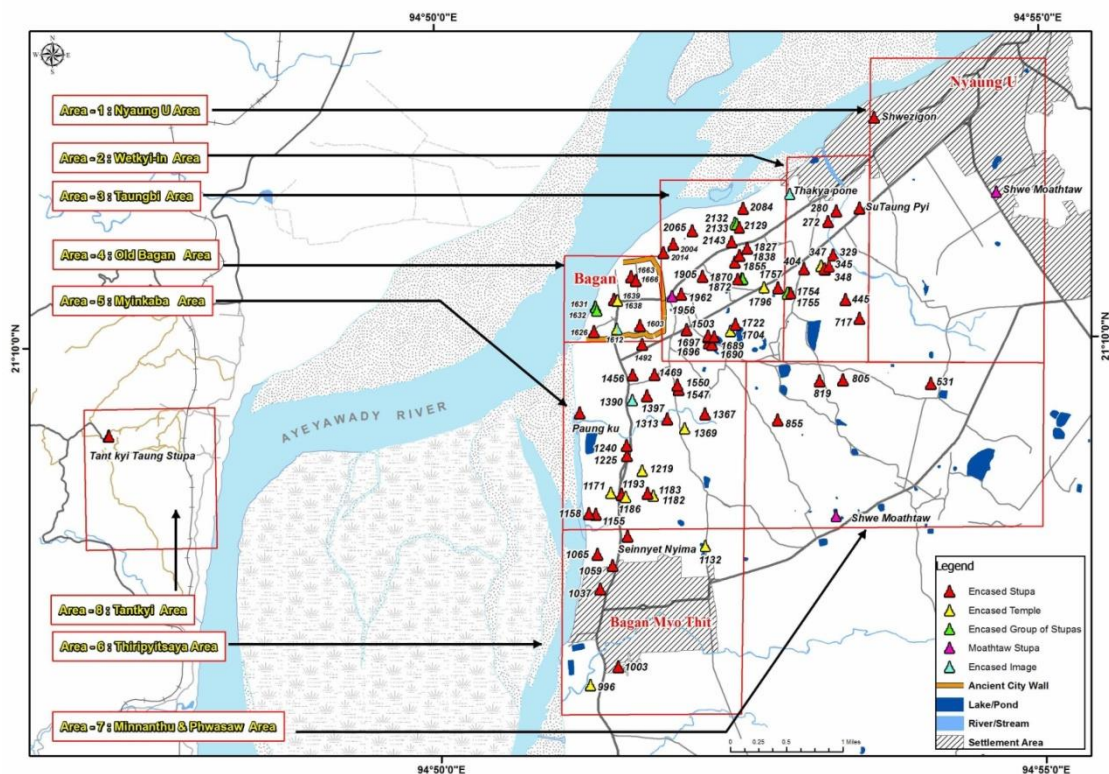


Figure 99: Map showing the Encased Monuments at Bagan with Eight Areas
 Note. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Research and Training Section, Department of Archaeology and National Museum, Taungdwingyi. Copyright by the Author.

4.1 Area 1: Nyaung U Area

There are only two encased monuments in Nyaung U area (Area 1) (see Figure 100). These monuments are Shwezigon stupa (No.1), and Shwe Moathtaw stupa (No.194). Two different architectural types of encasements can be found in this area. These types are encased stupas and encased moathtaw stupas. There are only three encased moathtaw stupas with circumambulatory corridors found at Bagan. This moathtaw stupa (No.194) is located at the Buffer zone of Bagan world heritage site. Tradition has it that the inner moathtaw stupa may have been built by the King Asoka.

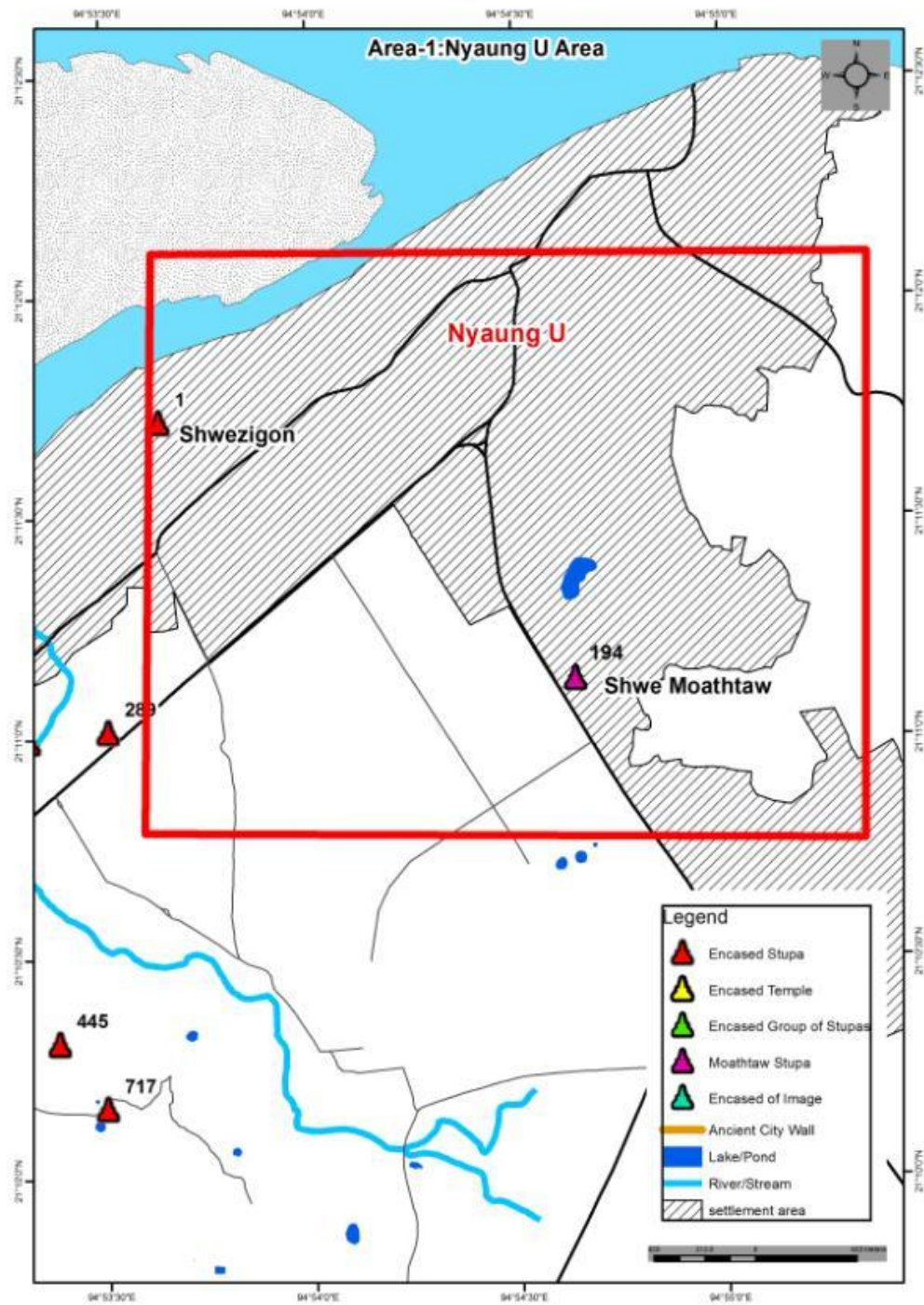


Figure 100: Map showing the Area 1(Nyaung U Area)

Note. There are only two encased monuments in Nyung U area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.1.1 Monument No. 1 (Shwezigon Stupa)

Shwezigon stupa (see Figure 102) is located to the northwest of Nyaung Oo and about 6.44 km to the northeast of old Bagan in the Nyaung U area. Myanmar Chronicles said that only three terraces of the stupa were built by King Anawrahta (1044-1077 CE) and completed by King Kyansittha (1084-1113 CE). After the earthquake occurred in 1975, the top finial was damaged and some cracks appeared before repair was carried out. The inner stupa could be seen from the outside at that time and some respected archaeologists mentioned that according to the architectural shape of the conical spire at the inner and outer stupas, the inner stupa may have been probably built by the King Anawrahta in 1059 CE and the outer stupa may have been built by the King Kyansittha in 1089 CE with no space between two stupas (Aung Kyaing, 2002). There are three accessible square receding terraces with four projections and four satellite stupas on each terrace. There are four stairways in the middle of each side and one octagonal terrace with two projections and one circular terrace; it comprises the four gateways at the centre of a walled enclosure on each side. In front of each stairway, is one square temple with a central shrine (3.00 x 3.10 m), a vestibule and a porch facing outwards. Each whitewashed temple with plain stucco mouldings has sloping roofs and a square tower with a timber gallery around east temple and the modern structures around the others. There are four standing bronze Buddha images, 3.96 metres high, in a Gupta-influenced style to house inside the four square temples. These Buddha images are original and contemporaneous with the outer shell of the Shwezigon stupa built by King Kyansittha. Shwezigon stupa is a solid cylindrical structure and a prototype of many later Myanmar stupas. It has a bold waistband around the bell-shaped dome above which rises a series of concentric rings ending in a bronze cap and crowned by an umbrella (hti). Myanmar chronicles say that the frontlet relic and tooth relic duplicate supplied by the King of Sri Lanka are enshrined inside the stupa. Around the terraces of the stupa, there are glazed plaques in sandstone illustrating the scenes from the previous lives of the Buddha. It was built of sandstones from base to top, carried from the quarry at Turintaung hill 11.27 kilometres away from Shwezigon stupa by using a chain of people; the average sandstone brick size is 38 x 26 x 8 centimetres. There are two quadrangular stone

pillars with Mon inscriptions describing the biography of King Kyansittha on all four sides donated by the King Kyansittha in the 11th century CE, two bronze bells inscribed in three languages (Mon, Pali, and Myanmar) donated by King Bayintnaung in the 16th century CE describing his generous merits throughout the country of Myanmar. There is also a huge inscribed stone housed in a brick structure describing the Shwezigon umbrella (hti) in detail mentioning the cost, material and weight of each receding chattra vallies (umbrella rings) dedicated by King Sinbyushin inside the compound of the Shwezigon stupa (Pichard, 1992, pp. 62-67, Vol-1; Aung Kyaing, 2007, pp. 29-32). After the earthquake in 1975, it was repaired and strengthened by the Construction Cooperation and Department of Archaeology (DOA) in 1975-1978. During the reign of the King Anawrahta, most of the stupas are built with the octagonal shape in Bagan. In his reign, Myinkaba stupa, Lokananda stupa, Turintaung stupa, Inn stupa, and Kyauk Myet Maw stupa built by King Anawrahta, are octagonal-shaped base stupas in Bagan and he only built the solid stupas. The probable shape of the inner base may have been octagonal (see Figure 101) and the shape of the outer base is square with four projections. In 1975, archaeological evidence indicates that the outer stupa was concentrically built around the encased stupa; it is one of the prominent encased stupas at Bagan.



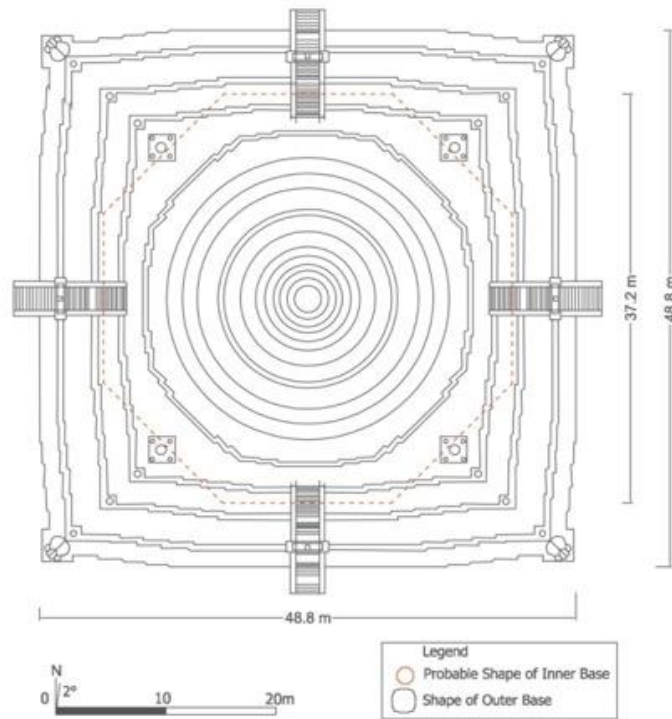


Figure 101: Plan of Monument No.1 (Shwezigon Stupa) at the Nyaung Area
 Note. The shape of inner base may have been octagonal in this stupa.



Figure 102: Shwezigon Stupa Viewed from Southeast Direction
 Note. Three receding terraces with four stairways can be seen in this stupa.

4.1.2 Monument No.194 (Shwe Moathtaw Stupa)

Shwe Moathtaw stupa (see Figure 104) is located between Zeyawaddy and Tekthe wards in the Nyaung U area, a small single-storeyed, circular temple at the centre of a platform. This temple faces to the east and it has the circular central shrine, 3.25 metres in diameter with vestibule and porch on each face. It was repaired and rebuilt in 1983; the upper parts were damaged before repair and the hemispherical dome, the square crowning block with two projections, and the conical spire were reconstructed by the DOA. It has the cupola vault over the shrine and the barrel vault over the vestibule and porch. There is a small gilded inner stupa (see Figure 105) at the centre of the outer stupa. According to the legend, an original inner stupa was called Shwe Moathtaw stupa, which might have been built by the King Asoka. The average brick size of the outer stupa is 30 x 17 x 4.5 centimetres (Pichard, 1992, p. 299, Vol.1). The type is thus an encased moathtaw stupa. There are three Moathtaw stupas at Bagan and at all, the original inner stupas can be visually seen from the outside. The shape of the inner base (see Figure 103) is circular and the shape of the outer base is also circular; the outer stupa is one of the Sinhalese-typed stupas at Bagan. According to architectural typologies, the outer stupa may be belonging to the 13th century CE. After the earthquake occurred in 1975, the original inner stupa was found by the DOA when it was repaired in 1983 after the excavation of the debris in the temple. Pichard suggests that there was an older inner stupa in the centre of shrine and he took a photo of the damaged outer stupa in 1983 (see Figure 106) (Pichard, 1992, p. 299, Vol.1). This confirmed that there is a circumambulatory corridor to worship and move around the small stupa and the outer temple was concentrically built around the moathtaw stupa.

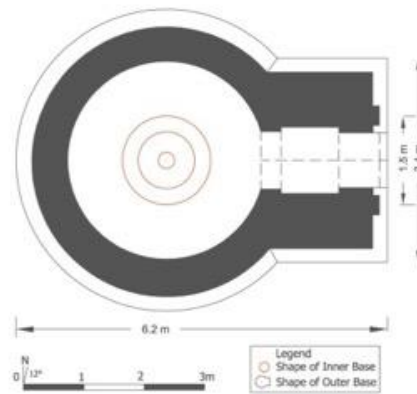


Figure 103: Plan of Monument No. 194 (Shwe Moathtaw Stupa) at the Nyaung U Area

Note. Inner stupa in circular shape can be seen in this stupa.

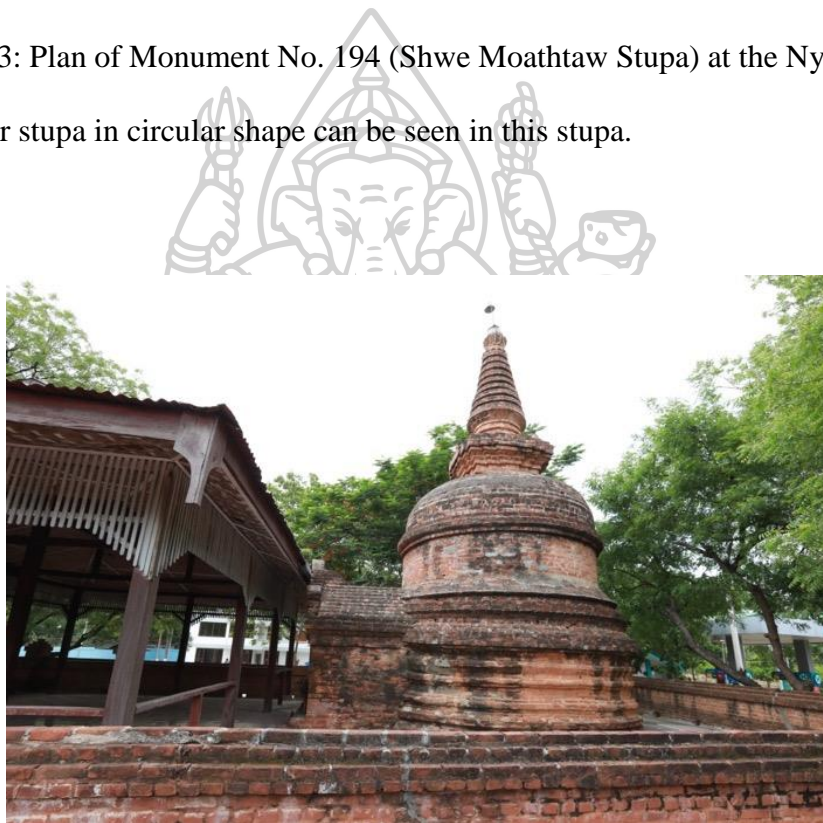


Figure 104: Shwe Moathtaw Stupa Viewed from North
Note. This Sinhalese-typed temple faces to the east.



Figure 105: Original Gilded Inner Stupa at the Nyaung U Area
 Note. The space between inner and outer structures is seen here.



Figure 106: Original damaged outer temple before 1983
 Note. There is an original older small stupa in the centre of shrine. From Inventory of Monuments at Pagan. United Nations Educational, Scientific and Cultural Organization (UNESCO), p. 299, Vol-1, by P. Pichard. Copyright 1992 by Pierre Pichard.

4.2 Area 2: Wetkyi-in Area

In the Wetkyi-in area, there are thirteen encased Buddhist monuments (see Figure 107). Among these monuments, four different architectural encasement typologies can be found. These encased monuments are nine encased stupas (No.272, 280, 289, 329, 345, 348, 404, 445, 717, and 1755), one encased temple (No.347), one encased Buddha image (No.235), and one encased group of stupas (No.1754). The encased group of stupas can be only found at Bagan, this type cannot be seen at other places in Myanmar except an example at Sintgu village, Nyaung Oo district and other countries like India, Sri Lanka, and Thailand.

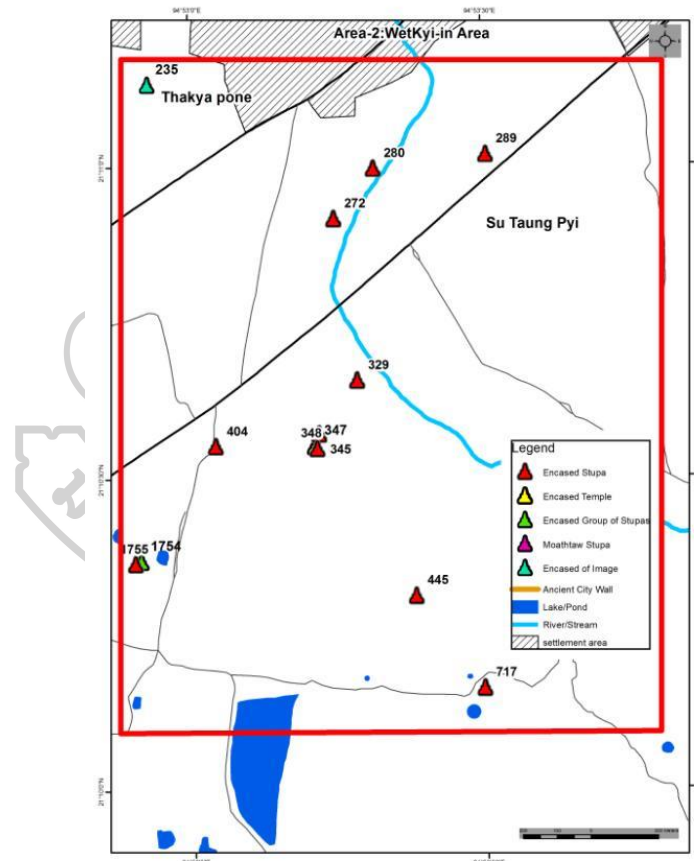


Figure 107: Map Showing the Area 2 (Wetkyi-in Area)

Note. There are thirty encased monuments in Wetkyi-in area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.2.1 Monument No. 235 (Thakyapone Temple)

Thakyapone temple (see Figure 110) is situated southwest of Wetkyi-in ward in the Wetkyi-in area, a medium-sized, single-storeyed temple. It is a square central shrine, 7.30 x 7.95 metres, an entrance hall, 5.80 x 6.14 metres on east side with a porch and the lateral porches and it faces to the east. It also has an internal staircase in the southeast corner of the hall, small apertures on the north and south foreparts and the blind forepart to the west. On the upper parts, there is one square terrace with corner stupas, one square terrace with two projections, axial stairways and corner stupas, one square terrace with two projections and axial stairways. This temple is surmounted by a square tower (sikhara) and it has a cloister vault over the shrine, a barrel vault over the entrance hall and the porches. There is pavement on the ground floor inside the temple and the average brick size of the outer temple is 42 x 20 x 5 centimetres. After the earthquake occurred in 1975, it was damaged and severe cracks appeared in this temple; it was repaired by the Construction Cooperation in 1984-85, again repaired by DOA in 1997 and after the earthquake occurred in 2016, again repaired by the DANM in 2017. About 10% of the original stucco decorations still remain in place and for the mural paintings: 2% under vaults and 5% on walls still remain in place in this temple. The estimated date of this temple is the 13th century CE (Pichard, 1992, pp. 355-357, Vol-1). There is an encased Buddha image (see Figure 109), which may have been in Bhumisparsa mudra and the inner and outer Buddha images facing to the east against the screen wall and the outer Buddha image is sitting in Bhumisparsa mudra. The author assumes that originally there may have been an inner image house for the inner Buddha image donated by the first donor. In later times, the secondary donor would like to build a larger temple and a suitable larger Buddha image after the previous inner monument collapsed or destroyed by a secondary donor. According to the iconography of the Buddha images in the Bagan period, the inner Buddha image may belong to the 12th century CE, while the outer Buddha image may belong to the 13th century CE. The inner Buddha image is located at the centre of the outer central shrine and formerly the inner image house (see Figure 108) may have been at the centre of the outer central shrine as well. The author concludes that the probable

shape of the inner image house may have been square and the shape of the outer base is rectangular; there is no space between the two Buddha images.

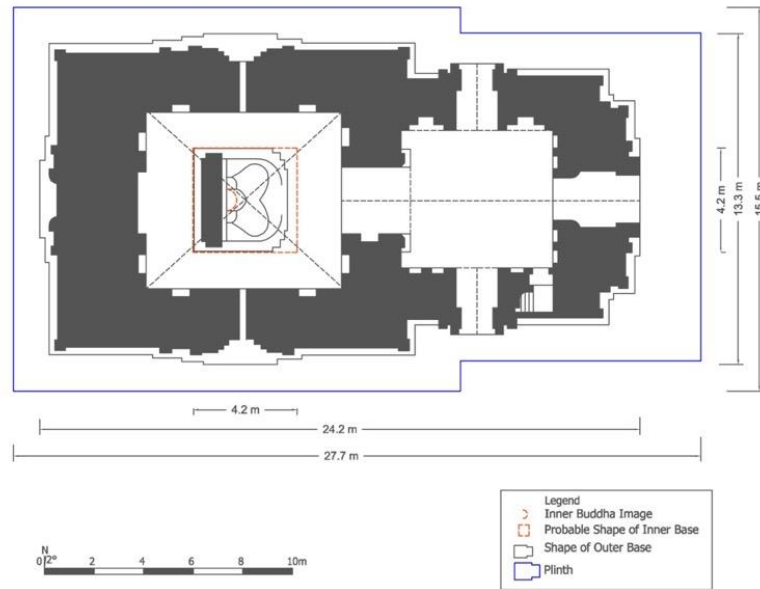


Figure 108: Plan of Monument No. 235 (Thakypone Temple) at the Wetkyi-in Area Note. The shape of inner base may have been square in this temple.

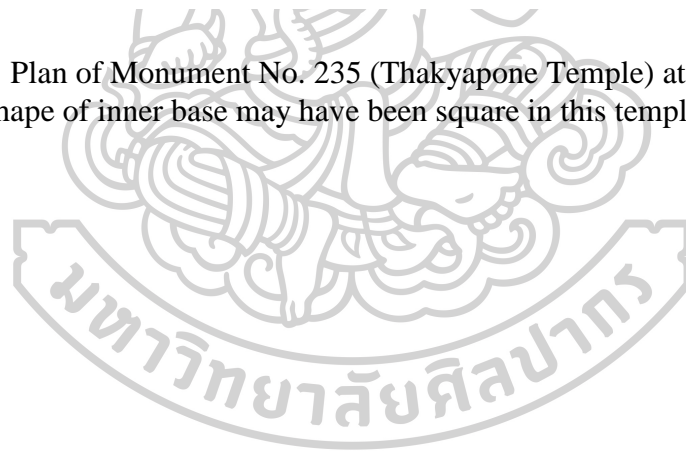




Figure 109: Inner and Outer Buddha Images at Thakypone Temple
 Note. Two encasements of Buddha images can be seen in this temple.



Figure 110 Thakypone Temple Viewed from Southeast at the Wetkyi-in Area
 Note. A medium-sized, single-storied temple is seen here.

4.2.2 Monument No. 272

No.272 is a small stupa situated on the western bank of Shwe Chaung stream, Wetkyi-in ward in the Wetkyi-in area (see Figure 112), with a smaller and older stupa encased. There is a large treasure hole from the eastern side on the outer stupa, dug by the treasure hunters who also dug into the inner stupa. It was built on the high plinth about 1.25 metres from the ground floor (Pichard, 1993, p. 26, Vol-2). Before it was repaired by the DOA in 1997, a half portion of the stupa has been damaged and the inner stupa can be seen from the east and after the restoration, it cannot be seen. It consists of the square base, one square terrace with two projections and one circular terrace, a circular bell-shaped dome and conical spire and the average brick size is 32 x 16 x 4.8 centimetres. Pichard describes a damaged outer stupa and an original inner stupa before being repaired by the DOA (Pichard, 1993, p. 26, Vol-2). According to architectural typologies, the outer stupa may belong to the 13th century CE, while the inner stupa may belong to the 11th century CE. The probable shape of the inner base (see Figure 111) may have been circular and the shape of the outer base is square. This evidence indicates that the outer stupa was concentrically built around the encased inner stupa and there is no space between the inner and outer stupas. The inner stupa cannot be visible after repaired by the DOA.

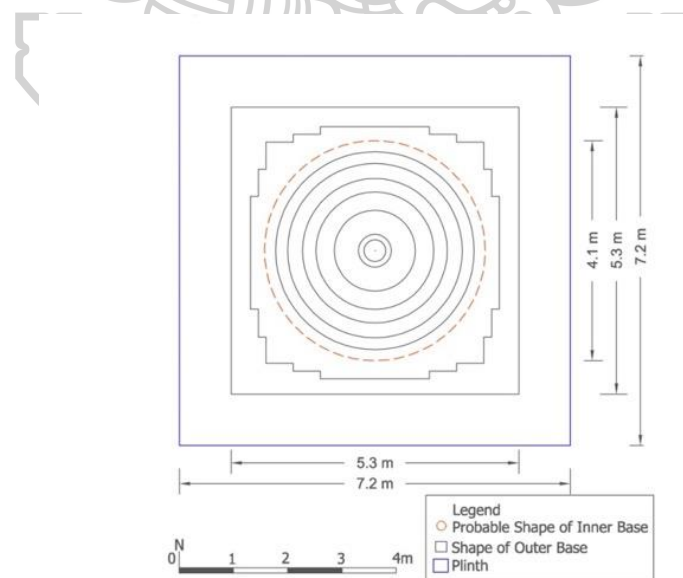


Figure 111: Plan of Monument No.272 at the Wetkyi-in Area
 Note. The shape of the inner base may have been circular in this stupa.



Figure 112: Monument No.272 at the Wetkyi-in Area
 Note. Inner stupa is not visible from the outside after repair by DOA.

4.2.3 Monument No. 280

Monument No.280 (see Figure 114) lies on the western bank of Shwe Chaung stream, south of Wetkyi-in ward in the Wetkyi-in area; it is a small stupa with a smaller and older stupa encased. Before the restoration of this stupa, a part of the inner stupa was clearly visible from the south side from which can be seen that the probable shape of the inner base (see Figure 113) was circular, while the outer base was octagonal. There is a square plinth with a brick stairway on the northern side and it has a projecting rectangular block of brick, which is a part of the inner stupa, facing to the south in this stupa. The average brick size of the inner stupa is 32 x 16 x 6.5 centimetres and the average brick size of the outer stupa is 36 x 18 x 4.5 centimetres. Numerous inscribed bricks with Pyu characters and the finger marked bricks were recovered in this structure (Pichard, 1993, p. 35, Vol-2). Some of them are currently displayed in the Bagan Archaeological Museum at Bagan. The inner structure may date to the 10th century CE, while the outer stupa may be estimated to the 11th century CE. This evidence confirms that there is no space between the two stupas and the outer stupa was concentrically built around the inner stupa. List of Pyu-typed stupas at Bagan will be mentioned in the chapter-5.

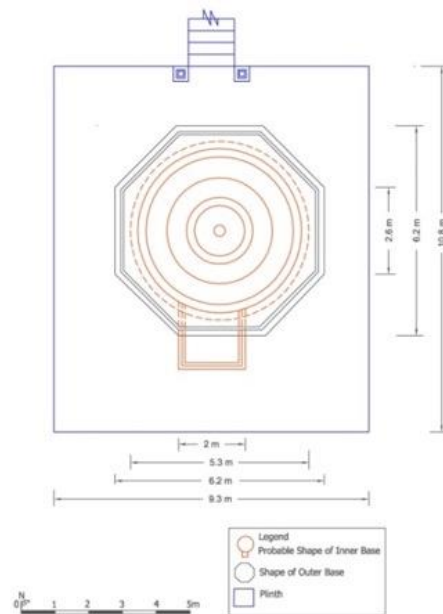


Figure 113: Plan of Monument No.280 at the Wetkyi-in Area
 Note. The shape of inner base may have been circular in this stupa.



Figure 114: Monument No.280 Viewed from East at the Wetkyi-in Area
 Note. Inner stupa surmounted with a bulbous-shaped dome can be seen here.

4.2.4 Monument No.289 (Sutaungpyi Temple)

Sutaungpyi temple (see Figure 116) is situated to the southeast of Wetkyi-in ward, south of Wetkyi-in Gubyaukngge temple in the Wetkyi-in area and is located on the northern side of Anawrahta road. It is a small stupa with a smaller and older inner stupa encased and a small temple was added on the western face in the later times. There is the square base, 3.15 metres in height, one square terrace, one square terrace with two projections and a corner stupa remaining, and one twelve sided terrace on the outer structure. On the upper parts, it consists of the circular bell-shaped dome and the conical spire on outer structure and the circular bulbous-shaped dome and urn-shaped spire on the inner structure. The average brick size of the encased stupa is 30 x 15 x 5.2 centimetres and the average brick size of the outer structure is 37 x 18 x 7 centimetres. There are 20% of the original stucco decorations on bases and terraces, dado with triangles, ornate waistband and frieze with ogre heads around dome still remaining in place on the outerstupa (see Figure 117) (Pichard, 1993, p. 47, Vol-2). The inner structure may date to the 9th century CE and the outer structure may be estimated to the 12th century CE. The bulbous-shaped dome and urn-shaped spire on the inner structure are a unique architectural design found at Bagan. It was firstly repaired by the DOA in 1981 and it was again repaired by the DOA in 1997. The inner stupa can be visually seen from the south and southeast side. The probable shape of the inner base may have been circular in shape (see Figure 115), while the shape of the outer base with an added temple is rectangular. This evidence confirms that the outer stupa was concentrically built around the encased inner stupa with no gap between the two stupas. There are no original stucco decorations surviving on the encased inner stupa and bulbous-shaped dome with plain concentric rings is datable to 9th century CE. A renovated seated Buddha image (see Figure 118) in Bhumisparśa mudra on the original pedestal in the 12th century style can be seen in the western added temple. This brick Buddha image facing to the west was also renovated by the DOA in 1997.

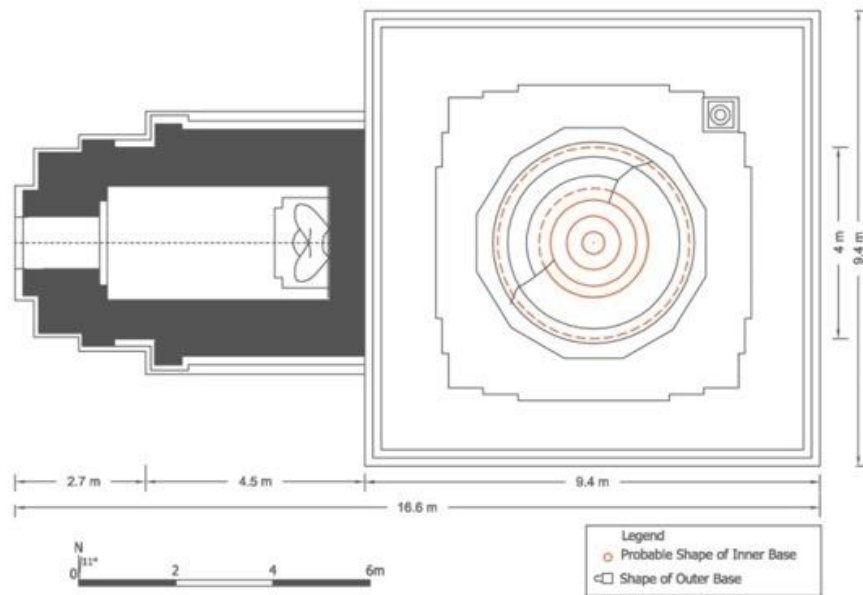


Figure 115: Plan of Monument No.289 (Sutaungpyi Temple)
 Note. The shape of inner base may have been circular in this stupa.



Figure 116: Monument No.289 (Sutaungpyi Temple) from Southeast in the Wetkti-in Area
 Note. Inner stupa with circular bulbous-shaped dome can be seen here.



Figure 117: Original Stucco Deorations on Bell-Shaped Dome of Outer Stupa
 Note. The dado with triangles, ornate waistband and frieze with oge heads around the bell-shaped dome still remain on the outer stupa.

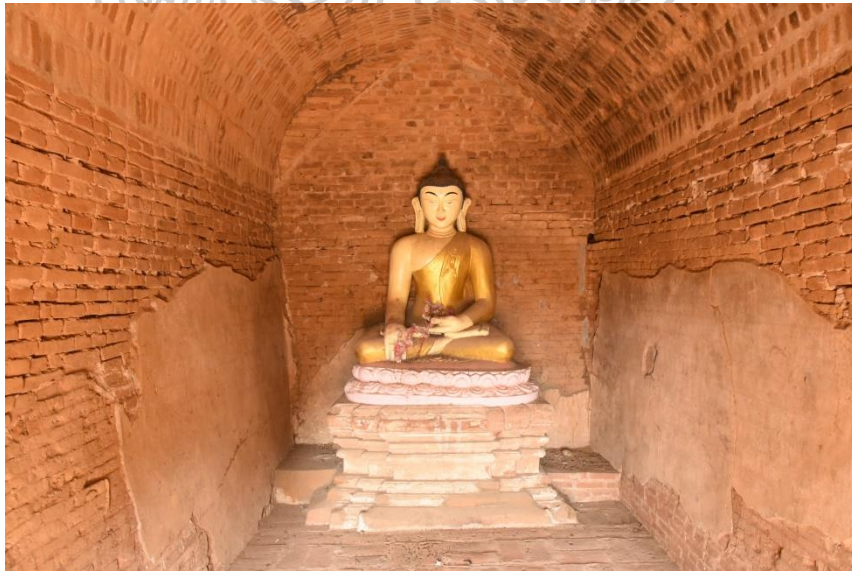


Figure 118: A Renovated Seated Buddha Image Housed in the Temple
 Note. Brick Buddha image in Bhumisparsa mudra sits on the original pedestal.

4.2.5 Monument No.329 (Wut-tha-na-daw Group)

Monument No.329 (see Figure 120) is located at the Wut-tha-na-daw group to the south of Wetkyi-in ward in the Wetkyi-in area to the south of Anawrahta road. It is a small stupa with a smaller and older stupa encased. It consists of the square base, one square terrace with the parapets, one square terrace with two projections, one octagonal terrace, bell-shaped dome and conical spire at the outer stupa. Before repair, the base of the outer stupa is disintegrated and upper parts above the dome have been damaged (see Figure 121). The treasure seekers have dug not only the outer stupa but to the encased inner stupa. The inner one (see Figure 122) with the original stucco decorations can be clearly seen from the northwest side; it was repaired by the DOA in 1997 and after repair, the inner stupa cannot be viewed from the outside. Originally the inner stupa consists of the bell-shaped dome, but its terraces are untraceable and the average brick size of the inner and outer stupas is 39 x 19.5 x 6 centimetres (Pichard, 1993, p. 110, Vol-2); the probable shape of the inner base may have been square with two projections (see Figure 119) and the shape of outer base is also square. The inner stupa may be dated to the early 12th century CE, while the outer stupa may belong to the late 12th century CE. This evidence indicates that the outer stupa was concentrically built around the encased stupa and there is no gap between the two stupas.

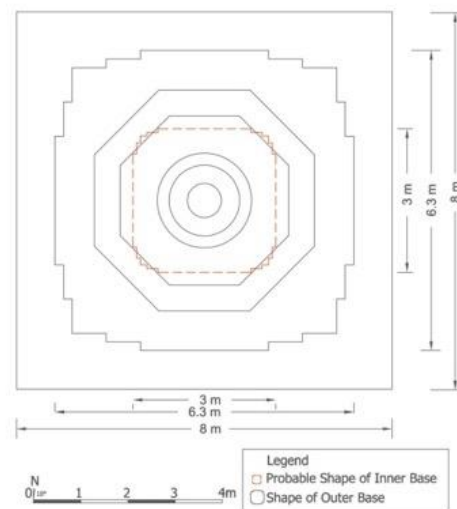


Figure 119 Plan of Monument No. 329 (Wut-tha-na-daw Group) at the Wetkyi-in Area

Note. The shape of inner base may have been square with two projections in this stupa.



Figure 120: Monument No.329 (Wut-tha-na-daw Group) at the Wetkyi-in Area
Note. Inner stupa cannot be seen from the outside after repair by DOA.



Figure 121: The Damaged Outer Stupa before Repair in 1997

Note. The outer stupa can be viewed from the southeast. From Inventory of Monuments at Pagan. United Nations Educational, Scientific and Cultural Organization (UNESCO), p. 100, Vol-2, by P. Pichard. Copyright 1993 by Pierre Pichard.



Figure 122: The Inner Stupa Viewed From the outside

Note. The inner stupa can be clearly seen from the northwest before repair. From Inventory of Monuments at Pagan. United Nations Educational, Scientific and Cultural Organization (UNESCO), p. 100, Vol-2, by P. Pichard. Copyright 1993 by Pierre Pichard.

4.2.6 Monument No.345 (Wut-tha-na-daw Group)

Monument No.345 (see Figure 124) is located at the Wut-tha-na-daw group to the south of Wetkyi-in ward, in the Wetkyi-in area to the south of Anawrahta road and in the south enclosure wall of the Wut-tha-na-daw group. It is a small stupa with a smaller and older stupa encased, and is located in the walled enclosure of temple No.352. There are two square terraces and one octagonal terrace at the outer stupa and it may have originally been the circular bell-shaped dome and conical spire on upper parts. The inner stupa consists of the circular bell-shaped dome and conical spire; its terraces are untraceable. Some 80% of the original stucco mouldings such as the ornate lower ring of the spire and dado with triangles and ornate waistband around the dome still remain in place on the encased stupa and 3% of the stucco mouldings still remain in place on the outer stupa. Before repair, the bases of the inner and outer stupas were buried under debris and above the bell-shaped dome of the inner structure could be clearly viewed from the north, west, and south sides. The upper parts of the outer structure were nearly destroyed and the bases and terraces disintegrated before repair and was repaired by the DOA in 1997. The average brick size of the outer stupa is 37 x 18 x 6 centimetres and the average brick size of the inner stupa is 40 x 20 x 7 centimetres (Pichard, 1993, p. 127, Vol-2). According to the shape of the concentric rings of the inner one, the estimated date of the inner stupa may possibly be dating to the 12th century CE, while the outer structure may belong to the 13th century CE. The probable shape of the inner base may have been square with two projections (see Figure 123); the shape of the outer base is square. According to the plan, the outer stupa was not symmetrically built around the encased inner stupa. The original stucco decorations over the bell-shaped dome and conical spire at the inner stupa are very valuable and artistic evidence for the study of the methods and research on art and architecture of the Bagan period. Archaeological evidence indicates there is no space between the two stupas.

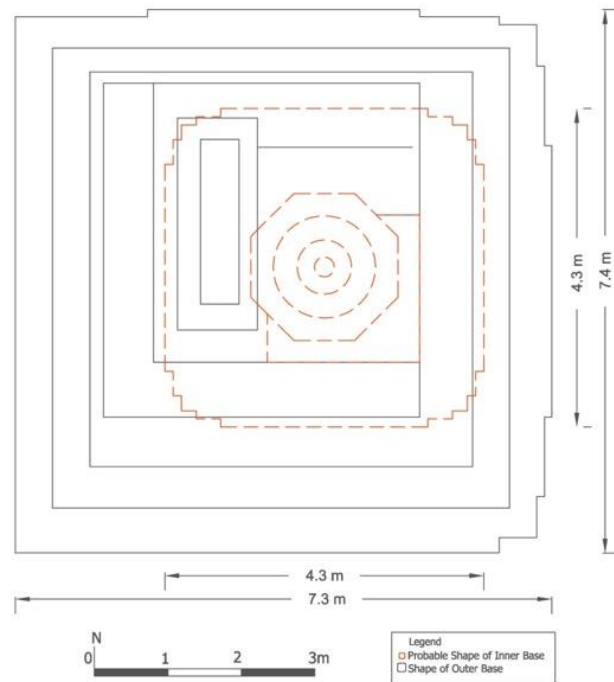


Figure 123: Plan of Monument No.345 (Wut-tha-na-daw Group) at the Wetkyi-in Area

Note. The shape of inner base may have been square with two projections.



Figure 124: Monument No.345 (Wut-tha-na-daw Group) at the Wetkyi-in Area

Note. Inner stupa with original stucco decorations can be seen from the outside.

4.2.7 Monument No.347 (Wut-tha-na-daw Group)

Monument No. 347 (see Figure 126) is situated at the Wut-tha-na-daw group to the south of Wetkyi-in ward in the Wetkyi-in area to the south of Anawrahta road: it is in the south enclosure wall of Wut-tha-na-daw group. It is a medium-size, single-storeyed temple and is located in the walled enclosure of the temple No.352. It is one of the encased temples; a part of the original outer temple measuring 7.5 metres in breadth x 2.8 metres in thickness x 1.06 metres in height still remains at the eastern side of the inner temple. The outer and inner bases (see Figure 125) are rectangular in shape; there are the square central shrine 4.40 x 4.62 metres, the entrance hall 3.05 x 4.48 metres, on western side with porch at the inner temple. Before repair, the vaults are collapsed and the ground floors are buried under the debris at the inner temple. The 15% of the original stucco decorations like the ornate cornice and frieze with ogre heads, and false aperture on the north walls, with the floral patterns in a diamond still remain in this temple (Pichard, 1993, p. 129, Vol-2). There is a renovated seated Buddha image in Bhumisparśa mudra (see Figure 127) flanked by the two disciples of the Buddha in adoration postures on the lotus pedestals in brick and stucco with the 12th century Myanmar style facing to the west to house in the central shrine of the inner temple; formerly it was damaged and it has a headless Buddha image in brick before repair. The average brick size is 36 x 18 x 4.5 centimetres at the inner temple. The inner one may belong to the 12th century CE, while the outer one may belong to the 13th century CE. Both of them are longer in length and shorter in breadth. The restoration works have been done by the DOA including the cloister vault over the central shrine and the barrel vaults over the vestibule and porch. According to a part of its outer base remaining, evidence indicates that the outer temple may have been symmetrically built around the encased inner temple; there is no gap between two of them.

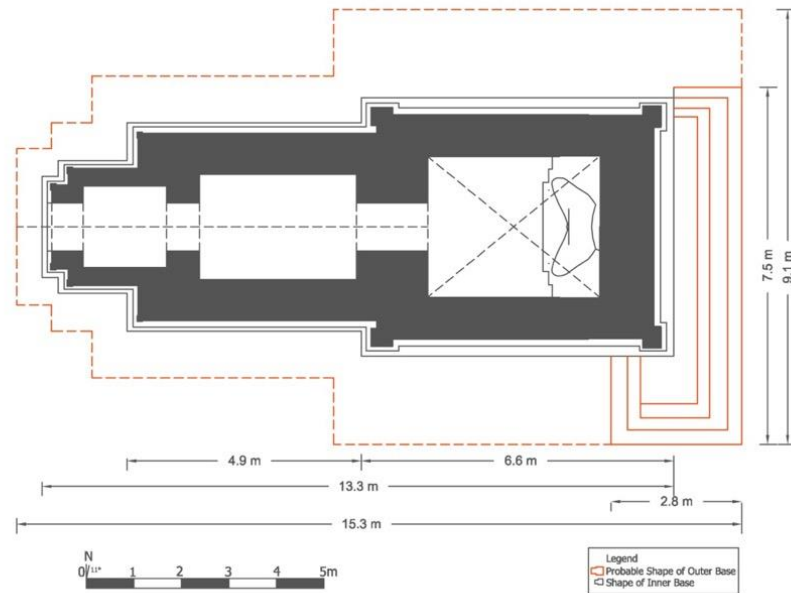


Figure 125: Plan of Monument No.347 (Wut-tha-na-daw Group) at the Wetkti-in Group
 Note. A part of outer temple still survives at the eastern side of the inner temple.



Figure 126: Monument No.347 (Wut-tha-na-daw Group) at the Wetkti-in Group
 Note. The false apertures in stucco on the north wall of inner temple can be seen here.



Figure 127: A Seated Buddha Image in central shrine at Monument No.347
 Note. Brick Buddha image in Bhumisparsha mudra flanked by two disciples in adoration posture.

4.2.8 Monument No.348 (Wut-tha-na-daw Group)

Monument No. 348 (see Figure 129) is situated at the Wut-tha-na-daw group to the south of Wetkyi-in ward in the Wetkyi-in area to the south of Anawrahta road; it is located to the south side of the south enclosure wall of Wut-tha-na-daw group. It is a small stupa, with a smaller and older stupa encased and is located in the walled enclosure of temple No.352. Before it was repaired by the DANM in 2011, the inner stupa can be clearly visible from the northwest side with the bases of these stupas buried under debris and upper parts of the outer stupa including all terraces totally collapsed, its terraces untraceable and the concentric rings on the inner stupa still remaining above the hemispherical dome. The encased stupa has the circular bell-shaped dome and conical spire while its terraces are untraceable. After repair, there are the two square terraces with two projections and one octagonal terrace on the outer stupa. The average brick size of the inner and outer stupas is 38 x 19 x 6 centimetres (Pichard, 1993, p. 130, Vol-2). According to architectural typologies, the inner stupa may belong to the 12th century CE and the outer one may belong to the 13th century CE. The probable shape of the inner base (see Figure 128) might have been square and the shape of the outer base is also square with two projections and it

consists of a plinth. Its plan indicates that the encased inner stupa is located at the northwest corner of the outer stupa. Original stucco carvings on two stupas have not remained yet. The evidence shows that the outer stupa was not symmetrically built around the encased stupa and there is no space between the two stupas. There is a large shrine on upper part of the outer stupa constructed with a radiating arch, exposed for worship and to be able to see the encased stupa from the outside following repairs by the DOA.

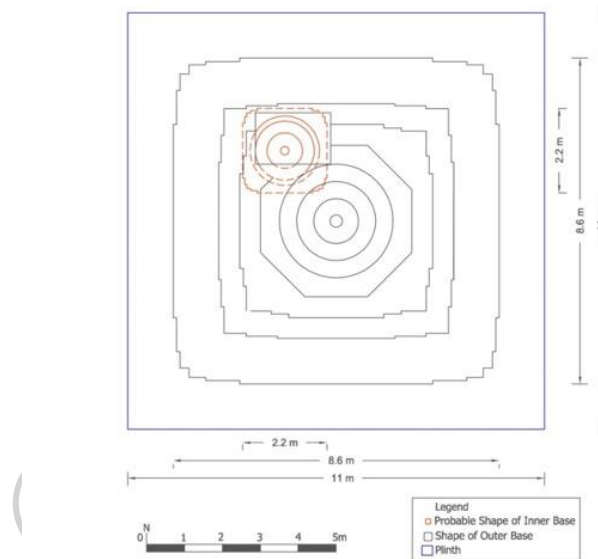


Figure 128 :Plan of Monument No.348 (Wut-tha-na-daw Group) at the Wetkyi-in Area

Note. The inner stupa is located at the northwest corner of the outer stupa.



Figure 129: Monument No.348 (Wut-tha-na-daw Group) at the Wetkyi-in Area
Note. The inner stupa can be clearly visible from the north side.

4.2.9 Monument No.404

Monument No.404 (see Figure 131) is situated to the southwest of Wetkyi-in ward, southeast of Alodawpyi temple and to the north of monument No.421 and No.422 in the Wetkyi-in area. It is a small stupa, with a smaller and older stupa encased. Both of these stupas on upper parts have been totally collapsed and before repair, the bases and terraces are disintegrated and buried under the debris on the outer one. The encased stupa can be clearly seen from the north side before repair and the average brick size of the inner stupa is 40 x 20 x 6.5 centimetres and the average brick size of the outer stupa is 39 x 19.5 x 5.5 centimetres (Pichard, 1993, p. 203, Vol-2). According to its plan, the probable shape of the inner one may have been circular (see Figure 130) and the shape of the outer base is rectangular and the inner stupa is not located at the centre of the outer stupa. The encased stupa may be dated to the 11th century CE, while the outer one may be estimated to the 13th century CE. This evidence confirms that there is no space between the two stupas and the outer stupa was not symmetrically built around the encased inner stupa. It was repaired by the DOA in 1999.

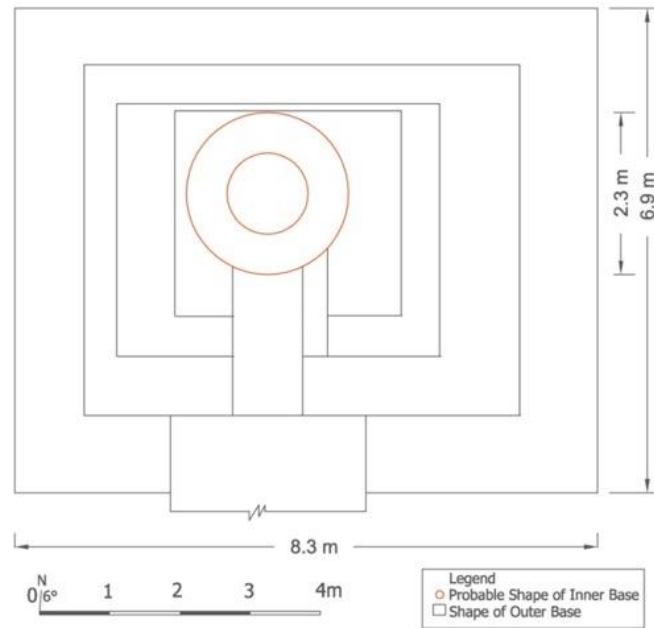


Figure 130: Plan of Monument No.404 at the Wetkyi-in Area
 Note. Outer stupa was not concentrically built around the inner stupa.



Figure 131: Monument No.404 at the Wetkyi-in Area
 Note. The shape of inner base may have been circular in this stupa.

4.2.10 Monument No.445

This example is situated to the south of Wetkyi-in ward and to the southeast of Wuttha-na-daw group in the Wetkyi-in area. It is a small stupa (see Figure 133), with a smaller and older stupa encased. Before the excavation and restoration of this stupa, the upper parts on inner and outer stupas have been collapsed and the 20% of the ornate stucco decorations like the frieze with ogre heads and floral lotuses around the bell-shaped dome still remain on the encased stupa. An original square relic chamber in sandstone measuring 0.80 x 0.80 metres under the dome can be clearly seen from the west side before repair and originally it consists of the one square terrace, one square terrace with two projections and one twelve sided terrace, circular bell-shaped dome, and conical spire on the encased stupa. The average brick size of the inner stupa is 38.5 x 19 x 5 centimetres and the average brick size of the outer one is 37 x 18 x 4.5 centimetres (Pichard, 1993, p. 245, Vol-2). It was repaired by the DOA in 1999 and after the excavation of the debris, the shape of the inner and outer base can be clearly visible from the outside. The probable shape of the outer base may have been circular (see Figure 132) and the shape of the inner base is square. Its plan indicates that the inner stupa is not exactly located at the centre of the outer stupa. According to architectural typologies, the inner one may be dating to the 12th century CE, while the outer one may be estimated to the 13th century CE. Archaeological excavation indicates that the outer stupa was not symmetrically built around the encased stupa and there is no space between the two stupas.

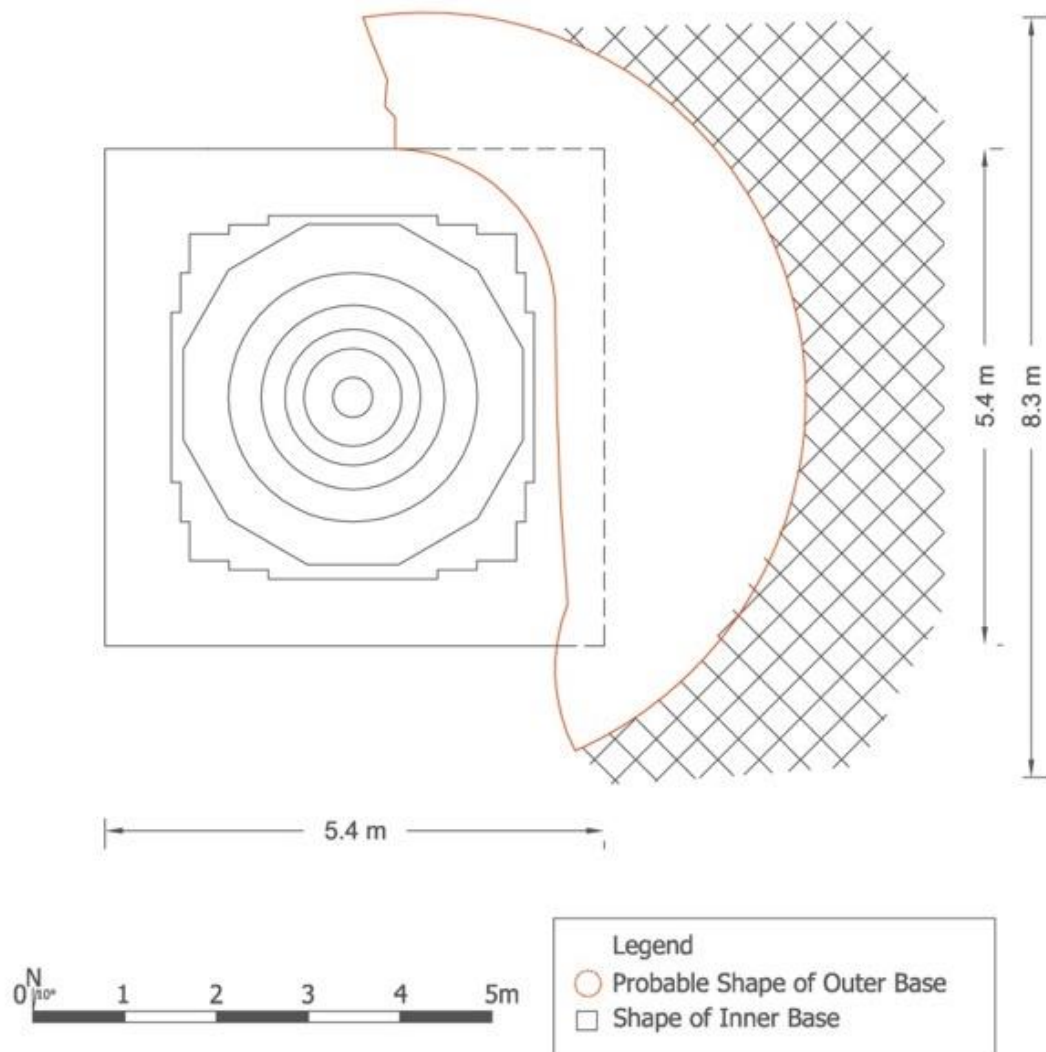


Figure 132 Plan of Monument No.445 at the Wetkyi-in Area
 Note. Outer stupa with circular base in shape can be seen here.



Figure 133: Monument No.445 at the Wetkyi-in Area
 Note. Outer stupa was not concentrically built around the encased stupa.

4.2.11 Monument No.717

This example is situated between Minnanthu and Wetkyi-in area and to the west of Thinkanyon temple (No.712) and lies in a ruined walled enclosure with temple No.716. It is a small stupa (see Figure 135), with a smaller and older stupa encased and it is one of the unexcavated mounds listed by the DANM. It is about 1.5 metres in height and the excavation and restoration of this mound by the DANM have not started yet. The bases of the outer and inner structures are buried under the debris. The encased stupa may have originally been the circular bell-shaped dome and conical spire and it can be seen from the southwest side. The top portion of an encased stupa is only visible below the collapsed outer structure and the terraces of these structures are untraceable. The average brick size of the inner one is 36 x 18 x 5.5 centimetres and the average brick size of the outer one is 38 x 19 x 5 centimetres (Pichard, 1994, p. 254, Vol-3). The probable shape of the inner base may have been square (see Figure 134), while the shape of the outer base may have been also square and the inner one is not exactly located in the centre of the outer stupa. According to the plan on archaeological remains, both of these structures may be dating to the 13th

century CE. Archaeological remains on this mound confirm that the outer structure was not symmetrically built around the encased stupa and there is no gap between the two structures.

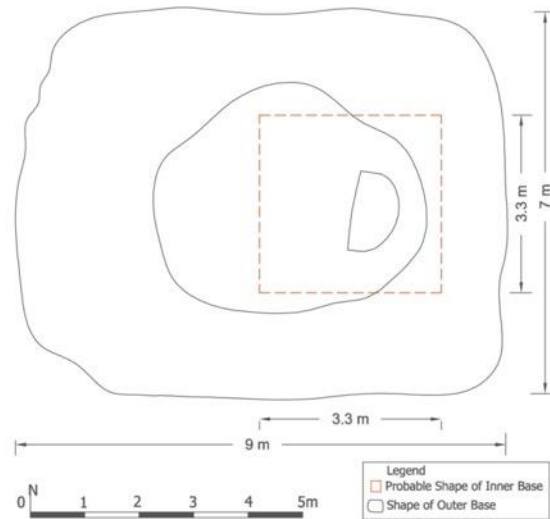


Figure 134 Plan of Monument No.717 at the Wetkyi-in Area
Note. Inner and outer bases may have been circular in shape.

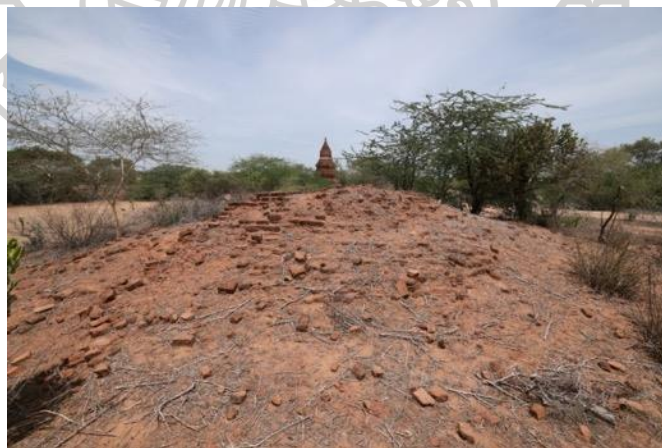


Figure 135 Monument No.717 at the Wetkyi-in Area
Note. It is one of the unexcavated mounds at Bagan.

4.2.12 Monument No.1754

Monument No.1754 (see Figure 137) is situated to the south of Alodawpyi temple (No.374) and Buleithi stupa (No.394) in Wetkyi-in area and it lies to the south of Anawrahta road. It is a small single-storeyed temple added on the west side of an outer stupa, with two smaller and older stupas encased. There are a square central shrine measuring 2.20 x 2.25 metres, vestibule and porch on west face, apertures on south and north foreparts and it was adjacent to the stupa on east side. The outer stupa consists of the square base with two projections, two square terraces with two projections, the bell-shaped dome and conical spire. There are two encased stupas, which are the eastern encased stupa and western encased stupa. Before it was repaired by the DOA in 1997, the western encased stupa can be only seen from the crack on the west side. The probable shape of western inner base (see Figure 136) might have been circular and the probable shape of the eastern inner base might have been also circular. The western temple on upper parts has been collapsed and originally it may have the cloister vault over the shrine and the barrel vaults over the vestibule and porch and the average brick size in this temple is 44 x 22 x 6 cm. The average brick size of the eastern inner stupa is 28 x 16 x 5.5 centimetres and the average brick size of the outer stupa is 36 x 18 x 5.5 centimetres. Before the restoration, the half portion of the monument has been generally damaged and the vaults of the temple have been totally collapsed and the ground floors are buried under the debris. The bases and terraces are disintegrated and the upper parts are badly damaged on the outer stupa. The 10% of the stucco mouldings on the plain pediments, urn-profiled base and perforated stone apertures still remain in this western temple. The 5% of the stucco decorations such as the dado with triangles, ornate waistband and frieze with ogre heads around the dome still remain on the outer stupa (Pichard, 1999, pp. 22-23, Vol-7). According to architectural typologies of the stupas, the eastern and western encased stupas may be datable to the 9th century CE, while the estimated date of the outer stupa may be datable to the 12th century CE. The shape of the eastern encased stupa is cylindrical in shape and the western encased stupa is bulbous in shape. The eastern inner one is very similar to the Bawbawgyi stupa at Srikshetra in the Pyu period and its design is unique and extraordinary architecture at Bagan so these inner

stupas are influences of the Pyu culture. Its plan indicates that the western inner one is smaller and older than the eastern inner stupa. The eastern encased stupa is located in the centre of the outer stupa. Originally these inner stupas may have been built on the same plinth and they are encased by a single larger stupa in later times. There are some treasure holes on the inner and outer stupas, dug by the treasure seekers. This evidence indicates that it is one of the encased group of stupas in this area at Bagan and the outer stupa was concentrically built around the eastern encased stupa and there is no space between the three structures.

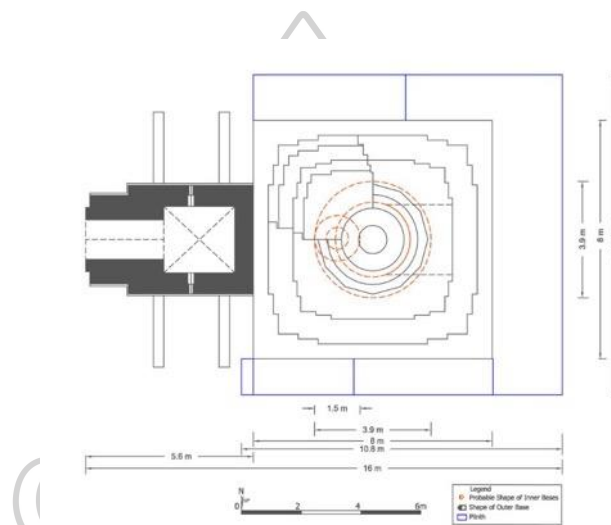


Figure 136 Plan of Monument No.1754 at the Wetkyi-in Area
Note. There are two encased stupas covered by a larger stupa in later times.



Figure 137 Monument No.1754 at the Wetkyi-in Area
Note. The inner stupa with a cylindrical dome in shape can be seen from the east side.

4.2.13 Monument No.1755

Monument No.1755 (see Figure 139) is situated to the south of Alodawpyi temple (No.374) and Buleithi stupa (No.394) in the Wetkyi-in area and lies to the west of the monument No.1754 and to the south of Anawrahta road. It is a small stupa, with a smaller and older stupa encased. The outer stupa has the square base and one square terrace and the upper parts have been totally collapsed. Originally the outer stupa may have been the circular bell-shaped dome and conical spire and the inner stupa has the circular bell-shaped dome and conical spire. The bases and terraces on outer one are disintegrated and the 5% of the original plain stucco mouldings still remain in place on the outer stupa. The terraces of the encased stupa are buried under the debris and the upper parts including the finial on the encased inner stupa have been damaged and the 80% of the original stucco decorations like the dado and frieze with triangles, ornate waistband around the bell-shaped dome still remain on the encased stupa. The average brick size of the inner one is 32 x 16 x 5.5 centimetres and the average brick size of the outer one is 36 x 18 x 5 centimetres (Pichard, 1999, p. 24, Vol-7). Before and after the restoration, the encased stupa can be visible from the east, south and north and the restoration works by the DANM was completed in 1997. The probable shape of the inner base (see Figure 138) might have been square with two projections, while the shape of the outer base is also square. The encased stupa is not exactly located at the centre of the outer stupa. According to architectural typologies, the encased stupa may be datable to the 12th century CE, while the outer stupa may be datable to the 13th century CE. This evidence confirms that the outer stupa was not symmetrically built around the encased stupa and there is no space between the two stupas.

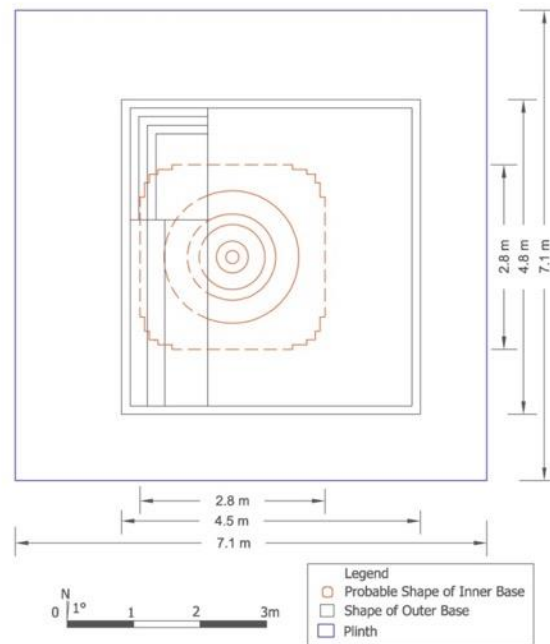


Figure 138 : Plan of Monument No.1755 at the Wetki-in Area
 Note. Outer stupa is not concentrically built around the encased stupa.



Figure 139 Monument No.1755 at the Wetkyi-in Area
 Note. The inner stupa with original stucco decorations can be seen here.

4.3 Area 3: Taungbi Area

Among the encased Buddhist monuments at Bagan, Taungbi area is the in richest encasements in the Bagan incirbed region. There are twenty-five encased structures (see Figure 140) and four different architectural typologies of encasements in this area. There are nineteen encased stupas (No.1503, 1689, 1690, 1696, 1697, 1722, 1757, 1827, 1838, 1855, 1872, 1905, 1962, 2004, 2014, 2065, 2084, 2129, 2143), two encased temples (No.1704, 1796), and three encased group of stupas (No.1870, 2132, 2133), and one encased moathtaw stupa (No.1956) in Taungbi area. According to the inventory of monuments at Pagan written by Pichard, the author gives the number of encased monuments. Therefore some of the encased group of stupas consist of two numbers of encased stupas, but some have only one encased stupa.

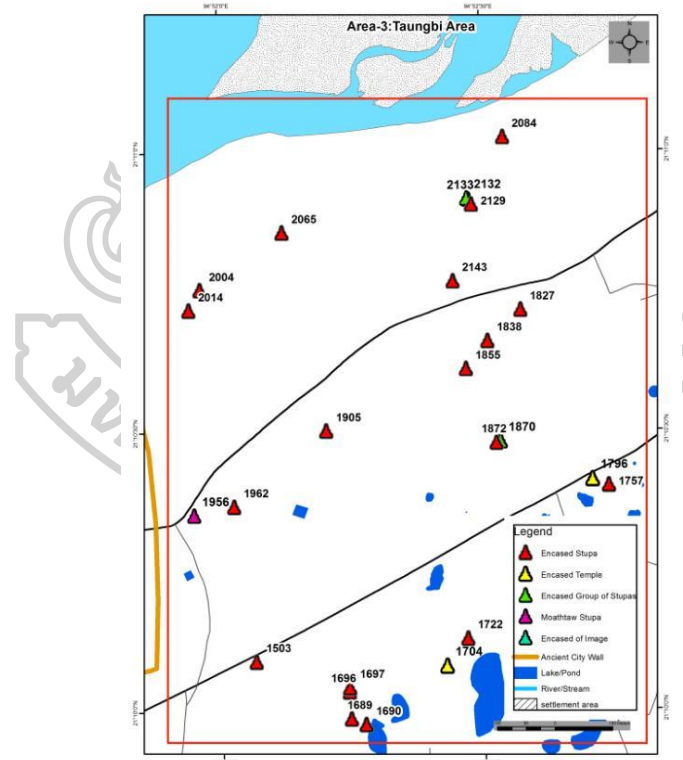


Figure 140 : Map Showing the Area 3 (Taungbi Area)

Note. There are twenty-five encased monuments at the Taungbi area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.3.1 Monument No.1503

Monument No.1503 (see Figure 142) is situated to the south of Ananda temple (No.2171) and to the southeast of old Bagan city wall in the Taungbi area. There are one circular terrace, one octagonal terrace, and upper parts, which consist of the circular bell-shaped dome and conical spire. There is a small niche with a radiating arch to house a seated Buddha images in plaster added in later times, when it was repaired and an encased stupa can be clearly visible from this niche through a treasure hole on the eastern side, but its terraces and upper parts are untraceable. The average brick size of the outer stupa is 42 x 21 x 7 centimetres (Pichard, 1996, p. 103, Vol-6). An original part of the outer base can be clearly seen on the southwestern and northern sides. According to the this evidence, the shape of the outer base is circular (see Figure 141), while the probable shape of the inner base may have been also circular and there is no space between the two stupas. Architectural typologies indicate that the outer stupa may be datable to the late 11th century CE and the inner one may be belonging to the early 11th century CE. Traces of the original stucco decorations still remain in place on the outer and inner stupas. Before repair, the bases and terraces of the outer stupa are disintegrated and it was repaired by the DOA in 1996. The plan of these stupas indicates that the outer stupa was concentrically built around the encased inner stupa.

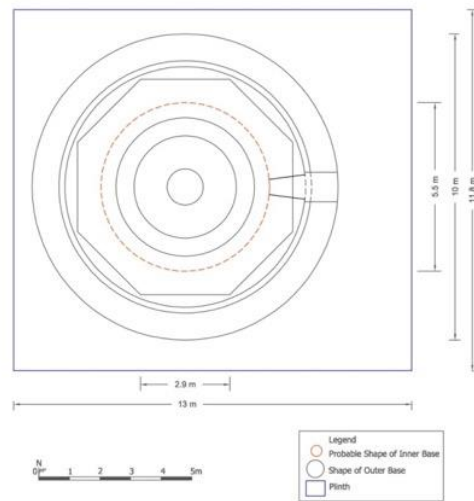


Figure 141: Plan of Monument No.1503 at the Taungbi Area
 Note. *The shape of inner base may have been circular in this stupa.*



Figure 142 : Monument No.1503 at the Taungbi Area
 Note. The inner stupa can be seen through a small niche from the east.

4.3.2 Monument No.1689

This example is situated to the northwest of Dhammayangyi temple (No.771), old Bagan, in the Taungbi area. It is a small stupa (see Figure 144), with a smaller and older stupa encased. The outer stupa consists of the two square terraces, circular bell-shaped dome, and conical spire. It has the first terrace with one projection and the second terrace with two projections. The inner stupa also consists of the circular bell-shaped dome, and the conical spire. The inner stupa can be visible from the western side. The 10% of the original stucco decorations like dado with triangles, ornate waistband, and frieze with ogre heads around the dome, still remain in place on the outer stupa. The original stucco decorations like dado with triangles, ornate waistband, frieze with ogre heads around the dome, and floral decorations on the concentric rings also still remain on the encased stupa. The average brick size of the outer one is 35 x 17 x 5 centimetres and the average brick size of the inner one is 40 x 20 x 6.5 centimetres (Pichard, 1996, p. 357, Vol-6). Before repair, the half portion of the outer stupa was ruined and the terraces are disintegrated and the upper parts are badly damaged. It was repaired by the DOA in 1997 and after the earthquake occurred in 2016, it was again repaired by the DANM in 2017. The shape of outer base is square with one projection (see Figure 143), while the probable shape of inner base may have been square with two projections. According to architectural typologies, the encased stupa may be datable to the early 12th century CE, while the outer stupa may be estimated to the 13th centuries CE. According to this evidence, the outer stupa was not concentrically built around the encased stupa and there is no space between the two stupas. There was a previous large treasure hole, exposing for worship with the inner one from the west side visible when it was repaired in 1997. Before repair, treasure hunters dug not only the outer one, but also the encased stupa (Pichard, 1996, p. 357, Vol-6).

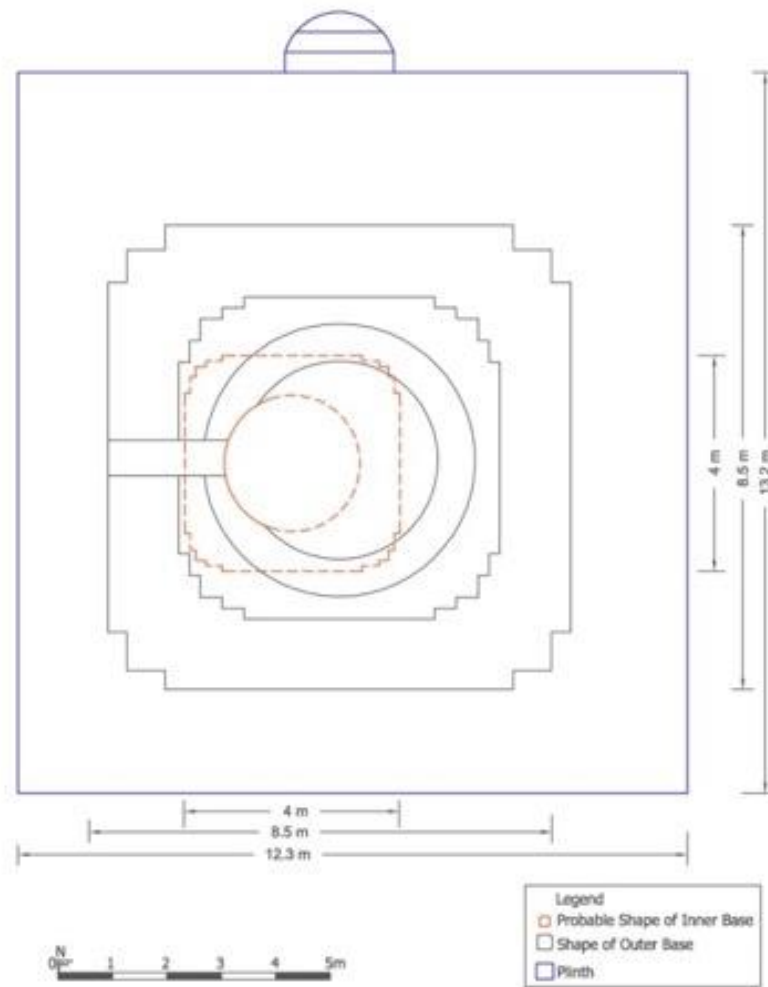


Figure 143 Plan of Monument No.1689 at the Taungbi Area
 Note. The outer stupa was not concentrically built around the encased stupa.



Figure 144 Monument of No.1689 at the Taungbi Area
 Note. The original inner stupa can be seen through a treasure hole from the outside.

4.3.3 Monument No.1690

This example is situated to the northwest of Dhammayangyi temple (No.771) and to the southeast of old Bagan, in the Taungbi area and it was locally called Scovell Pawdawmu stupa (see Figure 146) after Mr. C.E. Scovell, late Executive Engineer in charge at Bagan, removed a ruined outer stupa. It is a small stupa, which was formerly encased in a larger one. It was exposed since 1918 when Mr. Scovell dismantled the outer stupa (Luce, 1969, p. 281). It has the square base with two projections, two square terraces with two projections and it has the circular bell-shaped dome and short conical spire. There are 80 % of the original stucco decorations like the bases and terraces, ornate waistband, floral frieze around the dome and conical spire still remaining on the encased inner stupa. The average brick size of the existing stupa is 34 x 17 x 5.8 centimetres (Pichard, 1996, p. 358, Vol-6). The shape of inner base is square with two projections, while the probable shape of outer base (see Figure 145) may have been also square with two projections. According to architectural typologies, the encased stupa may be datable to the 11th century CE, while the outer one, which was removed in 1918, may be estimated in the 12th century CE. According to the plan, the inner one is exactly located at the centre of the outer stupa and the outer stupa may have been concentrically built around the inner one; there is

no gap between the two stupas (ASI, Annual Report, 1919-20, p. 31; ASB, Annual Report, 1920, pp. 26-27). The author concludes that the great percentage of the original beautiful stucco decorations on the encased stupa still remain in this area. There are only original stucco decorations on inner stupa datable to the 11th century, but the outer stupa had been removed in 1918. Therefore the original stucco decorations on the outer larger stupa dating the 12th century cannot be seen now. Original excellent beautiful stucco decorations over the finial, concentric rings (see Figure 147), waistband dating the 11th century still survive on the inner stupa. In this stupa, flat and moulded concentric rings with floral designs are alternately built on the original conical spire. The floral friezes (see Figure 148) below the waistband are very similar to the frieze with ogre heads in this stupa. There is a photo of this stupa, which was taken in 1918-19 from the Old Burma-Early Pagan (see Figure 149).

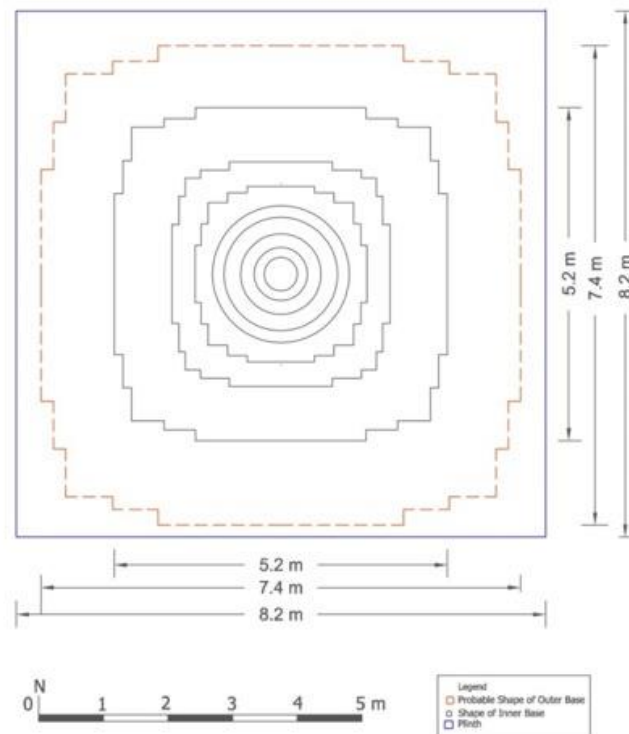


Figure 145: Plan of Monument No. 1690 (Scovell Pawdawmu Stupa) at the Taungbi Area

Note. The shape of outer base may have been square with two projections in this stupa.



Figure 146 : Monument No.1690 (Scovell Pawdawmu Stupa) at the Taungbi Area
 Note. The elevation of the original inner stupa can be seen from the outside.



Figure 147: Original Stucco Decorations over the Finial and Concentric Rings
 Note. Floral designs on conical spire can be seen on the encased stupa.



Figure 148: Original Stucco Decorations over the Bell-Shaped Dome
 Note. Original floral frieze around the waistband can be seen on the encased stupa.

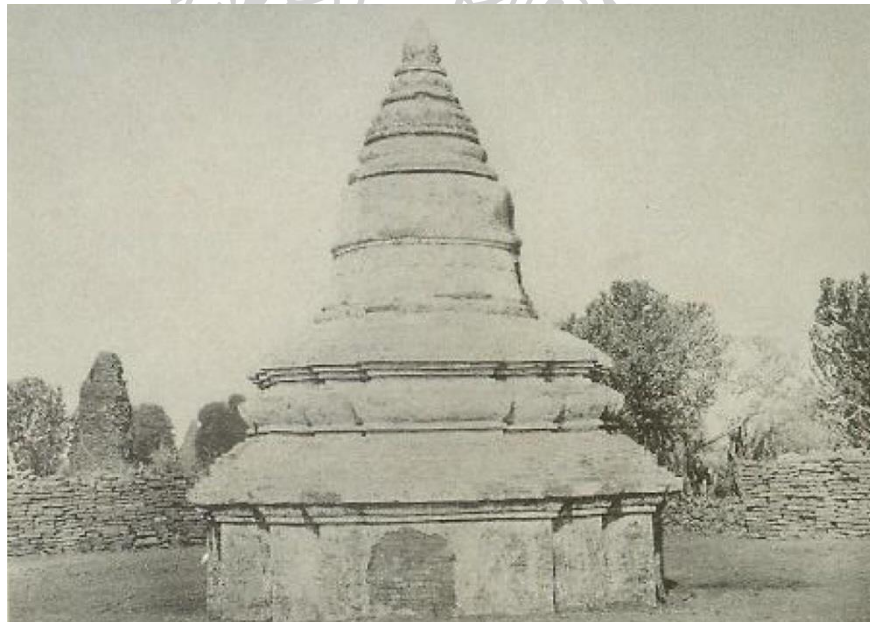


Figure 149: Old Photo of Monument No.1690 (Scovell Pawdawmu Stupa)
 Note. It was taken in 1918-19. From *Old Burma-Early Pagan*. *Artibus Asiae* and
 Institute of Fine Arts, New York University, Plate 259b, Vol-3, by G.H. Luce.
 Copyright 1969 by Gordon Hannington Luce.

4.3.4 Monument No. 1696

This example is situated to the southwest of Shwenanyindaw monastic complex in the Taungbi area. It is a small stupa (see Figure 151), with a smaller and older stupa encased and it has one square terrace, one sixteen sided terrace, circular bell-shaped dome and conical spire. Before repair, the inner stupa can be clearly seen from the eastern side. The encased inner stupa also consists of the circular bell-shaped dome and conical spire and its original stucco decorations on the exposed part can be visible from the outside and its terraces are untraceable. When it was repaired by the DOA in 1997, there is a small square hole exposing on the outer stupa to see and worship the inner one from the eastern side. There are three lines of the original ornate waistband around the dome, still remaining and the terraces are disintegrated and upper parts are badly damaged on the outer stupa before restoration. Only 4% of the original stucco decorations still remain on the outer stupa. The average brick size of the outer one is 32 x 16 x 5.5 centimetres and the average brick size of the inner one is 28 x 14 x 5 centimetres (Pichard, 1996, p. 364, Vol-6). Plan of these stupas indicates that the shape of outer base is square with two projections and the shape of inner base (see Figure 150) may have been also square with two projections and the encased stupa may have exactly been located at the centre of the outer one. According architectural typologies, the encased stupa may be datable to the 11th century CE, while the outer one may be estimated to the 12th century CE. The outer stupa may have been concentrically built around the encased stupa and there is no space between the two stupas.

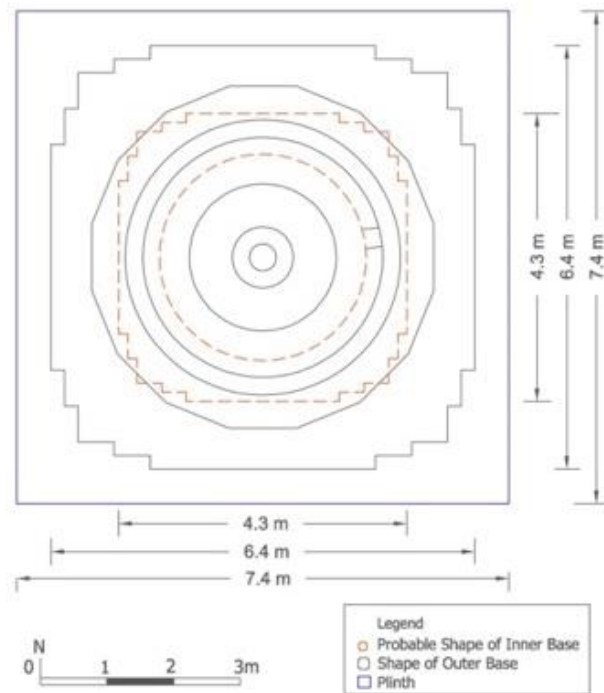


Figure 150: Plan of Monument No.1696 at the Taungbi Area

Note. The shape of inner base may have been square in this stupa.



Figure 151: Monument No.1696 at the Taungbi Area

Note. Inner stupa can be seen through a treasure hole from the outside.

4.3.5 Monument No. 1697

This example is situated to southwest of Shwenanyindaw monastic complex in the Taungbi area. It is a small stupa (see Figure 153), with a smaller and older stupa encased. Before restoration, both of these stupas are totally destroyed and all terraces and upper parts are disintegrated and untraceable and it was repaired by the DOA in 1999 and it was again repaired by the DANM in 2017 after the earthquake occurred in 2016. After clearing debris, it was found that the shape of the encased stupa is octagonal, while the shape of the outer one is square with two projections. When it was repaired, it was reconstructed as the circular bell-shaped dome and conical spire on inner stupa. A part of the original outer base (see Figure 152) can be clearly seen at the southeast corner of its outer stupa still remaining. The average brick sizes of the inner and outer stupas are 32 x 16 x 5.5 centimetres (Pichard, 1996, p. 365, Vol-6). According to architectural typologies, both may be datable to the 11th century CE because they have used the same brick size during a century in the Bagan period. These stupas have been reconstructed in the seven sided enclosure wall and the octagonal-shaped stupas are mostly built during the 11th century CE in Bagan area. This evidence indicates that there is no gap between the two stupas and the outer stupa may have been concentrically built around the encased stupa.

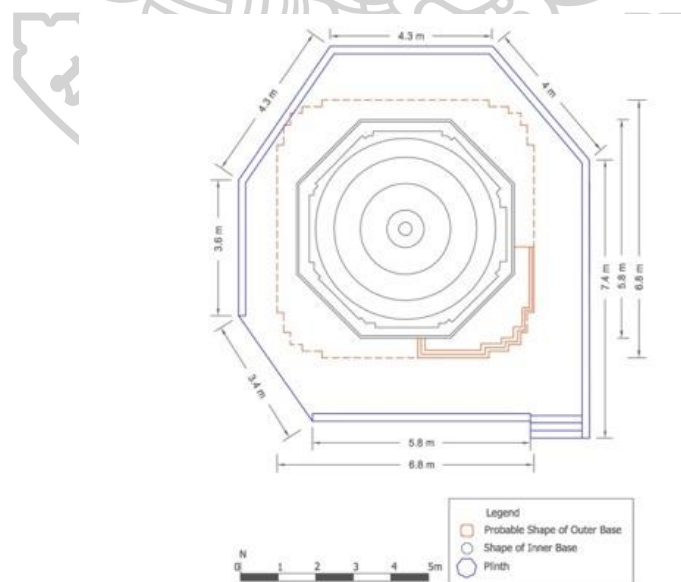


Figure 152: Plan of Monument No.1697 at the Taungbi Area
Note. The shape of outer base may have been circular in this stupa.



Figure 153: Monument No.1697 at the Taungbi Area
 Note. A part of outer stupa still remains at the southeast corner of inner stupa.

4.3.6 Monument No.1704

This example is situated in the south sector of the outer enclosure wall of Shwenanyindaw monastic complex and to the southeast of old Bagan in the Taungbi area. The outer temple (see Figure 155) is a medium sized, single-storeyed temple, with a smaller and older image house and inner one may have formerly been an image house to house only a seated Buddha image in brick. There are vestibule and porch on east face, windows with an aperture on the south and north walls of vestibule, brick perforated windows on the south and north walls of main body, blind window on west wall. Before restoration, the vaults and upper parts are collapsed and the ground floor are partly buried under the debris and there is a damaged and headless seated Buddha image in brick, facing to the east in an inner image house and it was repaired by the DOA in 2000. The cloister vault over the shrine and the barrel vaults over the vestibule and porch are reconstructed in this temple, when it was repaired. The 15 % of the original stucco decorations like the cornice, pilasters, base with recess and ornate pediments above the windows still remain in place on the outer temple. The average brick size of the inner one is 38 x 18 x 5 centimetres and the average brick size of the outer temple is 38 x 19 x 5.5 centimetres (Pichard, 1996, p. 373, Vol-6). According to architectural typologies, the inner one may be datable to the early 11th

century CE, while the outer temple may be estimated to the late 11th century CE. The shape of the outer base is rectangular, while the shape of the inner image house is square. The inner one (see Figure 154) is located at the central shrine of the outer temple. The author concludes that an inner image house was firstly built by the first donor and the outer temple was secondly built by the first donor or second donor. If the inner one was secondly built, the windows on the main body of the outer temple will not block in later times. These windows are secondly built and blocked because there is firstly an image house to house a Buddha image. In later times, the first donor or secondary donor had a different idea to build a larger temple than a previous image house and he built the beautiful perforated windows, blind windows, and blind windows with an aperture. This evidence indicates that there is no space between the two temples.

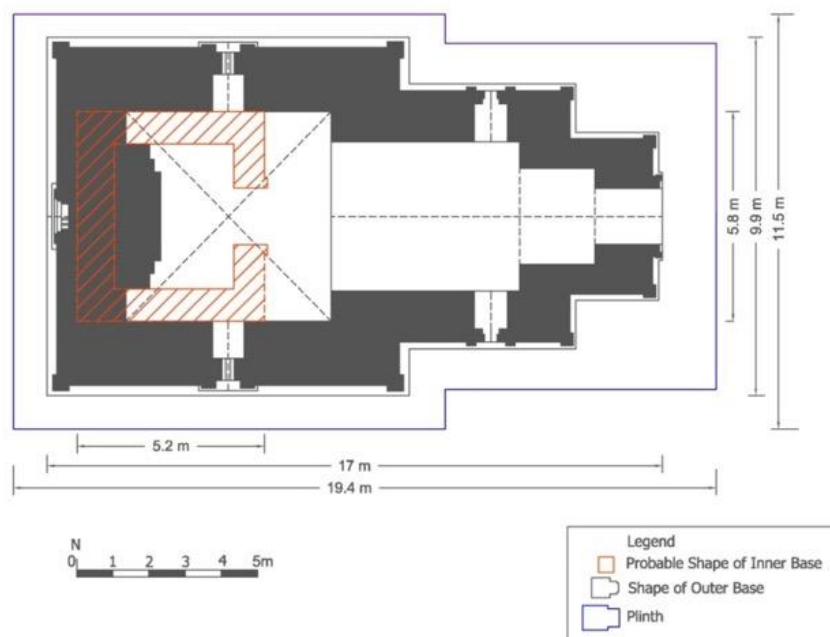


Figure 154: Plan of Monument No.1704 at the Taungbi Area
 Note. The shape of Inner temple may have been square in this stupa.



Figure 155: Monument No.1704 at the Taungbi Area
 Note. Outer temple can be seen from the southeast side.

4.3.7 Monument No.1722

This example is situated in the inner enclosure wall of the Shwenanyindaw monastic complex and to the southeast of old Bagan in the Taungbi area. It is a small stupa (see Figure 157), with a smaller and older stupa encased. The outer stupa is a Sinhalese-typed stupa, while the inner stupa may have also been a Sinhalese-typed stupa and the original stucco mouldings over the stone top finial of the inner stupa can be visible through a treasure hole from the southeast side before repair. The bases and terraces are disintegrated and the upper parts are badly damaged on the outer one and the encased stupa of the upper part of the conical spire appears with a stone top before repair. It was firstly repaired by the DOA in 1997 and it was secondly repaired by the DANM in 2016 after the earthquake occurred at Bagan in 2016. There are two circular terraces, an hemispherical dome and crowning block on the outer stupa and the shape of the inner one is untraceable. The average brick size of the terraces on outer stupa is 34 x 17 x 4 centimetres and the average brick size of the dome on outer stupa is 28 x 14 x 4 centimetres (Pichard, 1996, p. 391, vol-6). The plan of these stupas (see Figure 156) indicates that the shape of the outer base is circular, while the shape of the inner base may have been also circular. According to architectural

typologies, the inner one may be datable to the 12th century CE, while the outer one may be estimated to the 13th century CE. This evidence indicates that there is no space between two of them and the outer stupa may have been concentrically built around the encased stupa.

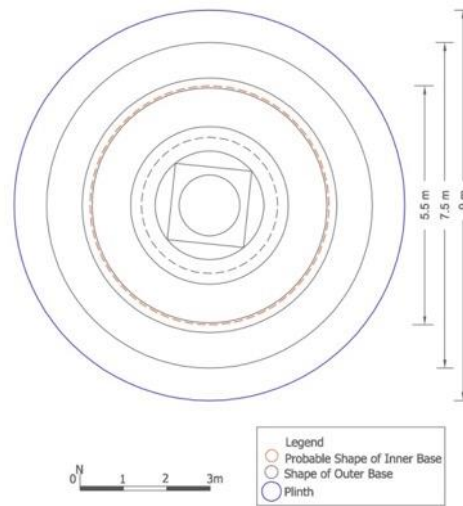


Figure 156: Plan of Monument No.1722 at Taungbi Area
Note. The shape of inner base may have been circular in this stupa



Figure 157: Monument No.1722 (Sinhalese-Typed Stupa) at Taungbi Area
Note. Inner stupa cannot be seen from the outside after repaired by the DOA.

4.3.8 Monument No.1757

This example is situated to the south of Hitlominlo temple (No.1812) in Taungbi area and it is located to the south of the Anawrahta road. It is a small single-storeyed temple (see Figure 159), with a smaller and older stupa encased; the western base of the outer temple can be clearly seen at the bottom of the inner stupa and the inner stupa was encased by the main body of the outer temple, which was added and enlarged on the eastern side of an older stupa. This temple consists of the central shrine, 4.88 x 4.68 metres, the entrance hall with porch facing east, the windows on the south and north walls of the central shrine. Before restoration, the vaults and upper parts collapsed and the ground floors are buried under the debris. Both of these monuments were repaired by the DOA in 1998. When they were repaired, the cloister vault over the shrine and the barrel vaults over the entrance hall and porch were constructed in this temple and there is a renovated seated Buddha (see Figure 160) in Bhumisparsa mudra with the 12th century style, on the original lotus pedestal in brick and stucco, housing in the central shrine of the outer one. The inner stupa consists of the two square terraces with two projections and one octagonal terrace. The bases and terraces are disintegrated and upper parts have been totally destroyed in the inner stupa. The average brick size of the inner stupa is 40 x 20 x 6 centimetres and the average brick size of the outer stupa is 40 x 20 x 5 centimetres (Pichard, 1999, p. 26, Vol-7). Numerous broken bricks have been used on outer temple and a few traces of stucco decorations can be seen over the inner stupa. The shape of the inner base (see Figure 158) is square with two projections, while the shape of the outer base is rectangular. According to architectural typologies, the inner stupa may be datable to the 12th century CE, while the outer temple may be estimated to the 13th century CE. It is one of the distinguished unique encased stupas in the Taungbi area. This type is a different encasement that is a smaller and older stupa encased by a larger temple. This evidence indicates that there is no space between two monuments. It is one of the unusual encased monuments at Bagan.

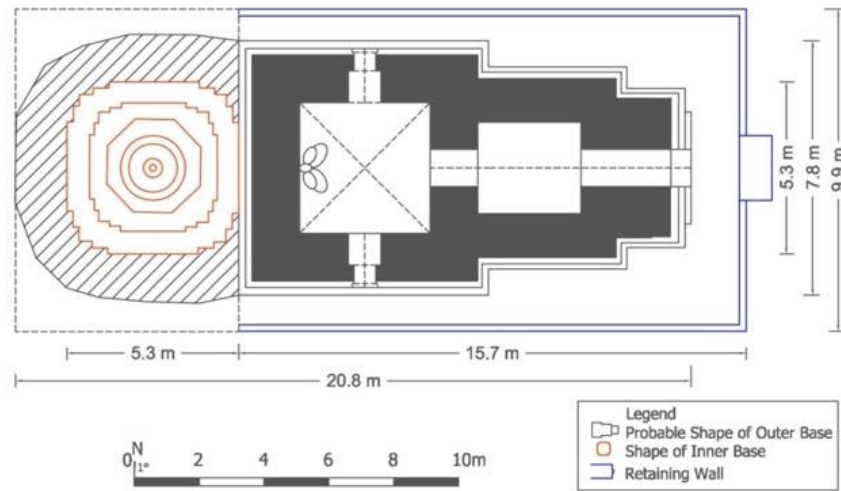


Figure 158: Plan of Monument No.1757 at Taungbi Area
 Note. The shape of inner base may have been circular in this monument.



Figure 159: Monument No.1757 (Unusual Monument) at Taungbi Area
 Note. Inner stupa was encased and enlarged by a larger temple.



Figure 160: A seated Buddha image in brick and stucco housed in the central shrine
 Note. A Buddha image in Bhumisparsha mudra can be seen in this stupa.

4.3.9 Monument No.1796

This example (see Figure 163) is situated to the south of Htilominlo temple (No.1812) and to the south of Anawrahta road in the Taungbi area. It is a small single-storeyed temple encased and enlarged by a younger and larger temple, which remains at the base on the north and south walls of the inner temple. Before excavation and repair by the DOA, this mound is 2.10 metres in height and the inner temple consists of the central shrine measuring 3.80 x 3.90 metres, vestibule and porch facing to the east; the upper parts of these two temples have been totally collapsed and it was excavated by the DOA in 1994. The maximum remaining of the outer temple is 0.75 metres in height around the inner temple and a few traces of stucco decorations can be seen on the exterior walls of the inner temple. The average brick size of the inner one is 38 x 19 x 6 centimetres (Pichard, 1999, p. 74, Vol-7). The original brick pedestal still remains and the original Buddha image disappeared before repair. It was repaired by the DOA in 1997 and when the earthquake was occurred in 2016, the conservation works in this temple have been again undertaken by the DANM in 2016. A new seated Buddha image in brick and stucco (see Figure 162) was renovated on the original pedestal in 1997. The cloister vault over the central shrine and the barrel vaults over the vestibule and porch have been reconstructed when it was repaired in

1997. According to architectural typologies, the inner temple may be datable to the early 13th century CE (Pichard, 1999, p. 74, Vol-7), while the outer one may be estimated to the late 13th century CE. The shape of the inner base (see Figure 161) is rectangular and the probable shape of the outer base is also rectangular and there is no gap between two of them. This evidence indicates that the outer temple was symmetrically built around the encased inner temple.

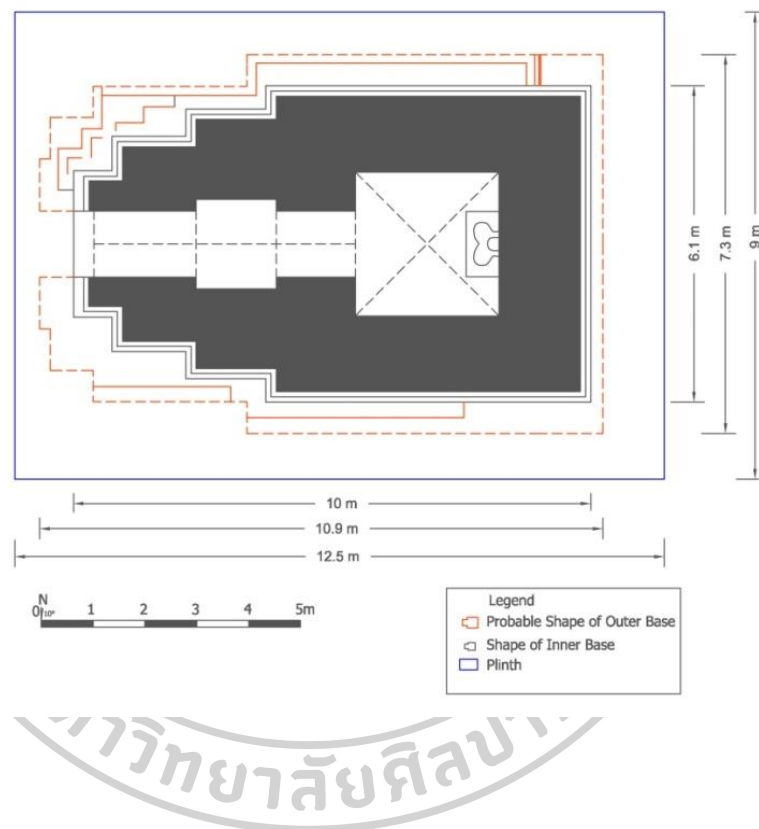


Figure 161 Plan of Monument No.1796 at Taungbi Area

Note. Parts of outer temple still remaining at the north and south sides of inner temple

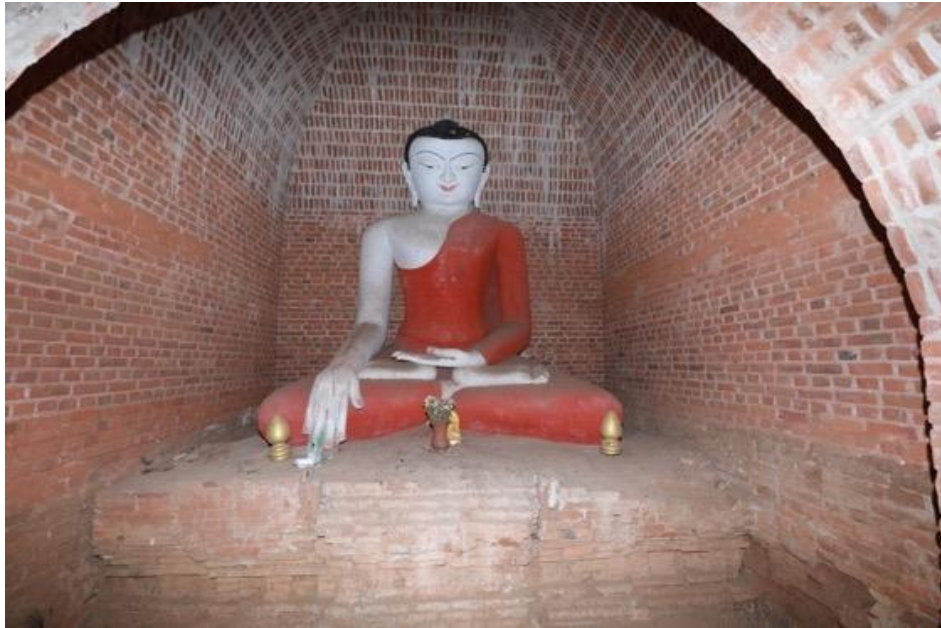


Figure 162: A Renovated Seated Buddha Image in the Central Shrine of No.1796
 Note. Buddha image in Bhumisparsa mudra on the original pedestal can be seen here.



Figure 163: Monument No.1796 at the Taungbi Area
 Note. A part of outer temple can be seen at the base of inner temple.

4.3.10 Monument No.1827

This example (see Figure 165) is situated to the west of Htilominlo temple (No.1812) and to the east of old Bagan in Taungbi area. It is a small stupa, with a smaller and older stupa encased. There are two square terraces, one octagonal terrace, circular bell-shaped dome and conical spire on the outer stupa, but its upper parts have been collapsed before repair. The second terrace of the outer temple consists of the two projections. The terraces of the inner stupa are untraceable and it may have been the circular bell-shaped dome and conical spire. It was repaired by the DOA in 1998. There is a large niche with a radiating arch, exposing it to see and worship the encased stupa when it was repaired. Before repair, only 4% of the original plain stucco mouldings still remain in place on the outer stupa. The average brick size of the encased stupa is 36 x 18 x 5.5 centimetres and the average brick size of the outer one is 38 x 19 x 5 centimetres. According to architectural typologies, the inner one may be datable to the 12th century CE, while the outer one may be estimated to the 13th century CE (Pichard, 1999, p. 120, Vol-7). The probable shape of the encased stupa may have been square with two projections, while the shape of the outer base is also square and there is no space between the two stupas. Plan of these stupas indicates that the encased stupa (see Figure 164) is located at the southwestern approach of the outer stupa and that the outer stupa was not symmetrically built around the encased stupa.

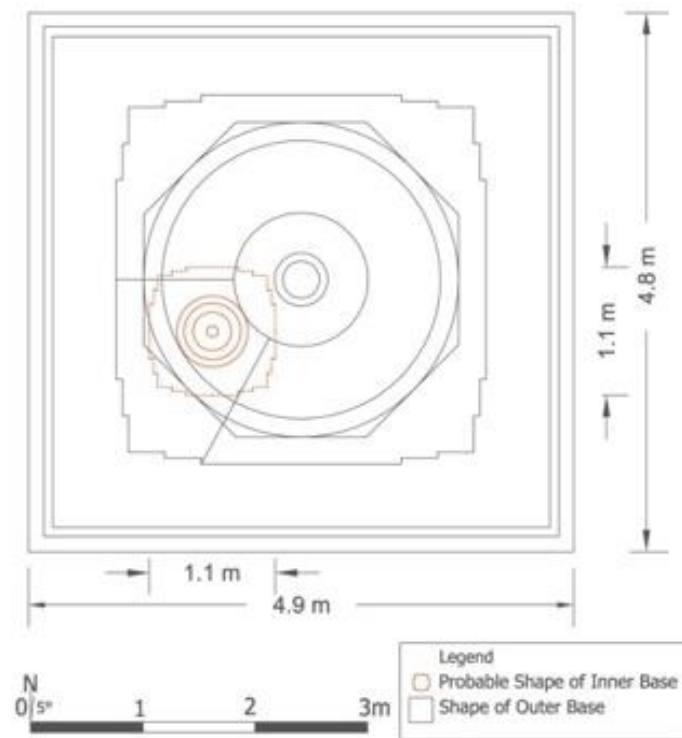


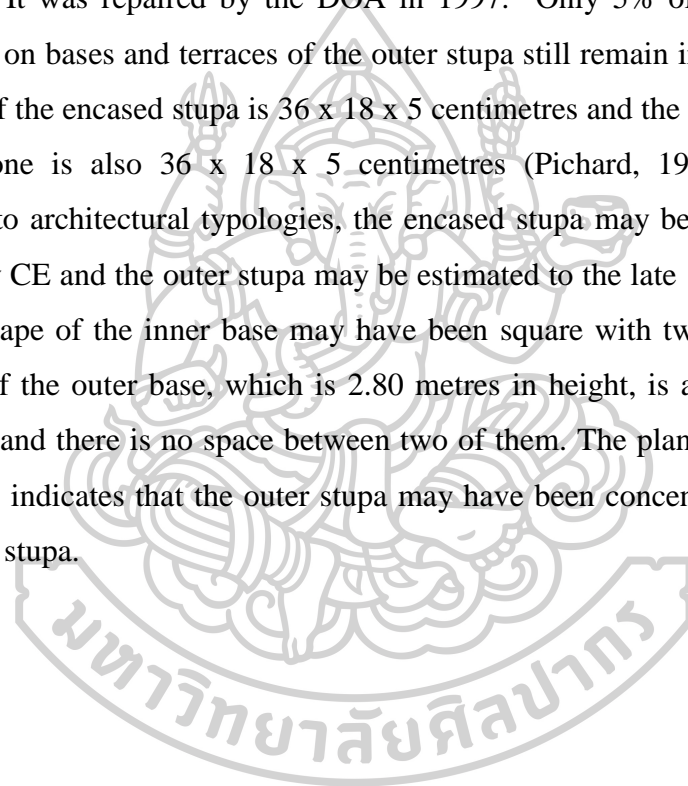
Figure 164: Plan of Monument No.1827 at Taungbi Area
 Note. Inner stupa is located at the southwestern part of outer stupa.



Figure 165: Monument No.1827 at Taungbi Area
 Note. The inner stupa can be seen from the outside.

4.3.11 Monument No.1838

This example (see Figure 167) is situated to the west of Htilominlo temple (No.1812) and to the east of old Bagan in Taungbi area. It is a small stupa, with a smaller and older stupa encased. There are the two square terraces with two projections, one twelve sided terrace, circular bell-shaped dome and conical spire on the outer stupa and the terraces of encased stupa are untraceable (Pichard, 1999, p. 136, Vol-7). The encased stupa can be visible through a treasure hole from the northeast side and the bases and terraces are badly damaged and the spire is nearly destroyed before restoration. It was repaired by the DOA in 1997. Only 5% of the original stucco decorations on bases and terraces of the outer stupa still remain in place. The average brick size of the encased stupa is 36 x 18 x 5 centimetres and the average brick size of the outer one is also 36 x 18 x 5 centimetres (Pichard, 1999, p. 136, Vol-7). According to architectural typologies, the encased stupa may be datable to the early 13th century CE and the outer stupa may be estimated to the late 13th century CE. The probable shape of the inner base may have been square with two projections, while the shape of the outer base, which is 2.80 metres in height, is also square with two projections and there is no space between two of them. The plan of these stupas (see Figure 166) indicates that the outer stupa may have been concentrically built around the encased stupa.



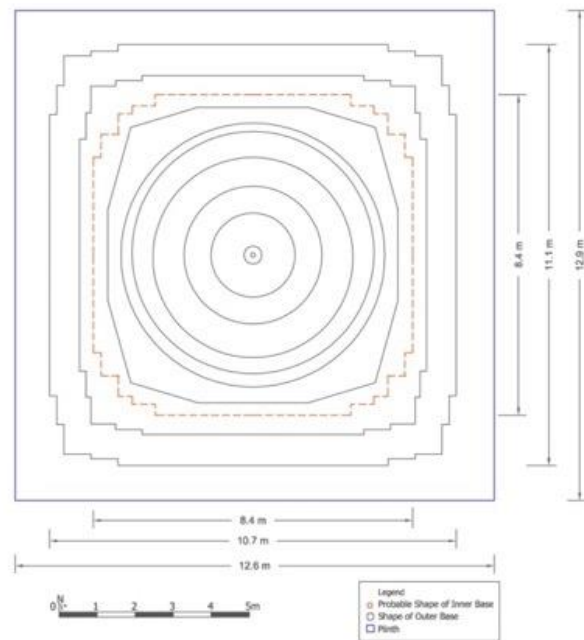


Figure 166: Plan of Monument No.1838 at Taungbi Area
 Note. Inner base may have been square in shape with two projections.

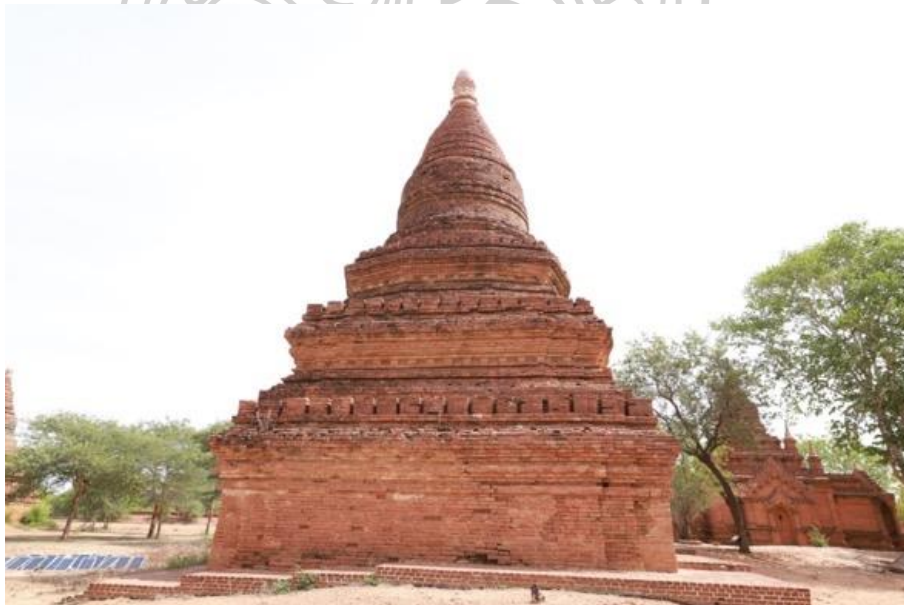


Figure 167: Monument No.1838 at Taungbi Area
 Note. Inner stupa cannot be seen from the outside after being repaired by the DOA.

4.3.12 Monument No.1855

This example (see Figure 169) is situated between Ananda (No.2171) and Htilominlo (No.1812) temples and to the east of old Bagan in the Taungbi area. It is a small stupa, with a smaller and older stupa encased. The outer stupa consists of two square terraces, one twelve sided terrace, circular bell-shaped dome, conical spire and the second terrace with two projections. Before repair, the bases and terraces are disintegrated and upper parts are damaged and the half portion of the outer stupa has been ruined and endangered. Only 10% of the original stucco decorations like the terraces, ornate waistband, frieze with ogre heads around the dome still remain in place. There are the base under the debris, upper parts dug into by the treasure hunters, circular bell-shaped dome and conical spire on the encased stupa. Some 50% of the original stucco decorations still remains on it. The encased stupa can be seen from the south side before repair. It was repaired by the DANM in 2007-08. The average brick size of the inner stupa is 36 x 18 x 6 centimetres, while the average brick size of the outer one is 36 x 18 x 6 centimetres as well (Pichard, 1999, p. 167, Vol-7) and the secondary donor used the same brick sizes as the encased stupa. Architectural typologies indicate that the inner one may be datable to the early 12th century CE and the outer stupa may be estimated to the late 12th century CE. The shape of outer base is square, while the probable shape of the encased stupa may have been also square with two projections. According to the plan (see Figure 168), the encased stupa was located to the southeastern part of the outer stupa which was not symmetrically built around the inner one. There is a large niche with a radiating arch, exposing on the outer one to see and worship the encased stupa when it was repaired by the DANM.

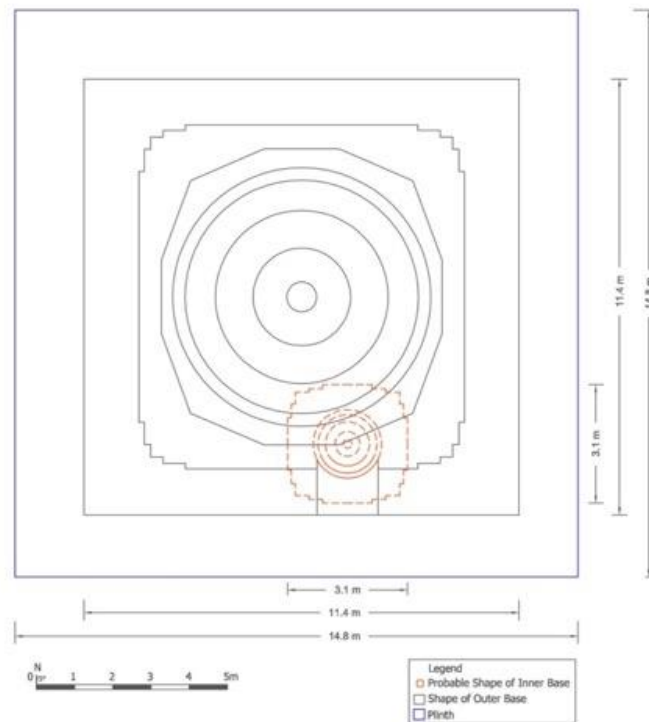


Figure 168: Plan of Monument No.1855 at the Taungbi Area
 Note. Inner stupa is located at the southeastern part of outer stupa.



Figure 169: Monument No.1855 at the Taungbi Area
 Note. The inner stupa can be seen from the outside.

4.3.13 Monument No.1870

This example (see Figure 171) is situated between Ananda (No.2171) and Htilominlo (No.1812) temples and to the east of old Bagan in Taungbi area. It is a small stupa, with two smaller and older stupas encased and there are two smaller stupas encased and enlarged by a larger stupa on the same plinth. These two encased stupas can be found at the northwest and southwest corner of the outer stupa. There are two square terraces, one octagonal terrace, circular bell-shaped dome and conical spire on the outer stupa besides the second terrace has two projections in this stupa. Both of these encased stupas consist of the circular bell-shaped dome and conical spire as well. Before repair, the bases and terraces are disintegrated and upper parts are nearly collapsed and the half portion of the outer stupa has been ruined. The bases on the encased stupas are buried under the debris. Only 4% of the original plain stucco mouldings on bases and terraces still remain on the outer stupa. Some 50% of the original stucco decorations like dado and frieze with triangles and ornate waistband around the dome can be seen on the encased stupas. The average brick size of the southwest encased stupa is 36 x 18 x 6 centimetres, and the average brick size of the northwest encased stupa is 35 x 17 x 5.5 centimetres, while the average brick size of the outer stupa also is 36 x 18 x 6 centimetres. Architectural typologies indicate that both of these encased stupas may be dated to the 12th century CE, while the outer one may be estimated to the 13th century CE. According to the plan (see Figure 170), the probable shape of the inner bases may have been square and the shape of the outer base is also square and the size of the southwest encased one is larger than the northwest encased one. This evidence confirms that there are no spaces between inner and outer stupas when it was repaired by the DOA in 1997-98.

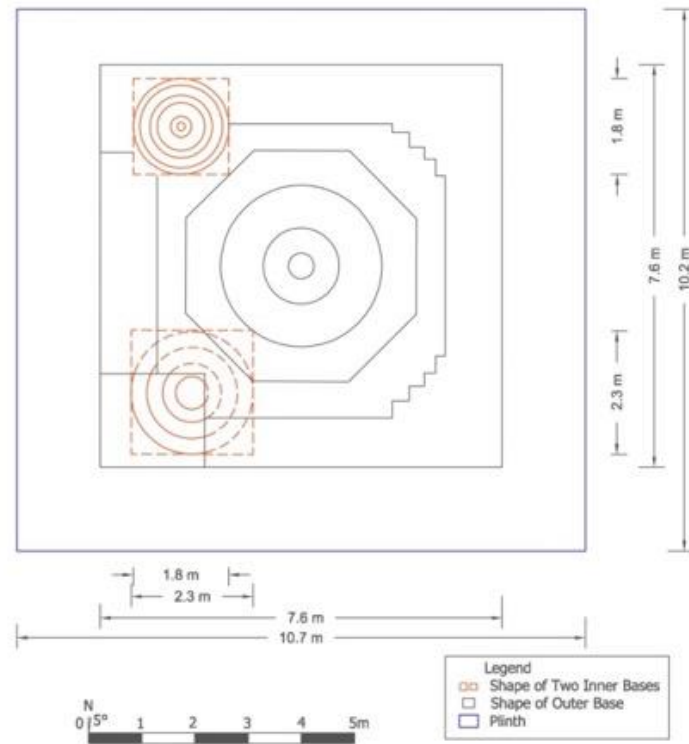


Figure 170: Plan of Monument No.1870 at Taungbi Area
 Note. Two encased stupas on the same plinth are encased by a larger stupa.



Figure 171: Monument No.1870 at Taungbi Area
 Note. Two smaller encased stupas can be visible from the outside.

4.3.14 Monument No. 1872

This example (see Figure 173) is situated between Ananda (No.2171) and Htilominlo (No.1812) temples and to the east of old Bagan in the Taungbi area. It is a small stupa, with a smaller and older stupa encased. Before restoration, the terraces of the inner one are untraceable and the terraces of the outer one are also untraceable. The base of the encased stupa is buried under the debris and upper parts are nearly collapsed. A few traces of stucco mouldings can be seen on the inner one. Both of them are repaired by the DOA in 1997-98. The encased stupa consists of the circular bell-shaped dome and conical spire and a part of the outer stupa only remains at the base of the northwestern corner, which is about 1.0 metre in height and the rest parts are totally destroyed. The average brick size of the encased stupa is 28 x 14 x 4.5 centimetres and the average brick size of the outer stupa is 36 x 18 x 5.5 centimetres (Pichard, 1999, p. 185, Vol-7). Architectural typologies indicate that the inner one may be dated to the 12th century CE and the outer one may be estimated to the 13th century CE. The shape of the encased stupa (see Figure 172) is circular, while the shape of the outer one may have been octagonal. This evidence confirms that there is no gap between two of them and the outer stupa was concentrically built around the encased stupa.

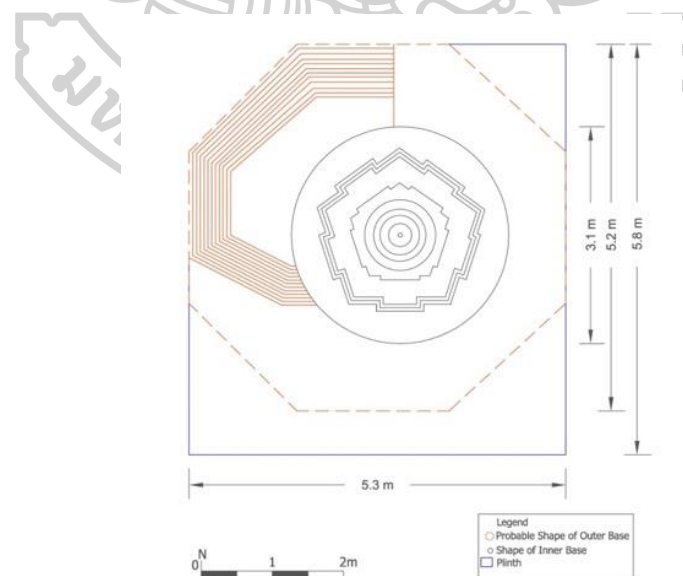


Figure 172: Plan of Monument No.1872 at the Taungbi Area
 Note. The shape of outer base may have been octagonal in this stupa.



Figure 173: Plan of Monument No.1872 at the Taungbi Area
 Note. The shape of inner and outer bases can be seen here.

4.3.15 Monument No. 1905

This example (see Figure 175) is situated to the northeast of Ananda temple (No.2171) and to the east of old Bagan in Taungbi area. It is a small stupa, with a smaller and older stupa encased; the encased stupa can be clearly seen from the northeast side and the outer stupa with a clear case of enlargement has been concentrically built around the first one (Pichard, 1999, p. 224, Vol-7). There are two square terraces with two projections, one twelve-sided terrace, circular bell-shaped dome and conical spire on the outer stupa. Somw 10 % of the original plain stucco mouldings on bases and terraces, ornate waistband and frieze with ogre heads around the dome still remain in place on the outer stupa. The encased stupa also consists of the circular bell-shaped dome and conical spire. The 80 % of the original plain stucco mouldings on bases and terraces, the original stucco decorations like dado with triangles, ornate waistband, and frieze with ogre heads around the dome still remain in place on the encased stupa as well. The average brick size of the encased stupa is 36 x 18 x 6 centimetres and the average brick size of the outer one is 38 x 19 x 6 centimetres (Pichard, 1999, p. 224, Vol-7). Architectural typologies indicate that the inner one may belong to the 11th century CE, while the outer one may be estimated to the 12th century CE. The shape of the inner base (see Figure 174) may have been

square with two projections, while the shape of the outer base is also square with two projections. This evidence confirms that there is no space between the inner and outer stupas and the average thickness of the outer stupa is 0.75 metre. It was firstly repaired by the DOA in 1977 after the earthquake in 1975 and it was secondly repaired by the DOA in 1997-98 and it was thirdly repaired by the DANM in 2017 after the earthquake occurred in 2016.

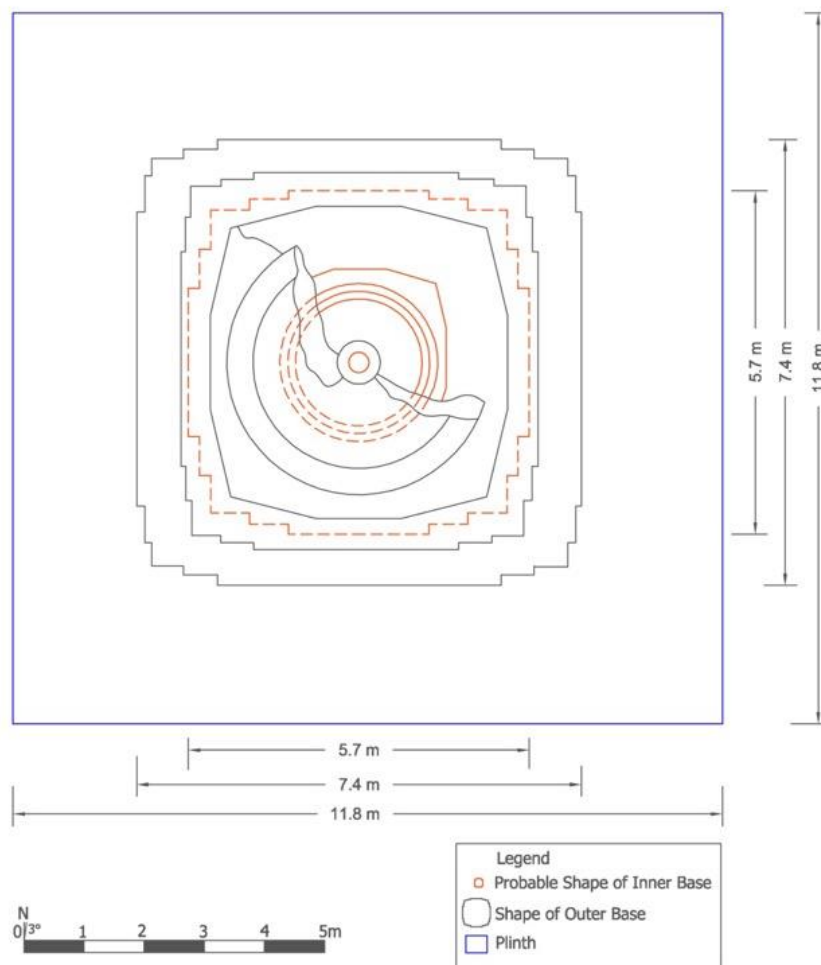


Figure 174 Plan of Monument No.1905 at the Taungbi Area

Note. The shape of inner base may have been square with two projections.



Figure 175: Monument No.1905 at the Taungbi Area
 Note. There is no space between the inner and outer stupas.

4.3.16 Monument No.1956 (Shwe Moathtaw Stupa)

This example (see Figure 177) is situated to the east of Tharaba gate (No.1634), which is one of the twelve gateways of the Bagan city wall and to the south of Taungbi village in the Taungbi area. It is a small single-storeyed temple with a timber pavilion on west side and it was locally called as Shwe Moathtaw stupa. There are the square central shrine measuring 3.73 x 3.75 metres, with a small stupa at the center, vestibule and porch on west face, apertures on north, east, and south foreparts and the upper parts consist of the one square terrace with one projection and corner stupas, two square terraces with two projections, circular bell-shaped dome, conical spire, and an umbrella. It was built with corbelled cloister vault over the shrine and the interior and exterior walls have been whitewashed and maintained by the public. Virtually 100 % of the stucco decorations like ornate cornice, pediments, pilasters, base with recess, dado and frieze with triangles, and plain waistband around the dome still remain on the outer stupa (Pichard, 1999, p. 278, Vol-7). There is a small stupa (see Figure 178), which may have been built by the King Asoka in the 3rd century BCE and it may have been renovated and reconstructed in later times. There is a space between the two stupas as a circumambulatory corridor to move around and worship

the inner stupa. Architectural typologies indicate that the outer stupa may be datable to the 17th century CE (Konbaung period). According to the plan (see Figure 176), the outer stupa was concentrically built around the encased inner moathtaw stupa.

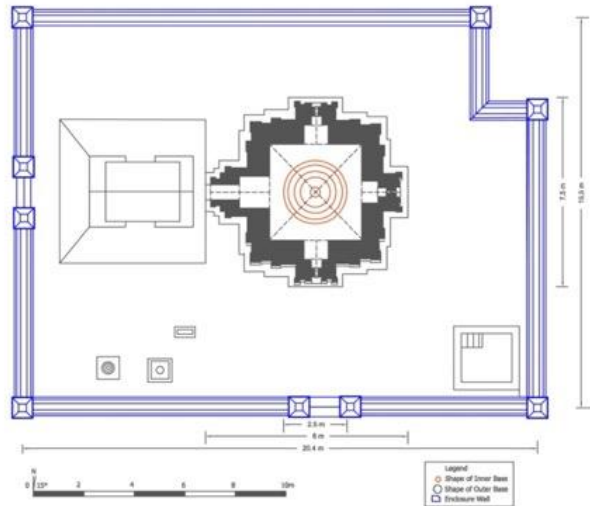


Figure 176: Plan of Monument No.1956 (Shwe Moathtaw Stupa) at the Taungbi Area Note. There is a space between the two structures in this plan.



Figure 177: Monument No.1956 (Shwe Moathtaw Stupa) at the Taungbi Area Note. The elevation of the outer temple can be seen here.



Figure 178: Inner Stupa of Shwe Moathtaw stupa at the Taungbi Area
Note. Inner stupa was covered by a larger temple in later time.

4.3.17 Monument No.1962

This example (see Figure 180) is situated to north of Ananda temple (No.2171) and to the south of Taungbi village in Taungbi area. It is a medium-sized stupa with a smaller and older stupa encased and there are the three square terraces with two projections, one octagonal terrace, circular bell-shaped dome and conical spire on the outer stupa. The encased stupa also consists of the square terraces with two projections, circular bell-shaped dome and conical spire before it was repaired. The bases, terraces, and upper parts have been damaged at the outer stupa before it was firstly repaired by the DOA in 1998 and it was secondly repaired by the DANM again in 2016 after the earthquake occurred in 2016. The encased stupa can be clearly seen from the northwestern side before repair and the outer stupa, slightly larger, has been concentrically built around the first stupa which was not yet plastered. The average brick sizes of the two stupas are 38 x 19 x 5 centimetres (Pichard, 1999, p. 285, Vol-7). Architectural typologies confirm that both of them may be estimated to the 13th century CE and the same brick sizes on both of these stupas and unplasters on the encased stupa have been built. The secondary donor or first donor may have immediately enlarged and encased the inner stupa. According to this evidence, there is no gap between the two stupas. The shape of the inner base (see Figure 179) may have been square with two projections, while the shape of the outer one is square with two projections.

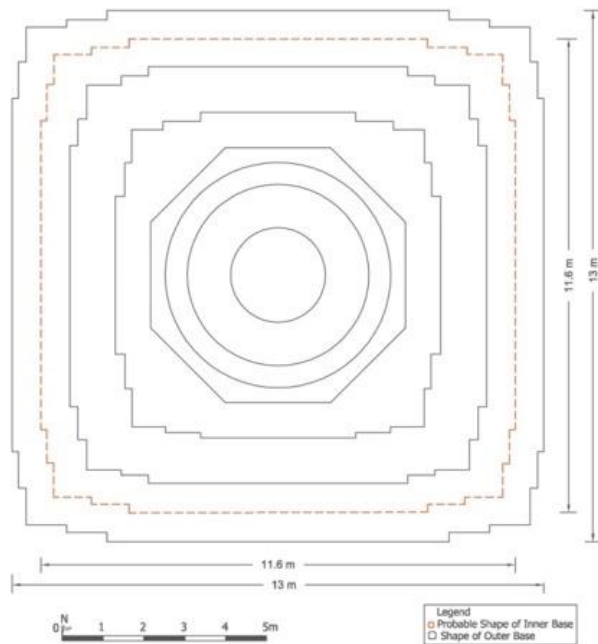


Figure 179: Plan of Monument No.1962 at the Taungbi Area
 Note. The shape of inner base may have been square with two projections in this stupa.



Figure 180: Monument No.1962 at the Taungbi Area
 Note. Inner stupa cannot be seen from the outside after repaired by the DOA.

4.3.18 Monument No.2004

This example (see Figure 182) is situated to the northeast of Bagan and to the west of Taungbi village in the Taungbi area. It is a small stupa, with a smaller and older stupa encased. Before repair, the terraces that are untraceable are disintegrated and the upper parts are badly damaged. The outer stupa consists of the circular bell-shaped dome and conical spire. The encased one also consists of the circular bell-shaped dome and conical spire and its terraces are also untraceable. Only 4 % of the original stucco decorations like dado with triangles, ornate waistband, and frieze with ogre heads still remain on the outer stupa and some 50 % of the original plain stucco mouldings like terraces, circular bell-shaped dome and conical spire may have remained on the encased stupa. The average brick size of the outer stupa is 40 x 20 x 6 centimetres (Pichard, 1999, p. 334, Vol-7). The encased stupa can be seen from the western side and it was repaired by the DOA in 1998. There is a large hole with a corbelled arch about 1.75 metres in height from west face, exposing to see and worship the inner one. Architectural typologies indicate that the encased stupa may be datable to the 11th century CE and the outer one may belong to the 12th century CE. According to this evidence, the probable shape of the inner base may have been square with two projections while the shape of the outer base is circular and there is no space between two of them. It was found that the treasure hunters dug not only the outer stupa, but also the encased stupa to search valuable things. The plan of these stupas (see Figure 181) indicates that the outer stupa was not concentrically built around the encased stupa and the centre of the outer one is located to the northwest of the centre of the inner one.

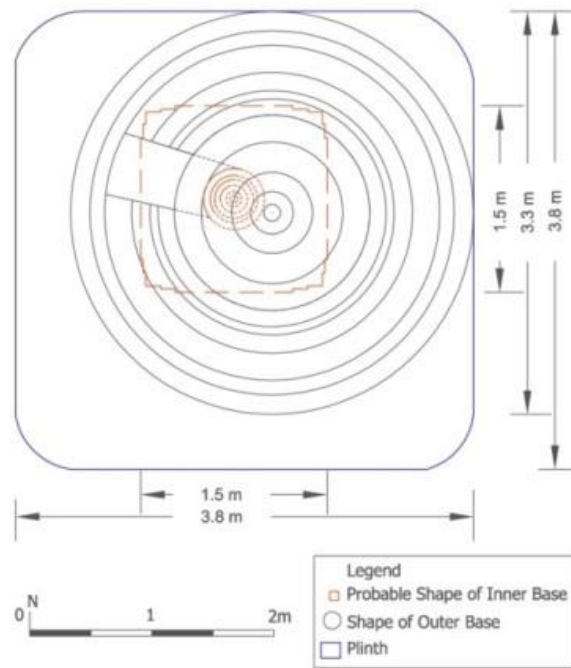


Figure 181: Plan of Monument No.2004 at the Taungbi Area
 Note. Outer stupa was not concentrically built around the encased stupa.



Figure 182: Monument No.2004 at the Taungbi Area
 Note. The inner stupa with stucco carvings can be seen from the outside.

4.3.19 Monument No.2014

This example (see Figure 184) is situated to the west of Taungbi village and to the northeast of old Bagan in Taungbi area. It is a small stupa, with a smaller and older stupa encased. There are the two square terraces with two projections, one twelve sided terrace, circular bell-shaped dome, conical spire. Before restoration, the terraces of the outer stupa are untraceable and disintegrated and it was firstly repaired by the DOA in 1998 and secondly it was again repaired by the DANM in 2016 after the earthquake at Bagan occurred in 2016. Originally, the encased stupa may have bulbous-shaped dome and conical spire and the 50 % of the original plain stucco mouldings and stucco decorations like terraces, bulbous-shaped dome, conical spire may have still remained on it. The 2 % of the original stucco decorations like dado and frieze with triangles, ornate waistband around dome still remain on the outer stupa. The average brick size of the outer stupa is 40 x 20 x 7 centimetres (Pichard, 1999, p. 347, Vol-7). The encased stupa can be clearly seen from the north side since before repair. Architectural typologies indicate that the inner one may be dating to the 11th century CE and the outer one may be estimated to the 13th century CE. This evidence confirm that there is no space between two of them and the shape of the inner base may have been square with two projections and the shape of the outer base is also square with two projections. According to the photos from the Inventory of Monuments at Bagan (Pichard, 1999, p. 347, Vol-7), the treasure hunters dug not only the outer stupa, but also the encased stupa to search the treasure. There is a big hole with a radiating arch exposing on the outer stupa on the north face to see and worship the inner one. Plan (see Figure 183) indicates that the outer stupa was concentrically built around the encased stupa.

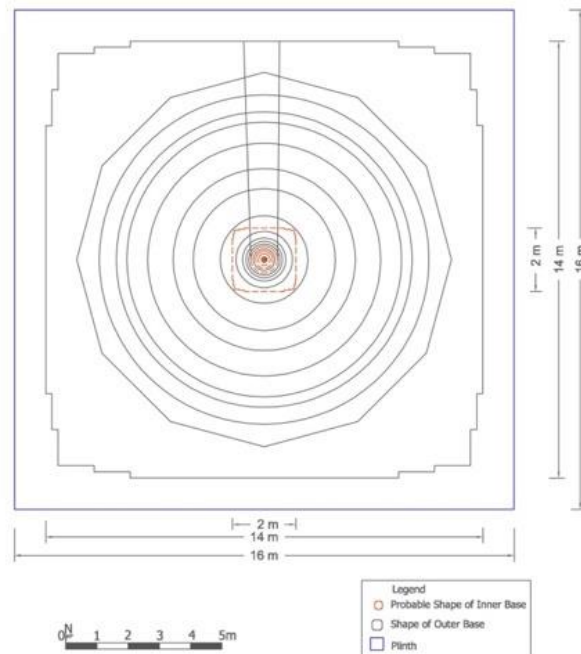


Figure 183: Plan of Monument No.2014 at the Taungbi Area
 Note. The shape of inner base may have been square in this stupa.



Figure 184: Monument No.2014 at the Taungbi Area
 Note. Inner stupa with original stucco decorations can be seen from the north side here.

4.3.20 Monument No. 2065

This example (see Figure 186) is situated to the northeast of Taungbi village in the Taungbi area. It is a small stupa, with a smaller and older stupa encased. There are two square terraces with two projections, one twelve sided terrace, circular bell-shaped dome and conical spire and the cloister vault over the relic room on upper parts. The bases and terraces on the outer stupa are disintegrated and upper parts are nearly collapsed. The 2 % of the traces of plain stucco mouldings on bases and terraces, the original stucco decorations like dado with triangles, ornate waistband, and frieze with ogre heads around dome, still remain on the outer stupa. The encased stupa may have the circular bell-shaped dome, conical spire, and no stucco on it. The average brick size of the encased one is 26 x 14 x 4 centimetres, while the average brick sizes of the outer stupa are 40 x 20 x 6 and 36 x 18 x 4 centimetres (Pichard, 2001, p. 1, vol-8). It was repaired by the DOA in 1998. Architectural typologies indicate that the encased stupa may be dating to the 12th century CE and the outer stupa may be estimated to the 13th century CE. According to this evidence, the probable shape of the inner base may have been square with two projections, while the shape of the outer base is also square with two projections with a height of 1.60 metres and there is no gap between two stupas when it was repaired. Plan of these stupas (see Figure 185) confirms that the outer stupa was concentrically built around the encased stupa.

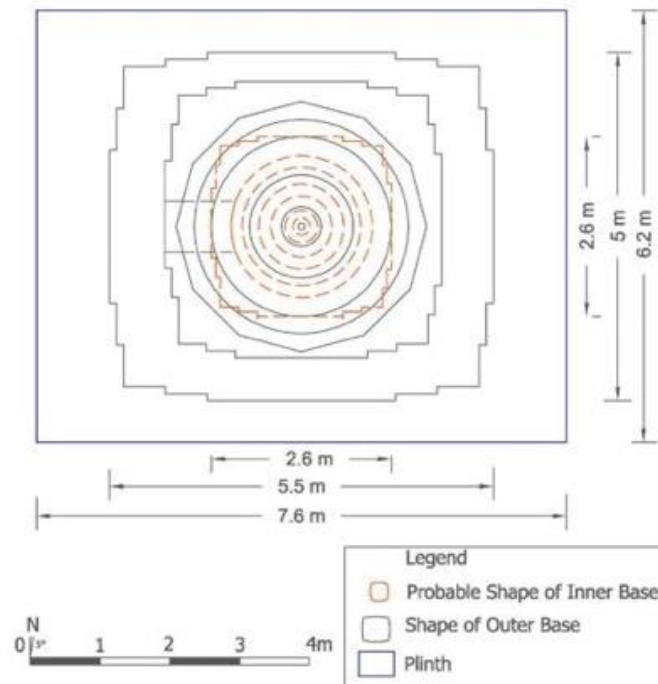


Figure 185: Plan of Monument No.2065 at the Taungbi Area
 Note. The shape of inner base may have been square with two projections here.



Figure 186: Monument No.2065 at the Taungbi Area
 Note. Original inner stupa can be seen from the west side here.

4.3.21 Monument No.2084 (Myazigon Stupa)

This example (see Figure 188) is situated between Taungbi and Wetkyi-in villages near the river bank and to the northeast of old Bagan in Taungbi area. It is a medium-sized stupa, with a smaller and older stupa encased. There are the square base with corner lion, two square terraces with four projections and corner urns, a shrine with stairway added later on east face of the first terrace, one square terrace with four projections and corner stupas, one octagonal terrace with two projections, circular bell-shaped dome, conical spire and umbrella. The 100 % of the original plain stucco mouldings on bases and terraces, the original stucco decorations like waistband and frieze with ogre heads around dome still remain on the outer stupa (Pichard, 2001, p. 26, Vol-8). It was repaired by the DANM in 2019 after the earthquake at Bagan occurred in 2016. Nowadays it was maintained and whitewashed by the Pagoda Trustees at Bagan. According to the Jabudipa Oaksaung Kyan (Chronicle) (Furnivall and Pe Maung Tin, 1960), the encased stupa may have been built by the King Nyaung Oo Sawrahan (931-964 CE). This chronicle mentioned that Nada Thura during the Inwa period has copied a stone inscription regarding the history of Myazigon stupa (Furnivall and Pe Maung Tin, 1960). Architectural typologies indicate that the outer stupa may have been built during the Inwa period (1364-1555 CE). The author concludes that the probable shape of the inner base (see Figure 187) may have been circular, while the shape of the outer base is square with four projections. The outer stupa may have been concentrically built around the encased stupa.

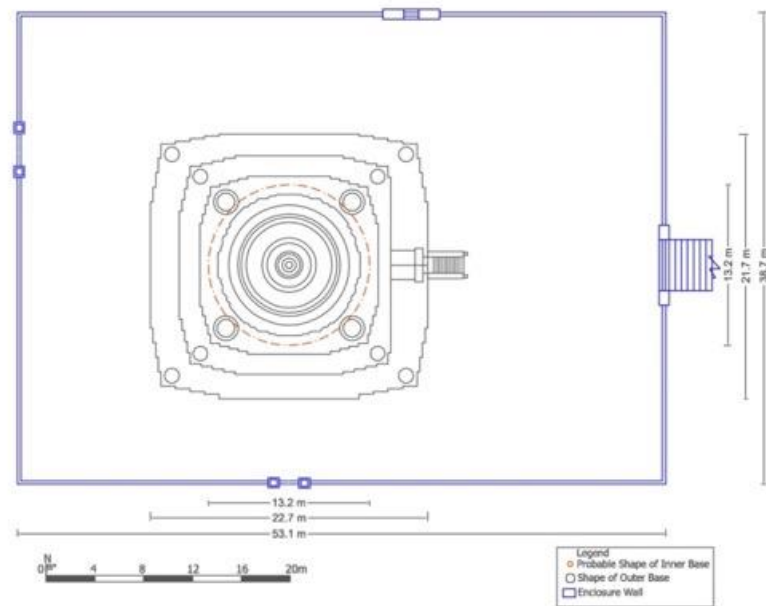


Figure 187: Plan of Monument No.2084 (Myazigon Stupa) at the Taungbi Area
Note. The shape of inner base may have been circular in this stupa.



Figure 188: Monument No.2084 (Myazigon Stupa) at the Taungbi Area
Note. Three square receding terraces with four projections can be seen here.

4.3.22 Monument No. 2129

This example (see Figure 190) is situated to the northwest of Htilominlo temple and to the southwest of Myazigon stupa, between Taungbi and Wetkyi-in villages in the Taungbi area. It is a small single-storeyed temple, with a smaller and older stupa encased. There are the: square central shrine, 2.87 x 2.81 metres, vestibule and porch on north, east, and west faces and blind forepart to west, encasing a small stupa. The upper parts consist of the one square terrace with corner stupas, one square terrace with two projections, one twelve sided terrace, circular bell-shaped dome and conical spire on the outer temple. There is a cloister vault over the shrine, barrel vaults over the vestibules and porches. The encased stupa also has the two square terraces with two projections and upper parts are untraceable. Before repair of the outer temple, most pediments are destroyed and upper parts are badly damaged and it was repaired by the DOA in 1998. Before repair, there is a seated Buddha image (see Figure 191), facing north with original pedestal, but the traces of legs on it only remain and the traces of the stucco mouldings can be seen on the encased stupa and outer temple. Only 10 % of the original mural paintings under vault and the 5% on walls still remain on the outer temple. There are the original murals on shrine like lotus rosace, corner bands, floral pattern with figures and motifs in vault quadrant under vault and frieze with pointed obovals and dummy corner pilasters on walls still in place. There are also the original murals on the vestibule including floral and small lotus rosace pattern under vault and frieze with pointed obovals and frames on walls still in place. The average brick size of the encased stupa is 34 x 17 x 4 centimetres, while the average brick size of the outer temple is 31 x 16 x 3.5 centimetres (Pichard, 2001, pp. 89-90, Vol-8). Architectural typologies indicate that the inner one may be dating to the 12th century CE and the outer temple may be estimated to 13th century CE. The inner stupa (see Figure 189) is a unique instance of a stupa encased in the wall of a temple at Bagan. According to this evidence, the encased stupa is located in the southern wall of the outer temple and there is no space between two of them.

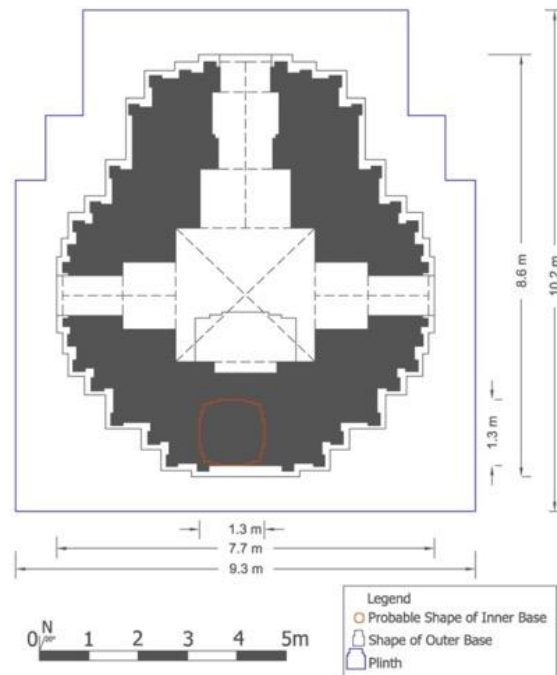


Figure 189: Plan of Monument No.2129 at the Taungbi Area
 Note. Encased stupa is located at the southern wall of outer temple here.



Figure 190: Monument No.2129 at the Taungbi Area
 Note. The elevation of the outer temple can be seen here.

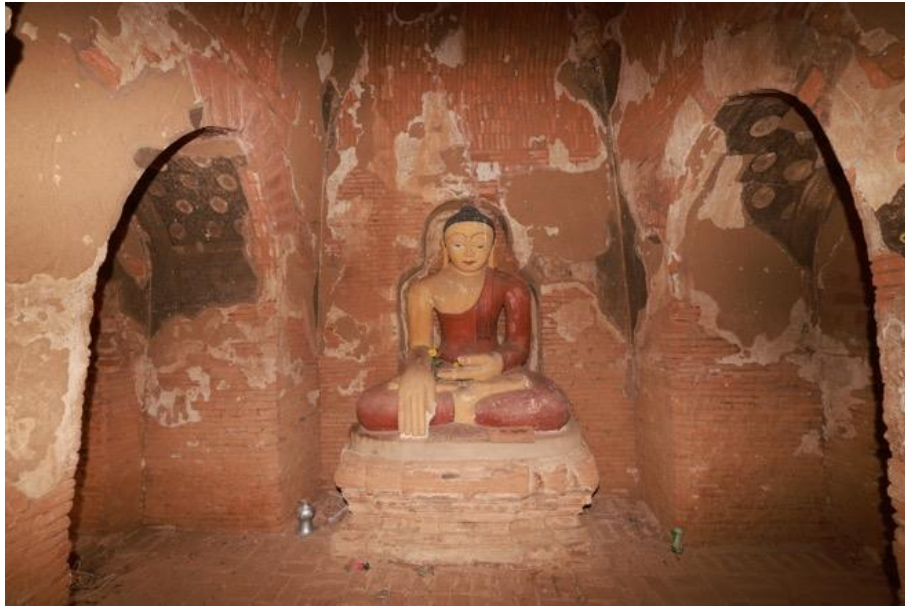


Figure 191: A Renovated Seated Buddha Image in Brick and Stucco in the Central Shrine

Note. Buddha image in Bhumisparsa mudra on the original pedestal can be seen here.

4.3.23 Monument No.2132 and No.2133

Both of these stupas (see Figure 193) are situated to the northwest of Htilominlo temple and to the southwest of Myazigon stupa, located between Taungbi and Wetkyi-in village in Taungbi area. Two of them are small stupas that were formerly encased in a larger, single stupa of which the debris were removed in 1968. These stupas illustrate a type of group encased stupas. Stupa No.2132 consists of one square terrace with two projections, a circular bell-shaped dome and a conical spire. Traces of the original stucco mouldings can be clearly seen on this stupa with some 10 % of the original stucco decorations like dado and frieze with triangles, ornate waistband around the dome still remaining on it. No.2133 also consists of two square terraces with two projections, circular bell-shaped dome and conical spire. The 30 % of the original stucco decorations like stucco mouldings on terraces, dado with triangles, ornate waistband, and frieze with lotus petals around the dome, and ornate mouldings on spire still remain on this stupa. There is also a rare instance of an intact spire in this stupa (No.2133). The average brick size of Stupa No. 2132 is 33 x 18 x 5 centimetres and the average brick size of Stupa No. 2133 is 32 x 16 x 4.8 centimetres (Pichard, 2001, pp. 93-94, Vol-8). Architectural typologies indicate that both of the inner stupas may be dating to the 11th century CE and the outer stupa may be estimated to the 13th

century CE. The plan of these stupas (see Figure 192) confirm that the shape of the inner base on No. 2132 is square and the shape of the inner base on No.2133 is also square with two projections, while the probable shape of the outer base may have been square with two projections. Both of them were repaired by the DOA in 1999.

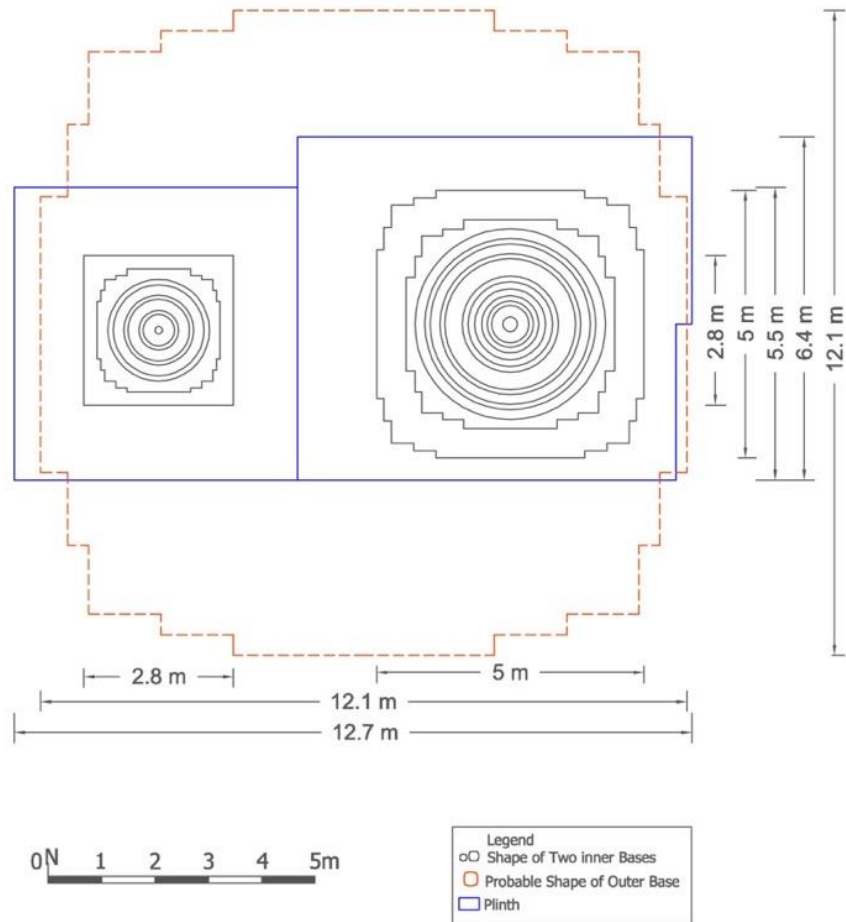


Figure 192 Plan of Monument No.2132 and No.2133 at the Taungbi Area
 Note. The shape of outer base may have been square with two projections in this plan.



Figure 193: Monument No.2132 and No.2133 (Encased Group of Stupas) at the Taungbi Area

Note. Traces of original stucco decorations still survive in these stupas.

4.3.24 Monument No.2143

This example (see Figure 195) is situated between Taungbi and Wetkyi-in villages and to the northeast of old Bagan in the Taungbi area. It is a small temple, with a smaller and older stupa encased. The outer stupa consists of two square terraces, a second terrace with two projections, circular bell-shaped dome and conical spire. Before restoration, the terraces are disintegrated and upper parts are badly damaged on the outer stupa. There is one square terrace with two projections, a circular bell-shaped dome, and a conical spire on the encased stupa. *Circa* 50 % of the original plain stucco mouldings on bases and terraces still remain on the encased stupa. It was firstly repaired by the DOA in 1997 and secondly it was again repaired by the DANM in 2014. The average brick size of the encased stupa is 32 x 18 x 5 centimetres, while the average brick size of the outer one is 40 x 20 x 6 centimetres (Pichard, 2001, p. 106, Vol-8). Architectural typologies indicate that the encased stupa may be dating to the 12th century CE and the outer stupa may be estimated to the 13th century CE. According to this evidence, the probable shape of the inner base (see Figure 194) may have been square with two projections, while the shape of the outer base is rectangular and there is no space between two of them. The outer one was not

concentrically built around the inner one and the outer one is located to the eastern side of the encased stupa. Originally there was an entrance facing west with a corbelled arch, exposing to see and worship the encased stupa. The encased stupa can be seen through an entrance from the western side.

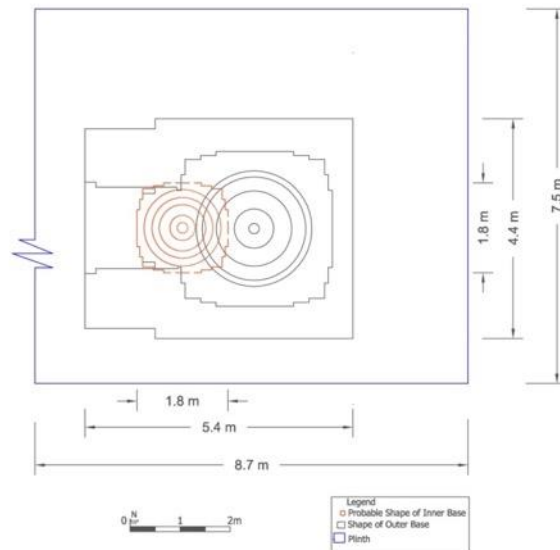


Figure 194: Plan of Monument No.2143 in the Taungbi Area
Note. The shape of inner base may have been square in this plan.



Figure 195: Monument No.2143 at the Taungbi Area
Note. Inner stupa can be seen from the west side here.

4.4 Area 4: Old Bagan Area

The Old Bagan area is located inside the city wall and moat of Bagan, where the last palace was situated, founded by King Pyinbya in the 9th century CE. There are nine encased Buddhist monuments located inside the city wall and moat of Bagan (see Figure 196). Five encased stupas (No.1603, 1626, 1639, 1663, 1666), two encased temples (No.1612, 1638), two encased group of stupas (No.1631, 1632) and one encased Buddha image (No.1612) can be found in this area. Temple No.1612 is an encased temple as well as an encased Buddha image located in the Old Bagan area.

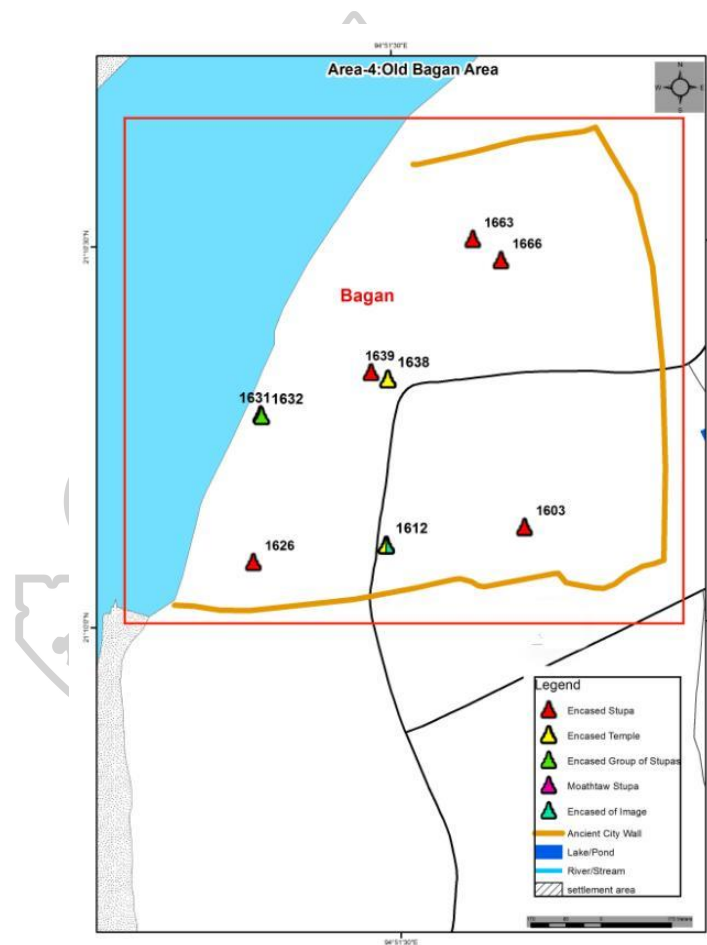


Figure 196: Map Showing the Area 4 (Old Bagan Area)

Note. There are nine encased monuments at the Old Bagan area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.4.1 Monument No.1603 (Ngakywendaung Stupa)

This is situated to the west of Thatbyinnyu temple (No.1597), inside the Bagan city wall. It is a medium-sized stupa (see Figure 198) previously enlarged and covered by a larger and older stupa; the encased stupa consists of the circular bulbous dome and it may have been circular terraces. There are the glazed bricks facing on bulbous dome of the encased stupa. Before restoration in 1975, the terraces are disintegrated and upper parts are badly damaged. When the earthquake occurred in 1975, the circular bulbous dome was cracked by the tremors. This cracked dome was strengthened with steel rings by the Construction Cooperation in 1981 and it was again repaired by the DOA in 1997. The bottom of the outer stupa about 2 metres high still remains at the eastern part although the rest of the parts have been totally collapsed. The average brick size of the inner stupa is 36 x 17 x 6.5 centimetres and the average brick size of the outer one is 42 x 21 x 6 centimetres (Pichard, 1996, p. 242, Vol-6). According to architectural typologies, the encased stupa may be dating to the 9th century CE, while the outer one may be estimated to the 11th century CE. The plan of these stupas (see Figure 197) indicates that the shape of the inner base is circular and the probable shape of the outer one is also circular; there is no gap between the two stupas. There is an old photo of this stupa which was taken in 1953-54 from the Old Burma-Early Pagan (see Figure 199). This evidence confirms that the outer stupa was concentrically built around the encased stupa.

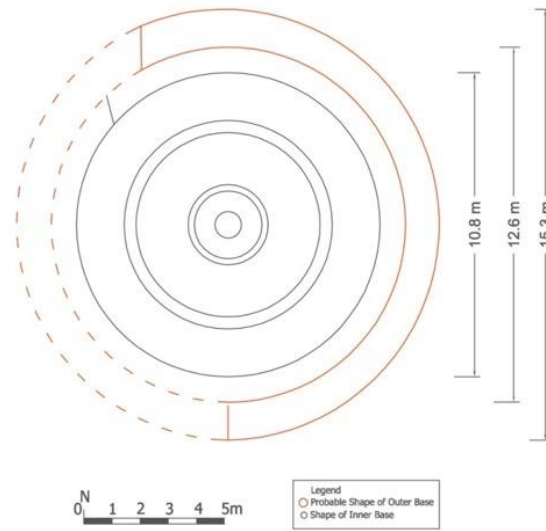


Figure 197: Plan of Monument No.1603 (Ngakywenadaung Stupa) at the Old Bagan Area

Note. The shape of outer base may have been circular in this stupa.

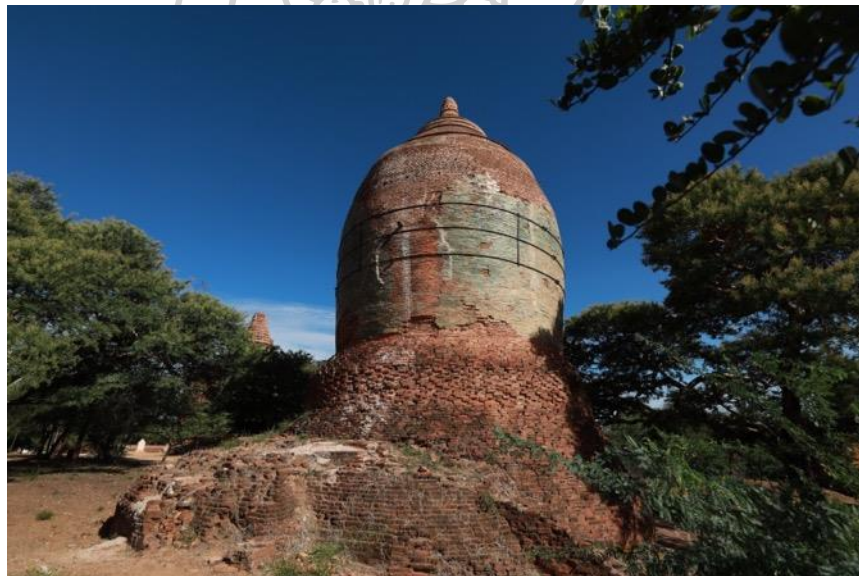


Figure 198: Monument No.1603 (Ngakyewnadaung stupa) at the Old Bagan Area
Note. The inner stupa surmounted with bulbous-shaped dome can be seen here.

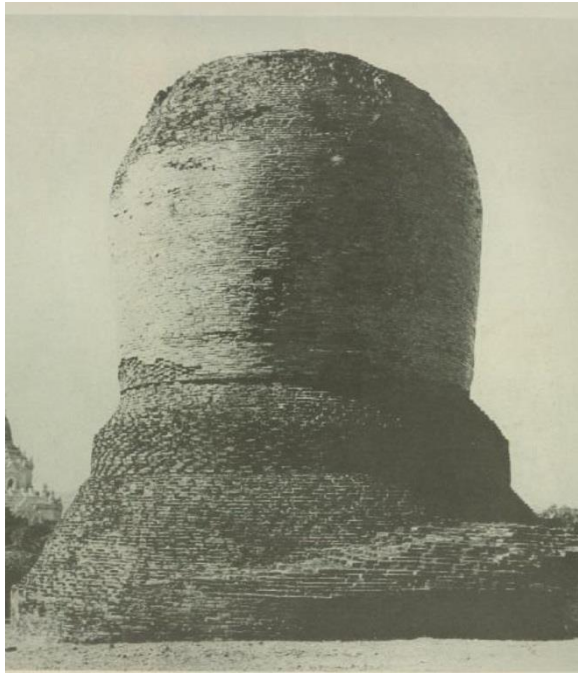


Figure 199: Old Photo of Monument No.1603 (Ngakywenadaung Stupa)
 Note. It was taken in 1953-54. From *Old Burma-Early Pagan*. Artibus Asiae and
 Institute of Fine Arts, New York University, Plate 75c, Vol-3, by G.H. Luce.
 Copyright 1969 by Gordon Hannington Luce.

4.4.2 Monument No.1612

This example (see Figure 201) is situated to the southeast of Gawdawpalin temple (No.1622) and to the east of the Bagan Archaeological Museum, inside the Bagan city wall. It is a small temple, with a smaller and older temple encased. These temples face to the west and there are the two Buddha images, an inner image and outer image in brick and plaster, in these temples. There are the central shrine, 3.26 x 2.60 metres, vestibule and porch on west face, one square terrace, one sloping roof, one square terrace with two projections, a circular bell-shaped dome, and a conical spire on the encased temple. It consists of the cloister vault over the shrine, barrel vault over the vestibule and porch. Before repair, there was a damaged seated Buddha facing west, with a smaller and older Buddha image encased in the central shrine; the average brick size of the inner temple is 35 x 17.5 x 5 centimetres (Pichard, 1996, p. 257, Vol-6). It was firstly repaired by the DOA in 1997 and secondly it was again repaired by the DANM in 2013. The hand attitude of the outer Buddha image is in Bhumisparsa mudra, while the inner one may have been in Bhumisparsa mudra as well.

Architectural typologies and iconographic features of the Buddha images indicate that the encased temple may be belonged to the 11th century CE and the outer temple may be estimated to the 12th century CE. *Circa* 10 % of the original mural paintings like a Bodhi tree on the eastern wall, still remain in the central shrine. The shape of the inner base is square (see Figure 200), while the shape of the outer base may have been square and there is no space between two of them. According to this evidence, the outer temple was built around the inner one as well as the outer Buddha image was built around the inner Buddha image. The author concludes that the secondary donor did not destroy the inner Buddha image when he built the outer temple and outer Buddha image. The inner Buddha image (see Figure 202) can be clearly seen through a treasure hole from the western face.

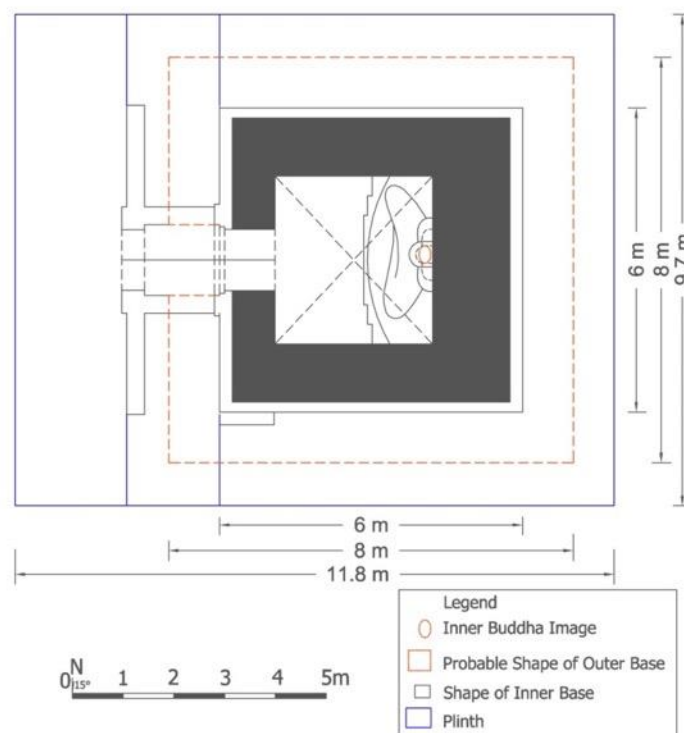


Figure 200: Plan of Monument No.1612 at the Old Bagan Area
 Note. The shape of outer base may have been square in this temple.



Figure 201: Monument No.1612 at the Old Bagan Area
Note. An encased temple as well as an encased Buddha image can be seen here.



Figure 202: Two encasements of Buddha Images in Temple No.1612
Note. Inner encased Buddha image can be seen through a treasure hole from the outside here.

4.4.3 Monument No.1626

This is situated to the southwest of Gawdawpalin temple (No.1622) and to the northwest of Bagan Archaeological Museum, located inside the Bagan city wall. It is a small stupa (see Figure 204), with a smaller and older stupa encased and the outer stupa consists of the circular terrace and upper parts may have been circular bell-shaped dome. The upper parts of the encased stupa are untraceable and it can be seen from the northeastern side. Traces of the stucco decorations on ornate waistband can be seen on the inner one. The average brick size of the outer stupa is 32 x 16 x 4 centimetres and it was firstly repaired by the DOA in 1978 (Pichard, 1996, p. 279, Vol-6). According to architectural typologies, the encased stupa may be dating to the 10th century CE and the outer stupa may be estimated to the 11th century CE. The probable shape of the inner base may have been circular, while the shape of the outer base is also circular. The plan (see Figure 203) indicates that the outer one was concentrically built around the encased stupa with no gap between the two stupas.

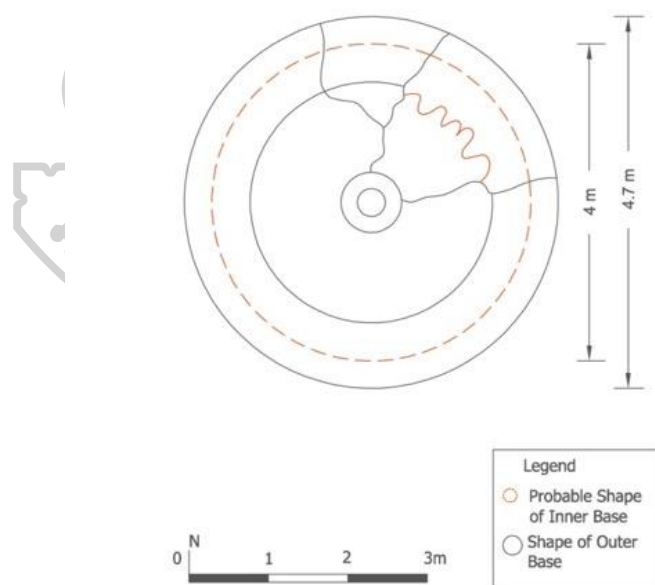


Figure 203: Plan of Monument No.1626 at the Old Bagan Area
 Note. The shape of Inner base may have been circular in this stupa.



Figure 204: Monument No.1626 at the Old Bagan Area
Note. Original inner stupa can be seen from the outside.

4.4.4 Monument No. 1631 and No.1632 (Shinpin Pwintsa and Pawdawmu Stupas)

This is situated to the northwest of Gawdawpalin temple (No.1622), located inside the Bagan city wall. These two stupas (see Figure 206) are built on the same rectangular plinth and both of them are said to have been previously encased together in a single larger stupa and the outer stupa has been removed during the colonial times (Pichard, 1996, pp. 285-286, Vol-6). Traditionally, No.1631 was called Shinpin Pwintsa Phaya (stupa) which is very similar to Bu Phaya stupa built by the King Pyusawhti in the 3rd century, while No. 1632 was called Pawdawmu Phaya (stupa) which is similar to Lawkananda stupa built by the King Anawrahta.

There are circular bases, circular cylindrical bell-shaped domes, conical spires, and umbrellas on these two stupas. According to architectural typologies, both of them are very similar to the Pyu-typed stupas at Bagan and Srikshetra near Pyay, Bago region. These stupas may be estimated to the 10th century CE and the larger outer stupa may be dating to the 11th century CE. The author concludes that they were originally built with a plain conical spire like a Pyu-type stupa. A total of 100 % of the plain stucco mouldings on these stupas still remain in place. It was maintained and whitewashed

by the public concerned with the previous ward at Bagan and the probable shape of the outer base (see Figure 205) may have been previously square with two projections.

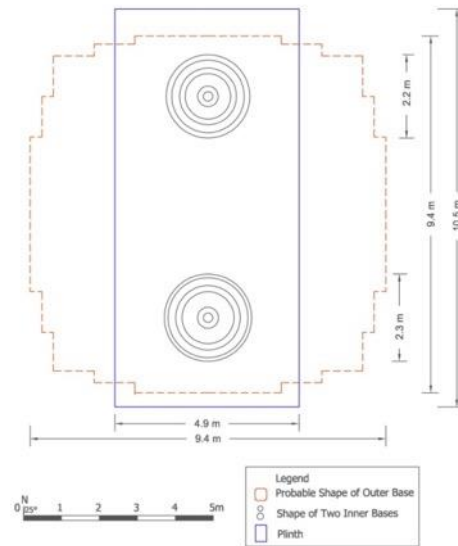


Figure 205: Plan of Monument No.1631 and No.1632 at the Old Bagan Area
Note. The shape of outer base may have been square in this plan.



Figure 206: Monument No.1631 (Shinpin Pwintsa Stupa) and No.1632 (Pawdawmu Stupa) at the Old Bagan Area
Note. These stupas are very similar to the Pyu-type of stupas in Myanmar.

4.4.5. Monument No.1638 (Myet Taw Pyi Temple)

This is situated to the northeast of Gawdawpalin temple (No.1622) in the enclosure wall of Atwinzigon stupa (No.1639), inside the Bagan city wall. It is a medium-sized and single-storeyed temple (see Figure 208), with a smaller and older temple encased. U Aung kyaing, former Deputy Director General (Upper Myanmar), Mandalay region, was interviewed on 17 December 2007. He said that he saw an encased temple surmounted with sikhara-shaped temple through a treasure hole of the outer temple. Tradition said that it may have been built by King Kyansittha. There are: the stupa-shaped solid core with niches on north and south faces, a square shrine, 3.68 x 3.70 metres on east side, a vestibule and porch on the east face, and apertures in the north and south walls of the shrine; the upper parts consist of the flat roofs on the shrine, a sloping roof on the vestibule, two square terraces with two projections and corner stupas, one twelve sided terrace, a circular bell-shaped dome, a conical spire and an umbrella on the outer temple (Pichard, 1999, p. 294, Vol-6). There is a barrel vault hipped at east end over the shrine and a barrel vault over the vestibule and porch. There is a renovated Buddha image housed in the square shrine and it was repaired by the Pagoda Trustees at Bagan in 1984 and it was again repaired by the DOA in 2003. A total of 100 % of the plain stucco mouldings still remain in place on the outer temple. Architectural typologies indicate that the encased temple may be dated to the 12th century CE, while the outer one may be estimated to the 13th century CE and there may have no space between the two temples. According to the plan (see Figure 207), the probable shape of the encased temple may have been square with two projections, while the shape of the outer base is rectangular with two projections. The plan shows that the main outer temple may have been concentrically built around the encased temple.

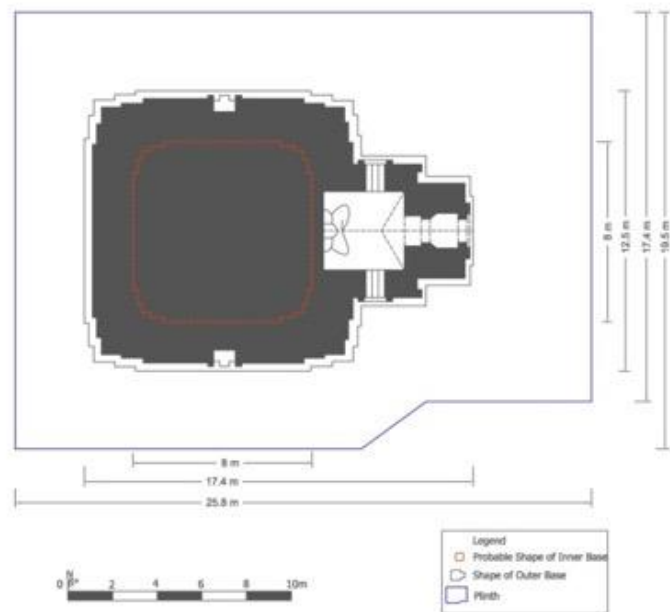


Figure 207: Plan of Monument No.1638 (Myet Taw Pyi Temple) in the Old Bagan Area

Note. The shape of inner temple may have been square with two projections.

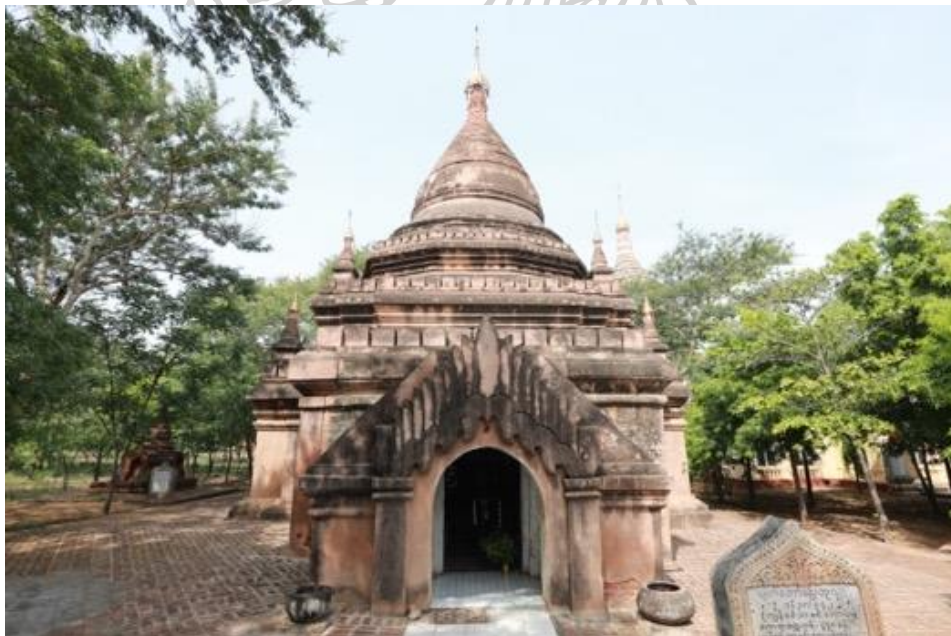


Figure 208: Monument No.1638 (Myet Taw Pyi Temple) at Old the Bagan Area

Note. The inner temple is not visible after repair by the DOA.

4.4.6 Monument No.1639 (Atwinzigon Stupa)

This is situated to the northeast of Gawdawpalin temple (No.1622), 1 inside the Bagan city wall. Traditions said the history of Atwinzigon stupa (see Figure 210) at Bagan that the inner stupa was built by the King Kunsaw Kyaungphyu (964-986 CE) and the outer stupa was built by the King Kyansittha (1084-1113 CE)(Chit Thein, 1969, p. 64-67). It is a large stupa located at the centre of a walled enclosure with a gateway on east. There are: the square base, 3.50 metres in high, with corner urns, a stairway and a small temple using as a Nat shrine Sandi Nat on north face, two octagonal terraces with corner stupas, one octagonal terrace with two projections, circular bell-shaped dome, conical spire and umbrella on the outer stupa (ASI, Annual Report, 1927-28, pp. 46-47). It was maintained and whitewashed by the Pagoda Trustees at Bagan. It was repaired by the DOA in 1984 and then it was again repaired by the DOA in 2017. A total of 100 % of the renovated stucco mouldings still remain in place. Architectural typologies indicate that the encased stupa may be dating to the 10th century CE, while the outer one may be estimated to the 11th century CE and then it may have been renovated to the 16th century CE (Pichard, 1996, p. 295, Vol-6). The probable shape of the inner base (see Figure 209) may have been circular and the shape of the outermost base is square. The outer stupa may have been concentrically built around the inner stupa with no space between the two of them.

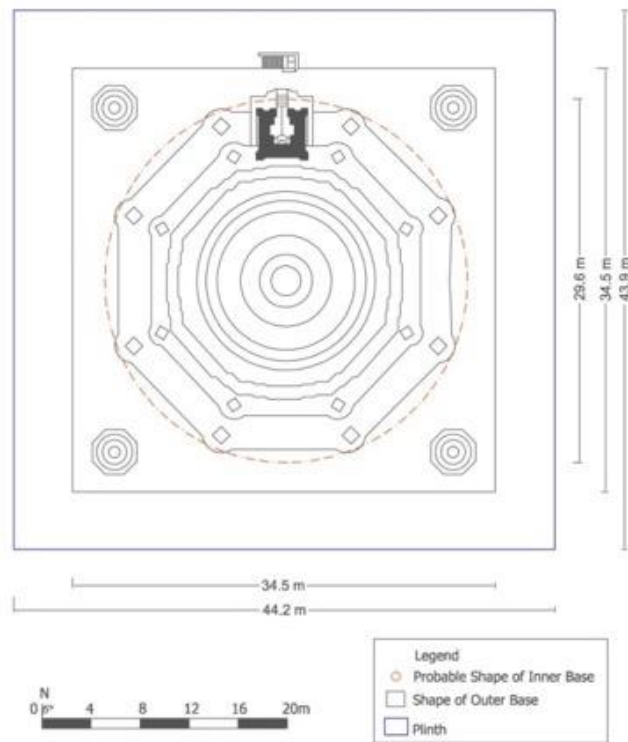


Figure 209: Plan of Monument No.1939 (Atwinzigon Stupa) at the Old Bagan Area
 Note. The shape of inner base may have been circular in this plan.



Figure 210: Monument No.1939 (Atwinzigon Stupa) at the Old Bagan Area
 Note. The inner stupa cannot be seen from the outside.

4.4.7 Monument No.1663

This example (see Figure 212) is situated to the north of Mahabodhi temple (No.1670) and to the west of Gubizatgyi temple (No.1662), inside the Bagan city wall. It is a small stupa, with a smaller and older stupa encased. Before restoration, the half portion of the outer stupa has been ruined and terraces are disintegrated and upper parts are badly damaged. There is one square terrace with two projections, one octagonal terrace, a circular bell-shaped dome and a conical spire on the outer stupa. There was a square relic room, 2.70 x 2.82 metres using the barrel vault over the relic room and circular bell-shaped dome on the encased stupa. The relic chamber which can be seen from the treasure hole, was found under the conical spire on upper parts before repair by the DOA in 1997. The detail of the encased stupa can be seen from the northwest side and the relic room can be seen from the northeast side. The treasure hunters dug not only the outer one, but also till to the inner one. The average brick sizes of these stupas is 31 x 15 x 5.5 centimetres (Pichard, 1996, p. 322, Vol-6). Both of them used the same brick sizes. Architectural typologies indicate that the encased stupa may be belonged to the 11th century CE and the outer one may be estimated to the 12th century CE. According to this evidence, the probable shape of the inner base (see Figure 211) may have been square, while the shape of the outer base is square with two projections and no gap between the two stupas. The outer stupa was concentrically built around the encased stupa.

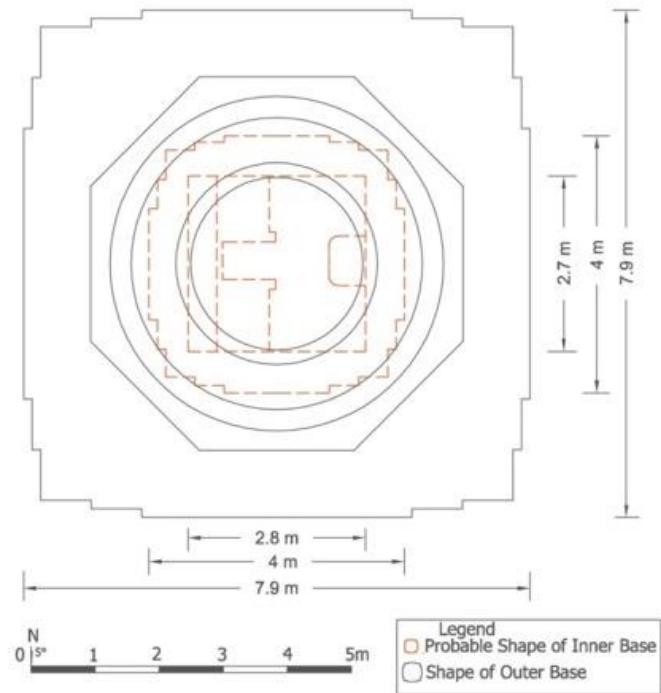


Figure 211: Plan of Monument No.1663 at the Old Bagan Area
 Note. The shape of inner stupa may have been square with two projections in this stupa.



Figure 212: Monument No.1663 at the Old Bagan Area
 Note. The inner stupa cannot be seen after repair by the DOA.

4.4.8 Monument No.1666

This example (see Figure 214) is situated to the north of Mahabodhi temple (No.1670) inside the Bagan city wall, located to the north of Shwehtisaung temple (No.1668) in the Old Bagan area. It is a medium-sized stupa, with a smaller and older stupa encased. There is one square terrace, one square terrace with two projections, one twelve sided terrace, a circular bell-shaped dome and a conical spire on the outer stupa. Before repair, the encased stupa through a treasure hole on the outer stupa can be found from the northeast side and the terraces are disintegrated and upper parts are badly damaged. Some 20 % of the original plain stucco mouldings on bases and terraces still remain in place. The average brick size of the outer stupa is 42 x 21 x 5.5 centimetres (Pichard, 1996, p. 325, Vol-6). It was firstly repaired by the DOA in 1996 and secondly it was again repaired by the DOA in 2012. Architectural typologies indicate that the encased stupa may be datable to the 12th century CE and the outer stupa may be estimated to the 13th century CE. According to this evidence, the probable shape of the inner base (see Figure 213) may have been square with two projections and the shape of the outer base is square as well and there is no space between the two stupas. The outer one was concentrically built around the encased stupa.

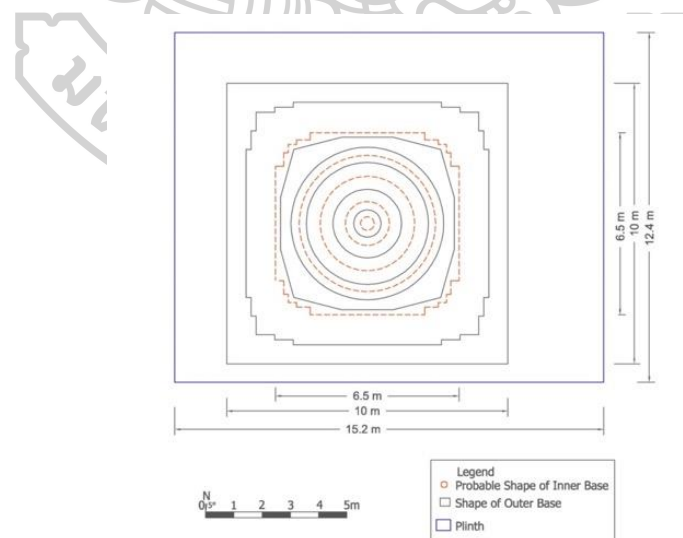


Figure 213: Monument No.1666 at the Old Bagan Area

Note. The shape of inner base may have been square with two projections in this example.



Figure 214: Monument No.1666 at the Old Bagan Area
 Note. Inner stupa cannot be seen from the outside after repair by the DOA.

4.5 Area 5: Myinkaba Area

In this area, there are twenty-one encased monuments (see Figure 215). Three different architectural typologies of the encasements can be found at the Myinkaba area. These types are fifteen encased stupas (No.1155, 1158, 1183, 1193, 1225, 1240, 1313, 1339, 1367, 1397, 1456, 1469, 1492, 1547, 1550), five encased temples (No.1171, 1182, 1186, 1219, 1369), and one encased Buddha image (No.1390). In this area, there are two epigraphic records being an ink inscription and a stone inscription from Kyazin temple (No.1219) and Manuha temple (No.1240) regarding encasements at Bagan during the Bagan period. In this area, there are two unusual encased monuments such as Kyauk Myet Maw (No.1158), and No.1182. In these encased monuments, distinctive spatial patterns between inner and outer structures can be clearly visible from the outside. These monuments are described in details in this section.

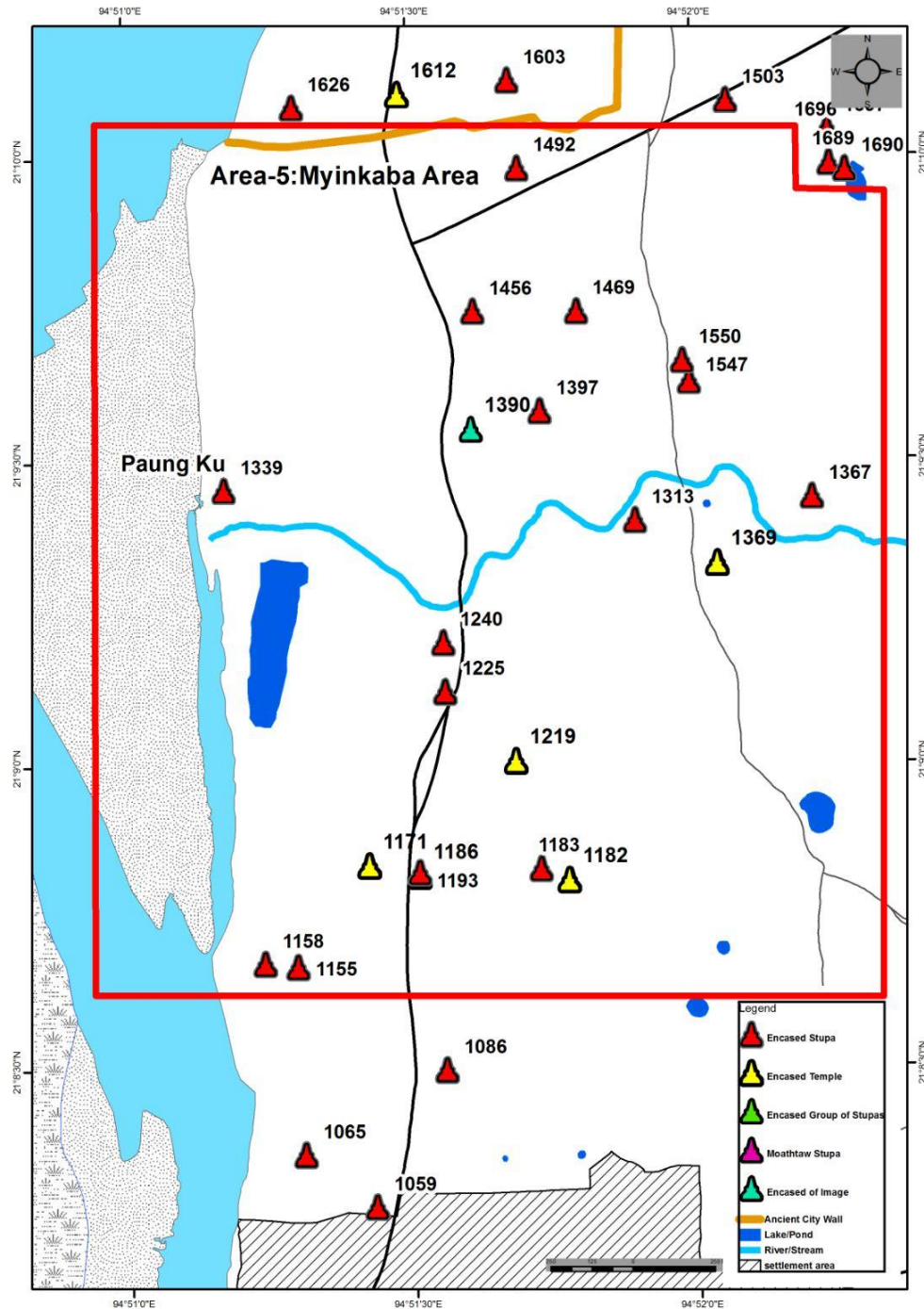


Figure 215: Map Showing the Area 5 (Myinkaba Area)

Note. There are twenty-one encased monuments at the Myinkaba area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.5.1 Monument No.1155

This example (see Figure 217) is situated to the east of Kyauk Myet Maw stupa (No.1158) and to the south of Myinkaba village in Myinkaba area, located near the Ayeyarwady river. It is a small stupa, with a smaller and older stupa encased. The outer stupa consists of the square base with two projections, 2.9 metres in high, and originally it may have been two square terraces with two projections, a circular bell-shaped dome and a conical spire documented in 1930 (ASI, Annual Report, 1930-34, p. 178). There is one square terrace with two projections, 1.0 metres in high, a circular bell-shaped dome and a conical spire on the encased stupa. Before repair, the half portion of the outer stupa was collapsed and the encased stupa can be clearly seen from the northeast side. Some 50 % of the original stucco decorations like the stucco mouldings on bases and terraces, dado and frieze with triangle, ornate waistband around the dome still remain in place on the encased stupa; the original traces of the stucco decorations can be seen on the outer stupa. The average brick size of the encased stupa is 40 x 20 x 7 centimetres, while the average brick size of the outer stupa is 32 x 16 x 5 centimetres (Pichard, 1995, pp. 30-31, Vol-5). Before repair, there was a large treasure hole from the northeast side, dug by the treasure hunters and a stupa-shaped relic casket was found in this stupa when clearing the debris in 1930 (ASI, Annual Report, 1930-34, p. 178). Architectural typologies indicate that the encased stupa may be datable to the 12th century CE and the outer one may be estimated to the 13th century CE. The probable shape of the inner base is square (see Figure 216), while the shape of the outer stupa is also square with two projections. There is an old photo of this stupa which was taken in 1930-31 from the Old Burma-Early Pagan (see Figure 218). According to this evidence, there is no space between the two stupas and the outer stupa was concentrically built around the encased stupa. It was repaired by the DOA in 1999.

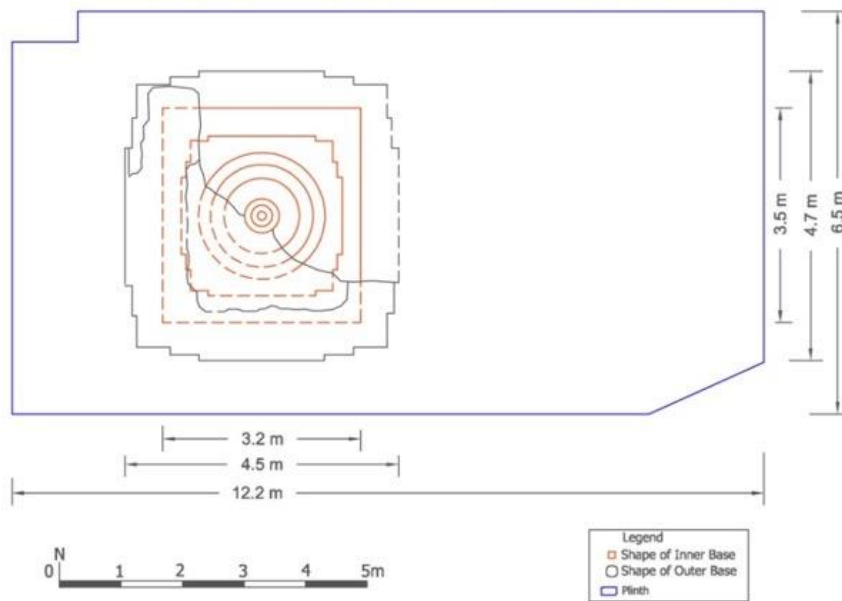


Figure 216: Monument No.1155 at the Myinkaba Area
 Note. The shapes of both inner and outer bases are square in this plan.



Figure 217: Monument No.1155 at the Myinkaba Area
 Note. Inner stupa with original stucco decorations can be seen here.



Figure 218: Old Photo of Monument No.1155
 Note. It was taken in 1930-31. From *Old Burma-Early Pagan*. *Artibus Asiae* and
 Institute of Fine Arts, New York University, Plate 259a, Vol-3, by G.H. Luce.
 Copyright 1969 by Gordon Hannington Luce.

4.5.2 Monument No.1158 (Kyauk Myet Maw Stupa)

This example (see Figure 220) is situated to the southwest of Soemngyi stupa (No.1145) and to the south of Myinkaba village near the Ayeyarwady river in the Myinkaba area. It is a medium-sized stupa, with a smaller and older stupa encased. The outer stupa consists of the one large octagonal base, two square terraces, and circular bell-shaped dome; the conical spire on the upper parts has been totally collapsed. The encased stupa may have been a bulbous-shaped dome, with a unique unusual conical spire; any radiating walls around the encased stupa and its terraces are untraceable. The average brick size of the encased stupa is 42 x 21 x 7.5 centimetres and the average brick size of the outer stupa is 36 x 18 x 6.5 centimetres (Pichard, 1995, p. 34, Vol-5). The author concludes that these radiating walls were originally used as the buttresses between the two stupas when the outer stupa was built. Four radiating walls can be clearly visible from the outside, some of them have been

damaged. Numerous finger-marked bricks were found around the stupa; the outer stupa is very similar to the Lawkananda stupa, which was built by King Anawrahta in the 11th century CE. The finger-marked bricks are one of the characteristics of Pyu culture. Architectural typologies indicate that the encased stupa may be dating to the 10th century CE and the outer stupa may be estimated to the 11th century CE. Traces of the original stucco decorations like ornate waistband and frieze with triangles around the dome still remain in place on the outer one. Before repair, the base of the outer stupa was buried under the debris and it was repaired by the DOA in 1983 and it was again repaired by the DANM in 2014. The author concludes that the shape of the inner base may have been circular, while the shape of the outer base is octagonal. Plans of these stupas (see Figure 219) confirms that the outer one was concentrically built around the encased stupa.

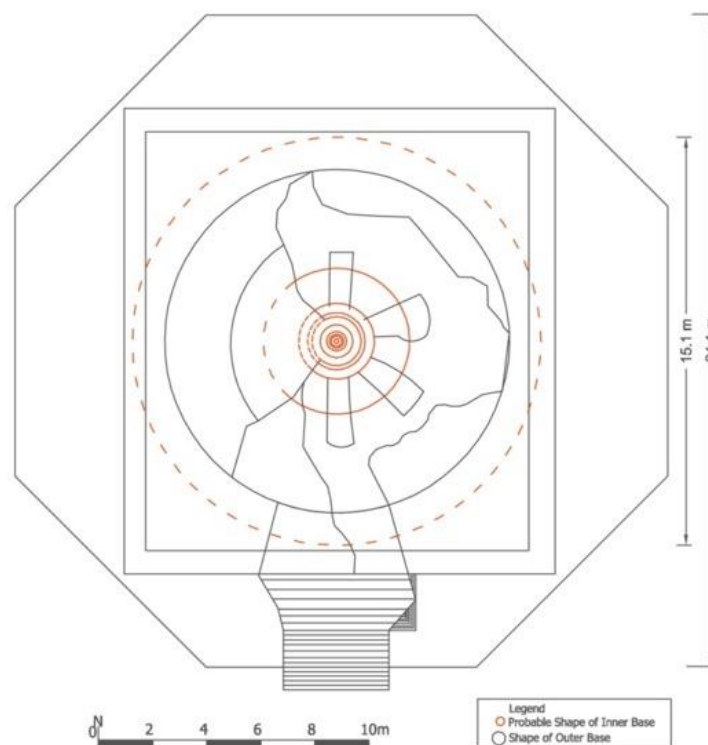


Figure 219: Plan of Monument No.1158 (Kyauk Myet Maw Stupa) at the Myinkaba Area

Note. The shape of the inner base may have been circular in this stupa.



Figure 220: Monument No.1158 (Kyauk Myet Maw Stupa) at the Myinkaba Area
 Note. The radiating walls around the inner stupa can be seen here.

4.5.3 Monument No.1171

This example (see Figure 222) is situated to the northwest of Soemngyi stupa (No.1145) and to the south of Myinkaba village in the Myinkaba area. It is a small single-storeyed image house, with a smaller and older image house, located in the ruined walled enclosure of Soemngyi stupa together with monument No.1146, No.1172, and No.1173. There are the central shrine, 4.20 x 5.50 metres, vestibule and porch on the east face, brick perforated windows on north and south faces. It is not located at the centre of the walls and has a barrel vault over the porch on the outer stupa. The encased image house consists of a renovated seated brick Buddha image in Bhumisparsa mudra, apertures on north and south faces, a cloister vault over the shrine, a barrel vault over the vestibule; originally there was a smaller image house, 3.26 x 2.60 metres, to house a Buddha image. Before repair, the northwest corner of the outer temple disintegrated and the upper parts are totally collapsed; there was a damaged, headless, seated Buddha image, facing east. It was firstly repaired by the DOA in 2003 and after the earthquake occurred in 2016, secondly it was again repaired by the DANM in 2017. The average brick size of the encased stupa is 42 x 22 x 7.5 centimetres and the average brick size of the outer stupa is 43 x 21 x 7 centimetres (Pichard, 1995, p. 50, Vol-5). Architectural typologies indicate that the

inner image house may be dated to the early 12th century CE and the outer image house may be estimated to the late 12th century CE. The author concludes that the secondary donor built the outer and larger image house with each window on the north and south walls. He selected and built the suitable places to install the perforated windows on the outer one symmetrically to match with each aperture of the inner image house. Normally the windows were mostly built at the centre of the walls, but the outer one was secondly built to match with encased image house and the secondary donor would like to build a larger temple than the smaller and older image house. If the outer one was firstly built, the secondary donor will build the wider inner windows on both faces like the outer windows to get light and ventilation for the Buddha image with worshippers, but he only used apertures inside the inner image house so that author considers that the inner one was firstly built in this case. According to this evidence (see Figure 221), there is no space between two of them and the shape of the inner base is rectangular, while the shape of the outer base is rectangular as well.

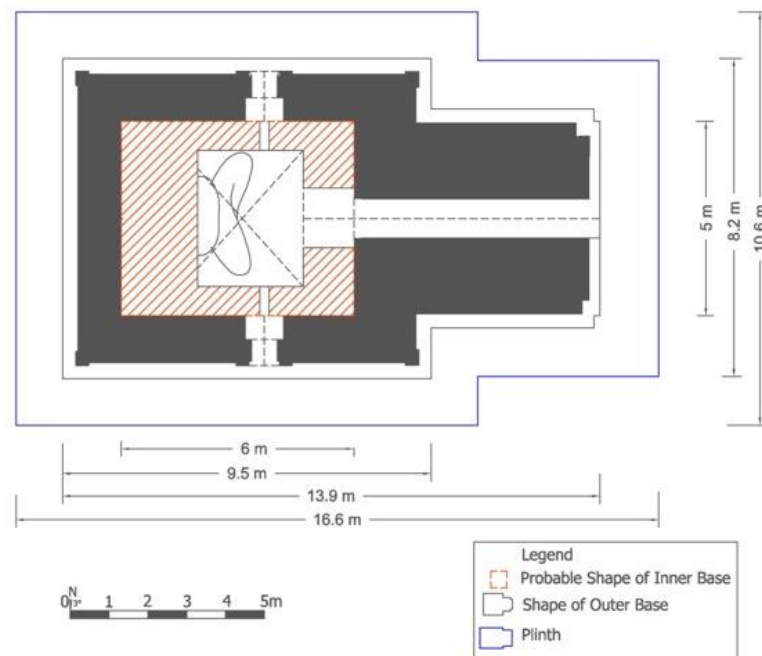


Figure 221: Plan of Monument No.1171 at the Myinkaba Area
 Note. The shape of inner base may have been rectangular in this example.



Figure 222: The elevation of the outer temple can be seen here.
 Note. The inner image house was subsequently enlarged by a larger temple.

4.5.4 Monument No.1182

This example (see Figure 224) is situated to the southeast of Nagayon temple (No.1192) and to the south of Myinkaba village in the Myinkaba area. It is a medium-sized, single-storeyed temple, with a smaller and older temple encased and it is located in a ruined walled enclosure, together with monument No.1183, No.1184 and five mounds. There are the square central shrine, 2.34 x 2.49 metres, a vestibule and a porch on the east face, one sloping roof, two square terraces with two projections, a square tower, and a cloister vault over the shrine on the inner temple. Originally there was a seated Buddha image, facing east, but the legs only remained in the shrine before repair; the stone perforated window in the north exterior wall of the inner temple can be seen. Only 10% of the original stucco mouldings on the inner temple still remain in place and the average brick size of the inner one is 43 x 21 x 7 centimetres (Pichard, 1995, p. 61, Vol-5). Before repair, the base was buried under debris and the upper parts are damaged; it was firstly repaired by DOA in 1997. There is a renovated seated Buddha image in Bhumisparśa mudra in the central shrine (see Figure 225). Originally there are nine niches on the north, west and south exterior walls of the inner temple, and seventeen niches on the north, west and south interior walls of the outer temple to house the Buddha images. However, no Buddha images in

the niches can be found now. The outer temple is very similar to the walled enclosure of the inner temple; it is a temple of unusual shape. The upper parts of the outer temple are totally destroyed and the average remain of the outer temple are about 1.0 metre high. This is an extraordinary and beautiful encased temple at Bagan. When you look from the outside, it seems that the inner temple design was enclosed by its precinct. Actually it was found that the inner one was encased by the outer one.

Architectural typologies indicate that inner one may date to the early 12th century CE and the outer one may be estimated to the late 12th century CE. According to this evidence (see Figure 223), the shape of the inner base is rectangular, and the shape of the outer base is also rectangular with a circumambulatory corridor between the two temples. The outer temple was symmetrically built around the inner temple.

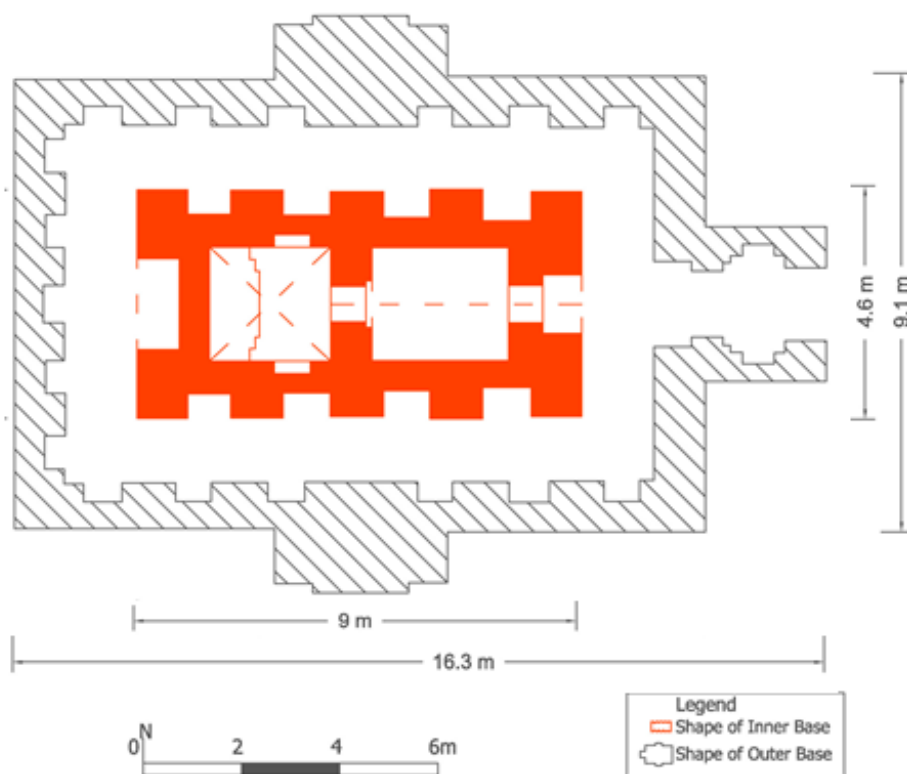


Figure 223: Plan of Monument No.1182 at the Myinkaba Area
 Note. The shapes of inner and outer bases are rectangular in this plan.



Figure 224: Monument No.1182 at the Myinkaba Area
 Note. This temple is a unique and unusual shape at Bagan.



Figure 225: A renovated seated Buddha image on the original pedestal in the central shrine
 Note. The Buddha image in Bhumisparsa mudra in the 12th century style can be seen here.

4.5.5 Monument No.1183

This example (see Figure 227) is situated to the southeast of Nagayon temple (No.1192) and to the south of Myinkaba village in Myinkaba area. It is a small stupa, with a smaller and older stupa encased and it is located in a ruined walled enclosure, together with monument No.1182, No.1184 and five mounds. There is the square base, 2.8 metres high, one square terrace with two projections, one twelve sided

terrace, and a circular bell-shaped dome on the outer stupa. The encased stupa consists of the square base, two square terraces with two projections, a circular bell-shaped dome and conical spire. Before repair, the half of the outer stupa collapsed, east and north faces are disintegrated and the upper parts are nearly destroyed. Traces of the original plain stucco mouldings can be seen on the outer stupa with 30% of the original plain stucco mouldings on bases and terraces, ornate waistband with frieze and dado around the dome still remain in place on the encased stupa. It was repaired by the DOA in 1998. The average brick size of the encased stupa is 44 x 21.5 x 6 centimetres and the average brick size of the outer one is 42 x 20.5 x 6 centimetres (Pichard, 1995, p. 62, Vol-5). Architectural typologies indicate that the encased stupa may date to the 12th century CE; the outer stupa is estimated to date to the 13th century CE. According to this evidence (see Figure 226), the probable shape of the inner base is square, while the shape of the outer base is also square with originally no gap between the two stupas. The outer one was not concentrically built around the encased stupa; at present it is located to the west of the encased stupa.

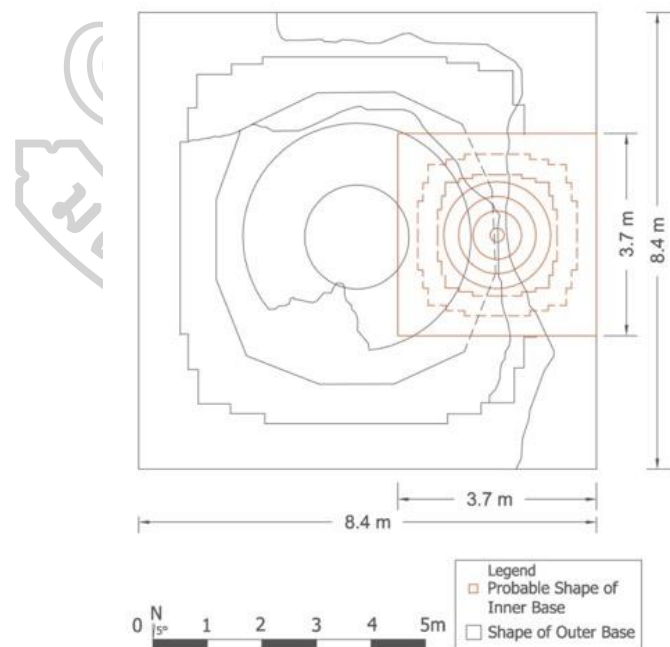


Figure 226: Plan of Monument No.1183 at the Myinkaba Area

Note. The outer stupa was not concentrically built around the encased stupa in this plan.



Figure 227: Monument No.1183 at the Myinkaba Area
Note. Inner stupa can be clearly seen from the outside here.

4.5.6 Monument No.1186

This example (see Figure 229) is situated to the southwest of Nagayon temple (No.1192) and to the south of Myinkaba village in the Myinkaba area. It is a small temple or image house, with a smaller and older temple encased. There is the central shrine, 2.10 x 1.90 metres, a vestibule and a porch on west face, a cloister vault over the shrine, and barrel vaults over the vestibule and porch on the inner temple. Before repair, the upper parts of the encased temple collapsed and its ground floor was buried under the debris. The western parts of the inner and outer temple have been destroyed and the half portions of these temples are totally ruined before repair. It was repaired including the exterior walls of the outer temple reinforced by the DOA in 2000. The average brick size of the encased temple is 32 x 16 x 5.5 centimetres (Pichard, 1995, p. 66, Vol-5). Before repair, traces of the original stucco mouldings on interior walls of the inner temple and exterior walls of the outer temple still remain in place. There was a renovated standing Buddha image in Abhaya and Civara mudras in the central shrine and the donor also built a walled enclosure around the temple with a stairway on west face after it has been repaired. Architectural typologies indicate that the inner temple may be datable to the 12th century CE and the outer temple may be estimated to the 13th century CE. According to the plan (see Figure 228), the shape of the inner

base is square and the shape of the outer base is rectangular with no space between two of them. The outer one was symmetrically built around the encased temple.

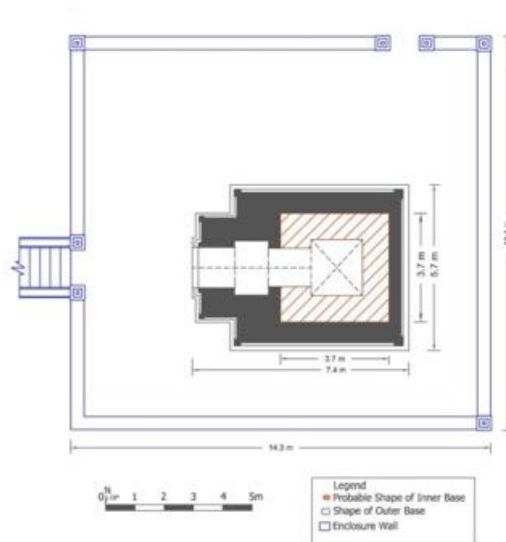


Figure 228: Monument No.1186 at the Myinkaba Area

Note. The shape of inner image house may have been square in this temple.



Figure 229: Monument No.1186 at the Myinkaba Area

Note. Inner image house was covered by a larger temple here.

4.5.7 Monument No.1193

This example (see Figure 231) is situated to the southwest of Nagayon temple (No.1192) and to the south of Myinkaba village in the Myinkaba area. It is a small unique stupa at Bagan, located at the centre of a low walled enclosure and it was formerly encased in a ruined larger stupa removed in 1916 (ASB, Annual Report, 1916, p. 27). It consists of the octagonal base, one octagonal terrace, a circular bell-shaped dome, and a square spire with one projection. The average brick size of the encased stupa is 38 x 19 x 5.8 centimetres (Pichard, 1995, p. 78, Vol-5). Some 60 % of the original plain stucco mouldings on bases and terraces, waistband and dado around the dome still remain in place. Luce documents that the pyramid in this stupa tapers to the amalaka-lotus holding the bulbous finial. He said that such a pyramidal top is unique at Bagan (Luce 1969, p. 281). Taw Sein Ko said that it was exposed to view by removing the outer stupa (ASB 1916, p. 27) and it was repaired by the DOA in 1996. According to architectural typologies, the inner stupa may be dating to the 11th century CE and the outer stupa may be estimated to the 12th century CE. The plan (see Figure 230) indicates that the shape of the inner base is octagonal and the shape of the outer base may have been square. There is an old photo of this stupa which was taken in 1905-06 from the Old Burma-Early Pagan (see Figure 232). The outer one may have been symmetrically built and encased around the inner stupa.

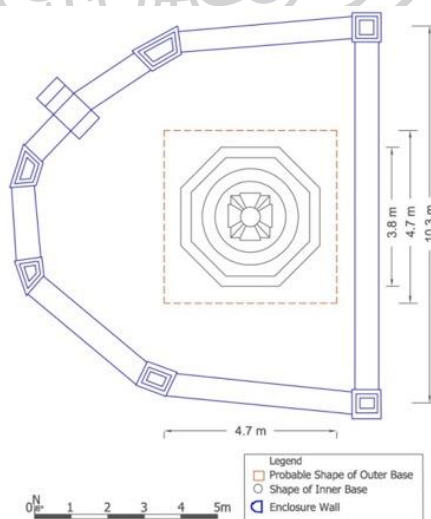


Figure 230: Monument No.1193 (Pawdawmu Stupa) at Myinkaba Area
 Note. The shape of outer base may have been square in this stupa.



Figure 231: Monument No.1193 (Pawdawmu stupa) at the Myinkaba Area
Note. The pyramidal top in this stupa is a unique and unusual shape at Bagan

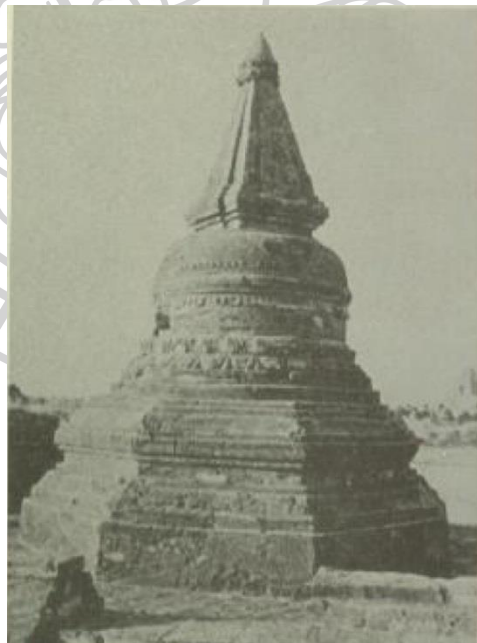


Figure 232: Old Photo of Monument No.1193 (Pawdawmu Stupa)
Note. It was taken in 1905-06. From *Old Burma-Early Pagan*. *Artibus Asiae* and
Institute of Fine Arts, New York University, Plate 78d, by G.H. Luce. Copyright 1969
by Gordon Hannington Luce.

4.5.8 Monument No.1219 (Kyazin Temple)

This example (see Figure 234) is situated to the northeast of Nagayon temple (No.1192) and to the south of Myinkaba village in the Myinkaba area. It is a medium-sized three-storeyed temple - according to the original ink inscriptions, formerly there was a smaller and older temple enshrined in a larger temple built by the secondary donor. There is the rectangular central shrine, a corridor on south, west, and north side, an entrance hall with a porch and lateral porches, a vestibule and porch with south, west, north faces, internal staircases in the northeast and southeast corner of shrines on ground floor. Upper parts include one square terrace with corner stupas, one square terrace with stairways on east, south, north and corner stupas at the lower terrace, and one square terrace with one projection and corner stupas, one square terrace with two projections and corner stupas, one square terrace with two projections and square tower at the upper terrace. There is a barrel vault hipped at both end over the shrine, a barrel vault hipped at east end over the entrance hall, a barrel vault over the corridor, a vestibule and porches, traces of stairs in west vestibule and a timber floor at the middle level of corridor on ground floor and a $\frac{3}{4}$ barrel vault over the west room, a corbelled vault over the corridor on the entresol and cloister vault over the shrine, barrel vaults over the vestibules and porches on upper storey constructing in this temple. There is one seated Buddha image (see Figure 235) flanked by two Buddha images in Pralambanasana, seated 'European-style' on a throne on the ground floor and four seated Buddha images back to back (traces of legs only remain) on a circular pedestal on the upper storey. Only 4 % of the original stucco mouldings like plain cornice and pediments, pilasters and base with recess and 12 % of the original mural paintings on the interior walls still remain in place in this temple (Pichard, 1995, pp. 113-118, Vol-5). Original ink inscriptions have been found at the northwest and southwest corners of the entrance hall (Luce, 1969, pp. 391-397, Vol-1). Some of them were made faint by the light. According to the ink inscriptions at Kyazin temple, the secondary donor named Thindra-o enshrined the inner temple built by the primary donor named Barusi who died in 1125 CE after he began, but probably did not complete building a temple. Thindra-o totally enshrined Barusi's temple in 1217 CE, completed in 1223 CE. The original name of the outer temple was originally called Tre-Loka-Luwalbo in the Bagan period (Bo Kay, 1981, pp. 336-338). Now it is

locally called Kyazin temple. The inscriptions illustrate ancient knowledge of the donor in enshrining a structure in the 13th century. The average brick size of the ground floor is 40 x 20 x 5 centimetres and the average brick size of the upper storey is 38 x 19 x 4.5 centimetres. According to the ink inscriptions, the inner temple was built by Barusi in the 12th century CE, while the outer temple was built by Thintra-o in the 13th century CE. Pichard suggests that two distinctive features of Kyazin temple are unique at Bagan and its ground plan and the small apertures integrated into the cornice of the main body to provide light in the entresol and three Buddha images seated side by side can be found in this temple (Pichard, 1995, pp. 113-118, Vol-5). The author concludes that the shape of the inner base may have been square and the shape of the outer base is rectangular. The inner one (see Figure 233) may have been built and enshrined in the centre of the small central pillar of the outer temple. It was repaired including the brick grilles by the DOA in 1931 and it was again repaired by the DOA in 1997 and 2013 and repaired including the strengthening works by the ASI with the supervision of the DANM in 2020.

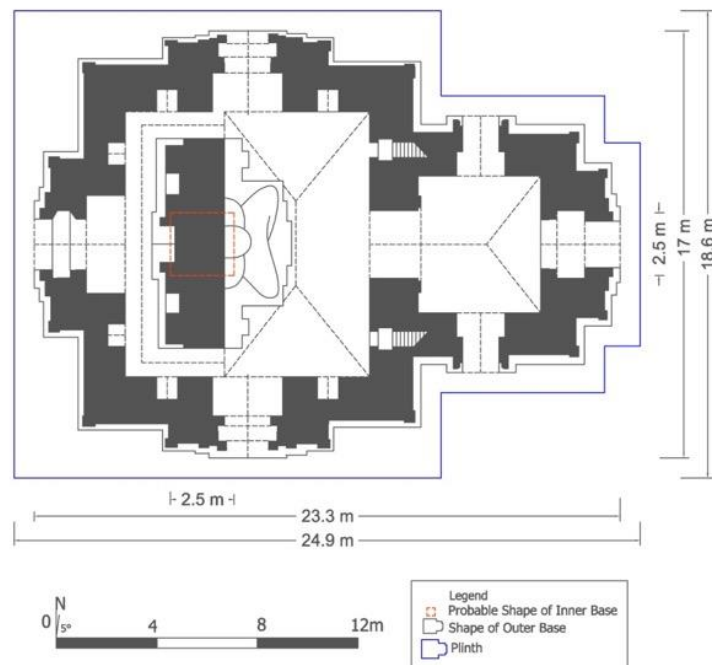


Figure 233: Plan of Monument No.1219 (Kyazin Temple) at the Myinkaba Area
 Note. The inner temple may have been square in shape in this temple.



Figure 234: Monument No.1219 (Kyazin Temple) at the Myinkaba Area
 Note. Kyazin temple is one of the three-storeyed buildings at Bagan.



Figure 235: A Seated Buddha Image in Bhumisparsa Mudra Flanked by Two Buddha Images in the Central Shrine
 Note. Two Buddha images in preaching attitude in Pralambanasana style can be also seen on ground floor in this temple.

4.5.9 Monument No.1225

This example (see Figure 237) is situated to the south of Manuha temple (No.1240) and to the south of Myinkaba village as well in the Myinkaba area. It is a small single-storeyed temple, with a smaller and older stupa encased. The outer stupa consists of a square base with two projections, a central shrine, 1.88 x 2.00 metres, a vestibule and a porch on the west face, barrel vaults over the vestibule and porch, and a cloister vault over the central shrine. Besides, there are three square terraces with two projections and sloping roofs. Before repair, the half portion of the outer temple and inner stupa were totally destroyed and upper parts of the outer stupa were collapsed; the encased stupa has a bell-shaped dome and conical spire as well. It was repaired by the DOA in 1996. Architectural typologies indicate that the encased stupa may date to the 11th century CE and the outer temple may be estimated to the 13th century CE. Though the encased stupa is located in the eastern wall of the outer one, there is a space in front of the inner one to worship and meditate like the moathtaw stupas in Myanmar, which may have been built by the King Asoka. According to this evidence (see Figure 236), the shape of the encased stupa is circular and the shape of the outer one is square with two projections. The average brick sizes of the outer stupa are 37 x 19 x 6.5 centimetres and 30 x 15 x 4 centimetres (Pichard, 1995, p. 124, Vol-5). There is a window with the radiating and corbelled arches from the east face added in later, exposed to see and worship the inner stupa; the stairway was built and added to better see it in later times.

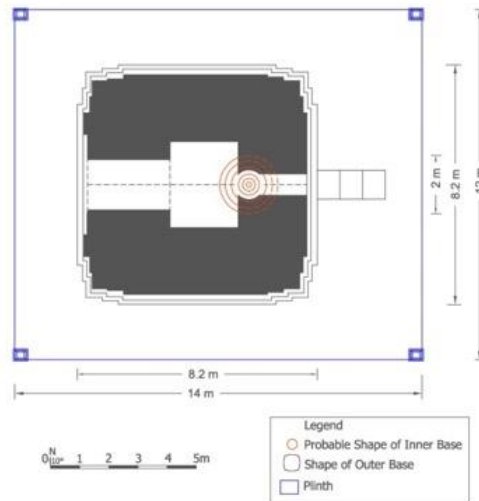


Figure 236: Plan of Monument No.1225 at the Myinkaba Area
 Note. There is a smaller and older stupa in a temple.



Figure 237: Monument No.1225 at Myinkaba Area
 Note. Half portion of inner stupa is located in the eastern wall of outer temple.

4.5.10 Monument No.1240 (Manuha Temple)

This example (see Figure 239) is situated to the north of Nanphaya temple which is one of the stone monuments at Bagan, located in the Myinkaba village. It is a medium-sized single-storeyed temple and it was built in a low walled enclosure. According to the Manuha stone inscription, it was known that there was an inner Mahtaw stupa built by King Manuha when the Buddha images were encased and constructed by him over it. Pichard suggests that there are three shrines on east side, 6.25 x 7.10 metres, 10.24 x 9.40 metres, 6.25 x 6.54 metres, three vestibules and porches on east face, one shrine on west side, 28.80 x 3.90 metres, three porches on west face, one door in southwest corner, and an internal staircase in southwest corner. Upper parts consist of the one square terrace with twelve stupas and a dome crowned by a stupa over the axial eastern shrine, one square terrace with seven stupas and a dome crowned by a stupa over the lateral shrines and one square terrace with two flat domes over the western shrine. There are barrel vaults over the eastern shrines, barrel vaults hipped at both ends over the western shrine, and barrel vaults over the vestibules and porches in this temple. It consists of the three renovated, seated Buddha images in Bhumisparsha mudras and one reclining Buddha image and the 100% of the original stucco mouldings like plain cornice, pediments, friezes with ogre heads, and pilasters still remaining in place. It was regularly maintained and whitewashed by the Pagoda Trustee of Manuha temple and the vaults and upper parts collapsed when the earthquake was occurred in 1975 and it was reconstructed in reinforced concrete works by the Construction Cooperation in 1975-80 (Pichard, 1995, p. 144, Vol-5). According to the Manuha stone inscription, a small stupa called Mahtaw stupa which enshrined the relics of the Buddha encased by three massive Buddha images and another enormous reclining Buddha image were built by King Manuha in 1067-CE. The construction of the huge Buddha images over the Mahtaw stupa was completed in six months and six days. This stone inscription records that the Manuha Phaya (temple) is located on the victorious mound (Zeyabon Kon) to the northeast of the Lokananda Harbour where the tooth relic of the Buddha was received by the King Anawrahta. King Manuha built the Buddha images after he received six bullock-carts loaded with silver by selling his ring with a precious stone named Manawmaya (Nyein Maung, 1972, Vol-1, pp. 322-323). Inscriptional evidence

indicates that there was an inner mahtaw stupa encased by the enormous Buddha images in the Bagan period. The probable shape of the inner base (see Figure 238) may have been circular, while the shape of the outer base is rectangular; there may have been no gap between two of them.

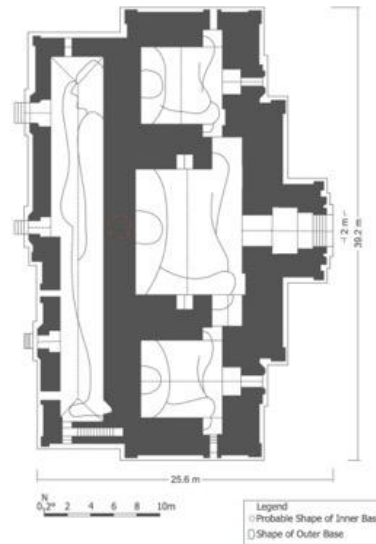


Figure 238: Plan of Monument No.1240 (Manuha Temple) at the Myinkaba Area
Note. The shape of inner base may have been circular in this temple.



Figure 239: Monument No.1240 (Manuha Temple) at the Myinkaba Area
Note. There are three seated Buddha images and one reclining Buddha image in this temple.

4.5.11 Monument No.1313

This example (see Figure 241) is situated to the northeast of Shwezedi stupa (No.1316) and to the east of Myinkaba village. It is a medium-sized temple, with a smaller and older stupa encased in Myinkaba area. The outer temple faces to the west and there is a renovated seated Buddha image in Bhumisparsa mudra in the shrine and the inner stupa is located in the main body of the outer temple. The outer temple consists of the original pedestal in brick and stucco about 1.5 metres in high and its shrine is about 1.5 metres high still remaining. Before repair, the bases and terraces of the encased stupa were buried under the debris and the original plain stucco mouldings on dome still remain in place and it has an original bell-shaped dome. It was repaired by the DOA in 1997-98 and the average brick size of the encased stupa is 36 x 18 x 5 centimetres (Pichard, 1995, p. 231, Vol-5). The outer one was reconstructed using the barrel vaults over the shrine and a new pediment on west face and there may have originally been rectangular terraces on upper parts. According to architectural typologies, the encased stupa may be dating to the 12th century CE and the outer one may be estimated to the 13th century CE. The probable shape of the encased stupa (see Figure 240) may have been square and the shape of the outer stupa is rectangular; there is no space between inner and outer stupas.



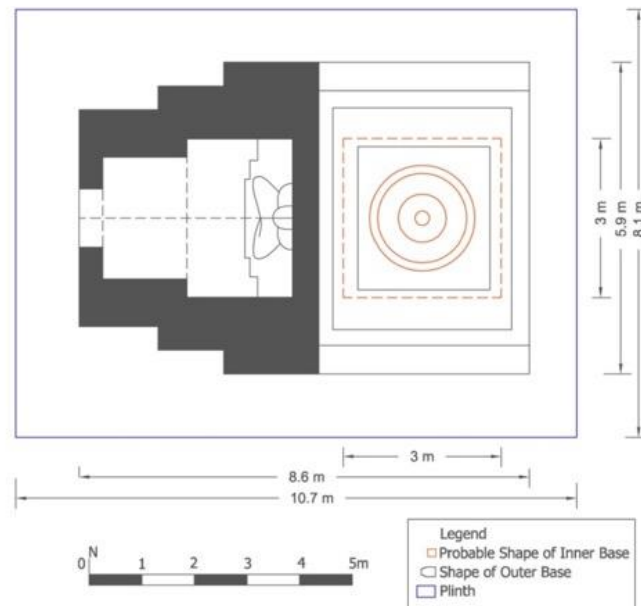


Figure 240: Plan of Monument No.1313 at the Myinkaba Area
 Note. The shape of inner base may have been square in this temple.



Figure 241: Monument No.1313 at the Myinkaba Area
 Note. The elevation of inner and outer monuments can be seen here.

4.5.12 Monument No.1339 (Paung Ku Stupa)

This example (see Figure 243) is situated to the southwest of Eikate temple (No.1340) and to the northwest of Myinkaba village, located near the Ayeyarwaddy river in Myinkaba area. It is a large stupa with associated two monastic structures, with a smaller and older stupa encased and the part of the encased stupa still remains near the centre of the outer stupa. There is the square base, two octagonal terraces, one circular terrace at the outer stupa and upper parts may have been built, the circular bell-shaped dome, but these have nearly collapsed. There are the axial access ways between the two monastic rectangular structures, 10.40 x 7.70 metres; the stone sockets, 39 x 39 centimetres for timber posts were found at the monastic structures and the several Pyu bronze figures and stone sculptures depicting the mythical birds which are displayed in the Bagan Archaeological Museum, were found around the stupa during the excavations together with a votive tablet with a Mon inscription. This stupa was partly excavated in 1916 and 1927 (ASB, Annual Report, 1916, p. 37; ASI, Annual Report, 1926-27, pp. 165-166). The average brick size of the outer stupa is 29 x 14 x 5.5 centimetres and the average brick size of the monastic structures is 40 x 20 x 7 centimetres (Pichard, 1995, pp. 268-269, Vol-5). Originally there was an inner stupa with a square central relic chamber and the part of the inner one can be clearly seen from the western side. The half portion of the outer stupa and 80 % of the inner stupa had been collapsed by the erosion of the river bank. There is a circumambulatory corridor between the inner and outer stupas, but this corridor has no arches between two of them. The base of the inner one is lower than the base of the outer stupa. According to architectural typologies, the encased stupa may be dating to the 9th century CE and the outer stupa may be estimated to the 11th century CE. The finger-marked bricks were found around these stupas. The plan of these stupas indicates that the probable shape of the inner base may have been circular and the shape of the outer base may have been rectangular. The inner stupa (see Figure 242) may have been cylindrical in shape like Bawbawgyi stupa at Srikshetra. The author concludes that there was a circular shaped corridor without using arches (see Figure 244) and vaults over the corridor between two of them. The debris over the corridor between the two stupas can be seen from the outside so that there is a space like a corridor which is very similar to the moathtaw stupas found in the various parts of

Myanmar, which may have been built by the King Asoka. The author concludes that the outer stupa was constructed and encased by the secondary donor after the upper part of the inner stupa has been damaged. It is a unique stupa with two monastic structures or two shrines at Bagan.

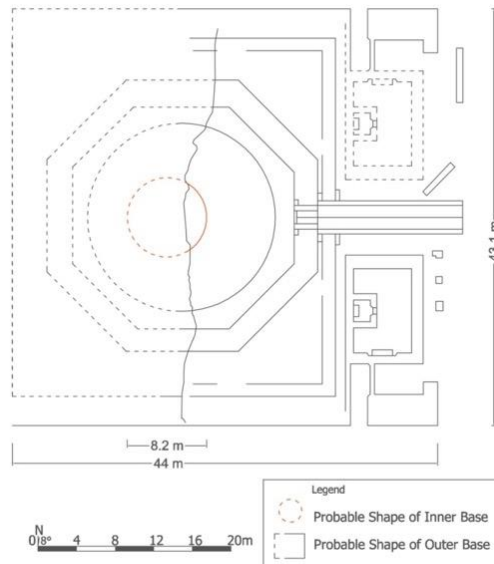


Figure 242: Plan of Monument No.1339 (Paung Ku Stupa) at the Myinkaba Area
Note. There are inner and outer stupas with two monastic structures.



Figure 243: Monument No.1339 (Paung Ku Stupa) at the Myinkaba Area
Note. Half portion of outer stupa has been entirely collapsed.



Figure 244: Part of inner stupa still remaining in this structure
 Note. There is a space with debris between inner and outer structures.

4.5.13 Monument No.1367

This example (see Figure 246) is situated to the southwest of South Guni temple (No.765) and to the east of Myinkaba village, located in the Myinkaba area. Although it has not been excavated completely, the inner stupa and the outer stupa can be clearly seen from the outside. Upper parts of these monuments are totally collapsed and the shape of the outer base is untraceable because it has not been excavated and the terraces of both monuments are untraceable and disintegrated as well. The average brick size of the inner one is 32 x 16 x 4 centimetres (Pichard, 1995, p. 300, Vol-5). According to the plan (see Figure 245), the probable shape of the inner base may have been square, while the shape of the outer base is untraceable. Both of them may date to the 13th century CE and according to this evidence, there may have no space between the two stupas. This monument is one of the unexcavated mounds at Bagan. The maximum high of this mound about 2 metres. It was never touched by the DANM for archaeological excavation though it was identified as an encased monument at Bagan in this department.

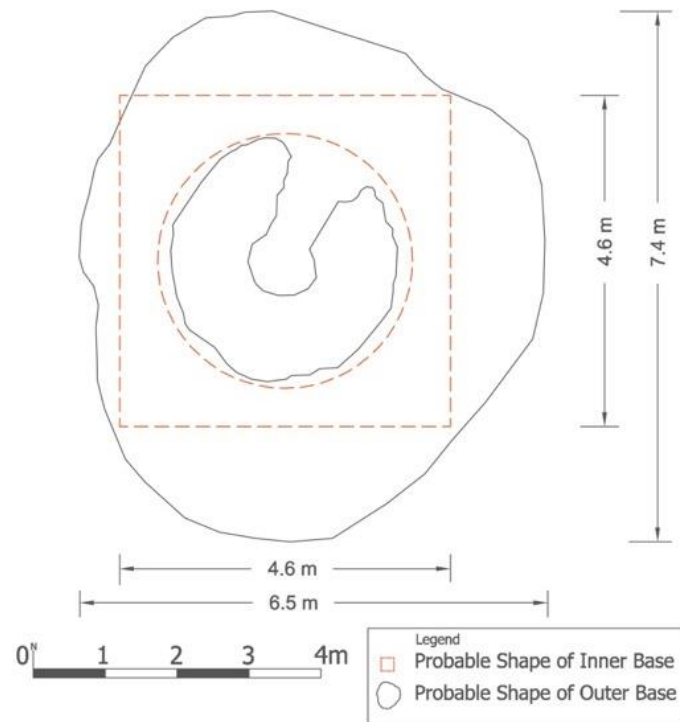


Figure 245: Plan of Monument No.1367 at the Myinkaba Area
 Note. The shape of inner base may have been square in this mound.



Figure 246: Monument No.1367 at the Myinkaba Area
 Note. It is one of the unexcavated mounds listed by the DANM.

4.5.14 Monument No.1369

This example (see Figure 248) is situated to the east of Shwezedi stupa (No.1316) and to the east of Myinkaba village, located in the Myinkaba area. It is a medium-sized, single-storeyed temple, with a smaller and older temple or an older image house, 6.10 x 6.00 metres, which is similar to the central shrine of the outer temple, located at the ruined walled enclosure. There is the entrance hall, 4.19 x 4.02 metres, on east side with a porch and lateral porches, vestibules and porches on south, west, north faces and two internal staircases in the eastern corner of the hall at the outer temple. Before repair, the vault of the image house and the upper parts of the outer temple have been totally collapsed and the ground floors are buried under the debris; there is a destroyed seated Buddha image in brick and stucco facing to the east against the screen wall. Before repair, there are the treasure holes on the destroyed Buddha image, dug by the treasure hunters. The average brick size of the inner one is 36 x 7 x 4 centimetres and the average brick size of the outer temple is 37 x 19 x 5.5 centimetres and (Pichard, 1995, p. 302, Vol-5). Originally the outer temple was constructed with a barrel vault over the entrance hall and there is an original older image house to house a Buddha image and only 8% of the original stucco decorations like pilasters and friezes with triangles on east face still remain in place. It was repaired by the DOA in 2004 and there is a renovated seated Buddha image in Bhumisparsa in the inner image house. Architectural typologies indicate that the inner image house may be dated to the 12th century CE and the outer temple may be estimated to the 13th century CE. According to the plan (see Figure 247), the probable shape of the inner base is square, while the shape of the outer base is rectangular and there is no gap between two of them. The author assumes that the inner image house was firstly built by the first donor and then the secondary donor or first donor would like to enlarge the larger temple to be more elaborate than the previous older image house. If the larger temple was firstly built, secondly the inner image house will be architecturally constructed with windows to get ventilation and light like the outer one. The author concludes that the first donor built an older and smaller image house without windows and the second donor or possibly the first donor elaborately built the bigger temple with windows. He did not wish to destroy the walls of the first image house to install the windows.

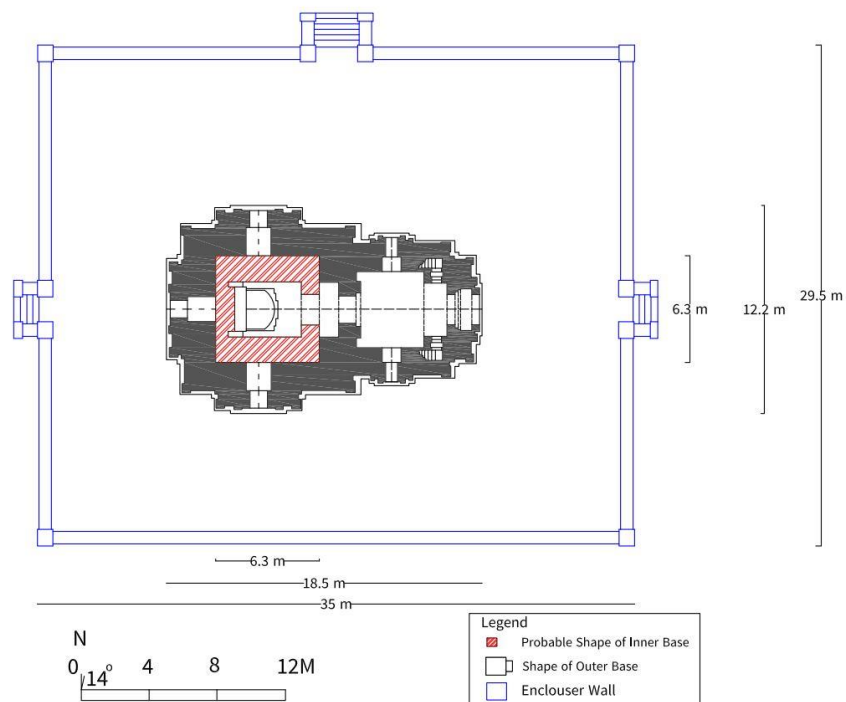


Figure 247: Plan of Monument No.1369 at the Myinkaba Area
 Note. The shape of inner base is square in this temple.



Figure 248: Monumnet No.1369 at the Myinkaba Area
 Note. Outer temple was symmetrically built around the inner image house.

4.5.15 Monument No.1390

This example (see Figure 251) is situated to the northwest of Myinkaba Gubyaukng temple (No.1391) and to the north of Myinkaba village, located in Myinkaba area. It is a medium-sized, single-storeyed temple, with an older and smaller Buddha image. There are the central shrine, 4.53 x 4.80 metres, vestibule and porch on east face and stone reinforcements at the outer temple. Before repair, the external face of the walls were disintegrated and the vaults and upper parts are totally collapsed and there was an outer damaged seated Buddha image together with an older and smaller damaged Buddha image. The average brick size of the temple is 40 x 19 x 6 centimetres (Pichard, 1995, p. 329, Vol-5). It was firstly repaired including the strengthening works by the DOA in 2001 and it was again repaired by the DANM in 2016 after the earthquake occurred in 2016. According to the iconography of the Buddha image in the Bagan period (see Figure 250), the inner Buddha image may be dating to the 11th century CE and the outer Buddha image may be estimated to the 12th century CE. When it was repaired in 2001, the cloister vault over the central shrine and the barrel vaults over the vestibule and porch were reconstructed. The author concludes that there was originally an inner image house regarding the inner Buddha image, but the secondary donor did not wish to remove the inner Buddha image and the inner temple or inner image house may have been damaged or removed when the outer temple was built. Archaeological evidence indicates that the shape of the inner base (see Figure 249) may have been square and the shape of the outer base is rectangular; there is no space between the two Buddha images.

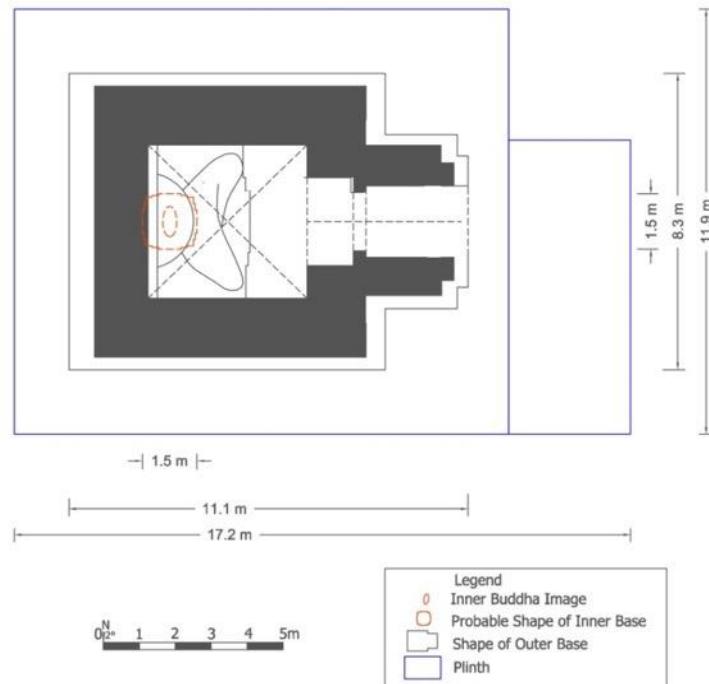


Figure 249: Plan of Monument No.1390 at the Myinkaba Area
 Note. Inner and outer Buddha images can be seen in this temple.



Figure 250: Two encasements of Buddha Images from No.1390
 Note. Inner and outer Buddha images in Bhumisparsa mudra, are housed in the central shrine.



Figure 251: Monument No.1390 at the Myinkaba Area
Note. This temple was viewed from the southeast side.

4.5.16 Monument No.1397

This example (see Figure 253) is situated to the northeast of Gubyaukng temple and to the north of Myinkaba village. It is a small stupa, with an older and smaller stupa encased, in Myinkaba area. There is a square base, two square terraces, one sixteen sided upper terraces and originally there may have been circular bell-shaped dome and conical spire on the outer stupa. The encased stupa consists of the bulbous shaped dome and plain conical spire and the finger-marked bricks and carved bricks on the waistband. The average brick size of the encased stupa is 28 x 14 x 5.5 centimetres and the average brick size of the outer stupa is 36 x 18 x 5 centimetres (Pichard, 1995, p. 342, Vol-5). Before repair, the bases and terraces disintegrated and the upper parts have been totally collapsed. The 10% of the original plain stucco mouldings on bases and terraces still remain in place and it was repaired by the DOA in 1998. According to architectural typologies, the encased stupa may be dating to the 10th century CE, while the outer stupa may be estimated to the 12th century CE. According to the plan of these stupas (see Figure 252), the probable shape of the inner base may have been circular and the shape of the outer base is square. In this outer stupa, there is a rare instance of a sixteen sided terrace with its apexes. Archaeological evidence indicates that there is no space between the two stupas and the outer stupa was concentrically built around the encased stupa. The encased stupa can be seen from the western face

of the outer one where the damaged part was exposed; finger-marked bricks were found around the stupa.

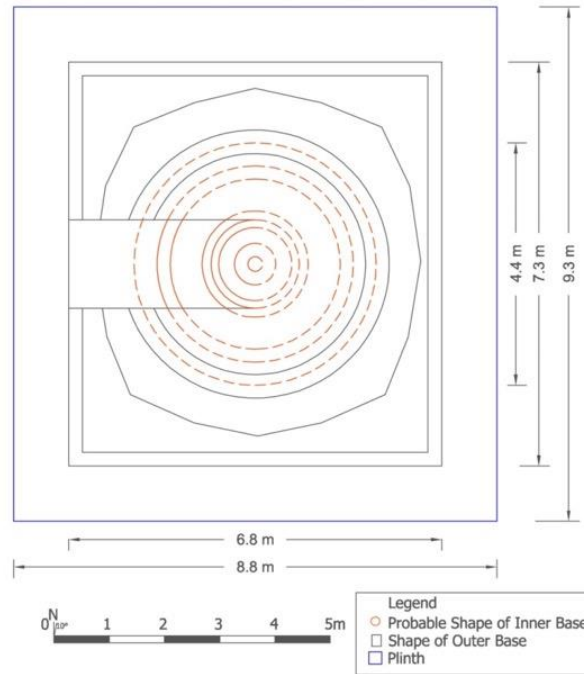


Figure 252: Plan of Monument No.1397 at the Myinkaba Area
Note. The shape of inner base may have been circular in this stupa.



Figure 253: Monument No.1397 at the Myinkaba Area
Note. Inner stupa with bulbous-shaped dome can be seen from the outside.

4.5.17 Monument No.1456

This example (see Figure 255) is situated to the northeast of Mingalazedi stupa (No.1439) and to the south of old Bagan in the Myinkaba area. It is a small stupa, with a smaller and older stupa encased and there are originally two square terraces with two projections and upper parts have been destroyed. The encased stupa consists of the circular bulbous-shaped dome and plain conical spire. Before repair, the bases and terraces of the outer one are disintegrated and only 2% of the original plain stucco mouldings on bases and terraces still remain in place. It was repaired by the DOA in 1998 and the average brick size of the encased stupa is 32 x 16 x 6 centimetres, while the average brick size of the outer one is 33 x 16 x 5.5 centimetres (Pichard, 1996, p. 19, Vol-6). The encased stupa is very similar to the Ngakywenadaung stupa at Bagan. Architectural typologies indicate that the encased stupa may date to the 9th century CE and the outer stupa may be estimated to the 13th century CE. According to this evidence, the probable shape of the inner base may have been circular and the shape of the outer base is square with two projections; there is no gap between the inner and outer stupas. The plan (see Figure 254) indicates that the encased stupa is not located at the centre of the outer stupa, which was not symmetrically built around the encased stupa.

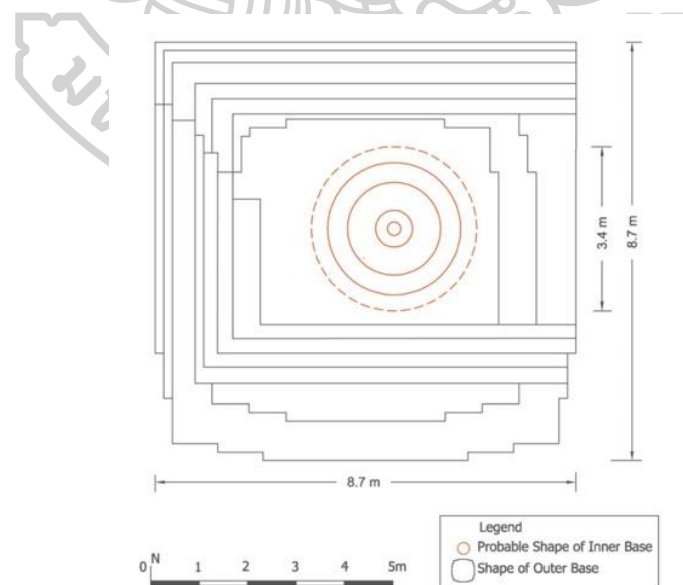


Figure 254: Plan of Monument No.1456 at Myinkaba Area
 Note. Inner stupa may have been circular in this stupa.



Figure 255 Monument No.1456 at the Myinkaba Area
 Note. Inner stupa with bulbous-shaped dome can be seen from the outside here.

4.5.18 Monument No.1469

This example (see Figure 257) is situated to the northeast of Lokaoakshaung temple (No.1467) and to the west of Shwesandaw stupa (No.1568), in the Myinkaba area. It is a small stupa, with a smaller and older stupa encased. There is a square base with two projections, 2.60 metres high, two square terraces with two projections, one twelve sided terrace, a circular bell-shaped dome and a conical spire in the outer stupa. The encased stupa consists of the one square terrace, one square terrace with two projections, one twelve sided terrace, circular bell-shaped dome and conical spire as well. Before repair, the bases and terraces are disintegrated and upper parts are damaged in the outer stupa and the encased stupa with a treasure hole dug by the treasure hunters seen from the northwestern side of the outer stupa. Some 90% of the original plain stucco mouldings like ornate recess, ornate mouldings around dome, and glazed elements on terraces still remain in place at the encased stupa. *Circa 25%* of the original plain stucco mouldings like ornate recess on terraces still remain in place at the outer stupa. The original glazed floral elements on terraces of the encased one (see Figure 258) can be seen from the western side. There was a hole with a radiating arch on the first terrace of outer stupa from the western side, exposing to see

the inner stupa when it was repaired by the DOA in 1997. The average brick size of the encased stupa is 44 x 22 x 5.8 centimetres and the average brick size of the outer one is 40 x 21 x 5.5 centimetres (Pichard, 1996, p. 38, Vol-6). The two similar stupas (No.1468 and No.1469) are located to the northeast and southeast of Lokaoakshaung temple. These two stupas at Bagan are a rare instance of regular spatial relationship like Hsinmyashin temple (No.1478) with two stupas (No.1477 and No.1479), Yadana Manaung (No.1695) with (No.1696 and No.1697). According to architectural typologies, the encased stupa may be dating to the early 12th century CE, while the outer stupa may be estimated to the late 12th century CE. The probable shape of the inner base may have been square with two projections and the shape of the outer base is also square with two projections and there is no gap between two of them. The plan (see Figure 256) indicates that the encased stupa is located at the northwest part of the outer stupa.

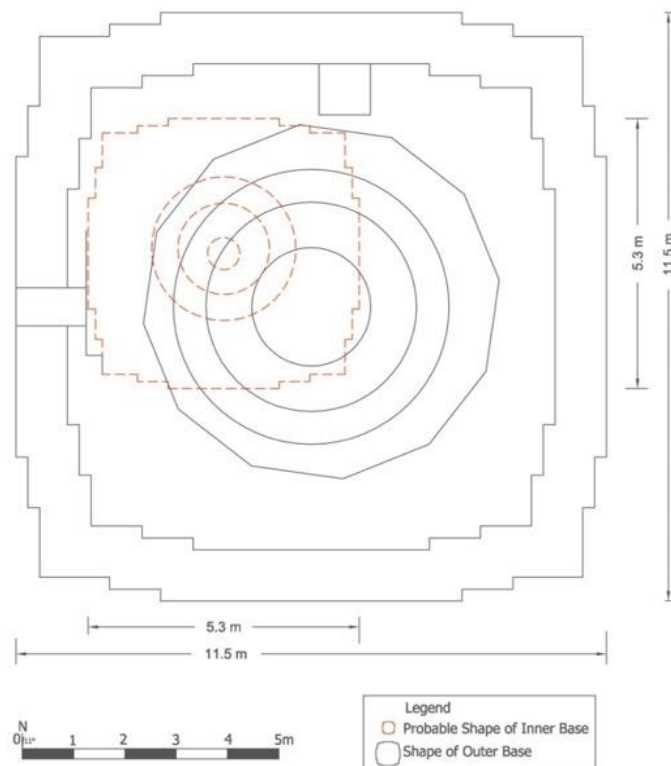


Figure 256: Plan of Monument No.1469 at the Myinkaba Area
 Note. Inner stupa is located at the northwestern part of the outer stupa.



Figure 257: Monument No.1469 at the Myinkaba Area
 Note. Inner stupa can be seen from the west side.



Figure 258: There is a niche exposed to see and worship the inner stupa here.
 Note. Original glazed and stucco decorations on the encased stupa can be seen here.

4.5.19 Monument No.1492

This example (see Figure 260) is situated to the northeast of Myinpyagu temple (No.1493) and to the southwest of Thatbyinnyu temple (No.1597) in the Myinkaba area. It is a small stupa, with a smaller and older stupa encased, which is located outside the Bagan city wall. Before repair, the circular base of the encased stupa can be seen from the two photos taken by Pichard (Pichard, 1996, p. 83, Vol-6). There are originally a circular base, circular bell-shaped dome and conical spire at the encased stupa. The outer stupa consists of the two square terraces with two projections and upper parts are totally collapsed. Before repair, the terraces of the outer stupa are disintegrated and the bell-shaped dome and conical spire of the encased stupa still remain; it was repaired by the DOA in 1997. Only 2% of the original stucco mouldings like dado with triangles, ornate waistband and frieze with ogre heads around dome still remain in place at the encased stupa. The average brick size of the outer stupa is 34 x 17 x 6 centimetres (Pichard, 1996, p. 83, Vol-6). Architectural typologies indicate that the encased stupa may date to the 11th century CE, while the outer stupa may be estimated to the 13th century CE. According to this evidence, the probable shape of the inner base may have been circular, and the shape of the outer base is square with two projections and there is no space between inner and outer stupas. Plan of these stupas (see Figure 259) indicate that the outer stupa was concentrically built around the encased stupa. The author concludes that parts of the bell-shaped dome of the inner one and parts of the terraces of the outer one are disproportionate because both of these parts are from the two different stupas.

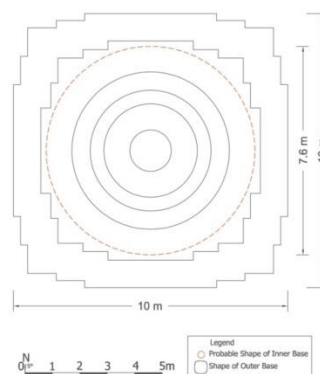


Figure 259: Plan of Monument No.1492 at the Myinkaba Area
 Note. The shape of inner base may have been circular here.



Figure 260: Monument No.1492 at the Myinkaba Area
 Note. The inner base cannot be seen from the outside after repaired by the DOA.

4.5.20 Monument No.1547

This example (see Figure 262) is situated to the south of Shwesandaw stupa (No.1568) and to the east of Myinkaba Gubyaukng temple (No.1391) in Myinkaba area. It is a small stupa, with a smaller and older stupa encased. There is a square base, one square terrace with two projections, one octagonal terrace, a circular bell-shaped dome and a conical spire at the outer stupa. A part of the conical spire of the encased stupa can be only seen from the southeastern corner of the outer stupa. Before repair, the bases and terraces are disintegrated and upper parts have been totally destroyed; the traces of the original plain stucco mouldings on terraces still remain in place at the outer stupa; the average brick size of the outer stupa is 38 x 19 x 6 centimetres (Pichard, 1996, p. 158, Vol-6). The original stucco decorations on the conical spire of the encased one can be only seen and some 90% of the original stucco decorations may be still remaining in this smaller inner stupa. It was repaired by the DOA in 1997 and it was again repaired by the DANM in 2016 after the earthquake occurred in 2016. Architectural typologies indicate that the encased stupa may be dating to the early 12th century CE and the outer stupa may belong to the late 12th century CE. According to this evidence (see figure 261), the probable shape of the inner base may have been circular while the shape of the outer base is square; there is

no gap between two of them. The plan indicates that the outer stupa was concentrically built around the encased stupa.

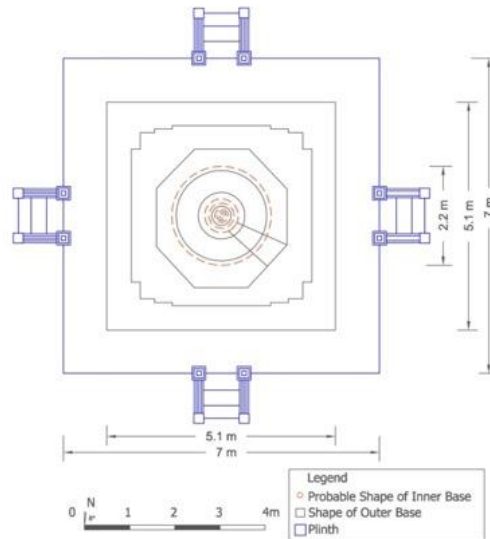


Figure 261: Plan of Monument No.1547 at the Myinkaba Area
Note. The shape of inner base may have been circular in this stupa.



Figure 262: Monument No.1547 at the Myinkaba Area
Note. Inner stupa can be seen through a treasure hole at the southeastern corner of outer stupa.

4.5.21 Monument No.1550

This example (see Figure 264) is situated to the south of Shwesandaw stupa (No.1568) and to northeast of Myinkaba Gubyaukng temple (No.1391) in Myinkaba area. It is a small stupa, with a smaller and older stupa encased and a part of the square base of inner stupa can be only seen from the northwest side before repair. There are the square base, one square terrace with two projections, one octagonal terrace, a circular bell-shaped dome and a conical spire at the outer stupa and the terraces of the encased stupa are untraceable. Before repair, the bases and terraces are disintegrated and upper parts have been totally collapsed and the traces of stucco decorations still remain at the outer stupa and it was repaired by the DOA in 2001. The average size of the encased stupa is 36 x 17 x 4 centimetres and the average brick size of the outer stupa is 40 x 20 x 5.5 centimetres (Pichard, 1996, p. 161, Vol-6). Architectural typologies indicate that the encased stupa may be dating to the early 13th century CE, while the outer stupa may be estimated to the late 13th century CE. According to this evidence (see figure 263), the probable shape of the inner base may have been square with two projections and the shape of the outer base is square with two projections and there is no space between the two stupas. Plan indicates that the outer stupa was concentrically built around the encased stupa. After repair the inner stupa cannot be seen from the outside.

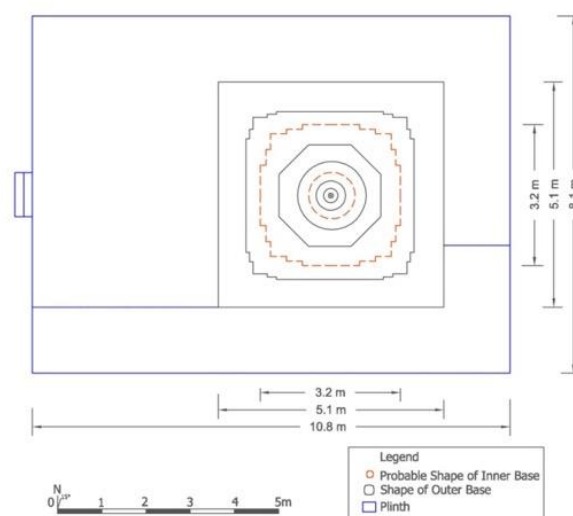


Figure 263: Plan of Monument No.1550 at the Myinkaba Area
 Note. The shape of inner base may have been square with two projections.



Figure 264: Monument No.1550 at the Myinkaba Area

Note. Inner stupa cannot be seen from the outside after repair by the DOA.

4.6 Area 6: Thiripyitsaya Area

In this area, there are only seven encased monuments (see Figure 265) and two different architectural typologies of encasements can be found there. These encased monuments are five encased stupas (No.1003, 1037, 1059, 1065, 1086) and two encased temples (No.996 and No. 1132) in Thiripyitsaya area. Among these encased monuments, Seinyet Nyima stupa (No.1086) is one of the distinctive beautiful Sinhalese-typed stupas in this area. In this stupa, archaeological evidence confirms that both inner and outer stupas are Sinhalese-typed stupas.

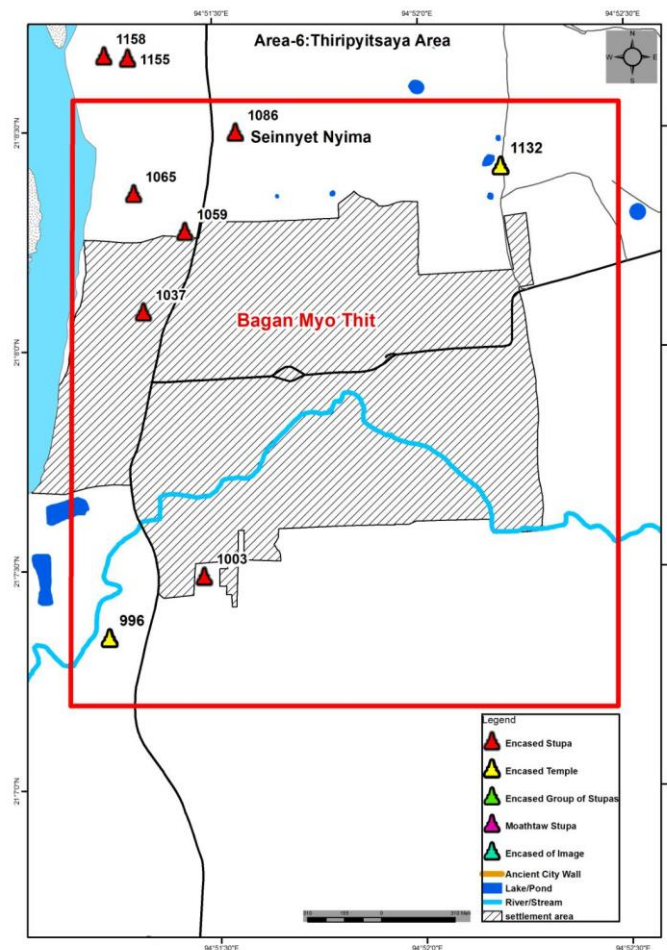


Figure 265: Map Showing the Area 6 (Thiripyitsaya Area)

Note. There are seven encased monuments at the Thiripyitsaya area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.6.1 Monument No.996 (Pawdawmu Temple) at Bagan

This example (see Figure 267) is situated to the northeast of Thiri Gubyauk temple (No.995) and to the northwest of Saytanagyi stupa (No.987), located in Thiripyitsaya area and it was locally called as Pawdawmu temple. It is a medium-sized ruined temple, with a smaller and older temple encased, which is located in a ruined walled enclosure. This temple was partially excavated and conserved by the DOA from 1995 to 2002. The bases of these two temples are buried 80 centimetres below the present ground level. A tunnel was dug by the treasure hunters on north side through and

under both two temples. The lower parts of the brick Buddha images can be found at ground level on two projections on the east side. Buddha images in brick and plaster in the niches on the exterior walls can be found in this temple. The top of the inner temple has been exposed and covered with a roof for conservation. The visible upper part of the inner temple has collapsed toward the east. Hudson suggests that the older temple and outer temple seem to have collapsed together (Hudson, 2004). The encased temple consists of the original stucco decorations like an anthropomorphised *naga*, an ogre head, which cannot be seen at any other place at Bagan and it has niches containing sandstone Buddha images at what may originally have been from the ground to the top level. These broken six Buddha images are stored in this temple and the remains of the two Buddha images in situ can be seen. A votive table of King Sawlu (1077-1084 CE), son of King Anawrahta, was discovered during the conservation of the site and the text record that this votive tablet was done by the King Srivajara barana (King Sawlu) to stop the samsara, by his hand (Hudson, 2004). Now it was stored in the Bagan Archaeological Museum. The circular stamped bricks measuring 4 to 5 centimetres in diameter like stupas, flowers, and birds, finger-marked bricks and bricks with some Myanmar letters were unearthed in this temple. These stamps cannot be found at any other monument at Bagan. Hudson suggests that this temple is unusual in terms of its plan, its decorations and its construction materials and the inner temple may have been similar to the Mahabodhi temple in India (Hudson, 2004). Pichard suggests that there was a stone inscription regarding the Sawlu votary in 1901, which has been now lost in this temple; the average brick size of the outer temple is 33 x 17 x 5.5 centimetres (Pichard, 1994, p. 224, Vol-4). The author concludes that this stone inscription mentioned regarding the outer temple built by the King Sawlu and there was no record regarding this stone inscription at DANM office, Bagan. According to this evidence (see Figure 266), the probable shape of the inner base may have been rectangular, while the shape of the outer base may have been also rectangular. The encased temple may be dating to the 9th century CE and the outer temple may be estimated to the 11th century CE. The remains and plan indicate that there is a space between these two temples.

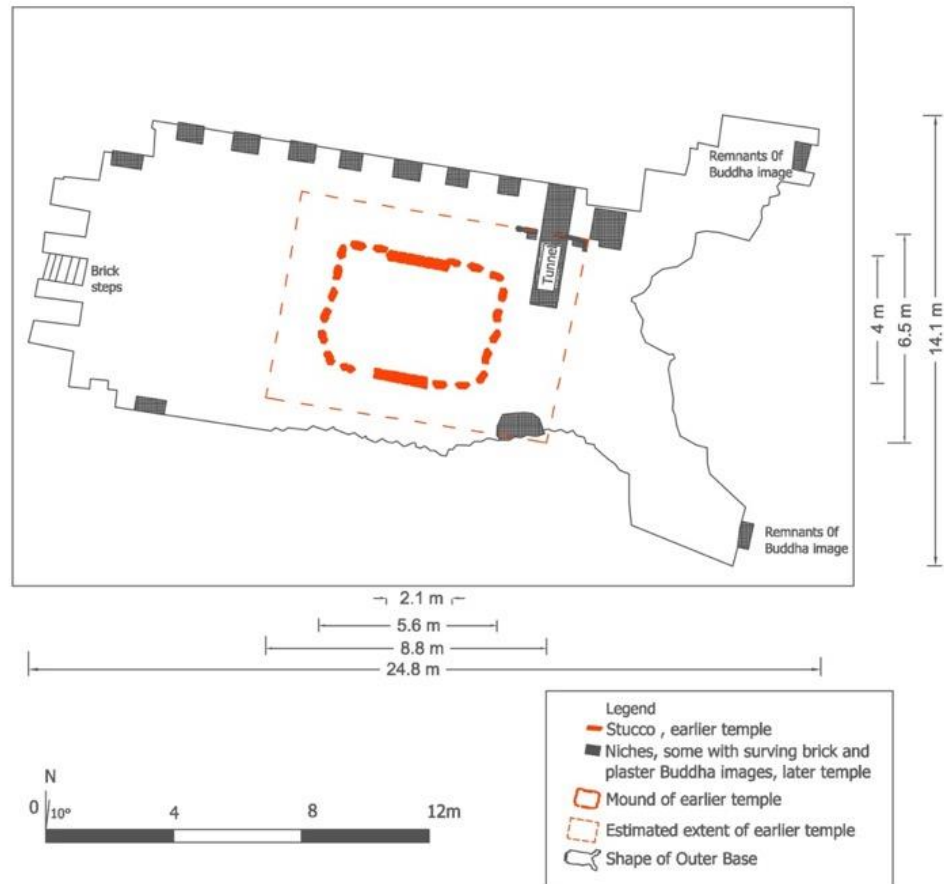


Figure 266: Plan of Monument No.996 (Pawdawmu Temple) at Thiripyitsaya Area
 Note. The shapes of inner and outer bases may have been rectangular in this structure.
 From *The Origins of Bagan, The Archaeological Landscape of Upper Burma to AD 1300*, PhD Dissertation, University of Sydney, Sydney, p. 255, by B. Hudson.
 Copyright 2004 by Bob Hudson.



Figure 267: Monument No.996 (Pawdawmu Temple) at the Thiripyitsaya Area
Note. There are some niches to house Buddha images around the outer stupa.

4.6.2 Monument No.1003

This example (see Figure 269) is situated to the north of Saytanagyi stupa (No.987) and to the southeast of Thiripyitsaya village, at the Kyauksaga palace site which is unexcavated. It is a small stupa, with a smaller and older stupa encased, located at the centre of a ruined walled enclosure with stupa No.1004 in the Thiripyitsaya area. Before repair, the encased stupa can be clearly seen from the western side and the treasure hunters dug the holes into both of these two stupas from the west and east face as well. There is one square terrace without projections, one square terrace with two projections, a bulbous-shaped dome and a plain conical spire at the outer stupa; the terraces of the encased stupa are untraceable. Only 5% of the original stucco decorations like plain stucco mouldings on terraces, ornate dado around the base of dome still remain in place at the outer stupa and before repair, the original plain stucco mouldings on the spire of the encased stupa were clearly visible from the west side. The terraces are partly disintegrated and upper parts are badly damaged at the outer stupa and it was repaired by the DOA in 1997. The average brick size of the encased stupa is 42 x 20 x 6 centimetres and the average brick size of the outer stupa

is 35 x 18 x 4.5 centimetres (Pichard, 1994, p. 233, Vol-4). Architectural typologies indicate that the encased stupa may be dating to the 10th century CE, while the outer stupa may be estimated to the 11th century CE. The probable shape of the inner base may have been circular and the shape of the outer base is square. According to this evidence (see Figure 268), the outer one was concentrically built around the encased stupa; there is no gap between these two stupas.

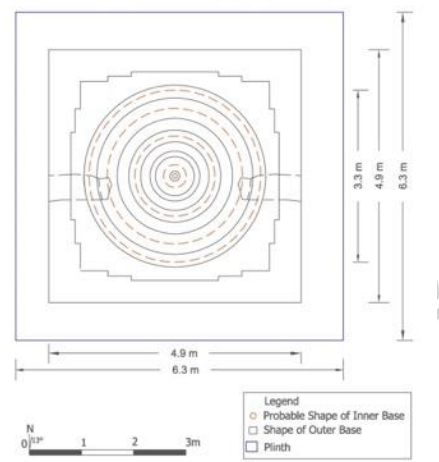


Figure 268: Plan of Monument No.1003 at the Thiripyitsaya Area
Note. The shape of inner base may have been circular in this stupa.



Figure 269: Monument No.1003 at the Thiripyitsaya Area
Note. Inner stupa cannot be seen from the outside after being repaired by the DOA.

4.6.3 Monument No.1037

This example (see Figure 271) is situated to the southwest of the four rows of Pyu stupas (No.1038, No.1039, No.1040, and No.1041) and to the north of Thiripyitsaya village, near the Thiripyitsaya palace site which is an unexcavated one in the Thiripyitsaya area. It is a small stupa, with a smaller and older stupa encased, built in the walled enclosure with three entrances on east, south, and north faces and the encased stupa can be clearly seen from the south side before and after repair. There are a square base, one square terrace without projections, one square terrace with three projections, a bell-shaped dome and a conical spire at the outer stupa. The encased stupa also consists of the square base, circular bell-shaped dome and conical spire. Some 15% of the original stucco mouldings still remain in place on the encased stupa and the original traces of the stucco mouldings can be seen on the outer one. Before repair, the bases and terraces disintegrated and upper parts are nearly damaged at the outer stupa; it was repaired by the DOA in 1998. The average brick size of the encased stupa is 33 x 17 x 5 centimetres and the average brick size of the outer stupa is 42 x 21 x 17 centimetres (Pichard, 1994, p. 272, Vol-4). Architectural typologies indicate that the encased stupa may be dating to the 11th century CE and the outer one may be belonging to the 12th century CE. The inscribed votive tablets and one bronze Buddha image dating to the 11th century CE, were recovered in this stupa during the clearing of debris in 1930 (ASI, Annual Report, 1930-34, pp. 176-177). According to this evidence (see Figure 270), the probable shape of the encased stupa may have been square with two projections and the shape of the outer base is square as well; there is no space between two of them. The plan indicates that the encased one is located at the southwest corner of the outer stupa, which was not symmetrically built around the encased stupa.

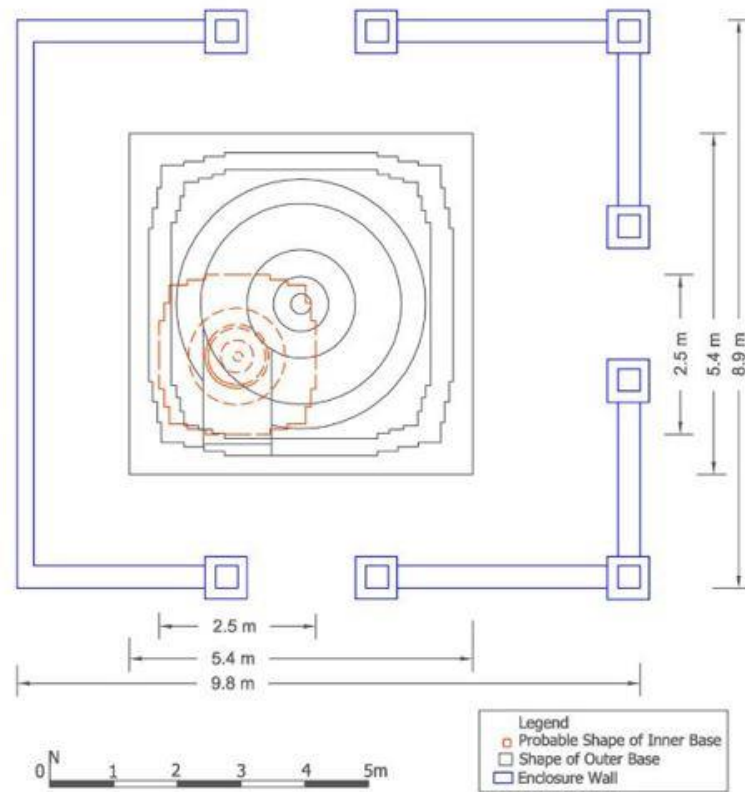


Figure 270: Plan of Monument No.1037 at the Thiripyitsaya Area
 Note. Inner stupa is located at the southwestern part of outer stupa.



Figure 271: Monument No.1037 at the Thiripyitsaya Area
 Note. Inner stupa can be visible from the south side.

4.6.4 Monument No.1059

This example (see Figure 273) is situated to the southwest of Seinnyet Ama (No.1085) and Nyima (No.1086) monuments, to the north of Thiripyitsaya village and to the northwest of New Bagan in Thiripyitsaya area. It is a small stupa, with a smaller and older stupa encased, which is located in the ruined walled enclosure with monuments No.1056 and No.1062. There are the square base, square terrace with two projections, circular bell-shaped dome and conical spire at the outer stupa. The encased stupa also consists of the circular bell-shaped dome and its terraces are untraceable and before repair, it can be clearly seen from the northeast side. The bases and terraces are disintegrated and upper parts are badly damaged at the outer stupa and the traces of the original stucco decorations can be seen from the outside; it was repaired by the DOA in 1997. The average brick size of the encased stupa is 34 x 16 x 6 centimetres and the average brick size of the outer stupa is 36 x 19 x 7 centimetres (Pichard, 1994, p. 298, Vol-4). The inscribed votive tablets with the name “Anawrahta” name an earthenware vessel were recovered in the relic chamber of this stupa during the clearing of debris in 1930 (ASI, Annual Report, 1930-34, pp. 177-178). Epigraphic records indicate that the encased stupa may be dated to the 11th century CE and the outer stupa may be estimated to the 12th century CE. According to this evidence (see Figure 272), the probable shape of the inner base may have been octagonal and the shape of the outer base is square; there is no gap between these two stupas. The plan shows that the outer one was concentrically built around the encased stupa.

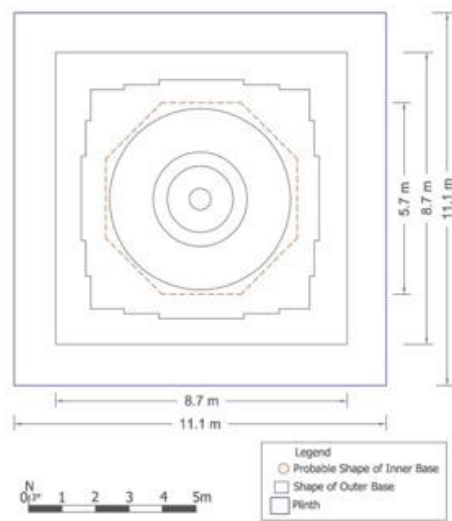


Figure 272: Plan of Monumnet No.1059 at the Thiripyitsaya Area
 Note. The shape of inner base may have been octagonal in this stupa.



Figure 273: Monument No.1059 at the Thiripyitsaya Area
 Note. Inner stupa cannot be seen from the outside after repaired by the DOA.

4.6.5 Monument No.1065

This example (see Figure 275) is situated to the north of Thiripyitsaya village and to the northwest of New Bagan in Thiripyitsaya area. It is a small temple, with a smaller and older stupa encased, which is located in a ruined walled enclosure together with monuments No.1064, No.1067, No.1077, and No.1079. There are the square base with two projections, axial niches, 3 metres in high, and two square terraces with two projections on the outer temple; the encased stupa can be seen from the eastern face before repair and its terraces are untraceable. The bases are disintegrated and upper parts have been nearly collapsed and there may have originally been the seated Buddha images in each niche, but they were already disappeared before repair. Some 20% of the original plain stucco mouldings on bases and terraces still remain in place at the outer temple and traces of the original mural paintings in the niches can be seen. The average brick size of the encased stupa is 38 x 19 x 5.5 centimetres and the average brick size of the outer temple is 38 x 18 x 6.5 centimetres (Pichard, 1994, p. 304, Vol-4). It was firstly repaired by the DOA in 1998 and it was again repaired by the DANM in 2017 after the earthquake occurred in 2016. In 1998, it was repaired with the radiating arches on each axial niche, bell-shaped dome, conical spire and four renovated seated Buddha images in Bhumisparsha mudra on each niche. Architectural typologies indicate that the encased stupa may be dating to the 11th century CE, while the outer temple may be estimated to the 13th century CE. According to this evidence (see Figure 274), the probable shape of the inner base may have been square and the shape of the outer base is square with two projections with no gap between two of them. The plan indicates that the outer temple was concentrically built around the encased stupa.

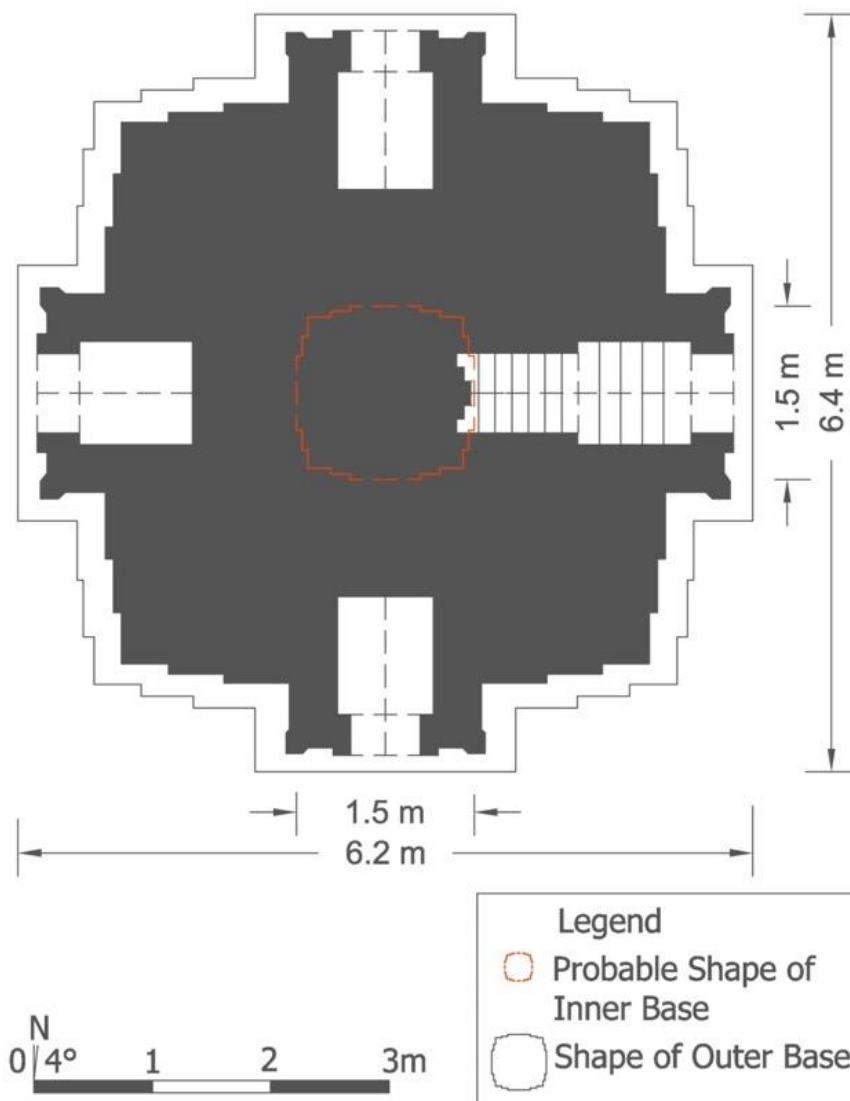


Figure 274 : Plan of Monument No.1065 at the Thiripyitsaya Area

Note. The shape of inner base may have been square with two projections in this stupa.



Figure 275: Monument No.1065 at the Thiripyitsaya Area

Note. Inner stupa cannot be seen from the outside after being repaired by the DOA.

4.6.6 Monument No.1086 (Seinnyet Nyima Stupa)

This example (see Figure 277) is situated to the east of Seinnyet Ama temple (No.1085) between Myinkaba and Thiripyitsaya villages in the Thiripyitsaya area. It is a medium-sized stupa in a brick paved courtyard with temple No.1085, with a smaller and older stupa encased, located in a walled enclosure with a gateway on west and a door on east. There are the one square terrace with three projections and corner stupas, one square terrace with three projections and corner urns, one square terrace with three projections and corner stupas, one sixteen sided terraces, a bell-shaped dome with four niches, a square crowning block with three projections and a conical spire at the outer stupa. It is one of the beautiful Sinhalese-typed stupas at Bagan. The encased stupa can be seen from the southeastern aperture with a radiating arch constructed by the DOA; a top finial part of the conical spire can be only found from this aperture and its terraces and dome are untraceable. It was firstly repaired by the ASI in 1907 (ASI, Annual Report, 1906-07, pp. 30-31) and it was again repaired by the Bagan Construction Cooperation in 1977-78 when the spire was badly damaged because of the earthquake in 1975. And then it was repaired by the DOA in 1997 and it was again repaired by the DANM in 2018 after the earthquake occurred in 2016.

Some 60% of the original plain stucco mouldings like bases, terraces, pediments, a temple tower above the niches, dado with triangles, ornate waistband and a frieze with ogre heads around the dome still remain in place on the outer stupa. The average brick size of the outer stupa is 40 x 20 x 7.8 centimetres (Pichard, 1994, pp. 335-337, Vol-4). There are four seated Buddha images in Dharmacakra mudra housing in highly ornamented niches facing the four cardinal points. The corner stupas are decorated with ogre figures on the first terrace, lion figures on the second terrace, and kainara figures on the third terrace. Seinnyet Nyima stupa is a beautiful and proportionate stupa at Bagan (Aung Kyaing (Minbu), 2007). The author concludes that its encased stupa may have been the Sinhalese-typed stupa as well. Architectural typologies indicate that the encased stupa may be dating to the early 12th century CE and the outer stupa may be estimated to the late 12th century CE. According to the iconography of the Buddha images housed in the niches on the bell-shaped dome, these Buddha images may be also dating to the 12th century CE. Archaeological evidence indicates that the probable shape of the inner base may have been square with two projections and the shape of the outer base is square base with three projections; there is no space between these two stupas. According to the plan (see Figure 276), the outer stupa was concentrically built around the encased stupa.

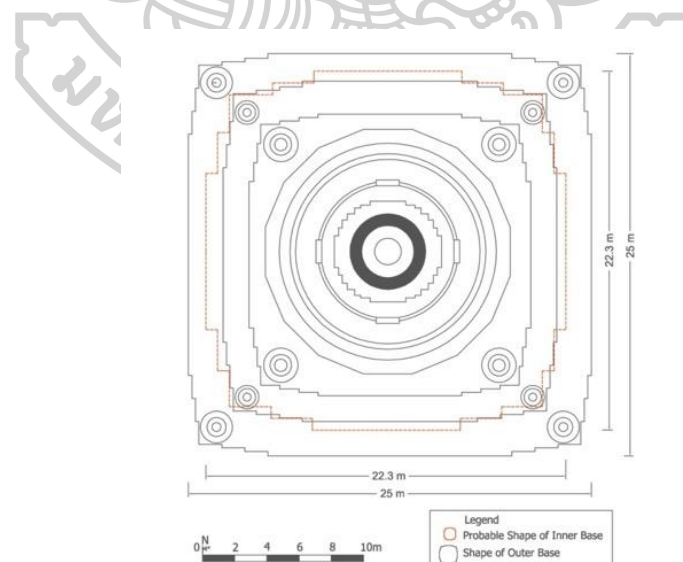


Figure 276: Plan of Monument No.1086 (Seinnyet Nyima Stupa) at the Thiripyitsaya Area

Note. The shape of inner base may have been square with two projections.



Figure 277: Monument No.1086 (Seinnyet Nyima Stupa) at the Thiripyitsaya Area
 Note. Top finial of inner stupa can be seen from the southeast side on bell-shaped dome.

4.6.7 Monument No.1132

This example (see Figure 279) is situated to the northeast of Tamani temple (No.1133), southeast of Myinkaba and to the east of new Bagan in Thiripyitsaya area. It is a small two-storeyed temple, encased with a damaged bigger and younger temple. The eastern and northern bases of the outer temple, about 1.0 metre in high still remain above the ground floor and its upper parts and the rest of its other faces have been totally collapsed. When the outer one would be excavated, its base and foundation may have been appeared in later times. There is a square solid core, 1.93 x 1.95 metres, a corridor, 0.92 metre wide, a vestibule with porch on west face, and apertures in south niche on the ground floor and square shrine, 2.9 x 2.84 metres, a vestibule and porch on east, north, and south faces, a niche on west forepart on the upper floor in this inner temple. This temple was constructed with barrel vaults over the vestibules and porches on the ground and upper floors, corridor on the ground floor and cloister vault over the square shrine on the upper floor. Before repair, the bases are disintegrated and vaults and upper parts have been totally collapsed and upper floor is buried under the debris; it was repaired by the DOA in 1999. The traces

of the stucco mouldings on exterior walls can be seen at the inner temple. The average brick size of the inner temple is 30 x 15 x 4 centimetres (Pichard, 1994, p. 394, Vol-4). This inner temple is an unusual and unique temple at Bagan because the main entrance faces on west side on the ground floor and the main entrance faces on east side on the upper floor. The two brick buttresses have been used to support to the west and south walls when it was repaired by the DOA in 1999 and there is a renovated seated Budha image (see Figure 280) in Bhumisparsa mudra facing to the west on the ground floor. Architectural typologies indicate that the inner temple may be dating to the early 13th century CE and the outer temple may be estimated to the late 13th century CE. According to the plan (see Figure 278), the shape of the inner temple is square, while the shape of the outer temple may have been rectangular; there is no space between these two temples. After the archaeological excavations by the DANM, the base and foundation of the outer temple may appear in the future.

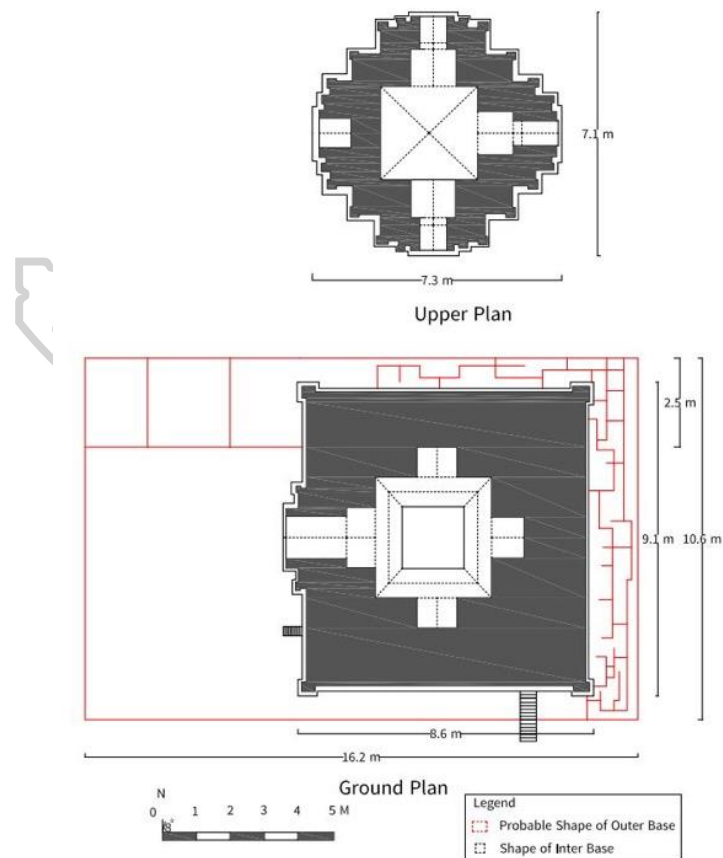


Figure 278: Plan of Monument No.1132 at the Thiripyitsaya Area
 Note. The shape of inner base may have been rectangular in this temple.



Figure 279: Monument No.1132 at the Thiripyitsaya Area
 Note. It is one of the small two-storeyed temples at Bagan.



Figure 280: A seated Buddha Image in brick and stucco on the ground floor
 Note. A Buddha image in Bhumisparsa mudra sits on the original pedestal.

4.7 Area 7: Minnanthu and Phwasaw Areas

In this area, there are only five encased monuments (see Figure 281) and two different architectural typologies of encasements can be found. These encased monuments are four encased stupas (No.531, 805, 819, 855), and one encased moathtaw stupa (No.920) in Minnanthu and Phwasaw areas. No.531 is one of the Sinhalese-typed stupas at Bagan.

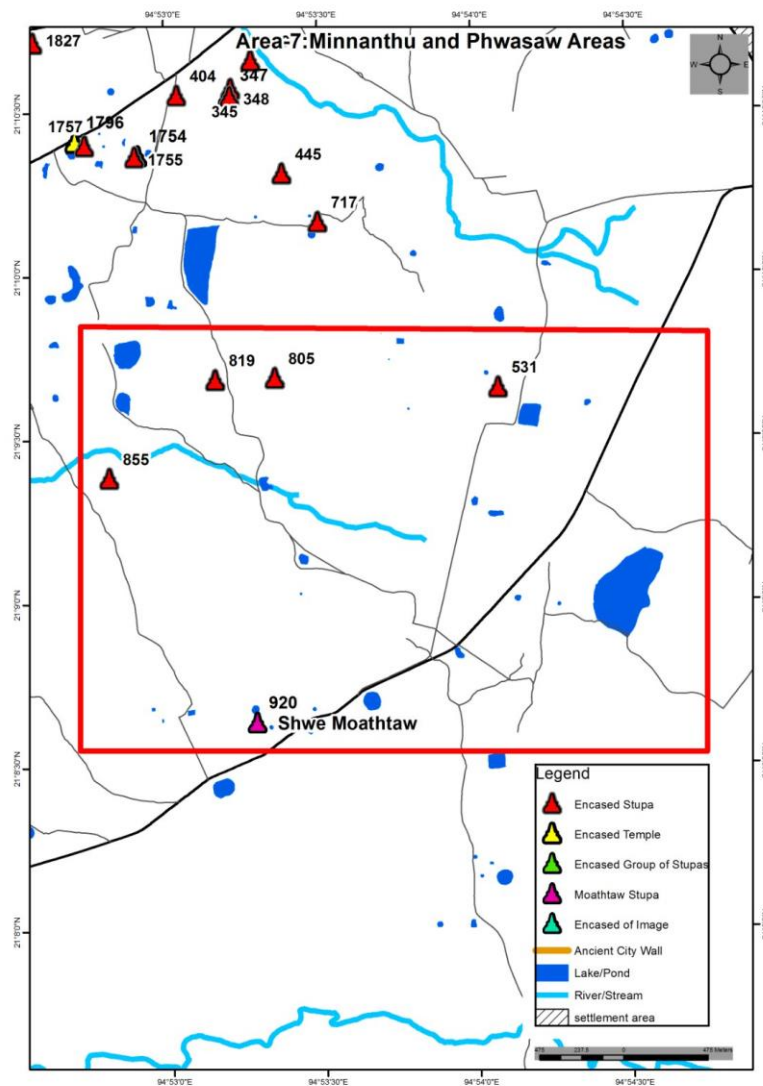


Figure 281: Map Showing the Area 7 (Minnanthu and Phwasaw Areas)

Note. There are only five encased monuments at the Minnanthu and Phwasaw areas on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.7.1 Monument No.531

This example (see Figure 283) is situated to the northwest of Lemyethna temple (No.447), located inside the Lemyethna monastic complex, north of Minnanthu village. It is a small Sinhalese-typed stupa, with a smaller and older stupa encased, which is located in the northwest sector of the outer walled enclosure of the Lemyethna monastic complex. It was built on a square platform with a stone stairway on east and there are two circular terraces, a hemispherical dome, a square crowning block and a spire on the outer stupa. Before repair, the encased stupa can be clearly visible through a treasure hole dug by the treasure seekers from the north side, but now it cannot be seen after blocking the treasure hole when it was repaired by the DOA in 1998. Also, its terraces are untraceable. Before repair, the bases and terraces are disintegrated and upper parts are badly damaged and the traces of the original stucco carvings on the outer stupa can be clearly seen. The average brick size of the outer stupa is 36 x 18 x 4 centimetres (Pichard, 1993, p. 364, Vol-2). The author concludes that the encased stupa may have been a Sinhalese-typed stupa and a secondary donor would like to build a larger Sinhalese-typed stupa. Architectural typologies indicate that the encased stupa may be dating to the early 13th century CE and the outer stupa may be estimated to the late 13th century CE. According to the plan (see Figure 282), the probable shape of the inner base may have been circular and the shape of the outer base is also circular and there is no gap between these two stupas. The outer stupa was concentrically built around the encased stupa.

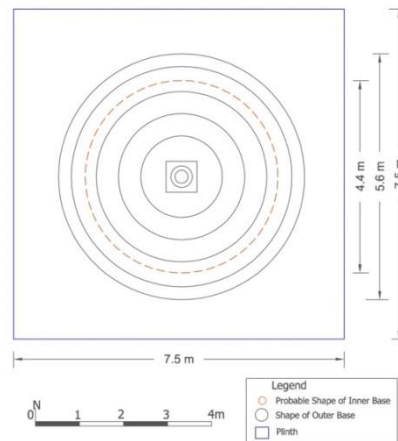


Figure 282: Plan of Monument No.531 at the Minnanthu and Phwasaw Areas
 Note. The inner base may have been circular in shape in this stupa.



Figure 283: Monument No.531 (Sinhalese-typed Stupa) at the Minnanthu and Phwasaw Areas
 Note. The inner stupa cannot be seen from the outside after being repaired by the DOA.

4.7.2 Monument No.805

This example (see Figure 285) is situated to the north of Pyathadagyi (No.803), located between old Bagan and Minnanthu village in Minnanthu and Phwasaw areas. It is a small stupa, with a smaller and older stupa encased. There are square base with one projection, one square terrace with two projections, one octagonal terrace, a circular bell-shaped dome and a conical spire on the outer stupa; the encased stupa

also consists of the circular bell-shaped dome and conical spire with its terraces are untraceable. Before repair, the bases and terraces are disintegrated and there are some treasure holes dug by the treasure hunters on these two stupas. Some 30% of the original stucco mouldings like bases, terraces, dado with triangles, ornate waistband, and frieze with triangles around the dome still remain in place on the outer stupa and 40% of the original stucco mouldings may have been on the encased stupa. The average brick size of the encased stupa is 32 x 16 x 5 centimetres and the average brick size of the outer stupa is 35 x 17.5 x 6 centimetres (Pichard, 1994, p. 385, Vol-3). Architectural typologies indicate that the encased stupa may be dating to the 11th century CE, while the outer one may be estimated to the 12th century CE. According to this evidence (see Figure 284), the probable shape of the inner base may have been square with two projections and the shape of the outer base is square with one projection. The encased stupa is located at the northwestern part of the outer stupa and there is no gap between the two stupas. There is an aperture with a corbelled arch on west face, exposing to see and worship the inner stupa when it was repaired by the DOA in 1997 and it was again repaired by the DANM in 2017 after the earthquake occurred in 2016. Archaeological evidence indicates that the outer stupa was not concentrically built around the encased inner stupa.

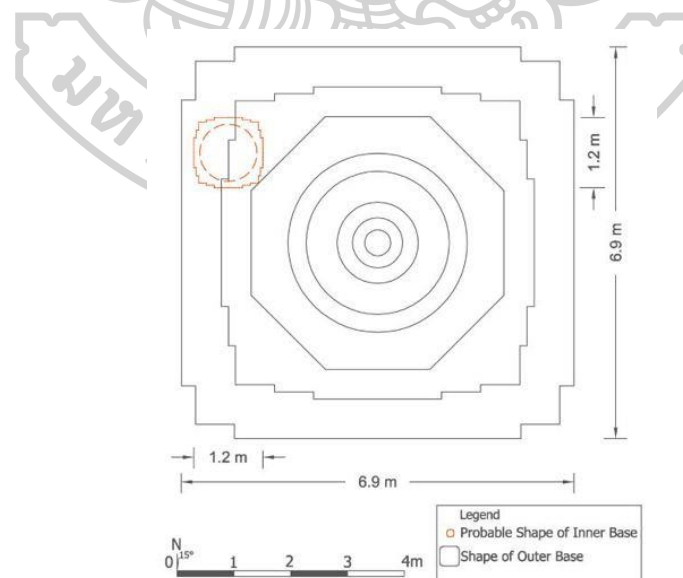


Figure 284: Plan of Monument No.805 at Minnanthu and Phwasaw Areas
Note. Inner stupa is located at the northwestern part of the outer stupa.



Figure 285: Monument No.805 at Minnanthu and Phwasaw Area
Note. Inner stupa can be seen from the outside in this stupa.

4.7.3 Monument No.819

Monument No. 819 (see Figure 287) is situated to the southeast of Sulamani temple (No.748) in Minnanthu and Phwasaw area. It is a small temple, with a smaller and older stupa encased. There are one square terrace with four corner stupas, one square terrace with two projections and four corner stupas, one octagonal terrace, a circular bell-shaped dome, a conical spire, with construction of barrel vaults over the vestibule and porch with an arch-pediment on the outer stupa. Before repair, the encased stupa can be clearly seen from the eastern side and its terraces and dome are untraceable. In this outer stupa, the bases are buried under the debris and upper parts have been totally collapsed and it was repaired by the DANM in 2010. There is a renovated seated Buddha image in Bhumisparsha mudra in the shrine of the outer temple. The average brick size of the outer temple is 36 x 18 x 6 centimetres and the broken bricks have been used on these structures (Pichard, 1994, p. 1, Vol-4). According to architectural typologies, the encased stupa may be dating to the 12th century CE, while the outer temple may be estimated to the 13th century CE. Archaeological evidence indicates that the probable shape of the inner base may have been square with two projections and the shape of the outer base is rectangular with vestibule and porch and there is no space between these two monuments. After repair, there is an aperture with a radiating arch (see Figure 288), exposing to see and worship the encased stupa on the second terrace of the outer temple. The plan (see

Figure 286) indicates that the outer structure was symmetrically built around the encased stupa.

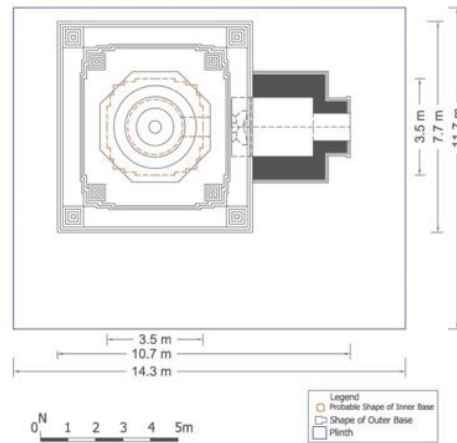


Figure 286: Monument No.819 at the Minnanthu and Phwasaw Areas
Note. The shape of the inner base may have been square with two projections.



Figure 287: Monument No.819 at the Minnanthu and Phwasaw Areas
Note. The inner stupa can be seen from the outside on upper part.



Figure 288: A niche with radiating arch exposed to see the encased stupa
 Note. Outer stupa was symmetrically built around the inner stupa.

4.7.4 Monument No.855

Monument No. 855 (see Figure 290) is situated to the northwest of Taungtawetgu temple (No.843) between old Bagan and Phwasaw village in the Minnanthu and Phwasaw areas. It is a small stupa, with a smaller and older stupa encased, which is located in a ruined walled enclosure, together with the unexcavated mound No.2461. There are square base with two projections, 2.8 metres in high, two square terraces with two projections and four corner stupas, one octagonal terrace, circular bell-shaped dome and conical spire at the outer stupa. Before repair, the encased stupa can be seen from the north side; it consists of the circular bell-shaped dome and conical spire and the original stucco decorations like dado with triangles, ornate waistband, frieze with ogre heads around the dome still remain in place on it; its terraces are untraceable. Before repair, the bases and terraces are disintegrated and upper parts above the two terraces have been totally collapsed and it was repaired by the DOA in 1999. The average brick size of the encased stupa is 36 x 18 x 5 centimetres and the average brick size of the outer stupa is 37 x 19.5 x 6.3 centimetres (Pichard, 1994, p. 50, Vol-4). Architectural typologies indicate that the encased stupa may be dating to the 12th century CE and the outer stupa may be estimated to the 13th century CE.

According to this evidence (see Figure 289), the probable shape of the inner base may have been square with two projections, while the shape of the outer base is square with two projections and there is no space between two of them. The plan of these two stupas indicates that the outer stupa was concentrically built around the encased stupa.

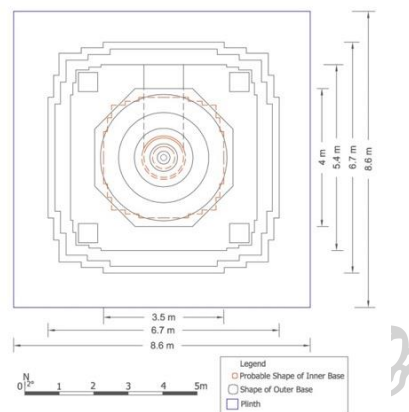


Figure 289: Plan of Monument No.855 at the Minnanthu and Phwasaw Areas
Note. The outer stupa was concentrically built around the encased stupa.



Figure 290: Monument No.855 at the Minnanthu and Phwasaw areas
Note. The inner stupa can be seen from the north side.

4.7.5 Monument No.920 (Shwe Moathtaw Stupa)

This example (see Figure 292) is situated to the west of Thitsawaddy temple (No.918), west of west Phwasaw village in Minnanthu and Phwasaw area. It is a medium-sized, single-storeyed temple, with a smaller and older moathtaw stupa encased, located on a low walled enclosure with gate and entranceway on east and one gate on north and west, two gates on south; it formerly had a timber pavilion on the east side. There are circular central shrine, 5.7 metres in diameter, small moathtaw stupa at the centre of the shrine, vestibule and porch on east face, apertures on south, north, and west foreparts, former timber pavilion on east, 10.90 x 12.30 metres in this temple. The upper parts consist of the one square terrace with corner urns, one sloping roof, one square terrace with corner stupas, a circular bell-shaped dome, a conical spire, and an umbrella. In this temple, there are cupola vaults over the shrine, barrel vaults over the vestibule and porch, stone plinth, stone sockets, 60 x 60 centimetres, from the former east pavilion and stone stairway in front of the gates; it was now replaced by a modern pavilion (Pichard, 1994, pp. 139-140, Vol-4). An estimated 100% of the original stucco decorations like cornice, pediments, pilasters, a base with recess, a dado with triangles, an ornate waistband, a frieze with ogre heads around the dome still remain in place in this temple. It was regularly maintained and whitewashed by a monk from the monastery and people around the villages and the eastern pediment was damaged when the earthquake occurred in 2016; it was repaired by the DANM in 2017. According the legend, the Moathtaw stupa (see Figure 293) may have been built by King Asoka and architectural typologies indicate that the outer temple may have been built in the 13th century CE. According to the plan (see figure 291), the shape of the inner base is circular and the shape of the outer temple is rectangular. There is a circumambulatory corridor in circular shape between the two structures to worship and move around the moathtaw stupa, while the outer temple was concentrically built around the stupa.

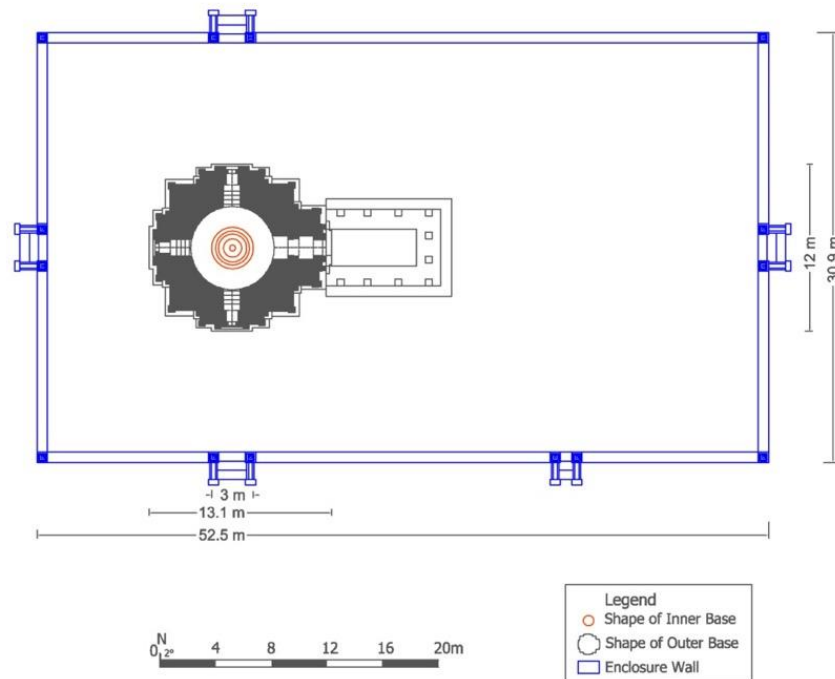


Figure 291: Plan of Monument No.920 (Shwe Moathtaw Stupa) at the Minnanthu and Phwasaw Areas

Note. The inner moathtaw stupa can be seen here.



Figure 292: Monument No.920 (Shwe Moathtaw Stupa) at the Minnanthu and Phwasaw Areas

Note. The outer temple can be viewed from the southeast direction.



Figure 293: Inner Moathtaw Stupa Covered by a Larger Temple
 Note. The encased moathtaw stupa with a circular corridor can be seen here.

4.8 Area 8: Tant Kyi Area

Tant Kyi area is situated on the western side of Ayeyarwaddy river, Pakokku district, Magway region, but this area is included in the Bagan World Heritage site inscribed in 2019. The history of Tant Kyi Taung stupa said that the tooth relic duplicate of the Buddha was enshrined inside this stupa. In this area, though there are only fifteen monuments built in successive periods, only one encased stupa can be found (see Figure 294). This area has the least occurrence of encasement among the eight areas at Bagan plain which is notable given the many pilgrims who visit it. Traditions say that the inner most one is a moathtaw stupa built by King Asoka and Tant kyī Taung stupa being one of the three encasements of this type at Bagan.

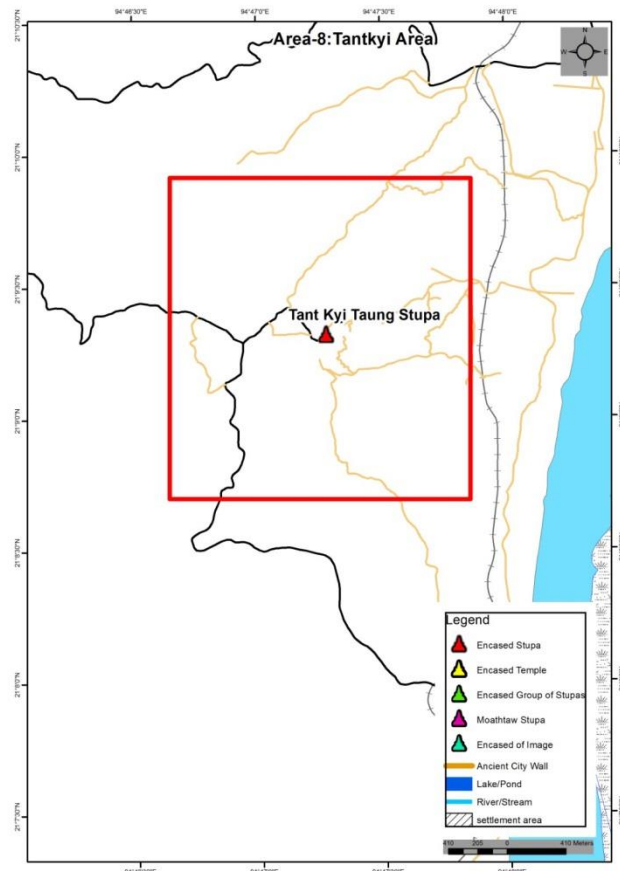


Figure 294: Map Showing the Area 8 (Tantkyi Area)

Note. There is only one encased stupa at the Tantkyi area on this map. It was designed and made by Kyaw Htun Win, Deputy Staff Officer, Research and Training Section, Department of Archaeology and National Museum, Bagan. Copyright by the Author.

4.8.1 Tant Kyi Taung Stupa

The Tant Kyi Taung stupa (see Figure 296) is situated on Tant Kyi Taung Mountain, Pakokku district, Magway region in the Tantkyi area, which is a part of the World Heritage site of Bagan. There are four tooth relic duplicate stupas like Shwezigon, Tant Kyi Taung, Lokananda, and Turintaung stupas, built by King Anawrahta; it is one of these four tooth relic stupas at Bagan. Traditions and some chronicles said that the innermost stupa is one of the eighty-four thousand stupas, which may have been built by King Asoka and that this mountain where the Buddha arrived and prophesied to Bagan region that will flourish and develop the Theravada Buddhism. Thus it is a very celebrated place for Myanmar pilgrimage (Chit Thein, 1969, pp. 88-91). King Anawrahta (1044-1077 CE) received the tooth relic duplicate from the King of Sri

Lanka and built a stupa on Tant Kyi Taung Mountain during his reign and enshrined a tooth relic duplicate in this stupa, which was locally called as Tant Kyi Taung stupa. According to the legend, King Anawrahta built and encased a previous stupa built by the King Asoka.

Tant Kyi Taung Mountain is 320 metres in high and the stupa is 27.43 metres in high (Paragu, 2008, pp. 331-338). King Narapatisithu (1174-1211 CE) reconstructed and encased again this stupa (Chit Thein, 1969, pp. 88-91). When the earthquake occurred in 1975, the top part of this stupa was damaged. It was repaired by the fertilizer factory at Kyun Chaung nearby this stupa. Numerous inscribed votive tablets including the assertion that Anawrahta made himself were recovered in the inner stupa; most of them have been again re-enshrined when it was repaired (Tin Naing Toe, 2008, pp. 73-75). These showed that the inner stupa was built by King Anawrahta and the outer one was built by King Narapatisithu. According to Myanmar chronicles, it is one of the triple encased stupas in Myanmar (Chit Thein, 1969, pp. 88-91) and when the earthquake occurred in 1975, the inner and outer stupas including the numerous votive tablets were recovered, but only the upper parts of these two stupas were found and the innermost stupa was not be visible as the upper parts have been destroyed and the debris are covered by lower parts at that time. There are one square terrace with two projections and sixty satellite stupas and four corner urns, one square terrace with two projections and four corner stupas and urns, one octagonal terrace, circular bell-shaped dome and conical spire in this stupa. Virtually 100 % of the renovated stucco decorations like bases, terraces, a dado with triangles, an ornate waistband, a frieze with ogre heads around the dome still remain since it was repaired. This stupa is regularly maintained, renovated and gilded on stupa by the Pagoda Trustee of Tant Kyi Taung stupa. Architectural typologies (see Figure 295) indicate that the probable shape of the innermost base may have been circular and the probable shape of the middle base may have been octagonal, while the shape of the outermost base is square with two projections. According to this evidence, the outermost stupa was concentrically built around the encased stupa and there is no space between the two stupas.

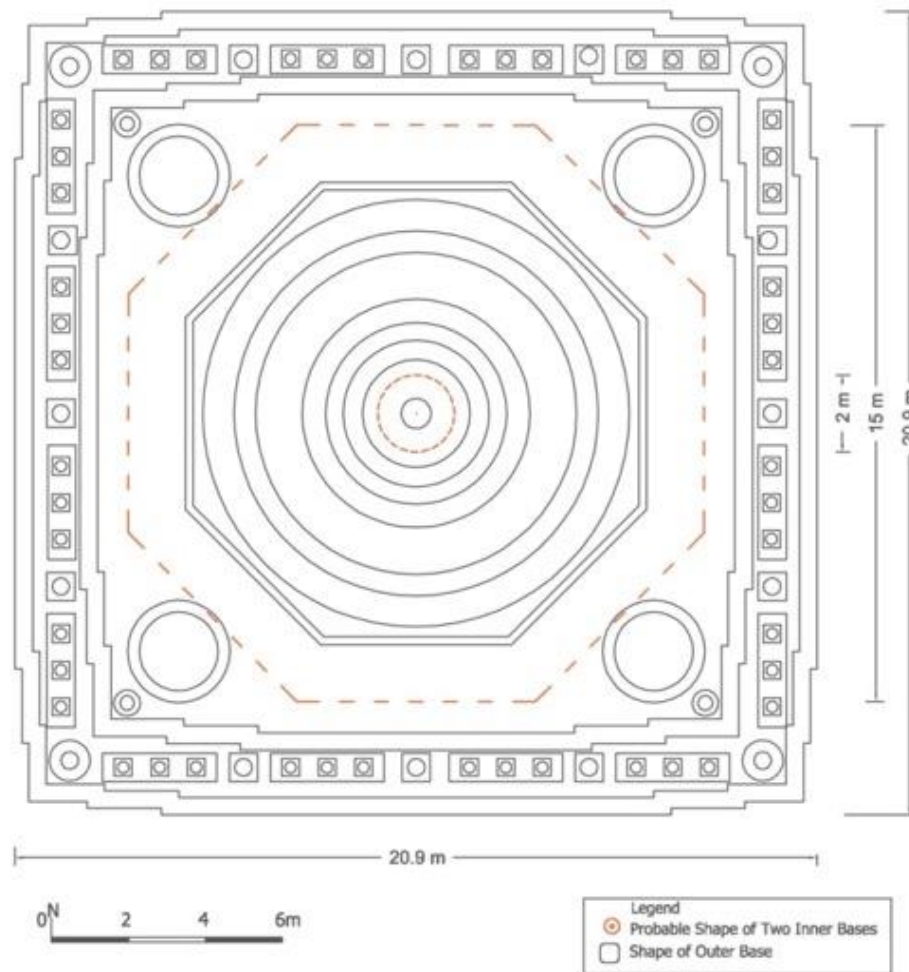


Figure 295: Plan of Tant Kyi Taung stupa at the Tantkyi Area
Note. The shapes of inner bases are circular and octagonal in this plan.



Figure 296: Tant Kyi Taung Stupa at the Tantkyi Area
 Note. It is one of the four tooth relic duplicate stupas built by King Anawrahta.

4.9 Summary

Encased Buddhist structures at the Bagan world heritage site are divided here into eight areas: Nyaung Oo (Area-1), Wetkyi-in (Area-2), Taungbi (Area-3), Old Bagan (Area-4), Myinkaba (Area-5), Thiripyitsaya (Area-6), Minnanthu and Phwasaw (Area-7), Tantkyi (Area-8). Among these, Taungbi area is the richest in encasements while Tant Kyi area has the least examples with twenty-five encased structures in the Taungbi Area (Area-3) and only one encased structure can be found in the Tantkyi Area (Area-8). There are totally eighty-three encased structures documented with five different architectural typologies of encasements can be seen. Among the eighty-three encased monuments at Bagan, there are sixty symmetrical encased monuments and twenty-two non-symmetrical monuments. Some of the inner structures are located at the centre, at the corner, and in the wall of the outer structures at Bagan, Myanmar. The bases of inner and outer stupas are circular, square, rectangular, and octagonal in shape in Myanmar. The relics of the Buddha enshrined at the different parts of the Buddhist monuments like finial, sikhara, concentric rings, Buddha images in Bagan, Myanmar.

In this chapter, a table (Appendix-A) showing the number of areas, name of areas, number of monuments, type of encasements, hollow and solid types of inner and outer

structures, shapes of inner and outer bases, and estimated periods of inner and outer structures on each encasement at Bagan is described. Plans and photos on each encased structure are also mentioned in this section. Some Myanmar chronicles, epigraphic records, exact history of monuments, average brick sizes of inner and outer structures, situation of surviving artistic decorations such as stucco carvings, mural paintings, glazed ornaments, stone carvings, and wood carvings, visual evidence of encasements, and history of conservation measures are noted on encased structure. The main measurements of inner and outer structures (Appendix-B) can be found on each plan of eighty-three encased monuments at Bagan. The exact locations of the inner and outer structures can be visually seen on each plan using with different colours. In this chapter, some outer structures are concentrically built around the encased inner structures, while some of them are not concentrically built around the inner structures. Some of inner structures are be visible from the outside, while some of them cannot be viewed from the outside after repair by the DOA or DANM. According to architectural typologies and iconography of the Buddha images in Bagan period, the estimated centuries of constructional periods on each encased monument at Bagan are described in this chapter.



CHAPTER 5

Classification, Chronological Sequence and Distribution of the Encased Buddhist Monuments at Bagan

As seen in the previous chapters, the style and form of encasements at Bagan and in Myanmar has a long history, drawing on interchange with neighboring regions. And at Bagan, the encasements are widely distributed both geographically and chronologically. In this chapter, the classification, chronological sequence, and distribution will be described in detail. The types of encasements at Bagan may be classified into five types: encased stupas, encased temples, encased group of stupas, encased Moathkaw stupas, and encased Buddha images. Some comparative encased monuments with archaeological *in-situ* evidence are found in India and Sri Lanka which was described in an earlier chapter but re-capped here to put the classification into context. The style of the Buddhist monuments at Bagan in its large and principal lines may be traced to Northeastern India. However, the style of Bagan paintings in the early period show influences of West India and the style of its paintings in the late Bagan period show influences of the Varendra school of Bengal and Nepal (Aung Thaw, 1972, pp. 41-98). There were numerous intercourses regarding Buddhist art and architecture between Bagan and North and South India during the Bagan period. The impact of Hinduism is seen in a temple dedicated to Vishnu at Bagan datable to about the 11th century CE, made by Indian settlers for their own use and veneration. It was called Nathlaungkyau temple, located to the west of Thatbyinnyu temple. Siva, Vishnu, and Brahma figures in sandstone dating to the 11th century were found in this Hindu temple. A Tamil inscription also discovered at Myinkaba, Bagan, describes the constructing of a porch and a door at a Vishnu temple at Pukkam (Bagan) by the merchants from South India (Aung Thaw, 1972, pp. 41-98). Some scholars divide the architecture into the early style called 'Mon' style and the later style called 'Myanmar' style on the basis of a parallel development in the different languages using the epigraphic records during the Bagan period (Universities Historical Research Centre, 1986). Within these many influences and earlier classifications, encasement is archaeologically important to understand the evolution of Bagan. Overall, the art and architecture of Bagan is adapted from India, Pyu, and Mon and also Sri Lanka. This multicultural background is very important to understand the

practice of encasement. Relevant areas and groups include the Pyu regions of Upper Myanmar and Mon regions of Lower Myanmar with their prototypes in India and Sri Lanka (Soni, 1991; Than Tun, 2002).

The chronological sequence of the encased Buddhist monuments at Bagan is defined here with in three phases, for the first time, and gives a new perspective on the evolution of style and patrons. Phase 1 is datable between the 9th to early 11th centuries CE, phase 2 between the early 11th to early 12th centuries CE, and phase 3 between the early 12th to late 13th centuries CE. The distribution of encased monuments at Bagan is mostly located within the inscribed Property Zone of Bagan World heritage site, but a few examples are located in the Buffer Zone of Bagan World heritage site. As explained in the previous chapter, the encased monuments have been grouped into eight areas at Bagan by location. There are totally the eighty-three encased Buddhist monuments at Bagan (see Figure 297).

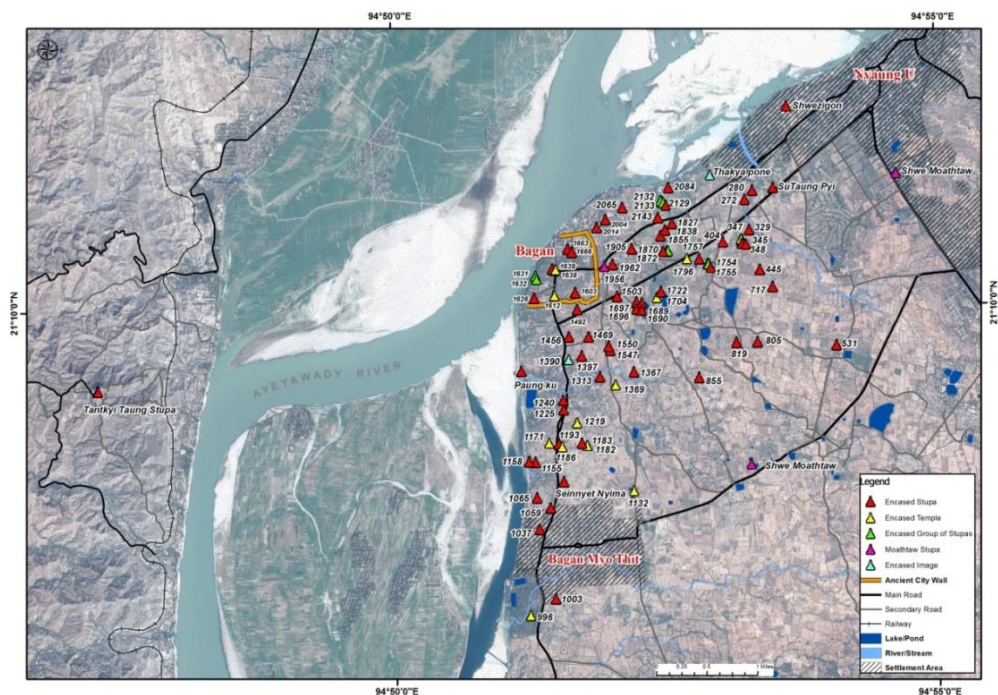


Figure 297: Map Showing the Distribution of the Encased Monuments at Bagan
Note. The map was designed and made by Phyo Pyae Ko Ko, Assistant Director, Research and Training Section, Department of Archaeology and National Museum, Taungdwingyi. Copyright by the Author

5.1 Classification of Type and Style

Examples of encasements have been geographically and stylistically inventoried and classified into five types: encased stupa, encased temple, encased group of stupas, moathtaw stupa, and encased image at Bagan (see Figure 297). Most of the encasements at Bagan show influences of India, Sri Lanka, Pyu, and Mon. Some of them are Northern Indian styles, while some are Southern Indian styles. A few of them exhibit influences of Central India style. Some of them are very similar to Sri Lanka styles, while some are very similar to Pyu and Mon styles (Lu Pe Win, 1954).

5.1.1 Encased Stupas

An encased stupa is an older and smaller stupa covered by a younger or newer larger stupa. Both of these stupas are mostly the solid stupas, so no one can enter inside these structures. There are sixty encased stupas found at Bagan as mentioned the table showing the encased monuments at Bagan divided by the five typologies (Table 9). The inner stupas were built by primary donors and outer stupas were built by the secondary donors. Most of them are the double encased stupas, but traditions or history of the stupas said that a few of them are the triple encased stupas like Tant Kyi Taung stupa at Bagan, and Tamote Shwegugyi temple in the Kyaukse region. Myanmar chronicles like Zata dawbon Yazawin (chronicle) describe that Tant Kyi Taung Stupa was firstly built by King Asoka and the first stupa was covered and encased by King Anawrahta and the second stupa was entirely encased and enlarged by King Narapatisithu. According to the archaeological evidence, numerous inscribed votive tablets that made by King Anawrahta were recovered in the inner stupa when this stupa was damaged by the earthquake occurred in 1975. The discovery of these votive tablets was concrete evidence for this stupa built by King Anawrahta. In Tamote Shwegugyi temple, archaeological evidence, history of the stupa, and iconographic features of Buddha images indicate that this temple is one of the three encasements of the monuments in Myanmar.

The probable shapes of the inner bases are circular, square, octagonal, and rectangular and the shapes of the outer bases which can be visible from the outside, are also circular, square, octagonal, and rectangular. There are eighteen encased Pyu-types stupas found at Bagan and all bases of these inner Pyu-typed stupas are circular in

shape. Among them, some of these stupas like No.1631, No.1632, Ngakywenadaung stupa, and three moathtaw stupas with circular bases can be clearly visible from the outside, but others are entirely invisible. During the early 11th century, some of the stupas are circular in shape, while some are square in shape. For example, No.1503, No.1225, and No.2004 are circular bases in shape and No.1 (Shwezigon stupa), No.1690 (Scovell Pawdawmu stupa), No.1905, No.2132, and No.2133 are square bases in shape. During the reign of King Anawrahta, the bases of Kyauk Myet Maw stupa, Shwezigon stupa, Tant Kyi Taung stupa are octagonal in shape. In Bagan, there are some stupas with octagonal base in shape like Myinkaba, Inn, and Turintaung stupas built by King Anawrahta. The base of No.996 built by King Sawlu dating to the 11th century is rectangular in shape. Most of the upper parts of inner and outer stupas are surmounted by the bulbous-shaped dome, bell-shaped dome, and conical spire. Mostly, the outer stupas at Bagan are concentrically built around the encased stupas, but a few of the outer ones are not symmetrically built around the inner ones as noted in the previous chapter.

The brick sizes, normally an important indicator of age, between the inner and outer stupas are always different, but a few of them used the same sizes. According to the analysis of the brick sizes using during the Bagan period, the brick sizes used in the pre-Bagan period and early Bagan period are mostly very long and thick bricks, but the short and thin brick sizes can be mostly found in the 12th & 13th centuries. The ancient bricks are always inserted with the paddy husks before baking in the pre and early Bagan periods, while the bricks used in the 12th & 13th centuries are not inserted with paddy husks before baking. Sometimes the one stupa with two or three different thin brick sizes used in the 13th century can be found at Bagan. The average brick sizes of Ngakywenadaung stupa (No.1603) built in pre-Bagan period are 42 x 21 x 6 cm and 36 x 17 x 6.5 cm. The average brick sizes of Kyauk Myet Maw stupa (No.1158) are 42 x 21 x 7.5 cm for inner stupa built in the 10th century and 36 x 18 x 6.5 cm for outer stupa built in the 11th century. The average brick sizes of No.1369 are 36 x 7 x 4 cm for inner temple built in the 12th century and 37 x 19 x 5.5 cm for outer temple built in the 13th century. The average brick sizes of No.1550 are 36 x 17 x 4

cm for encased stupa built in the early 13th century and 40 x 20 x 5.5 cm for outer stupa built in the late 13th century.

Original artistic decorations like stucco decorations, stone carvings, brick masonry works including the exposed shapes of the stupas are visible in some cases and glazed ornaments can be seen on the inner stupas used in the Bagan period. Mostly there are no spaces between the inner and outer stupas, but a few of them have spaces between the two stupas. The unusual shape of encased stupa like Kyauk Myet Maw stupa has spaces using the radiating walls as buttresses between the two stupas. In this stupa, there are four radiating walls between two of them still surviving. In this type, there is generally no Buddha image, but a few of the outer stupas have the Buddha images at Bagan. Sometimes although the inner ones are the solid stupas, the outer ones are the hollow temples in this type. For examples, No.289, No.1754, and No.1757 can be found at Bagan in this type.

5.1.2 Encased Temples

An encased temple means an older smaller temple covered by a younger larger temple. Both these temples are hollow type structures. There are twelve encased temples at Bagan as mentioned the table showing the list of the encased monuments at Bagan. These temples are No.347, No.1704, No.1796, No.1612, No.1638 (Myet Taw Pyi temple), No.1171, No.1182, No.1186, No.No.1219 (Kyazin temple), No.1369, No.996, and No.1132. The inner temples are built by the primary donors and the outer temples are built by the second donors, but a few of them may have been the same donors. In this matter, when the inner temple had been immediately constructed by the first donor, he or she may have been the different idea to build a larger and more elaborate temple with sufficient expenses. Sometimes there was an original stone inscription in the Bagan period and there are same brick sizes and plasters used by the same donors for inner and outer monuments. There may have been the same donors in these cases though they have used the same brick joints between the two temples. According to the Manuha stone inscription dated in 1067 CE (Nyein Maung, 1972, Vol-1, pp. 322-323), it recorded that a small inner stupa called mahtaw or moathtaw stupa covered and encased by three seated Buddha images and one reclining Buddha in brick and plaster, were built by a same donor named King Manuha.

Mostly they are the double encased temples and the probable shapes of the inner bases are square and rectangular with two or three projections and the shapes of the outer bases are also square and rectangular with projections. Most of the upper parts of the inner and outer temples are surmounted by a sikhara or square tower, bell-shaped dome, and conical spire. Mostly, the outer temples are symmetrically built around the inner temples, but a few of them are not symmetrically built around the encased temples. In this type, there is normally no gap between the two temples, but a few of them consist of the circumambulatory corridors or spaces between the inner and outer temple like monument No.1182. Their brick sizes in this type are always different between the two temples, but a few of them used as the same brick sizes or broken bricks. Original valuable decorations like the stucco carvings, brick masonry works, the architectural typologies, and stone ornaments can be unexpectedly found on the encased temple at Bagan. In this type, there may have been the original Buddha images inside the central shrines or shrine rooms of the inner temples in the Bagan period.

5.1.3 Encased Group of Stupas

Encased group of stupas mean two or three older and smaller stupas built on the same plinth, encased and covered by a single younger larger stupa in the later periods. All these stupas are the solid stupas in the Bagan period; no one can enter inside the stupas. The inner two stupas built on the same plinth can be only found at Bagan, but the inner three stupas on the same plinth can be found at Sintgu outside the Bagan World Heritage site, which is situated about 25 kilometres from Bagan. These inner three stupas (see Figure 81) are situated at Sintgu, Nyaung Oo district, Mandalay region. The outer younger larger stupa has been removed in 1960. The builders of these inner and outer stupas may have been relatives as traditions said that these inner three stupas were built by three sisters (Myo Nyunt Aung, 2015). There are six encased groups of stupas at Bagan as mentioned the table showing the encased monuments at Bagan divided by the architectural typologies. Among the six encased groups of stupas at Bagan, all of the inner stupas may have been built by the different primary donors, while all of the outer stupas may have been built by the secondary donors on each group. According to the legend, each donor for an encased group of stupas may have been the relatives. Archaeological evidence indicates that the sizes

and shapes of the inner stupas on each group are totally different though they may have been probably built at the contemporary times. The shapes of the inner stupa No.1870, No.2132, and No.2133 are a little different, but the sizes of these stupas are not entirely the same. In this type at Bagan, the outer, younger, larger stupas on the same plinth can be only found at No.1870, and No.1754 and the rest outer stupas like No. 1631, No.1632, No.2132, and No.2133 have been totally removed by the DOA. Their brick sizes using between inner and outer stupas are clearly different on each group. Original artistic decorations like stucco carvings, brick masonry works including the architectural shapes and motifs, can be seen on the encased stupas after removing the outer stupas. According to the archaeological evidence, the outer stupas are mostly not symmetrically built around the encased stupas and there are no spaces between the inner and outer stupas. In this type, most of the inner stupas are Pyu-typed stupas like the cylindrical-shaped stupa (No.1754, No.1339) (See Figure 137 & Figure 243) and bulbous-shaped stupa (No.280, No.289, No.1603) (see Figure 114, Figure 116, and Figure 198), while some of the inner stupas are bell-shaped stupas. Numerous encased bell-shaped stupas can be found at Bagan in this type.

According to the King Uzana stone inscription dated 1340 CE (see Figure 326) (Nyein Maung, 1983, p. 13, Vol-4), a secondary donor, King Uzana, encased and enlarged the inner stupa which has been built and donated by his son Saw Htwe up to 13.72 metres in diameter (Myo Nyunt Aung, 2021). In this matter, it recorded that the primary and secondary are relatives. Sometimes there are numerous chronicles, traditions, and legends regarding the relatives in the history of stupas in Myanmar. In Shwezigon stupa at Bagan, some Myanmar chronicles mentioned that the inner stupa was built by King Anawrahta and the outer stupa was built by King Kyansittha, an adopted son of King Anawrahta. In Nan Oo stupa (see Figure 80) located at the ancient city of Myinsaing, Kyaukse district, Mandalay region, tradition said that the inner stupa may have been built by the King Athin Khaya, an uncle of King Uzana during the Pinya period. According to the Nan Oo stupa stone inscription dated 1329 CE (see Figure 323) (Nan Oo stupa stone inscription, 2007), the outer larger stupa which comprises a small stupa, was built by King Uzana. In Phaya Thonzu stupas located at Sintgu outside Bagan, Nyaung Oo district, tradition said that the three inner

stupas dating the Bagan period were built by the three sisters till now. According to the inscriptions, Myanmar chronicles, traditions, and legends, the author assumes that the donors of inner and outer monuments may have been relatives.

5.1.4 Encased Moathtaw Stupas

Encased moathtaw stupa means an inner older smaller stupa, covered by an outer younger larger temple or stupa in the successive periods in Myanmar. Epigraphic records in the Bagan period and post Bagan period called as mahtaw, muhtaw, and moathtaw stupas in this type. Moathtaw may have derived from moatti in Pali that means escape or nirvana (Hoke Sein, 1954). According to the legend, Thet Lwin (2000) suggests that all these moathtaw stupas in Myanmar are believed to be built during a time of an eclipse of the moon which was an occasion when the earth passes between the sun and moon for a time during the reign of King Asoka. Everyone cannot see all or part of the moon in this time. Myanmar people believe that one will fulfill their wishes for the escape from difficulties, darkness, and dangers after worshipping this type of the moathtaw stupas in Myanmar (Thet Lwin, 2000). There are only three moathtaw stupas at Bagan. All these moathtaw stupas at Bagan consist of a circumambulatory corridor or a space to be worshipped and meditated in front of the inner moathtaw stupas. A number of moathtaw stupas found in the various parts of Myanmar have no corridors, but some of them have each corridor around the inner stupas. There are some epigraphic records in the post Bagan periods regarding the moathtaw stupas in some regions in Myanmar, but there is no inscriptional evidence regarding the moathtaw stupas at Bagan. According to the architectural typologies, the three outer temples of the moathtaw stupas at Bagan are covered and built in 13th and 17th centuries CE. These moathtaw stupas are situated at the Nyaung Oo, Taungbi, and the Minnanthu and Phwasaw areas. The bases of inner moathtaw stupas at Bagan are circular in shape, while the bases of the outer temples at Bagan are circular, square, and rectangular in shape. The outer temples are symmetrically built around the encased moathtaw stupas. Myanmar people believe that the relics of the Buddha are enshrined inside the moathtaw stupas because King Asoka distributed and enshrined the Buddha's relics around the Jambudvipa Island including Myanmar and ancient India (Thet Lwin, 2000).

Cooler notes that there are numerous moathtaw stupas in the various parts of Myanmar. Subsequently many of them were encased by the outer stupas or temples built by the secondary donors as they would like to enshrine the inner moathtaw stupas (Cooler, 2002).

5.1.5 Encased Buddha Images

Encased Buddha image means an inner, older and smaller Buddha images donated by a primary donor, encased by an outer younger and larger Buddha image donated by a secondary donor. In this type, there are three temples with the encased Buddha images at Bagan. These temples like No. 235, No.1390, and No.1612 are located at Wetkyin, Old Bagan, and Myinkaba areas. Among them, No.1612 is not only a type of encased Buddha image but also a type of encased temple. The author assumes that there is an inner temple or image house concerning the inner Buddha image on each temple in this type and that the inner temple or inner image may have been damaged or removed before the outer temple was built by the secondary donor. He might, for example, have been afraid to destroy the first inner Buddha image so that he covered it with the outer larger Buddha image and the outer temple. The author notes the belief of Myanmar people like the secondary donors, the might have been frightened of the original Buddha images being destroyed by constructing the outer Buddha images and outer temples. And as ancient evidence, there are so many curses and prayers recorded in the stone inscriptions of the Bagan periods. There are only the double encased Buddha images at Bagan, but other temples like Tamote Shwegugyi temple and Shinpin Shwesutthwa temple, located in Kyaukse region, consist of the three and five encasements of Buddha images, there may have same concepts and ideas concerning the encased Buddha images. According to the archaeological evidence at Bagan and other regions, there is no space between the two Buddha images at Bagan, but some of the encased Buddha images located in other regions have gaps between the two Buddha images. In this matter, when the inner Buddha images are covered and encased by the outer Buddha images, the secondary donors selected places, levels, sizes of the Buddha images and pedestals. There may have been a gap between the inner and outer Buddha images. These examples regarding the encased Buddha images (see Figure 298, 299 and Figure 300) can be found at Tamote Shwegugyi temple and Shinpin Shwesutthwa temple. In Tamote Shwegugyi temple,

according to the archaeological evidence, the secondary donors worried to damage the previous inner Buddha images when they encased and covered by the outer Buddha images. They put some clay as a buffer between inner and outer Buddha images (Win Maung (Tampawaddy), 2011).

In the Bagan examples, the outer Buddha images are symmetrically made around the encased Buddha images. The iconographic features of the inner and outer Buddha images at Bagan may be estimated with dates, styles and hand gestures. The encased Buddha images at Bagan were mostly made between the 11th to 13th centuries CE, but there are no Pyu Buddha images as the encased ones at Bagan. The Buddha images dating to the 11th century show influences of the Pala art style in Bihar of 8th to 12th centuries CE, while the Buddha images dating to the 12th and 13th centuries have the so-called Myanmar style (Strachan, 1989; Stadtner, 2005). All these encased Buddha images at Bagan are made of brick and stucco; mostly they are seated cross-legged Buddha images on a lotus pedestal with both the soles of the feet visible and hand gestures are in the earth-touching attitude or *Bhumisparsa mudra*, a symbol of the enlightenment of the Buddha. As noted, the inner Buddha images are datable to the 11th to 12th centuries CE, while the outer Buddha images may be estimated to the 13th century CE.

To be more specific, Aung Thaw (1972) suggests regarding the Buddha images dating to the 11th century that the faces of the Buddha images are oval and long in shape with a small well-defined mouth and a sharp nose and chin. The eyes are half closed looking downward and the eyebrows are shaped like arched curves. The body is plump in the upper parts and the waist is very slim or attenuated. In this type, the hair is shown by spiral curls and there is a hair-knob like protuberance at the centre of the head. The sacred hair-knob is seen between the spiral curls with the sacred hair comparable to a boss-shape. The robe is slightly thin with the right shoulder bare and the right nipple visible from the outside. The fingers in this type are uneven like an ordinary human. There is a hairy mole called *urna* between the two eyebrows and both of the ear-lobes do not touch to the shoulders (Aung Thaw, 1972). According to the iconography of the Buddha images, for the differences between 11th and 12th centuries CE, the face of the Buddha image comparable to an Indian face dating to the

11th century, it is slightly smiling, while the face of the Buddha image in the 12th century is definitely not smiling but serious and it has the appearance of an Myanmar face. The Buddha images datable to the 12th century Myanmar style mostly have no sacred hair like a boss-shaped and is called plain sacred hair. In this type, most artists like painters and sculptors used black colours on the heads of the Buddha images. Other iconographic features of the Buddha images in the 12th century are mostly similar to the Buddha images in the 11th century.

Aung Thaw (1972) notes regarding the Buddha images belonging to the 13th century that these Buddha images are really modelled in Myanmar style with slightly dropping head, short neck, thick-set torso, and uniform fingers in length. The head and forehead are slightly large with the waved lines of the hair and it has no spiral curl (*ushnisha*) and sacred hair like boss-shaped. The robes in this type are slightly thick. Both of the ear-lobes always touch to the shoulders (Aung Thaw, 1972). The dated Buddha images in both wood and sandstone can be found at Bagan.

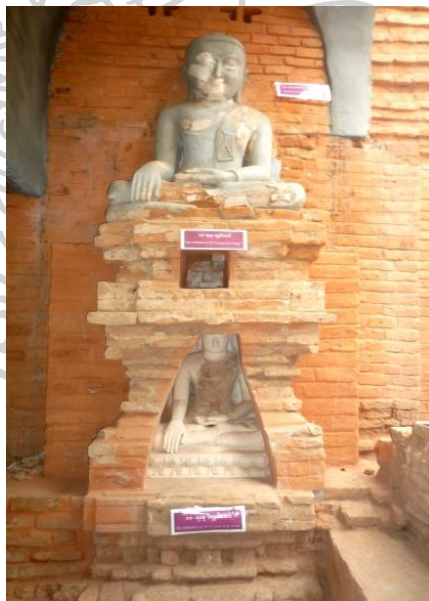


Figure 298: Two encasements of Buddha Images at the Tamote Shinpin Shwegugyi Temple

Note. There was a gap between the two Buddha images in this temple.



Figure 299 : Three Encasements of the Buddha Images at Tamote Shinpin Shwegugyi Temple
 Note. The three different iconographic features can be seen in this temple.



Figure 300: Encasements of the Buddha Images at the Shinpin Shwe Sutthwa Temple
 Note. There may have been a gap between the inner and outer Buddha images.



Figure 301: A Gilded Bronze Buddha Image (11th century) Found at Bagan
Note. This Buddha image in Bhumisparsa mudra can be seen in the Bagan Archaeological Museum (BAM)



Figure 302 : A Bronze Buddha Image (12th century) Found at Bagan
Note. This Buddha image in Bhumisparsa mudra can be seen in the BAM.



Figure 303: A Bronze Buddha Image (13th century) Found at Bagan
 Note. This Buddha image in Bhumisparsa mudra can be seen in the BAM.



Figure 304: A Stone Buddha Image Found (11th century) at Nagayon Temple, Bagan
 Note. This Buddha image in Dhyana mudra can be seen in the BAM.



Figure 305: A Stone Buddha Image (12th century) Found at Gubyaukngai Temple, Bagan

Note. This Buddha image in Dhyana mudra can be seen in the BAM.



Figure 306: A Stone Buddha Image (13th century) Found at Bagan

Note. This Buddha image in Bhumisparsha mudra can be seen in the BAM.



Figure 307: Two Encasements of the Buddha Images at the Temple No.235 (Thakypone Temple)

Note. Outer Buddha image in Bhumisparsa mudra can be seen here.



Figure 308: Two Encasements of the Buddha Images at the Temple No.1390
Note. Outer Buddha Image in Bhumisparsa mudra can be seen here.



Figure 309: Inner Buddha Image (11th century) at the Temple No.1390
 Note. Inner renovated Buddha Image in the 11th century style can be seen here.

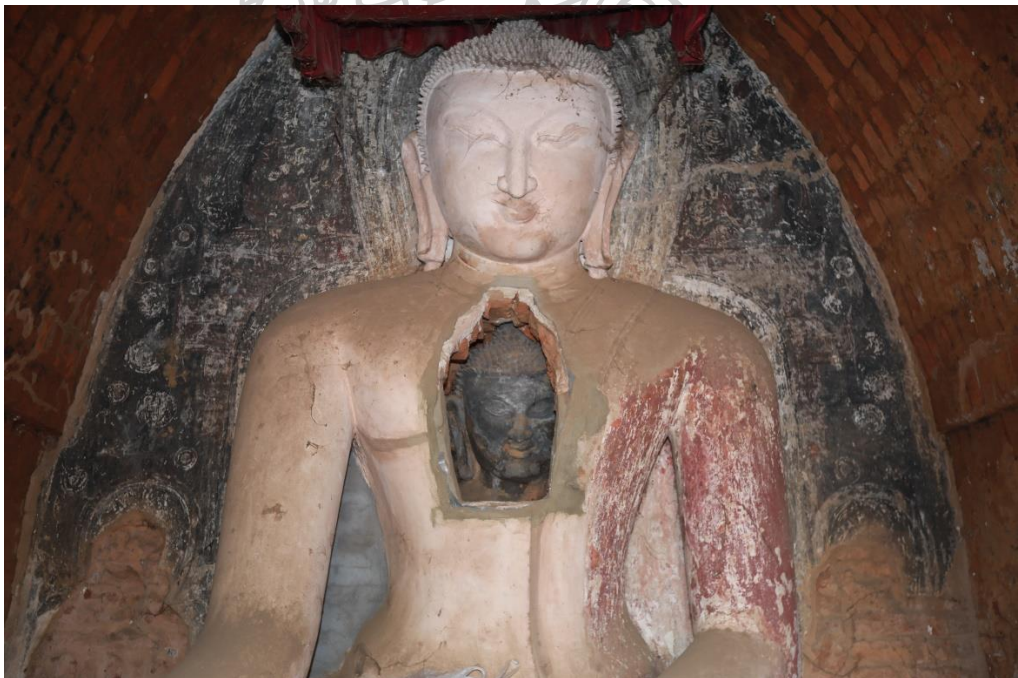


Figure 310: Two Encasements of the Buddha Images at the Temple No.1612
 Note. Inner and outer Buddha images can be seen in this temple

Table 9: The Encased Monuments at Bagan divided by the Five Typologies

Sr.No	Typologies of Encasements	Quantity of monument
1	Encased Stupas	60
2	Encased Temples	12
3	Encased Group of Stupas	6
4	Encased Moathtaw Stupas	3
5	Encased Buddha Images	3
	Total	84

5.2 Chronological Sequence

According to the chronological sequence, the encased monuments at Bagan may have been built between 9th and 13th centuries CE. Myanmar chronicles record that there are fifty five kings who ruled in the Bagan dynasty from 107 CE to 1369 CE (Pe Maung Tin and Luce, 1960; Aung Kyaing (Minbu), 2007) and that Bagan was founded by the King Thamudarit in 107 CE. A few buildings at Bagan may have been built between 2nd to early 11th centuries CE and numerous Buddhist buildings are mostly built between 11th to 14th centuries CE. According to the C-14 dating made by Bob Hudson (Hudson, 2004), the religious buildings and building materials are mostly datable to between 9th to 14th centuries CE. He suggests that some of the buildings at Bagan may have been found before 9th century and that this may be revealed in the future research. Therefore, the chronological sequence of the encased monuments at Bagan (Table 10) can be categorized into three phases here: phase-1 (9th to early 11th centuries), phase-2 (early 11th to early 12th centuries), and phase-3 (early 12th to late 13th centuries) during the Bagan period. The dating of the encased

monuments at Bagan may be estimated by the architectural typologies, archaeological evidence, epigraphic records, and iconographic features of the Buddha images.

5.2.1 Phase-1

The duration of the phase-1 period is from the 9th to early 11th centuries CE with Myanmar chronicles recording forty one Kings who ruled in the Bagan dynasty from King Thamudarit (107-152 CE) to King Sokkate (992-1017 CE) in this period (Appendix-C). It is called the pre-Bagan period with most of the buildings in this period having the influences of the Pyu style. These monuments at Bagan are very similar to the Buddhist monuments at Srikshetra located about 290 kilometres to the northwest of Yangon. There might have been around twenty-six Buddhist monuments at Bagan during the phase-1 period and among them, there are eighteen encased monuments (Table 10). In this period, the inner stupas of the three moathtaw stupas built in the pre-Bagan period, the inner stupas of No.1639 (Atwinzigon stupa) and No.2084 (Myazigon stupa) are included. Myanmar chronicles describe the inner stupas of No.1639 (Chit Thein, 1969, p. 64-67) and No.2084 (Furnivall and Pe Maung Tin, 1960) as being built in the 10th century CE though these stupas are not visible from the outside. The outer three moathtaw stupas (No.194, No.1956, No.920) at Bagan, are built and covered in successive periods. According to the architectural typologies at Bagan, the outer temples of the moathtaw stupas were covered in the 13th and 17th centuries CE. All of the encased stupas in this period are mostly the solid structures with the circular bases, but an inner temple of No.996 (Hudson, 2004) may have been the hollow structure. Most of them comprise bulbous-shaped domes with the plain conical spires (No.280, No.289, No.1603) (see Figure 114, Figure 116, and Figure 198), while a few of them are cylindrical-shaped domes (No.1339, and No.1754) (see Figure 243,244, and Figure 137) with the plain conical spires and these stupas are very low in high and small in size during the phase-1 period. The types of the encased stupas and encased group of stupas can be mostly found in this period. The encased stupas at Bagan during phase-1 are mostly very similar to the miniature stupas seen on terracotta votive tablets, relic caskets, and burial urns dated to the Pyu period. In addition, the finger-marked bricks and Pyu inscribed bricks have mostly been recorded around the encased stupas in this period.

5.2.2 Phase-2

The duration of the phase-2 period is from 1044 to 1113 CE (early 11th to early 12th centuries CE) called the early Bagan period; the encased structures in this period are mostly built during the reigns of King Anawrahta (1044-1077 CE), Sawlu (1077-1084 CE), and Kyansittha (1084-1113 CE) (Appendix-C). The epigraphic records like stone inscriptions, ink inscriptions, inscriptions on the votive tablets, archaeological evidence, architectural typologies, and iconographic features of the Buddha images in this period may be datable in tandem with the dating of the encased monuments (Aung Kyaing (Minbu), 1984; Pichard, 1992-2001). The bases of the encased stupas in this period are mostly circular, square, and octagonal in shape and these stupas are surmounted with elongated bell-shaped stupas, bulbous-shaped stupas. Sometimes, these stupas are plain conical spires above the bulbous-shaped domes. There are sloping, flat, and moulded concentric rings alternately above the elongated bell-shaped dome with the inverted lotus petals, the fulfilled blooming lotus petals, a row of bosses, and the banana buds as the parts of the conical spire. The encased temples in this period are mostly built with one entrance, two lateral porches, curvilinear roofs, three or five niches on the surfaces of the sikhara or square tower, corner stupas, upper shrines. These temples are always built with rectangular bases including projections, throne-shaped bases, Kalasa pot-shaped bases. They mostly comprise central shrines or central pillars with niches to house the Buddha images in sandstone, mural paintings on the interior walls and stucco decorations on the exterior walls. All doors, windows, entrances in these temples have originally used with wooden doors, but now most of these doors have been totally damaged due to natural disasters so only a few of these doors from this period still remain in Bagan. The radiating arches, square arches, corbelled arches and $\frac{1}{2}$ or $\frac{3}{4}$ barrel vaults, as well as the cloister vault utilized for the square central shrine, cupola vaults used for the circular central shrine are always used in these temples during the phase-2 period. These temples are mostly surmounted with sikhara in shape or bell-shaped dome. There are twenty-five encased monuments at Bagan during this period (Table 10). The circular, square, and octagonal terraces can be found on the encased stupas and temples at Bagan in this period. During this period, the one-storeyed temples and image houses are mostly built with 'gloomy' corridors, dim lights coming through the dormer windows or

apertures, perforated windows in sandstone or brick. In summary, the inner encased stupas and temples in the phase-2 period, were built between early 11th to early 12th centuries CE, while the outer structures were covered between 12th to 13th centuries CE.



Figure 311: Monument No.1503 built in the Phase-2 Period
Note. The circular base in shape can be seen in this stupa.



Figure 312: Monument No.1690 (Scovell Pawdawmu Stupa) built in the Phase-2 Period

Note. The square base in shape with two projections can be seen in this stupa.



Figure 313: Monument No.1193 (Pawdawmu Stupa) built in the Phase-2 Period

Note. The octagonal base in shape can be seen in this stupa.

5.2.3 Phase-3

Phase-3 period is from 1113-1287 CE (early 12th to late 13th centuries CE) with the encased structures at Bagan mostly built during this period. There are eight kings during the phase-3 period: Alaungsthu (1113-1167 CE), Narathu (1167-1170 CE), Naratheinkha (1170-73 CE), Narapatisathu (1174-1211 CE), Htilominlo (1211-1234 CE), Kyaswa (1234-1250 CE), Uzana (1250-55CE), and Narathihapate (1255-1287 CE) (Appendix-C). The encased monuments are always constructed by the Kings, royal families but also common people in this period. According to the epigraphic records, archaeological evidence, architectural typologies and iconographic features of the Buddha images, most of the encased structures may be estimated for the dating, but when epigraphic records are available, the dates of the encased structures can be exactly described. The bases of the encased stupas and temples are square and rectangular in shape with two or three projections with these stupas and temples mostly surmounted with bell-shaped domes, sikhara-shaped domes and conical spires. In this period, there are one to four- storeyed temples at Bagan and among these structures the encased temples are constructed with one to two-storeyed temples. There are mostly flat and moulded concentric rings alternately using at the part of conical spires during this period. The terraces of the encased structures with two or three projections during the phase-3 period are mostly higher than the encased structures built in the phase-2 period. Some encased temples comprise the central pillars, while some have no central pillars. The interior walls of the encased temples are mostly decorated with murals, while the exterior walls are decorated with stucco decorations. The iconographic features of the mural paintings on the encased temple may be estimated to the assist dating of the structures. In this period, the encased structures are mostly built with flat terraces with projections and stone gutters, brighter lights through windows and dormer windows, one or two staircases to be climbed, meditation cells in the vestibules, and niches to house the Buddha images around the interior walls. The radiating arches, corbelled arches, and square arches have been used and cloister vaults over the square central shrines, cupola vaults over the circular central shrines, barrel vaults over the corridors, and barrel vaults hipped at one end over the vestibules and entrance halls are constructed during this phase. Both the accessible square terraces with stairways and inaccessible square terraces with no

stairways are used for the encased stupas built in this period. Among the eighty-three encased structures at Bagan, there are forty encased structures during the phase-3 period (Table 10). The richest encased monuments at Bagan can be found in this period, while the least encasements can be found in the phase-1 period. Both the inner and outer structures are mostly built between early 12th to late 13th centuries CE.

Table 10: The Encased Monuments at Bagan Divided by Phase-1 to Phase-3 Periods

Sr.No	Phase	period	Quantity of monument
1	Phase -1	From 9th to early 11th centuries CE	18
2	Phase -2	From early 11th to early 12th centuries CE	25
3	Phase -3	From early 12th to late 13th centuries CE	40
	Total		83

5.3 Distribution of the Encased Buddhist Monuments at Bagan

Among the numerous Buddhist monuments at Bagan, there are eighty-three encased Buddhist monuments including three encased Buddha images. Mostly it was found that some of the inner monuments were built in the pre-Bagan period, while the outer monuments were built in the Bagan period. According to the eight-volume, *Inventory of Monuments at Pagan* (Pichard, 1992-2001), each encased monument has an original number as he record and some of them have both the original names and additional names. The encased monuments have been grouped into eight areas at Bagan depending on their locations. Each area is designated by the name of the nearest village (Myo Nyunt Aung, 2021). There are eight areas at Bagan including the Tant Kyi area which is situated on the western bank of the Ayeyarwady river, but all these eight areas are within the Bagan World Heritage Site inscribed by the UNESCO in 2019. These areas located in the vicinity of Bagan are called the Nyaung Oo area, Wetkyi-in area, Taungbi area, Old Bagan area, Myinkaba area, Thiripyitsaya area, Minnanthu & Phwasaw areas, and Tant Kyi area.

Area 1: Nyaung Oo Area, Two encased monuments

Area 2: Wetkyi-in Area, Thirteen encased monuments

Area 3: Taungbi Area, Twenty-five encased monuments

Area 4: Old Bagan Area, Nine encased monuments

Area 5: Myinkaba Area, Twenty-one encased monuments

Area 6: Thiripyitsaya Area, Seven encased monuments

Area 7: Minnanthu & Phwasaw Areas, Five encased monuments

Area 8: Tant Kyi Area, One encased monument

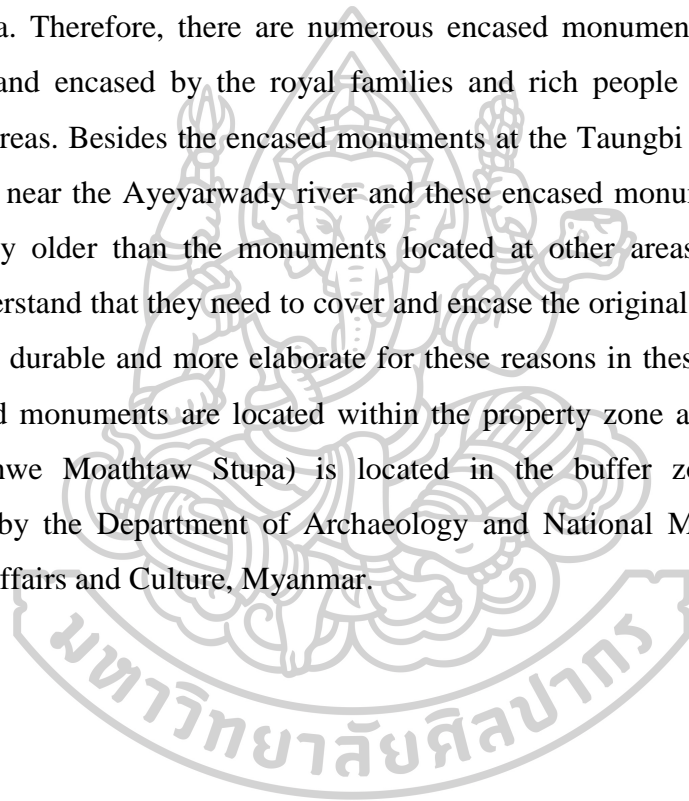


Table 11: The Encased Monuments at Bagan divided into Eight Areas

Sr.No	Number of Area	Name of Area	Quantity of monument
1	Area -1	Nyaung Oo Area	2
2	Area -2	Wetkyi-In Area	13
3	Area -3	Taungbi Area	25
4	Area -4	Old Bagan Area	9
5	Area -5	Myinkaba Area	21
6	Area -6	Thiripyitsaya Area	7
7	Area -7	Minnanthu & Phwasaw Areas	5
8	Area -8	Tant Kyi Area	1
		Total	83

In total, there are sixty encased stupas, twelve encased temples, three encased images, three moathtaw stupas, and six encased groups of stupas at Bagan (Table 9). According to the distribution of encasements at Bagan, there are 2.4 % in Area-1 (Nyaung Oo Area), 15.66 % in Area-2 (Wetkyi-in Area), 30.12 % in Area-3 (Taungbi Area), 10.84 % in Area-4 (Old Bagan Area), 25.30 % in Area-5 (Myinkaba Area), 8.43 % in Area-6 (Thiripyitsaya Area), 6.02 % in Area-7 (Minnanthu & Phwasaw Areas), 1.20 % in Area-8 (Tantkyi Area) (see Figure 314) (Myo Nyunt Aung, 2021).

The quantities of the encased monuments on each area at Bagan mention that Taungbi area is the richest encasements, while the Tantkyi area is the least encasement among the eight areas. The Myinkaba area is the second richest encasements at Bagan. Taungbi and Myinkaba areas are very close to the last palace site of Bagan where the twenty-two Kings ruled and lived there. Epigraphic records indicate that many royal families and rich people lived in these two areas during the Bagan period. In Tantkyi area, there are only fifteen Buddhist monuments built in the successive periods inside the World Heritage Site of Bagan, while there is only an encased stupa called Tant ky i Taung stupa. Therefore, there are numerous encased monuments, which may have been built and encased by the royal families and rich people in the Taungbi and Myinkaba areas. Besides the encased monuments at the Taungbi and Myinkaba areas are situated near the Ayeyarwady river and these encased monuments in these areas are normally older than the monuments located at other areas. So the secondary donors understand that they need to cover and encase the original inner monuments to be stronger, durable and more elaborate for these reasons in these areas. The eighty-two encased monuments are located within the property zone area of Bagan, while No.194 (Shwe Moathtaw Stupa) is located in the buffer zone area of Bagan designated by the Department of Archaeology and National Museum, Ministry of Religious Affairs and Culture, Myanmar.



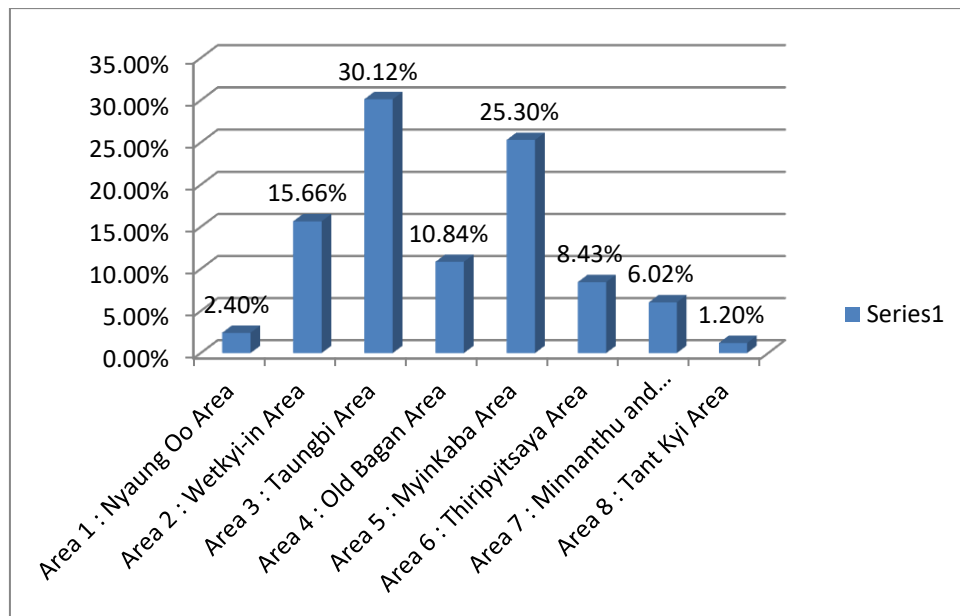


Figure 314 Encasements at Bagan by Area-1 to Area-8 in percent

Note. The name and percentage of examples in the eight areas at Bagan are noted in this chart.

5.4 Summary

In this chapter, the classification, chronological sequence, and distribution of the encasements at Bagan have been described in detail. The architectural typologies of encasements at Bagan are classified into five types: encased stupas, encased temples, encased group of stupas, encased moathtaw stupas, and encased Buddha images. The style of the Buddhist monuments at Bagan in its large and principal lines may be traced to the Northeastern India. The style of Bagan paintings in the early period shows influences of West India and the style of its paintings in the late period show influences of the Varendra school of Bengal and Nepal. There are intercourses regarding the Buddhist art and architecture between Bagan and North and South India throughout the Bagan period. The encasement is archaeologically important to understand the evolution of Bagan. The art and architecture of Bagan is adapted from India, Sri Lanka, Pyu, and Mon. With this multicultural background of Bagan is very important to understand the practice of encasement. Relevant areas and groups include the Pyu regions of Upper Myanmar and Mon regions of Lower Myanmar with their prototypes in India and Sri Lanka.

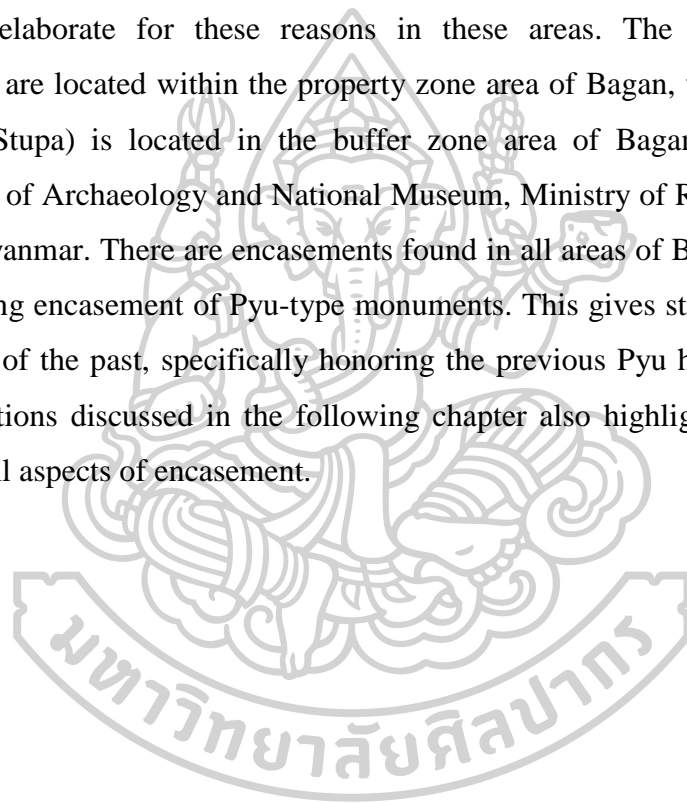
The chronological sequence of the encased monuments at Bagan have been categorized into three phases: phase-1 (9th to early 11th centuries), phase-2 (early 11th to early 12th centuries), and phase-3 (early 12th to late 13th centuries) during the Bagan period. Among them, the richest encased monuments at Bagan can be found in the phase-3 period, while the least encasements can be found in the phase-1 period. The dating of the encased monuments at Bagan may be estimated by the architectural typologies, archaeological evidence, epigraphic records, and iconographic features of the Buddha images. Among the encased monuments at Bagan, there are sixty symmetrical encased monuments and twenty-two non-symmetrical monuments.

Among the numerous Buddhist monuments at Bagan, there are eighty-three encased Buddhist monuments including three encased Buddha images. Mostly it was found that some of the inner monuments were built in the pre-Bagan period, while the outer monuments were built during the Bagan period. There are eight areas at Bagan including the Tantkyi area which is situated on the western side of the Ayeyarwady river, but all these eight areas comprise within the Bagan World Heritage Site inscribed by the UNESCO in 2019. These areas are called as Area 1: Nyaung Oo area, Area 2: Wetkyi-in area, Area 3: Taungbi area, Area 4: Old Bagan area, Area 5: Myinkaba area, Area 6: Thiripyitsaya area, Area 7: Minnanthu & Phwasaw areas, and Area 8: Tantkyi area, located in the vicinity of Bagan.

There are two encasements in Nyaung Oo area, thirteen encasements in Wetkyi-in area, twenty-five encasements in Taungbi area, nine encasements in old Bagan area, twenty-one encasements in Myinkaba area, seven encasements in Thiripyitsaya area, five encasements in Minnanthu and Phwasaw areas, and one encasement in Tantkyi area.

The quantities of the encased monuments on each area at Bagan mention that Taungbi area is the richest encasements, while the Tantkyi area is the least encasement among the eight areas. The Myinkaba area is the second richest encasements at Bagan. Taungbi and Myinkaba areas are very close to the last palace site of Bagan where the twenty-two Kings ruled and lived there. Epigraphic records indicate that many royal families and rich people lived in these two areas during the Bagan period. In Tantkyi

area, there are only fifteen Buddhist monuments built in the successive periods inside the World Heritage Site of Bagan, while there is only an encased stupa called Tant kyi Taung stupa. Therefore, there are numerous encased monuments, which may have been built and encased by the royal families and rich people in the Taungbi and Myinkaba areas. Besides the encased monuments at the Taungbi and Myinkaba areas are situated near the Ayeyarwady river and these encased monuments in these areas are normally older than the monuments located at other areas. So the secondary donors understand that they need to cover the original inner monuments to be stronger and more elaborate for these reasons in these areas. The eighty-two encased monuments are located within the property zone area of Bagan, while No.194 (Shwe Moathaw Stupa) is located in the buffer zone area of Bagan designated by the Department of Archaeology and National Museum, Ministry of Religious Affairs and Culture, Myanmar. There are encasements found in all areas of Bagan, with a notable number being encasement of Pyu-type monuments. This gives strong evidence of the recognition of the past, specifically honoring the previous Pyu heritage was present. The inscriptions discussed in the following chapter also highlight remembrance, as indeed do all aspects of encasement.



CHAPTER 6

Concepts of the Encased Buddhist Monuments at Bagan

Twenty-two epigraphic records (Table 12) inscribed in the Bagan and post-Bagan periods, including religious ideas, and socio-political ideas regarding the concepts of encased Buddhist monuments, are detailed in this chapter. Most of the concepts of the encasement are included in these epigraphic records. The examples comprise twenty stone inscriptions and two ink inscriptions regarding encasement found in Myanmar giving textual information on the underlying meanings of the encased monuments. These concepts are further supplemented by examples of reliquaries: inscribed reliquaries, and multi layered reliquaries and miniature stupas enshrining the relics of Buddha, Buddhist saints, the ashes of heroic Kings and elite persons, and valuables. These objects also conveyed ideas about the meaning of encasement in Buddhist religious structures. While the epigraphy and the small reliquary objects could be considered separately, the author brings them together here as illustrations of the different ways over many centuries that the physically encased monuments were valued by lay, royal and religious sectors of the society. While the focus of this dissertation is the physical monuments, their interpretation is greatly strengthened by these textual and reliquary objects.

6.1 Epigraphic Records

As noted, epigraphic records regarding encasement are found at Bagan and in upper Myanmar: twenty stone and two ink inscriptions are listed in detail. The table includes name of inscription, inscribed year, original place, and present place (Table 12). Twelve stone inscriptions regarding encasement are recorded in *Ancient Myanmar Stone Inscriptions* (Vol-1 to 6) written by archaeologist U Nyein Maung. Two stone inscriptions are at their original places: the Makkhaya Shwezigon stupa and the Nan Oo stupa. Two ink inscriptions are recorded from Kyasin temple and Thetkyamuni temple at Bagan. These ink inscriptions were also described in *Guide to Bagan Research* (In Myanmar) written by U Bo Kay, former archaeologist. All of the inscriptions used in Pali and old Myanmar languages (Myo Nyunt Aung, 2021). Six stone inscriptions are recorded in *Stone inscriptions in the walled enclosure of*

Mahamuni stupa at Mandalay (Vol- 4 to 6) published by the Department of Historical Research and National Library (DHRNL). There are two four-faced inscribed stones, nine two-faced inscribed stones, and nine one face inscribed stones regarding encasement found in Myanmar. Among the twenty-two epigraphic records, there are four stone inscriptions and two ink inscriptions in the Bagan period, nine stone inscriptions in the Pinya period, and seven stone inscriptions in the Konbaung period. Among the four stone inscriptions in the Bagan period, according to the writing style, Manuha stone inscription may have been inscribed in the post-Bagan period, but it recorded that King Manuha built a small stupa encased by three seated Buddha images and one recumbent Buddha in 1067 CE. This stone inscription was a duplicate of the original stone inscription donated by the King Manuha in later times. There are seven stone inscriptions inscribed by King Bodaw Phaya in 1785 CE during the Konbaung period, but he described the Buddhist practice of stupa encasements undertaken by Bagan and Pinya Kings after he had collected and read with the help of royal scholars numerous original stone inscriptions in the various parts of Myanmar. The inscriptional evidence and historical records indicates that there are eight stupas encased and enlarged by King Uzana as the patron of the stupa encasements during the Pinya period. In Myanmar, the Buddhist practice of the stupa encasement was since Bagan period to till now. Therefore, there are epigraphic records regarding the stupa encasements in Myanmar from Bagan to Konbaung periods with strong evidence.

1. The Manuha stone inscription (see Figure 315) (Nyein Maung, 1972, Vol-1, pp. 322-323), No.9 of Mandalay Nan Twin Inscription shed, described a small stupa called Mahtaw or Moathtaw stupa, which enshrined the relics of the Buddha encased by three massive Buddha images and another enormous image depicting the demise of the Buddha image built in 1067-CE to protect the relics. The construction of the huge Buddha images over the moathtaw stupa was completed in six months and six days. This stone inscription mentioned that the Manuha Phaya (temple) is located on the victorious mound (Zeyabon Kon) to the northeast of the Lokananda Harbour where the tooth relic of the Buddha was received by the King Anawrahta. King Manuha built the Buddha images after he received six bullock-carts loaded with silver by selling his ring with a precious stone named

Manawmaya (Myo Nyunt Aung, 2021). Manuha stone inscription records encasement in the early Bagan period; the front face of this stone inscription only mentioned that there was the strong inscriptional evidence concerning a small mahtaw stupa together with the relics of the Buddha before three seated Buddha images and a reclining Buddha have yet to be built. King Manuha built the huge Buddha images over the small mahtaw stupa.

2. The Hlai Htaung Phaya stone inscription (see Figure 316) (Nyein Maung, 1972, Vol-1, pp. 331-332), No.4 of Mandalay Nan Twin Inscription shed, describes that among the two small stupas there was originally a small stupa (Mahtaw stupa) remaining at Taung Byone region, that was encased by a temple (*gu*), enlarged and developed by King Alaungsithu, the grandson of King Kyansittha in 1111 CE. This stone inscription was originally found at Taung Byone Gyi village (Myo Nyunt Aung, 2021). It gave concrete inscriptional evidence regarding encasement in the early 12th century CE during the reign of the King Alaungsithu.

3. According to the Shwe Kon Cha temple stone inscription (see Figure 317) dated 1141 CE (Nyein Maung, 1972, Vol-1, pp. 143-151), located inside an inscription shed to the northeast of its temple, King Alaungsithu, the grandson of King Kyansittha donated and enshrined the gold, silver, copper, stone Buddha images, and other rare material Buddha images in this temple. It also records the placement and enshrinement of the relics of the Buddha in the two golden *patho* (miniature stupas), two silver *patho*, four sandalwood *patho*, two ivory *patho*, two cinnabar *patho*, five orpiment *patho*, five stone *patho*, together with three golden umbrellas and nine white umbrellas inside the reliquary. These show how encasement was a means to protect the security of the relics in a manner similar to a stupa encasement (Myo Nyunt Aung, 2021). Thus the concept of encasement was recorded in this stone inscription during the early 12th century CE.

4. According to the Anantathuya Couple stone inscription (see Figure 318) dated 1223 CE (Nyein Maung, 1972, Vol-1, pp. 151-163), No.2 stone inscription of Lemyethna inscription shed inside the Minnanthu Lemyethna monastic complex, it was mentioned that the donors enshrined the

relics of the Buddha put and encased by eight layers of the relic caskets made of various materials such as sandalwood (Myat Kyaw, 2009), glass, red sandalwood, gold, silver, gold with jewellery, ivory, and copper. These relic caskets were put in the stone *patho* (miniature stupa). As with the Shwe Kon Cha temple stone inscription, the Anantathuya Couple stone inscription shows that the concept of encasement in order to protect the relics of the Buddha was present since Bagan times (Myo Nyunt Aung, 2021). It was described the eight layers of the reliquaries made of various kinds of substances in the Bagan period.

5. There are two ink inscriptions regarding the encasement at Bagan. According to the ink inscriptions at Kyazin temple (see Figure 319), the secondary donor named Thindra-o enshrined the inner temple built by the primary donor named Barusi who died in 1125 CE after he began but probably did not complete building the temple. Thindra-o totally enshrined the Barusi's temple in 1217 CE, completed in 1223 CE. The original name of the outer temple was called Tre-Loka-Luwalbo in the Bagan period (Bo Kay, 1981, pp. 336-338). Now it was called Kyazin temple located to the south of Myinkaba village. The inscription illustrates ancient knowledge of the donor in enshrining a structure in the 13th century (Myo Nyunt Aung, 2021). There are seven lines of ink inscriptions, which may have inscribed by the secondary donor named Thindra-o; this ink inscription is located at the western wall of the vestibule on the southern side in this temple.

6. In the Thetkyamuni temple, ink inscriptions belonging 13th century CE (see Figure 320) record that King Asoka built eighty-four thousand stupas in Jambudipa Island including Myanmar in the 3rd century BC (Bokay, 1981, pp. 220-222). There are numerous, known as moathtaw stupas, which by tradition were built by King Asoka in various parts of Myanmar. This type is also mentioned in Myanmar chronicles with some stone and some ink inscriptions adding evidence (Myo Nyunt Aung, 2021). These ink inscriptions, which consist of one line, were inscribed on the western wall of the southern vestibule at Thetkyamuni temple. This temple dating 13th century CE, is located to the east of Nyaung Oo area. While on a temple wall, the

inscriptions shows that there is the strong inscriptional evidence of beliefs that the eighty-four thousand moathtaw stupas built by King Asoka existed during the Bagan period.

7. According to the Kan Swet Kyaung stone inscription dated 1324 CE (see Figure 321), originally found at Taung Pulu Pagoda to the northeast of Nge Toe Gyi village, 8.05 kilometres to the northeast of Kyaukse, the Taung Pa Min stupa at Taung Pa was enshrined into the Kan Swet Kaung monastery in the Kyaukse region in 1324 AD (Nyein Maung, 1983, Vol-3, pp. 299-300). This stone inscription is currently No.94 of Mandalay Nan Twin Inscription shed. It illustrates the reason for enshrining a structure being recorded in the 14th century (Myo Nyunt Aung, 2021).

8. The Shwezigon stupa stone inscription dated 1325 CE (see Figure 322) (Moe, 2008), located at the ancient city of Makkhaya, Kyaukse region, recorded that King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to be larger and more elaborate attaining 46.63 metres in diameter (Myo Nyunt Aung, 2021). This gives concrete inscriptional evidence regarding encasement during the Pinya period.

9. The Nan Oo stupa stone inscription dated 1329 CE (see Figure 323) (Nan Oo stupa stone inscription, 2007), also mentioned that King Uzana enlarged and encased a previous small stupa to be larger and more elaborate reaching 47.09 metres in diameter, named Nan Oo stupa at the ancient city of Myinsaing, Kyaukse region (Myo Nyunt Aung, 2021). There is not only inscriptional evidence, but also archaeological evidence in this stupa, and Aung Kyaing suggested that he found an inner stupa through a treasure hole on the northwestern side of the upper parts. According to the stone inscriptions inscribed by King Uzana, he enlarged and encased the numerous inner stupas in his reign, perhaps the foremost patron of his era in the act of encasement.

10. According to the Mahtaw Zedi stone inscription dated 1335 CE (see Figure 324) (Nyein Maung, 1983, Vol-3, pp. 351-352), originally found at Mahtaw Zedi (stupa) to the south of Tapekon village at the ancient city of Myin Khone Taing (Myingondaing), Kyaukse region, King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to be larger and more

elaborate measuring 28.80 metres in diameter. This stone inscription is currently No.101 of Mandalay Nan Twin Inscription shed (Myo Nyunt Aung, 2021). The strong inscriptional evidence shows that there is an encasement in this stupa at the ancient city of Myin Khon Taing during the reign of King Uzana.

11. According to the Thayegu Phaya stone inscription dated 1336 CE (see Figure 325) (Nyein Maung, 1983, Vol-3, p. 357), there was a small ruined stupa rebuilt and encased by King Uzana to be more elaborate and larger stupa measuring 27.89 metres in diameter. In order to last the five thousand religious years, he donated lands and slaves for this stupa. This stone inscription was originally found at Thayegugyi pagoda to the east of Kinton village, Myin Khone Taing region, Kyaukse District and it is currently No.114 of Mandalay Nan Twin Inscription shed.

12. According to the King Uzana stone inscription dated 1340 CE (see Figure 326) (Nyein Maung, 1983, p. 13, Vol-4), originally found between the farmyard of U Tha Paw and Daw Tin May, Tadaoo Township, a secondary donor, King Uzana, encased and enlarged the inner stupa which has been built and donated by his son Saw Htwe up to 13.72 metres in diameter (Myo Nyunt Aung, 2021). It was described that in order to last the five thousand religious years, King Uzana donated lands for this stupa and Eain Nein monastery. This stone inscription is currently No.5 of Maw Kun Phaya Inscription shed at Saga Inn village, Tadaoo Township.

13. According to the Thaman Star stone inscription dated 1343 CE (Nyein Maung, 1983, Vol-4, pp. 50-54), the rich man named Thaman Star built a monastery to the east of the ordination hall built by King Sithumingyi and he also built a temple and a monastery for the chief monk (thera) with the permission of a monk named Maha Upalawun in 1256 CE. It recorded that Maha Upalawun had a relic of the Buddha and Thaman Star also had a relic which was brought from the Mahabodhi temple, India. These two relics were placed and encased by three layers of the reliquaries: a golden relic casket, the silver casket, and a small stone stupa with a golden umbrella enshrined at Thaman Star temple, Chaung Oo Township, Monywa District (Myo Nyunt

Aung, 2021). This inscription illustrates that there was a concept of the encasement with relic caskets for the protection of the relics of the Buddha. Traditional custom and belief like enshrining and worshiping the relics with a golden umbrella inside the reliquaries can be also found in this temple built by Thaman Star.

14. According to the Nga Kausg Yan Thin Couple, Headman in the Pareinma stone inscription dated 1344 CE (see Figure 327) (Nyein Maung, 1983, Vol-4, pp. 56-59), it records that there was a small stupa (Moathtaw stupa) which may have been built by King Asoka at the Pareinma region. The Moathtaw stupa is one of the encasement types with this inscription recording the pride of the donors that they constructed and offered a monastery where the Moathtaw Zedi (stupa) built by King Asoka and an ordination hall built by Sithumingyi are located. Besides they described that Pareinma was their native place and the monk named Maha Kassapa also lives in this place. They further underline that the region called Pareinma is a very celebrated land. This stone inscription was originally found at Shwe Moathtaw stupa, Pareinma village, Monywa District and it is currently No.110 of Mandalay Nan Twin Inscription shed (Myo Nyunt Aung, 2021). It recorded that there was concrete inscriptional evidence regarding the moathtaw stupa, which may have been built by King Asoka at Pareinma village.

15. According to the Zigon Phayagyi Inscription dated 1352 CE (see Figure 328) (Nyein Maung, 1983, Vol-4, pp. 89-91), King Thihapati, the grandson of King Thiha Thuya built Zigon Taw Zedi at Sagaing called Zeyapura in ancient times. In this stupa, he enshrined the relics of the Buddha encased by four layers of relic caskets, made of gold, silver, ivory, and stone substances. All of the relics donated and encased by the reliquaries together with over one hundred silver Buddha images and three baskets of the Buddhist scriptures (Tripitakas) were placed into the relic chamber in order to protect the relics. This stone inscription is No.1 of the Htupa Yon Inscription shed, Sagaing. It gives strong epigraphic evidence that there was a concept of encasement in this period (Myo Nyunt Aung, 2021).

16. There is a stone inscription called Shwe Moathtaw stupa stone inscription (Nyein Maung, 2013, Vol-6, pp. 18-21), located near Shwe Moathtaw Zedi Thein (ordination hall), Nagabo village, Depayin township, Shwebo district. This stone inscription describes that Natkabo Theindaw Phaya, one of the eight-four thousand stupas was originally built by King Asoka and subsequently it was enlarged and repaired by King Alaungsithu (1113-1167 CE) in the Bagan period and then successive Myanmar Kings in the different periods. When King Narapatisithu (1174-1211 CE) from the Bagan dynasty patronised this stupa, he rebuilt and enlarged an earlier stupa, with enshrining the moathtaw stupa together with relics of the Buddha and a small golden Buddha image. There are nine moathtaw stupas enshrining the golden Buddha images, where the Natkabo Theindaw Phaya is located at Depayin. These nine moathtaw stupas donated by the successive Myanmar Kings, have been repaired by Maha Atulapavara Dhammaraja Guru together with king, ministers, and monks in 1764 CE. This stone inscription illustrates that there is the strong inscripational evidence regarding the moathtaw stupas which may have been built by King Asoaka and these stupas are enlarged and encased by the later Myanmar Kings in the successive periods. According to this stone inscription, it records eighty-four thousand moathtaw stupas, and eighty-four thousand tanks, which may have been constructed by the King Asoka on the Jambudipa Island.

17. The Shwe Intein stupa stone inscription dated 1785 CE (see Figure 329), inscribed by the King Bodaw Phaya (DHR, 2012, Vol-4, pp. 20-25), mentioned that Shwe Intein stupa was originally built by the King Asoka and it was encased and enlarged by the King Anawrahta in the Bagan period. Subsequently, this stupa was donated and repaired by the successive Myanmar Kings like King Narapatisithu, King Min Khaung, King Mohnyin Thado, King Minye Kyawswa, and King Hsin Phyu Shin. In addition, King Bodaw Phaya defined the area of Shwe Intein stupa and donated five hundred slaves for this stupa. This stone inscription is currently No.306 of the western inscription shed in the walled enclosure of Mahamuni stupa, Mandalay. Shwe Intein stupa

is situated west of Inle Lake, Intein village, Nyaung Shwe township in the southern Shan state.

18. According to the Lemyethna stupa and monastery stone inscription dated 1785 CE (see Figure 330), inscribed by the King Bodaw Phaya (DHR, 2012, Vol-4, pp. 37-43), the stupa now called Shwe Sawlu stupa regarding this stone inscription is situated at Phaung Lin village, Salin township, Magway region. This stone inscription describes that King Sawlu, son of King Anawrahta built Lemyethna stupa with four arch-pediments and a monastery in 1078 CE and he donated the rice and lands for this stupa. King Thadoeminphyia and his Queen worshipped the Lemyethna stupa and a Rakhine monk who lived at Phaung Lin in 1364 CE. He repaired the stupa and monastery and constructed the thein (ordination hall) and donated the rice, flowers, slaves and lands for this stupa. According to this stone inscription, the author assumes that he may have encased and enlarged this stupa at Phaung Lin. The original stupa built by King Sawlu cannot be viewed from the outside now. Subsequently the existing outer stupa may have been built and encased by the king Thadoeminphyia or other successive kings. This stone inscription is currently No.415 of western inscription shed in the walled enclosure of Mahamuni stupa, Mandalay.

19. According to the Gudaw Phaya (temple) at Thakyin village and Shwe Moathtaw stupa stone inscription at Letpanyin village (see Figure 331), Inwa (DHRNL, 2013, Vol-5, pp. 216-219), inscribed by King Bodaw Phaya in 1785 CE, this stone inscription describes that there are two moathtaw stupas built by the King Asoka and these two stupas have been encased and repaired by the Minmaha Kaungsin from Than village in 1305 CE. It was mentioned that King Anawrahta built a temple (gu) in Thakyin village in 1064 CE and he donated the lands for this temple. Besides Prince Kalakya Minsithu (Narathu) donated the lands around this area. Minmaha Kaungsithu also donated the lands for these two moathtaw stupas. There is the strong inscriptional evidence regarding the moathtaw stupas encased and enlarged by a secondary donor from Than village in 1305 CE. It is currently No.122 of western inscription shed in the walled enclosure of Mahamuni stupa, Mandalay.

20. The Moathtaw Phaya stone inscription (see Figure 332) inscribed by the King Bodaw phaya in 1785 CE (DHRNL, 2014, Vol-6, pp. 35-38), describes that there is a small moathtaw stupa, Makkhaya region, encased and enlarged by the King Uzana as a large stupa attaining 48.00 metres in diameter in 1325 CE. It was mentioned that King Uzana donated slaves, lands and palm trees for the stupa, monastery, and ordination hall. In order to last the five thousand religious years, King Badaw Phaya donated again these lands and palm trees for these religious monuments. This stone inscription was inscribed by the King Bodaw regarding the encasement of the moathtaw stupa, which gives concrete evidence during the Pinya period. It is currently No.425 of western inscription shed in the walled enclosure of Mahamuni stupa, Mandalay.

21. According to the Moathtaw Phaya stone inscription (see Figure 333) at Manpaw village at the ancient city of Myin Khone Taing, inscribed by the King Bodaw Phaya in 1785 CE (DHRNL, 2014, Vol-6, pp. 94-96), the stone inscription mentions that there is a small moathtaw stupa encased and enlarged by the King Uzana as a larger stupa attaining 28.80 metres in diameter at Myin Khone Taing region in 1335 CE. It was mentioned that King Uzana donated the lands for this stupa in order to last the five thousand religious years. This is the strong inscriptional evidence regarding the encasement of the moathtaw stupa during the Pinya period. This stone inscription is currently No.42 of eastern inscription shed in the walled enclosure of the Mahamuni stupa, Mandalay.

22. The Moathtaw Phonemase stupa stone inscription (see Figure 334), which was originally located at Maoo Gyi village, Alone Myo, inscribed by the King Bodaw Phaya in 1785 CE (DHRNL, 2014, Vol-6, pp. 193-197), mentioned that there is a Moathtaw Phonemase stupa built by the King Asoka, is situated at Maoo Gyi village near Chindwin river and King Asoka donated lands for this stupa around these areas. It was mentioned that according to King Asoka's donation of the lands, King Narapati donated lands in order to offer light and rice for this stupa in 1342 CE. It is strong inscriptional evidence regarding the building activity of King Asoka. According to the outer stupa

with its architectural decorations at Maoo village, the author concludes that this stupa may have been encased and enlarged by the King Narapati and other successive Myanmar Kings in the different periods. Now this stone inscription is No.464 (Ka) of western inscription shed in the walled enclosure of Mahamuni stupa at Mandalay.



Table 12: List of Epigraphic Records regarding the Encasements Found in Myanmar

No.	Name of Inscription	Inscribed Year	Original Place	Existing Place
1	Manuha Temple Stone Inscription	1067-CE	Manuha Temple	No.9 of Mandalay Nan Twin Inscription shed, Mandalay
2	Hlai Htaung Phaya Stone Inscription	1111-CE	Taung Byone Gyi Region	No.4 of Mandalay Nan Twin Inscription shed, Mandalay
3	Shwe Kon Cha Temple Stone Inscription	1141-CE	Shwe Kon Cha Temple	Inside an Inscription shed to the northeast of its temple.
4	Anantathuya Couplle Stone Inscription	1223-CE	Lemyethna Temple	No.2 of the Inscription shed of Lemyethna Temple
5	Ink Inscription of Kyazin Temple	1223-CE	Kyazin Temple	Kyazin Temple
6	Ink Inscription of Thetkyamuni Temple	13th century CE	Thetkyamuni Temple	Thetkyamuni Temple
7	Kan Swet Kyaung Stone Inscription	1324-CE	Taung Pulu Pagoda to the northeast of Nge Toe Gyi Village, Kyaukse District	No.94 of Mandalay Nan Twin Inscription shed, Mandalay
8	Shwezigon Stupa Stone Inscription	1325-CE	Shwezigon Stupa, Ancient City of Makkhaya, Kyaukse District	Shwezigon Stupa, Ancient City of Makkhaya Kyaukse District
9	Nan Oo Stupa Stone Inscription	1329-CE	Nan Oo stupa, Ancient City of Myinsaing, Kyaukse District	Nan Oo Stupa, Ancient City of Myinsaing, Kyaukse District
10	Mahtaw Zedi Stone Inscription	1335-CE	Mahtaw Zedi at Tapekon Village, Myin Khone Taing, Kyaukse District	No.101 of Mandalay Nan Twin Inscription shed, Mandalay
11	Thayegu Phaya Stone Inscription	1336-CE	Thayegugyi Pagoda to the east of Kinton Village, Myin Khone Taing, Kyaukse District	No.114 of Mandalay Nan Twin Inscription shed, Mandalay
12	King Uzana Stone Inscription	1340-CE	It was found between the farmyard of U Tha Paw and Daw Tin May, Tadaoo Township	No.5 of Maw Kun Phaya Inscription shed, Saga Inn village, Tadaoo Township

No.	Name of Inscription	Inscribed Year	Original Place	Existing Place
13	Thaman Star Stone Inscription	1343-CE	Thaman Star Temple, Chaung Oo Township, Monywa District	Thaman Star Temple, Chaung Oo Township, Monywa District
14	Nga Kausg Yan Thin Couple, Headman of Pareinma Stone Inscription	1344-CE	Shwe Moathtaw Stupa, Pareinma Village, Monywa District	No.110 of Mandalay Nan Twin Inscription shed, Mandalay
15	Zigon Phayagyi Stone Inscription	1352-CE	Zigon Phayagyi	No.1 of Htupa Yon Inscription shed, Sagaing
16	Shwe Moathtaw Stupa Inscription	1764-CE	Near Shwe Moathtaw Zedi Thein, Nagabo Village, Depayin Town- ship, Shwebo District	Near Shwe Moathtaw Zedi Thein, Nagabo Village, Depayin Township, Shwebo District
17	Shwe Intein Stupa Stone Inscription	1785-CE	Shwe Intein Stupa, Intein Village, Nyaung Shwe Township	No.306 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay
18	Lemyethna Stupa and Monastery Stone Inscription	1785-CE	Shwe Sawlu Stupa, Phaung Village, Salin Township	No.415 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay
19	Gudaw Phaya (Temple) and Shwe Moathtaw Stupa Stone Inscription (Thakyin and Letpanyin Village)	1785-CE	Gudaw Temple and Shwe Moathtaw Stupa	No.122 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay
20	Moathtaw Phaya Stone Inscription (Makkhaya Myo)	1785-CE	Moathtaw Phaya (Stupa), Makkhaya Myo	No.425 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay
21	Moathtaw Phaya Stone Inscription (Manpaw village at Myin Khone Taing)	1785-CE	Moathtaw Phaya (Stupa), Manpaw Village	No.42 of Eastern Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay
22	Moathtaw Phonemase Stupa Stone Inscription (Maoo Gyi Village at Alone Myo)	1785-CE	Moathtaw Phonemase Stupa, Maoo Gyi Village, Alone Myo	No.464 (Ka) of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay

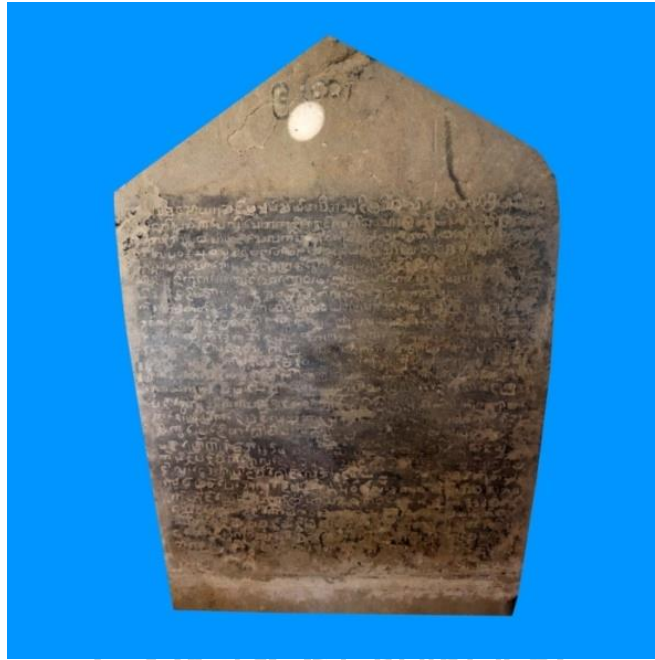


Figure 315: Manuha Temple Stone Inscription
 Note. It is No.9 of Mandalay Nan Twin Inscription shed, Mandalay.

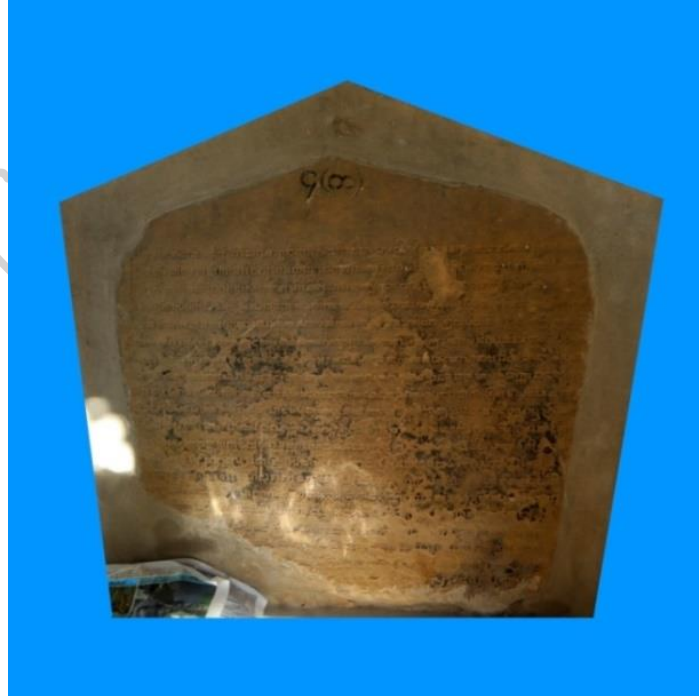


Figure 316: Hlai Htaung Phaya Stone Inscription
 Note. It is No.4 of Mandalay Nan Twin Inscription shed, Mandalay



Figure 317: Shwe Kon Cha Temple Stone Inscription

Note. It is located inside an inscription shed to the northeast of its temple

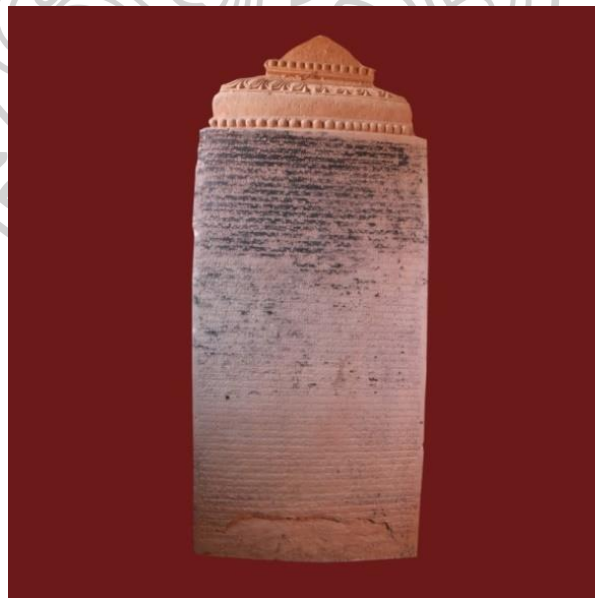


Figure 318: Anantathuya Couple Stone Inscription

Note. It is No.2 of the Inscription shed of Lemyethna Temple.

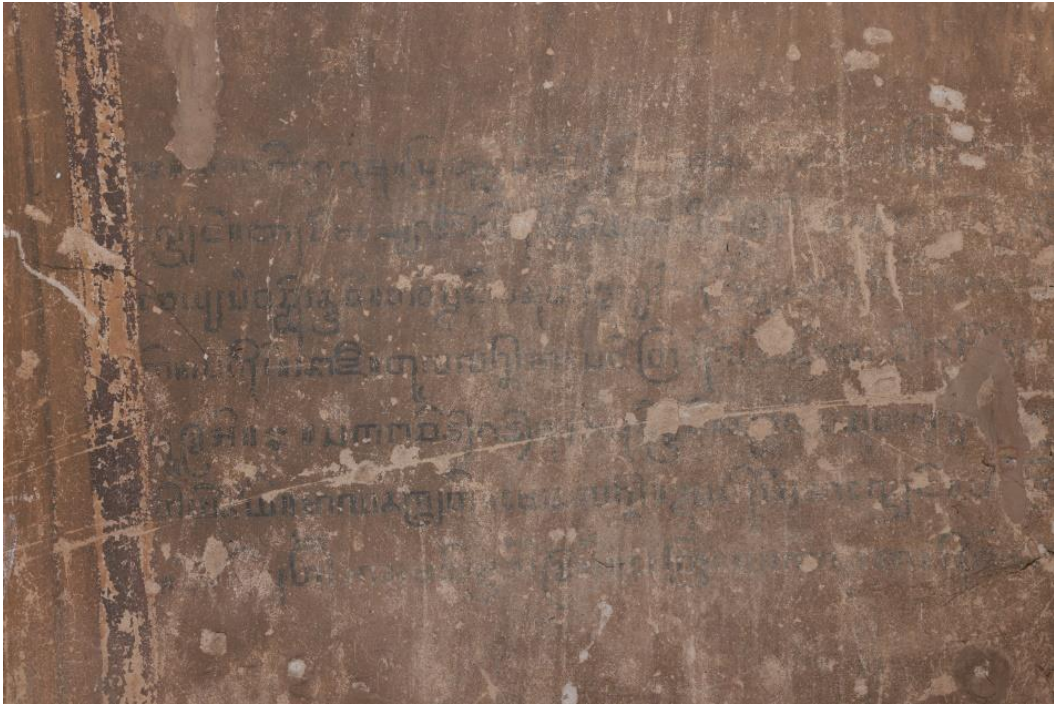


Figure 319: Ink Inscription of Kyazin Temple

Note. It is located in Kyazin temple.



Figure 320: Ink Inscription of Thetkyamuni Temple

Note. It is located in Thetkyamuni temple.



Figure 321: Kan Swet Kyaung Stone Inscription
 Note. It is No.94 of Mandalay Nan Twin Inscription shed, Mandalay.

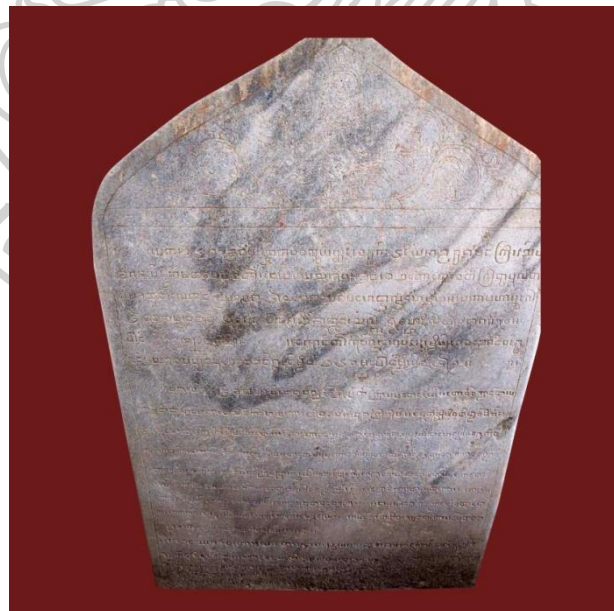


Figure 322: Shwezigon Stupa Stone Inscription
 Note. It is located in Shwezigon stupa at Makkhaya, Kyaukse district.



Figure 323: Nan Oo Stupa Stone Inscription

Note. It is loated in Nan Oo stupa at Myinsaing, Kyaukse district.



Figure 324: Mahtaw Zedi Stone Inscription

Note. It is No.101 of Mandalay Nan Twin Inscription shed, Mandalay.



Figure 325: Thayegu Phaya Stone Inscription
 Note. It is No.114 of Mandalay Nan Twin Inscription shed, Mandalay.



Figure 326: King Uzana Stone Inscription

Note. It is No.5 of Maw Kun Phaya Inscription shed, Saga Inn village, Tadaoo Township.



Figure 327: Nga Kausg Yan Thin Couple, Headman of Pareinma Stone Inscription
 Note. It is No.110 of Mandalay Nan Twin Inscription shed, Mandalay.



Figure 328: Zigon Phayagyi Stone Inscription
 Note. It is No.1 of Htupa Yon Inscription shed, Sagaing.

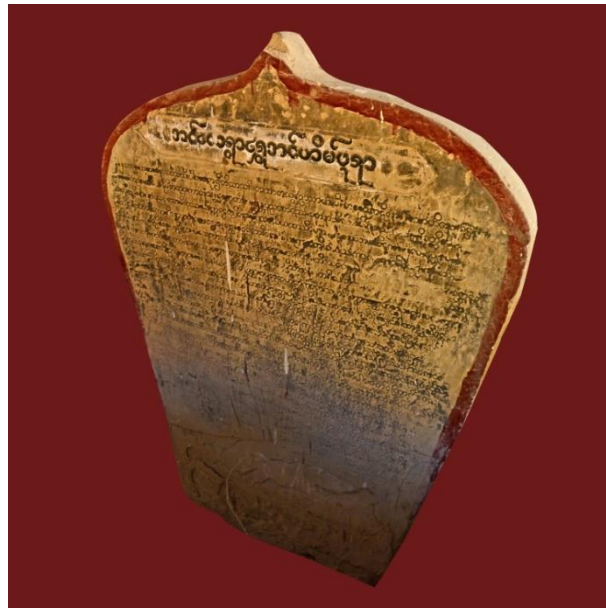


Figure 329: Shwe Intein Stupa Stone Inscription

Note. It is No.306 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.



Figure 330: Lemyethna Stupa and Monastery Stone Inscription

Note. It is No.415 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.



Figure 331: Gudaw Phaya (Temple) and Shwe Moathtaw Stupa Stone Inscription (Thakyin and Letpanyin Village)

Note. No.122 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.

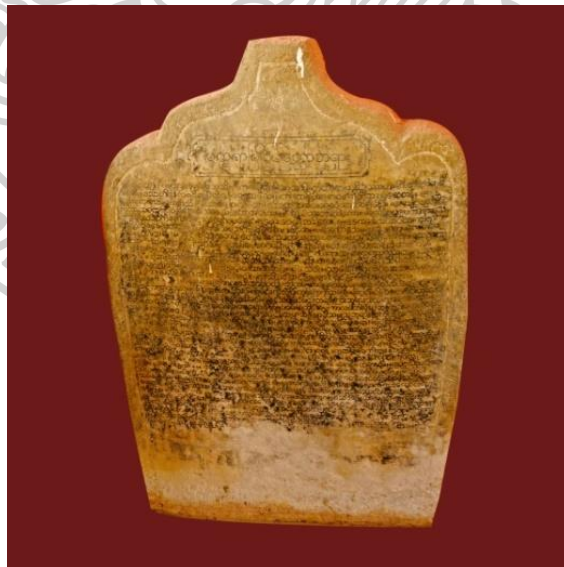


Figure 332: Moathtaw Phaya Stone Inscription (Makkhaya Myo)

Note. It is No.425 of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.

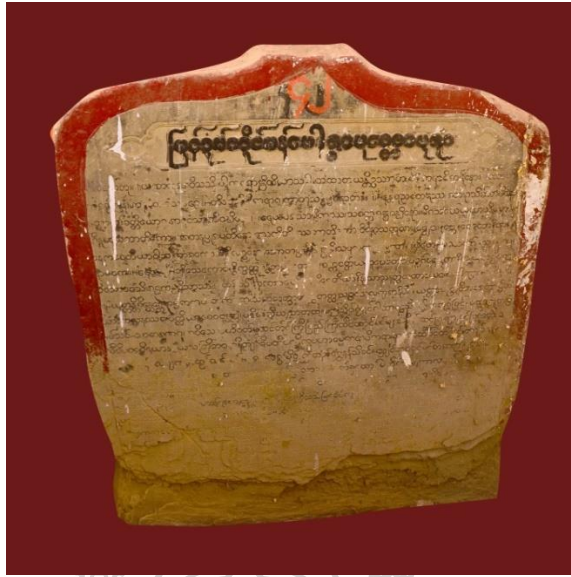


Figure 333: Moathtaw Phaya Stone Inscription (Manpaw village at Myin Khone Taing)

Note. It is No.42 of Eastern Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.



Figure 334: Moathtaw Phonemase Stupa Stone Inscription (Maoo Gyi Village at Alone Myo)

Note. It is No.464 (Ka) of Western Inscription shed in the walled enclosure of Mahamuni Stupa, Mandalay.

6.2 Religious Concepts

According to ancient chronicles like the Mahavamsa and archaeological excavations in India and Sri Lanka, the relics of the Buddha bodily, hair, tooth, collar bone and the Lord Buddha's larynx were enshrined in stupas in India and Sri Lanka. The enshrining the relics of the Buddha, the relics of the Buddhist saints, and the ashes of the hero kings in the Buddhist stupas was for worship and veneration of the religious ideals embodied by these personages. In Myanmar, the relics of Buddha like the tooth relic duplicate supplied by the King of Sri Lanka, the collar bone, and the frontlet relic, the ashes of the Buddhist saints like the monk named Shin Arahan at Bagan, the ashes of the renowned Kings and Queens at Srikshetra, ancient Myanmar are enshrined in Buddhist stupas (Aung Thaw, Myint Aung, Sein Maung Oo, and Than Swe, 1993) in order to worship and venerate the stupas for religious purposes. This custom, as noted earlier, is found in other regions as well.

6.2.1 Religious Idea in India

A brick stupa (see Figure 335) which may have been built in pre-Asokan times is situated at Piprahwa in Siddharthnagar district, Uttar Pradesh province, India. The stupa, built of large brick, has a diameter of 35 metres and an extant height of 6.6 metres. In this stupa, a figure in gold relief, representing the mother-goddess in a frontal pose, crystal casket (see Figure 336), inscribed steatite casket (see Figure 342) and a vase inscribed in characters believed to be pre-Asokan times among its relics were recovered. According to the inscriptions on the relic casket, the relics found in this stupa pertained to Buddha himself (ASI, 1996, p. 88). In order to worship and venerate the stupa in pre-Asokan times, the inscriptional evidence indicates that there were the relics of the Buddha put inside the inscribed reliquary enshrined in the stupa. This is also strong inscriptional evidence of the use of the Buddha's relics for religious purposes.

Archaeological evidence in India (Mitra, 1971) indicates that there are some encased stupas like Sanchi, Satdhara, Bharhut, Buddha relic stupa at Vaishali. In these stupas, the relics of the Buddha, and the relics of the Buddhist saints like the chief disciples of the Buddha are enshrined inside the inner stupas in order to worship and venerate

for religious idea. There is a Buddha relic stupa located at Vaishali district, Bihar state in India. It is one of the eight original relic stupas built over the corporeal remains of Buddha. According to Buddhist traditions, after the demise of the Buddha, his body was cremated by the Mallas of Kushinagar with a royal ceremony befitting a universal King and the mortal remains were distributed among the eight claimants including the Lichchhavis of Vaishali. This stupa was originally a small mud stupa measuring 8.07 metres in diameter built in the 5th century BCE. Subsequently it was encased with bricks and enlarged in four times, which increased the diameter to 12.00 metres during the Maurya, Sunga, and Kushan periods (Mitra, 1973). The ayaka projections noticed towards south and east give probably the earliest example of ayakapattas. The most remarkable discovery in this stupa is the soapstone relic casket partly filled with ashy earth besides a small conch, two glass beads, a fragmentary piece of gold leaf, and copper punch marked coin. The discoveries of the Buddha's relic stupa with associated wares are the concrete archaeological evidence for worship and religious ideas regarding the traditional customs.

Archaeological Excavations in India indicate that there are some relic caskets such as a large round stone box with a green marble relic-casket inside recovered in Dharmarajika stupa at Sarnath, a copper relic casket found in Nandangarh stupa, a soapstone relic casket found in a stupa at Vaishali, gold, seven crystal and ivory relic caskets found in Amaravati stupa (see Figure 337) (Mitra, 1971). These relic caskets are made of different materials that diminish in size to the innermost layer. The relics of the Buddha found in India were also enshrined in stupas. These relics of the Buddha are mostly put into the reliquaries using many layers to be protected and preserved from the natural disasters and vandalism. According to the archaeological excavations in India, these reliquaries are mostly found at the centre and bottom of the stupas to protect the relics of the Buddha for security purpose. The placement and enshrinement of the Buddha's relics inside the multiple layers of the reliquaries found from the Buddhist stupas in India, are in order to worship for the religious ideas.



Figure 335: Piprahwa Stupa in Siddharthnagar district, Uttar Pradesh province, India
 Note. The relics of Buddha inside the inscribed reliquary are found in this stupa, by
 J.K. Tiwari. Copyright 2022 by Jalaj Kumar Tiwari.



Figure 336: Crystal Casket Found at Piprahwa Stupa.
 Note. The casket with a lid can be seen here. From Buddhist Monuments. Sahitya
 Samsad, Photo.34, by D. Mitra. Copyright 1971 by Debala Mitra.

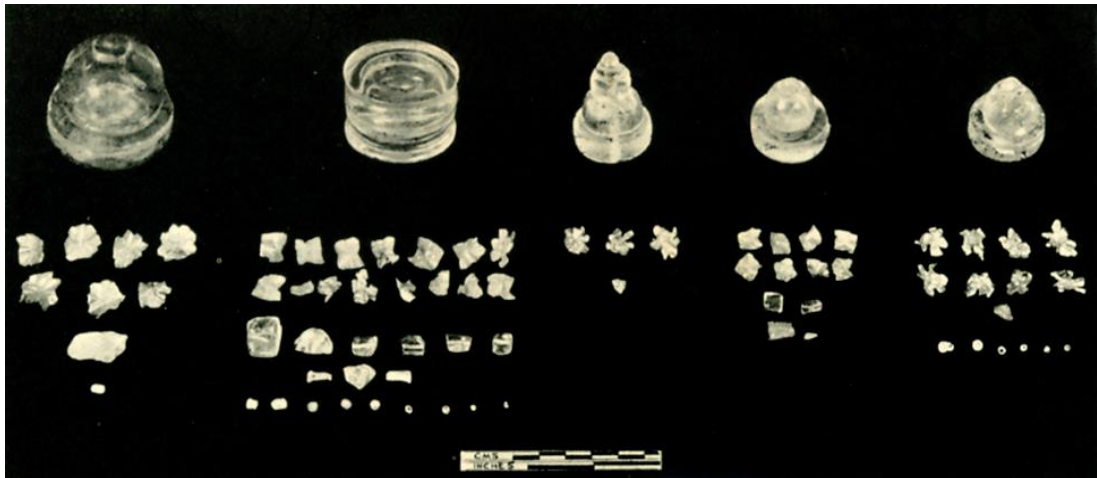


Figure 337: Relic Caskets Found at Amaravati Stupa

Note. The relic caskets were found at the southern ayaka of Amaravati stupa. From Buddhist Monuments. Sahitya Samsad, Photo.123, by D. Mitra. Copyright 1971 by Debala Mitra.

6.2.2 Religious Idea in Sri Lanka

Archaeological evidence in Sri Lanka (Ministry of Cultural Affairs, 1981; Ministry of Cultural Affairs, 1982) describes that there are some encased stupas like Mahiyangana, Thuparama, Dakkhina, Mirisawetiya, Ruwanweli, and Vatadage in Polonnaruwa. The hair and larynx relics of the Buddha in Mahiyangana stupa, the right collar-bone of the Buddha in Thuparama stupa, ashes of the King Duthagamani in Dakkhina stupa, the relics of the Buddha in Mirisawetiya stupa, the bodily remain of the Buddha in Ruwanweli stupa, and the relics of the Buddha in Vatadage in Polonnaruwa are enshrined in these stupas for religious purpose. Some relic caskets (see Figure 338) are found in Ruwanweli Dagaba, Anuradhapura, Sri Lanka (Fernando, 1965). The relic of the Buddha may have been put inside the multiple layers of the relic caskets made of different substances to protect for the security of the relics, which is the objectives of the religious idea. According to the archaeological excavations in Sri Lanka, the relics of the Buddha with the reliquaries have mostly been discovered at the centre of the stupas, on the floors or platforms in Sri Lanka, as possibly consecrated deposits (Revire, 2015, p. 183). These relic caskets unearthed in Sri Lanka also diminish in size to the innermost layer. The author assumes that the multiple layers of the reliquaries are very similar to the concepts of the encasements as noted at the start of this chapter.

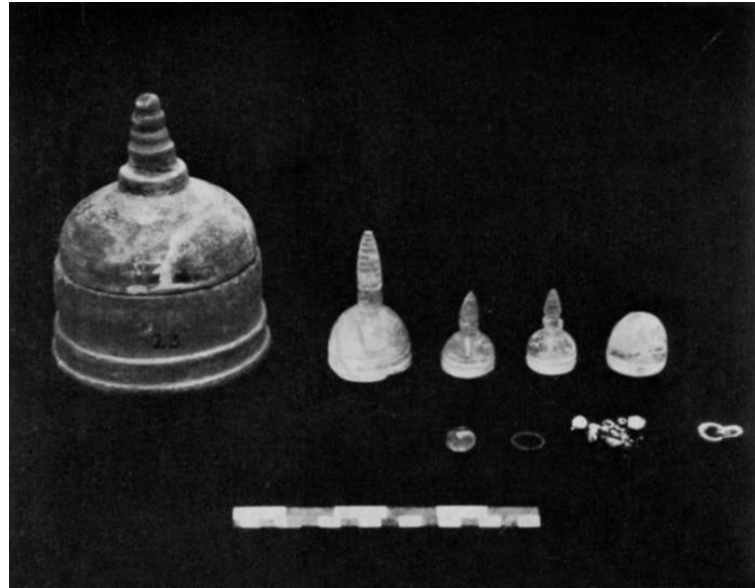


Figure 338: Reliquaries Found at Ruwanweli Stupa, Anuradhapura, Sri Lanka Note. The reliquaries are seen in this photograph. From Ancient City of Anuradhapura. The Archaeological Department, Government Press, p. 20, by W. B. M. Fernando. Copyright 1965 by W. B. Marcus Fernando.

6.2.3 Religious Idea in Thailand

The relics of the Buddha are also enshrined in stupas at important temples throughout Thailand to be venerated for religious purposes. In fact, relics of the Buddha in Thailand have been archaeologically excavated from nine major archaeological sites of the Dvaravati, Sukhothai, Lanna, Ayutthaya and Rattanakosin periods. Some of them are now kept in the Ratchaburi National Museum in Ratchaburi, the Ramkhamhaeng National Museum in Sukhothai, the Chiang Mai National Museum, the Chao Sam Phraya National Museum in Ayutthaya, and the National Museum in Bangkok (Svasti, 2016). Also in Thailand, the Buddha's relics in the inner chambers into which miniature statues of the Buddha, votive tablets are enshrined in a few stupas and sometimes gold and silver amulets are placed at the time of stupa construction. Sometimes the ashes of the kings and the royal families, the ashes of ordinary pious Thais are enshrined in the smallest stupas in a temple compound. The Buddhist stupas in Thailand are enlarged over time by encasing the older stupa in a new shell. The secondary donors in Thailand would like to encase to protect the inner

stupas, which enshrined valuables such as large golden Buddha images, jewelries, golden materials, and amulets so that due to encasement the treasure seekers and thieves cannot loot them (Byrne 1995, pp. 266-279). This is strong archaeological evidence regarding the encasement for religious idea to protect the relics of the Buddha. Reliquary-Type Stupas (see Figure 339) using for religious idea, have been Found at the Eastern Stupa, Wat Phra Si Sanphet, Ayutthaya in Thailand.



Figure 339: Reliquary-Type Stupas Found at the Eastern Stupa, Wat Phra Si Sanphet, Ayutthaya

Note. The seven reliquary-type stupas are seen in this photograph. From History of Ayutthaya: Temples & Ruins, Wat Phra Si Sanphet

(https://www.ayutthayahistory.com/Temples_Ruins_PhraSisanphet.html). Copyright 2016 by Tricky Vandenberg.

6.2.4 Religious Idea in Myanmar

The Manuha stone inscription mentioned that King Manuha built a small stupa called Mahtaw or Moathtaw stupa, which enshrined the Buddha's relics and he encased with three huge seated Buddha images and one recumbent Buddha image over the small stupa to protect the relics of the Buddha in 1067 CE. He built these Buddha images within six months and six days after selling his ring to a rich man from Myinkaba (Nyein Maung, 1972, Vol-1, pp. 322-323). Inscriptional evidence indicates that King Manuha enshrined the relics of the Buddha in a moathtaw stupa to be worshipped for religious idea. According to the Shwe Kon Cha temple stone inscription dating 1141 CE (Nyein Maung, 1972, Vol-1, pp. 143-151), it was mentioned that the relics of the Buddha were placed and enshrined in the two golden *patho* (miniature stupas), and other *patho* made of the different substances, together with three golden umbrellas and nine white umbrellas inside the reliquary. This stone inscription describes that the relics of the Buddha are placed together with miniature stupas inside the reliquary in order to worship for religious purpose. The Anantathuya Couple stone inscription dated 1223 CE (Nyein Maung, 1972, Vol-1, pp. 151-163) also describes that the relics of the Buddha are placed and enshrined by the eight layers of the reliquaries made of the different substances at Lemyethna temple, Minnanthu village, Bagan. The Thaman Star stone inscription dated 1343 CE (Nyein Maung, 1983, Vol-4, pp. 50-54), mentions that both the monk named Maha Upalawun and Thaman Star had the relics of the Buddha, which were placed and encased by three layers of the reliquaries: a golden relic casket, a silver casket, and a small stone stupa with a golden umbrella enshrined at Thaman Star temple. In these stone inscriptions, it recorded that the traditional custom of the placement and enshrinement of the relics of the Buddha in the reliquaries is in order to worship and venerate for religious ideals.

There are four tooth relic stupas at Bagan region. These stupas are Shwezigon, Tant Kyi Taung, Lokananda, and Turintaung stupas, built by the King Anawrahta in the 11th century CE. Among the four tooth relic stupas, the two stupas named Shwezigon and Tant Kyi Taung are the encased stupas at Bagan. The tooth relic duplicate of the Buddha presented by the King of Sri Lanka are enshrined in these stupas. Traditions said that the collar bone and frontlet relic of the Buddha are also enshrined in

Shwezigon stupa in 1059 CE (Aung Kyaing, 2017). In these encased stupas, enshrining the relics of the Buddha is in order to worship and venerate the stupas for religious practice and sustaining the religion. After the earthquake occurred in 1975, the reliquaries (see Figure 340 & 341) made of different substances like gold, silver, bronze, and sandstone, were found at Lokananda stupa (Aung Kyaing (Minbu), 1992) and Mahabodhi temple at Bagan. In these monuments, it recorded strong archaeological evidence regarding the concept of encasement for religious purposes since the Bagan period. The author assumes that the reliquaries may have been used to place and enshrine the relics of the Buddha in the Bagan period for religious purpose. According to the legend, there are a number of moathtaw stupas, which may have been built by the King Asoka in Myanmar (Bo Kay 1981, pp. 220-222). People believe that the relics of the Buddha are enshrined in each moathtaw stupas in his reign in order to worship for religious idea.

The history of Shwedagon stupa in Myanmar also records that relics of the three preceding of the Buddhas, namely the staff, the water-dipper and the lower garment are discovered on the excavation of this site where the Shwedagon stupa was built. These relics were re-enshrined together with the eight sacred hairs of the Gotama Buddha brought by the two brothers Taphussa and Bhallika from Okkala (Yangon), into the Shwedagon stupa (Aung Thaw, 1972). Shwedagon stupa is one of the encased stupas in Myanmar. Successive Myanmar Kings and donors in the different periods ritually re-enshrined these relics and encased numerous times in this stupa in order to worship and venerate for religious purpose. While not at Bagan, the pre-eminent role of the Shwedagon supports its inclusion here.



Figure 340: Relic Caskets Found at Lokananda Stupa, Bagan
Note. These relic caskets can be seen in the Bagan archaeological Museum.



Figure 341: Relic Caskets Found at Mahabodhi Temple
Note. These relic caskets can be seen in the Bagan Archaeological Museum.

6.3 Socio-Political Ideas

Bagan was the heart of the largest Buddhist empire of the medieval world, a centre of an economic, socio-political and cultural network in active exchange with other parts of the region. The Buddhist culture of Bagan, enriched by its synthesis of Pala Indian styles and local doctrines, generated religious and royal interchange and attendant administrative hierarchies demonstrated in extensive architecture, mural paintings, and epigraphic records. The construction of Buddhist monuments at Bagan enabled donatory exchange to and from court. Bagan emerged as the capital of this empire from the 10th century CE, with its peak period being from the 11th to 13th centuries CE, and it was the primary focus of the religious activity in the Bagan period. The Buddhist tradition of merit-making was a powerful force in the creation of Bagan and there are numerous religious structures still surviving at Bagan.

Socio-political idea at Bagan is the integration of social and political life, with the social character of village life (the heart of Bagan) being Buddhism and support of the community of monks. So the stupas and temples manifest royalty and social hierarchy in demonstrating power through donatory activities. The kings ruled in the Bagan period taught proper actions and morals by their actions reinforcing the Buddha's teachings through the artistic works such as the murals, glazed plaques, and terracotta plaques.

There are numerous socio-political ideas at the Buddhist monuments in India, Sri Lanka, Thailand and Myanmar. The mud Buddhist structures have been found at the Buddhist sites in India and there are also some mud structures in Kapilavastu, one of the Buddhist sites in Nepal. Subsequent donors enlarged and encased with bricks or stones, to strengthen and last a long time without becoming damaged these original mud structures built by the primary donors for the development of the Buddhist structure as the part of socio-political ideas. Inscribed reliquaries regarding the relics of the Buddha found at Pipahwa stupa and Bhattiprolu stupa and inscribed reliquaries regarding the relics of the chief disciples of the Buddha, Sariputa and Mahamogalana, recovered stupa-3 at Sanchi and stupa-2 at Satdhara, and inscribed reliquaries from Sanchi Stupa-2 and the four other Bhilsa Tope sites relating to a group of Hemavata teachers led by an individual named Gotiputa, are very important discoveries for religious and socio-political ideas. The inscribed copper relic casket was discovered at

the Shah-ji-ki-dheri which is the site of an ancient Kanishka stupa, Peshawar in Pakistan. Inscribed stone burial urns and an inscribed gilded silver relic casket were found at Srikshetra, Myanmar. The ashes of the heroic Kings of Ceylon (Sri Lanka), Thailand, and Myanmar buried in the stupas are also important contribution for socio-political ideas. Besides there are some Buddhist monuments with circumambulatory paths found in India, Thailand, and Myanmar. These paths are provided not only to venerate and move around the stupa but also to observe the sculptures and decorations on stupa as part of their political stature in order to be larger and durable for the development of Buddhist structures. Epigraphic records in the Pinya period indicate that King Uzana encased and enlarged to be larger and durable the eight original small stupas built by the primary donors for the growth and development of Buddhism and Buddhist structures as the part of the over-arching structure of socio-political ideas at the time.

6.3.1 Mud and Brick Structures

In Kapilavastu, there are the twin stupas in Dhamnihawa, Nepal, ancient India. Rijal suggests that the larger stupa, dedicated to the father of Buddha was built during the N.B.P period (6th century BCE) and then the smaller stupa, dedicated to the Queen Maha devi, the mother of Buddha was built. The centre of the larger stupa comprises a mud stupa. In the second phase of construction, the mud stupa was encased by tapered bricks (Rijal, 1979; pp. 39-42). Archaeological evidence indicates that the inner stupa of the larger one was originally made of mud and it was encased and enlarged with bricks in later times. The secondary donor enlarged and encased with bricks the inner mud structure built to be strengthened and elaborated for the socio-political idea in order to last a long time for the development of Buddhism and Buddhist structures. According to the archaeological excavations, the inner mud structure may have been built during the lifetime of the Buddha.

There is a Buddha's relic stupa built by Lichchhivi and it was encased and enlarged by the later Kings in successive periods in Vaishali. Original inner structure which may have been built in pre-Asokan times, was made of mud and it was encased in four times with bricks to be strengthened and elaborated. Most of the Buddhist stupas in India, built in pre-Asokan times are mud structures and the stupas built in the

Mauryan period are both mud and brick structures (Mitra, 1971). According to the archaeological excavations, the inner stupa of Sanchi is originally brick structure and it was encased and enlarged with stones to become stronger in the Sunga period. The inner stupas in the Mauryan period are built most frequently of mud which deteriorated easily; others were brick structures. In later times, subsequent donors out of concern for damage and disappearance of the original mud structures, encased and enlarged with stones or bricks to strengthen and enlarge, often five or six times by the subsequent kings. The socio-political ideas framing their actions are an essential part of the growth and prosperity of Buddhism and Buddhist structure. The original structures built in the Mauryan period are simple in design but in later times, more decorated (Mitra, 1971; ASI, 1996, pp. 85-88). Generally, inner stupas are older and smaller, while outer stupas are younger and larger in size in India, Sri Lanka, Thailand, and Myanmar. Thus another motivation of the next donors was to erect more elaborate and larger structures than the original ones built by the primary donors for socio-political ideas. There are numerous encased monuments in India, Sri Lanka, Thailand, and Myanmar. In order to be stronger and larger Buddhist structures, the concept of the encasement is very important contribution for the socio-political idea.

6.3.2 Inscribed Reliquaries

Sanchi and four other Buddhist sites like Sonari, Satdhara, Morel khurd and Andher in India, situated about 10 kilometres of Sanchi, were firstly discovered by Alexander Cunningham in 1854. The inscribed reliquaries from these sites indicate that they were linked to a group of Hemavata teachers led by an individual named Gotiputa. The Hemavatas may have arrived in Vidisha in the second century BCE (Sunga period). They took over the older sites of Sanchi and Satdhara and established new centres at Sonari, Morel khurd and Andher. According to the inscribed relic caskets, the relics of Sariputa and Mahamogalana, chief disciples of the Buddha were fortunately recovered stupa-3 at Sanchi and stupa-2 at Satdhara (Mitra, 1971, pp. 96-99; Mitra, 2001; Shaw, et al. 2009). Inscriptional and archaeological evidence indicate that these are very important discoveries in Buddhist archaeology, showing the religious and socio-political ideas.

Bhattiprolu village is situated in Guntur district, Andhra Pradesh state, India. Three unexcavated mounds were found at Bhattiprolu village in 1870. Archaeological excavations in this site were conducted by Alexander Rea in 1892 and three inscribed stone reliquaries containing crystal reliquaries, Buddha's relics and jewels were unearthed (Sajnani, 2001, p. 66). The base of the great stupa measuring 40 metres in diameter was recovered in this site. These relics of the Buddha with a crystal relic casket were discovered at the centre of the stupa. Besides a silver reliquary, a gold reliquary, a stone receptacle, a copper vessel and numerous Buddha images were recovered in the great stupa at Bhattiprolu. Brahmi scripts which were inscribed on an urn comprising Buddha relics were found at Bhattiprolu in south India (Sajnani, 2001, p. 66). This is concrete inscriptional and archaeological evidence, enshrining the relics of the Buddha for religious and socio-political purposes. It was proved that the donors were mostly motivated by the religious and political concepts to see as a remarkable relic stupa not only for worshipping and veneration but also to enhance the social and political ideas with inscribed reliquaries in stone regarding the relics of the Buddha. The inscriptional evidence at Bhattiprolu stupa indicates that King Kuberaka ruled over Bhattiprolu around 230 BCE. Bhattiprolu is well known for its Buddhist stupa built about 3rd-2nd centuries BCE and Buddha's relics were enshrined in this stupa (Sajnani, 2001, p.66). The inscribed copper relic casket (see Figure 343) discovered at the Shah-ji-ki-dheri, Peshawar describes that these inscriptions documents the Kushan ruler Kanishka (Mitra, 1971, pp.118-120). According to the inscribed reliquaries describing their names, it can be seen that most of the donors were motivated by both religious and socio-political concepts, wanting to see the relic-imbued stupa be more celebrated for veneration but also to enhance the associated social and economic benefits.

The four inscribed stone burial urns (see Figure 345, 346, 347, and 348) were discovered 183 metres to the south of Phayagyi stupa in Sri Kshetra in 1911-12. An Inscribed stone burial urn (see Figure 349) was discovered Payahtaung pagoda in 1993. It recorded that the royal entitles of the kings and their ages, reigns and the dates of their demise, the former stone urn names "Hrivikrama, Sihavikrama and Suravikrama", the later "Devamitra, Dhammaditravikrama, Brahimhtuvikrama,

Sihavikrama, Suriravikrama, Harivikrama and Ardhitravikrama”, their dates belong to 7th-8th Century A.D. and, successors of Vikrama Dynasty. The inscribed gilded silver relic casket (see Figure 344) was discovered at the Khinba mound in 1926-27 describes that “Sri Prabhu Varman and Sri Prabhu Devi”, the Sanskrit name of royal donors king and queen datable to the 5th-7th century CE (Varman Dynasty) (Aung Thaw, Myint Aung, Sein Maung Oo, and Than Swe, 1993). These inscribed burial urns and a gilded silver relic casket found at Srikshetra, Myanmar are also important discoveries showing the religious and socio-political ideas.

6.3.3 Buddhist Monuments with Circumambulatory Paths

In 1873, when Alexander Cunningham, a world-famous archaeologist and the father of Indian archaeology, found Bharhut stupa located at Madhya Pradesh state, India, he excavated this stupa. According to the archaeological excavations in this stupa, it is one of the encased stupas in India and there is a circumambulatory path found during the excavations (Cunningham, 1879). This was a small stupa compared to the two larger ones at Sanchi, or the stupas at Bhattiprolu, and Amravati stupa, but the sculptural details are phenomenal. This circumambulatory corridor was provided not only to venerate and move around the stupa but also to observe the sculptures and ornamentations on stupa as part of the socio-political ideas.

In Dharmayajika stupa located at Sarnath, for example, archaeological excavations revealed six successive encasements. There are additions of circumambulatory path (*pradakshina-patha*) in the second and third enlargements in this stupa (Mitra 1971, pp. 66-69). Between the railing and the drum there was a circumambulatory passageway in Amaravati stupa that was a later addition (Mitra, 1971, pp. 200-204).

In contrast, Phra Pathom stupa also had a circumambulatory corridor in Thailand. Soni noted that it is an example of encasement enveloping the original shrine with a space, fulfilling King Mongkut’s wish to protect the relics (Soni, 1991). The author assumes that prior to King Rama IV restoring the stupa, Phra Pathom stupa at that time was surmounted by prang inspired by a Khmer prasat. After King Rama IV’s encasement, there was a gallery path between the older and encased outer stupas. All

these buildings comprise circumambulatory paths which have been provided not only to venerate and move around the stupa but also to observe and study the sculptures and decorations on these monuments as part of their political stature.

In contrast, there are numerous moathtaw stupas in the various parts of Myanmar (Bo Kay 1981, pp. 220-222). These often have stone inscriptions describing the structures built by the King Asoka, so that while traditional concepts, the inscriptions give us good evidence of the belief being active during the Bagan era. Some moathtaw stupas built by the successive Kings in the different periods are solid stupas, but some are the hollow temples with corridors. There are three moathtaw stupas, which had the corridors at Bagan. All of the moathtaw stupas are the encased Buddhist stupas in Myanmar. Temple No.1182, which is a unique unusual-shaped temple, is one of the encased temples at Bagan. In this temple, there is a circumambulatory corridor between the inner and outer structures. A circumambulatory corridor or space is not only in order to worship and venerate the inner stupas but also to move around the stupas and to study and observe their art and architecture on the inner and outer stupas as their socio-political ideas.

There are by present count, eighty-three encased monuments at Bagan, which is the richest area of Buddhist monuments in Myanmar. Among these monuments, most of the secondary donors encased and enlarged the inner structures built by the primary donors for the growth and development of Buddhism and Buddhist structures as their socio-political stature in order to be stronger, larger and durable.

6.3.4 The Ashes of the Heroic Kings Enshrined in Buddhist Monuments

According to the archaeological excavation in Sri Lanka, Dakkhina dagaba (stupa), Anuradhapura in Sri Lanka was an encasement and enlargement of the earlier construction that was built over the ashes of Duthagamani. In this site, traces of charcoal and ashes were found in the centre of the dagaba. The Kujjatissa Pabbata (stupa) in Anuradhapura, dating to about the 8th century CE, is situated outside the south gate of the city, where the ashes of the Elara were buried by King Duthagamani (Ministry of Cultural Affairs, 1981, p. 21). Archaeological evidence indicates that the importance of these discoveries, showing the religious and socio-political ideas regarding the burying the ashes of the heroic Kings of Ceylon in this stupa.

In Wat Phra Si Sanphet, according to the Royal Chronicles of Ayuttha (2006), the first chedi on the eastern side was constructed by King Ramathibodi II (1491-1529 CE) to enshrine the ashes of his father, King Borommatrailokanat (1448-1463 CE) in 1492 CE. The second chedi, which is currently the middle one, was constructed at the same time as the first to enshrine the ashes of his elder brother, King Borommaracha III (1463-1488 CE). After 40 years, the third (western) chedi was constructed by King Boromracha IV (1529-1533 CE) to enshrine the remains of his father, King Ramathibodi II (Cushman, 2006). According to the Royal Chronicles of Ayutthaya, the King U Thong (1350-69 CE) arranged for the cremation of two princes known as Chao Keo and Chao Thai (Cushman, 2006). After cremation of their remains, the king constructed a temple named Wat Pa Kaeo, and a stupa and an assembly hall were built in their memory. Their ashes may have been enshrined in this stupa. This evidence indicates that the importance of these discoveries, showing the religious and socio-political ideas regarding the enshrining the ashes of the heroic Kings of Ayutthaya in this stupa. According to the ashes of the heroic Kings and royal families enshrined in the Buddhist monuments in Sri Lanka, Thailand, and Myanmar, it can be seen that most of the donors were motivated by both religious and socio-political concepts, wanting to see the relic-imbued stupa with their names be more celebrated for veneration but also to enhance the associated social and economic benefits.

6.3.5 The Buddhist Stupas Built by King Uzana in Myanmar

Epigraphic records describes that there are eight stupas encased and enlarged by King Uzana in the Pinya period. The Tamote Shwegugyi temple encased by King Uzana is also included. The Shwezigon stupa stone inscription dated 1325 CE (see Figure 322) (Moe, 2008), located at the ancient city of Makkhaya, Kyaukse region, recorded that King Uzana enlarged and encased a previous small stupa (Mahtaw stupa). The Nan Oo stupa stone inscription dated 1329 CE (see Figure 323) (Nan Oo stupa stone inscription, 2007), also mentioned that King Uzana enlarged and encased a previous small stupa to be larger, strengthened and more elaborate.

According to the Mahtaw Zedi stone inscription dated 1335 CE, originally found Mahtaw Zedi (stupa) to the south of Tapekon village at the ancient city of Myin

Khone Taing (Myingondaing), Kyaukse region, Myanmar, King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to be larger and more elaborate measuring 28.80 metres in diameter (Nyein Maung, 1983, Vol-3, pp. 351-352). According to the Thayegu Phaya stone inscription dated 1336 CE, there was a small ruined stupa rebuilt and encased by King Uzana to be more elaborate and larger stupa measuring 27.89 metres in diameter. This stone inscription was originally found at Thayegugyi pagoda to the east of Kinton village, Myin Khone Taing region, Kyaukse District (Nyein Maung, 1983, Vol-1-3, p. 357).

According to the King Uzana stone inscription dated 1340 CE, originally found between the farmyard of U Tha Paw and Daw Tin May, Tadaoo Township, Mandalay, Myanmar, a secondary donor, King Uzana, encased the inner stupa, which has been built by his son Saw Htwe up to 13.72 metres in diameter. King Uzana enlarged and elaborated the inner one to be stronger and strengthened the stupa (Nyein Maung, 1983, Vol.4, p. 13). The Moathtaw Phaya stone inscription (see Figure 332) inscribed by the King Bodaw phaya in 1785 CE (DHRNL, 2014, Vol-6, pp. 35-38), describes that there is a small moathtaw stupa, Makkhaya region, encased and enlarged by the King Uzana as a large stupa attaining 48.00 metres in diameter in 1325 CE. The Moathtaw Phaya stone inscription (see Figure 333) at Manpaw village at the ancient city of Myin Khone Taing, inscribed by the King Bodaw Phaya in 1785 CE (DHRNL, 2014, Vol-6, pp. 94-96), the stone inscription mentions that there is a small moathtaw stupa encased and enlarged by the King Uzana as a larger stupa attaining 28.80 metres in diameter at Myin Khone Taing region in 1335 CE.

According to some stone inscriptions inscribed by the King Uzana, he has encased and enlarged numerous inner stupas in his reign for the prosperity and development of Buddhism. These epigraphic records confirm how the underlying socio-political played an essential part of the growth and development of Buddhism and Buddhist structures in order to be stronger, larger, and durable. Therefore these ideas are included in concepts of the encasement found in Myanmar through the inscriptional evidence.



Figure 342: Inscribed Steatite Casket found at Piprahwa Stupa
 Note. Inscriptions on the lid can be seen in this casket. From Buddhist Monuments.
 Sahitya Samsad, Photo.35, by D. Mitra. Copyright 1971 by Debala Mitra.



Figure 343: Inscribed copper relic casket found at Shah-ji-ki-dheri, Peshawar
 Note. The inscriptions describe the Kushan ruler Kaniska. From Buddhist
 Monuments. Sahitya Samsad, Photo.86, by D. Mitra. Copyright 1971 by Debala
 Mitra.



Figure 344: Inscribed Gilded Silver Relic Casket Found at the Khinba Mound, Srikshetra

Note. The inscriptions describe the name of King and Queen.



Figure 345: Inscribed stone Burial Urn found nearby Phayagyi Stupa, Srikshetra.
Note. The inscriptions describe the royal entitles of the kings and their ages, reigns and the dates of their demise.



Figure 346: Inscribed Stone Burial Urn Found nearby Phayagyi Stupa in Sriksheetra. Note. The inscriptions describe the royal entitles of the kings and their ages, reigns and the dates of their demise.



Figure 347 : Inscribed Stone Burial Urn Found nearby Phayagyi Stupa in Sriksheetra Note. The inscriptions describe the royal entitles of the kings and their ages, reigns and the dates of their demise.



Figure 348: Inscribed Stone Burial Urn Found nearby Phayagyi Stupa in Sriksheetra Note. The inscriptions describe the royal entitles of the kings and their ages, reigns and the dates of their demise.



Figure 349: Inscribed Stone Burial Urn Found at Phayahtaung Stupa in Sriksheetra Note. The inscriptions describe the royal entitles of the kings and their ages, reigns and the dates of their demise.

6.4 Summary

In this chapter, there are twenty-two epigraphic records like stone inscriptions and ink inscriptions regarding the concept of encasement found in Myanmar. Among these epigraphic records, twenty stone inscriptions and two ink inscriptions are included in this section. The concepts of encasement in relation to religious idea and socio-political idea are very significant for the encased Buddhist monuments. A table (Table 12) describing the list of epigraphic records includes the name of inscription, inscribed year, original place, and present place. Among the twenty-two epigraphic records, there are four stone inscriptions and two ink inscriptions in the Bagan period, nine stone inscriptions in the Pinya period, and seven stone inscriptions in the Konbaung period. Among the four stone inscriptions in the Bagan period, according to the writing style, Manuha stone inscription may have been inscribed in the post-Bagan period, but it recorded that King Manuha built a small stupa encased by three seated Buddha images and one recumbent Buddha in 1067 CE. This inscription was a duplicate of the original stone inscription donated by the King Manuha in later times. There are seven stone inscriptions inscribed by King Bodaw Phaya in 1785 CE during the Konbaung period, but he described the Buddhist practice of stupa encasements undertaken by Bagan and Pinya Kings after he had collected and read with the help of royal scholars numerous original stone inscriptions in the various parts of Myanmar. The inscriptional evidence and historical records indicates that there are eight stupas encased and enlarged by King Uzana as the patron of the stupa encasements during the Pinya period. In Myanmar, the Buddhist practice of the stupa encasement was since Bagan period to till now. Therefore, there are epigraphic records regarding the stupa encasements in Myanmar from Bagan to Konbaung periods with strong evidence.

Archaeological evidence in India indicates that there are some encased stupas like Sanchi, Satdhara, Bharhut, Buddha's relic stupa at Vaishali. In these stupas, the relics of the Buddha, and the relics of the Buddhist saints like the chief disciples of the Buddha are enshrined inside the inner stupas in order to worship and venerate for religious idea.

Archaeological evidence in Sri Lanka describes that there are some encased stupas like Mahiyangana, Thuparama, Dakkhina, Mirisawetiya, and Ruwanweli. The hair and larynx relics of the Buddha in Mahiyangana stupa, the right collar-bone of the Buddha in Thuparama stupa, ashes of the King Duthagamani in Dakkhina stupa, the relics of the Buddha in Mirisawetiya stupa, and the bodily remain of the Buddha in Ruwanweli stupa, are enshrined in these stupas for religious purpose.

In Thailand, the Buddha's relics in the inner chambers into which miniature statues of the Buddha, votive tablets are enshrined in a few stupas and sometimes gold and silver amulets are placed at the time of stupa construction. Sometimes the ashes of the kings and the royal families, the ashes of ordinary pious Thais are enshrined in the smallest stupas in a temple compound. The Buddhist stupas in Thailand are enlarged over time by encasing the older stupa in a new shell. The secondary donors in Thailand would like to encase to protect the inner stupas, which enshrined valuables such as large golden Buddha images, jewelries, golden materials, and amulets so that due to encasement the treasure seekers and thieves cannot loot them. This is strong archaeological evidence regarding the encasement for religious idea to protect the relics of the Buddha.

Archaeological Excavations in India and Sri Lanka indicate that there are some relic caskets such as a large round stone box with a green marble relic-casket inside recovered in Dharmarajika stupa at Sarnath, a copper relic casket found in Nandangarh stupa, a soapstone relic casket found in a stupa at Vaishali, gold, seven crystal and ivory relic caskets found in Amaravati stupa, some relic caskets found in Ruwanweli Dagaba, Anuradhapura, Sri Lanka. These relic caskets are made of different materials that diminish in size to the innermost layer. The relics of the Buddha found in India, Sri Lanka, Thailand, and Myanmar were also enshrined in stupas. These relics of the Buddha are mostly put into the reliquaries using many layers to be protected and preserved from the natural disasters and vandalism. According to the archaeological excavations in India and Sri Lanka, these reliquaries are mostly found at the centre and bottom of the stupas. Besides there are a number of moathtaw stupas in Myanmar. According to the legend, people believe that the relics

of the Buddha are enshrined in each moathtaw stupas during the reign of the King Asoka in order to worship for religious idea. It recorded that the traditional custom of the placement and enshrinement of the relics of the Buddha in the reliquaries and stupas is in order to worship and venerate for religious idea.

Inscribed reliquaries are found at Piprahwa, Bhattiprolu, Sanchi, Sonari, Satdhara, Morel khurd Andher and Bhilsa in India. The inscribed copper relic casket was also discovered at the Shah-ji-ki-dheri, Peshawar, Pakistan. Inscriptional and archaeological evidence indicate that these are very important discoveries in Buddhist archaeology, showing the religious and socio-political ideas.

According to the archaeological excavation, Dakkhina dagaba (stupa), Anuradhapura in Sri Lanka was an encasement and enlargement of the earlier construction that was built over the ashes of Duthagamani. In this site, traces of charcoal and ashes were found in the centre of the dagaba. The Kujjatissa Pabbata (stupa) in Anuradhapura, dating to about the 8th century CE, is situated outside the south gate of the city, where the ashes of the Elara were buried by King Duthagamani. Archaeological evidence indicate that these are very important discoveries, showing the religious and socio-political ideas regarding the enshrining the ashes of the heroic Kings of Ceylon in this stupa. Generally, inner stupas are older and smaller, while outer stupas are younger and bigger in size in India, Sri Lanka, Thailand, and Myanmar. Thus another motivation of the next donors was to erect more elaborate and larger structures than the original ones built by the primary donors for socio-political ideas.

There are some Buddhist encased monuments with circumambulatory corridors found in India, Thailand, and Myanmar. These corridors are entirely provided not only to venerate and move around the stupa but also to observe and study the sculptures and decorations on these monuments as part of their political stature. In short, examples of encasement and reliquaries are known from South Asia, Thailand and Mynamar, underlining the shared heritage of Buddhism in the region. These objects deepen our understanding of the meaning of encasement in Buddhist religious structures. While the epigraphy and the small reliquary objects could form a distinct study, they give

notions and concepts in word and a diminutive physical form to show the high significance and value from different sectors of the society in an extended period. They thus complement and strengthen the description and analysis of the encased monuments that are central to this dissertation.



CHAPTER 7

Conclusion

This dissertation began by underlining the prevalence of encasement throughout Myanmar, with the greatest concentration at Bagan. In contrast to the number of encased monuments, their antiquity, sustenance and continued veneration, there is a striking the absence of research focused on encasement. This dissertation has aimed to fill this gap in describing the origins of encasement at the ancient capital of Bagan (9th to 13th CE), Myanmar where encased monuments date to *circa* the mid first millennium CE. As a focused study on encasement, this work is the first with it hoped it will lead others to document more examples and preserve. The chronology of the technical aspects of encasement situates them within religious concepts and the ancient socio-political patronage. Stupa architecture was well-known by the reign of Asoka in the third century BC with encased Buddhist monuments in India and Sri Lanka. Excavations in India and Sri Lanka have yielded further evidence of encasement through reliquaries made of the different substances. Against this background, the tradition and custom of encasement started during the life of the Gotama Buddha in ancient India. The primary impulse for enshrining relics of the Buddha, the Buddhist saints, and the ashes of heroic kings in stupas is for religious veneration. However, the patronage of kings and other elite groups and local communities was an essential context for supporting the building and maintenance of new structures and monastic communities.

In Myanmar, encasement is found from the earliest phases of Buddhism, at the Pyu Ancient Cities of Halin, Beikthano and Sri Ksetra, as well as other Pyu sites not included in the UNESCO Inscription. As stated in the 2014 UNESCO Nomination Dossier, the Pyu Ancient Cities provide the earliest testimony of the introduction of Buddhism into Southeast Asia almost two thousand years ago and the attendant economic, socio-political, cultural transformations which resulted in the rise of the first, largest, and longest-live urbanized settlements of the region up until to 9th century CE. The Pyu showed a striking capacity to assimilate the Indic influences and swiftly move into a degree significant of re-invention. The dossier further noted how the Pyu created a special form of urbanization, the city of extended urban format,

which subsequently influenced urbanization in most of mainland Southeast Asia. The patronage implied in this extended format may possibly have also encouraged encasement, a matter for further research.

The next major phase of Buddhism and encasement, the subject of this dissertation, was the ninth to thirteenth century CE capital of Bagan. Again, to cite the UNESCO Nomination Dossier, the one for Bagan being in 2019, Bagan was the heart of the largest Buddhist empire of the medieval world, a centre of an economic, socio-political and cultural network in active exchange with other parts of the region. The Buddhist culture of Bagan, enriched by its synthesis of Pala Indian styles and local doctrines, generated religious and royal interchange and attendant administrative hierarchies demonstrated in extensive architecture, mural paintings, and epigraphic records. The cultural and economic life was informed by its extreme environment, creating a substantial city in a resource-poor zone requiring constant and growing quantities of goods following in from its tributaries. The construction of Buddhist monuments at Bagan enabled donatory exchange to and from court. Bagan emerged as the capital of this empire from the 10th century CE, with its peak period being from the 11th to 13th centuries CE, and it was the primary focus of the religious activity in the Bagan period. The Buddhist tradition of merit-making was a powerful force in the creation of Bagan and there are numerous religious structures still surviving at Bagan till now. Socio-political idea at Bagan is the integration of social and political life, with the social character of village life (the heart of Bagan) being Buddhism and support of the community of monks. Moreover the stupas and temples at Bagan manifest royalty and social hierarchy in demonstrating power through donatory activities. The kings ruled in the Bagan period taught proper actions and morals by their actions reinforcing the Buddha's teachings through the murals and images. All these factors, from the local and international networks to the inseparable links between the royal and religious intertwined social and political life, supported further encasements.

Among the encased Buddhist monuments in Myanmar, the most have been already recorded at Bagan, located in the central part of the country. Archaeological evidence indicates that the development of this practice from circa 900-1300 CE (Hudson,

2004) can generally be seen in the existing chronological and spatial developments of Bagan. This idea may have originated from ancient India and some encased Buddhist monuments built in successive periods can be found in India. The practice of encased monuments was distributed in various parts of Myanmar. Sources include the strong epigraphic records such as stone inscriptions, ink inscriptions, Myanmar chronicles and history of Buddhist monuments regarding the encasement. This dissertation combines archaeological study, architectural and art historical study, epigraphic records regarding the encasement and anthropological approaches. Most of the style of the encasement show varied influences of India, Sri Lanka, Pyu, and Mon areas. Some of them are Northern Indian styles, while some are southern Indian styles. Some of them are very similar to Sinhalese styles, while some are very similar to Pyu and Mon styles (Myo Nyunt Aung, 2021).

Most encased Buddhist monuments and images in Myanmar cannot be found easily. When the outer stupas were collapsed by natural disasters such as earthquake, rain water, flood, wind, age, and vandalism from treasure seekers, thieves and smugglers, the inner stupas can be viewed from the outside. Normally we cannot say exactly that is an encased monument or not. Traditionally it was noted that it was an encased stupa and an encased temple for some encased monuments but some encasements have strong inscriptional evidence or epigraphic records even though the inner stupa cannot be viewed from the outside. In Bagan, there were many treasure holes on encasements so that most of the inner stupas can be visible through the treasure holes. Sometimes no one knows that is the encased monument but when the severe earthquake occurred at Bagan, inner monuments with original architectural decorations appeared. When the inner stupas or inner temples have been uncovered, the original extraordinary and artistic works in successive periods such as the stucco carvings, the stone carvings, the glazed decorations, the mural paintings, the brick masonry works, and the different architectural typologies with ornaments can be observed on the exterior of the inner ones (Myo Nyunt Aung, 2021).

The stupa encasement is a deliberate and religious practice, not merely a phenomenon of repairing the destroyed monuments. In fact, ancient inscriptions show how it was the avenue for its donors, perceived as the protectors of Buddhism, to strengthen their

spiritual power. This religious ideology and distribution of encasement at Bagan have been analysed in this study through epigraphic records. Among the twenty-two epigraphic records, the examples comprise twenty stone inscriptions and two ink inscriptions regarding encasement found in Myanmar giving textual information on the underlying meanings of the encased monuments. These concepts are further supplemented by examples of reliquaries: inscribed reliquaries, and multiple layered reliquaries and miniature stupas enshrining the relics of Buddha, Buddhist saints, the ashes of heroic Kings and elite persons, and valuables. These objects also conveyed ideas about the meaning of encasement in Buddhist religious structures. While the epigraphy and the small reliquary objects could be considered separately, the author brings them together here as illustrations of the different ways over many centuries that the physically encased monuments were valued by lay, royal and religious sectors of the society. While the focus of this dissertation is the physical monuments, their interpretation is greatly strengthened by these textual and reliquary objects. There are four stone inscriptions and two ink inscriptions in the Bagan period, nine stone inscriptions in the Pinya period, and seven stone inscriptions in the Konbaung period. Among the four stone inscriptions in the Bagan period, according to the writing style, Manuha stone inscription may have been inscribed in the post-Bagan period, but it recorded that King Manuha built a small stupa encased by three seated Buddha images and one recumbent Buddha in 1067 CE. This inscription was a duplicate of the original stone inscription donated by the King Manuha in later times. There are seven stone inscriptions inscribed by King Bodaw Phaya in 1785 CE during the Konbaung period, but he described the Buddhist practice of stupa encasements undertaken by Bagan and Pinya Kings after he had collected and read with the help of royal scholars numerous original stone inscriptions in the various parts of Myanmar. The inscriptional evidence and historical records indicates that there are eight stupas encased and enlarged by King Uzana as the patron of the stupa encasements during the Pinya period. In Myanmar, the Buddhist practice of the stupa encasement was since Bagan period to till now. Therefore, there are epigraphic records regarding the stupa encasements in Myanmar from Bagan to Konbaung periods with strong evidence. The different architectural typologies of encasement with art and iconography of Buddha images are extraordinarily diverse in their artistry at Bagan. Basically, the

five architectural typologies of encasement namely encased stupa, encased temple, encased group of stupas, encased moathtaw stupa, and encased images can be only found at Bagan. All these five types cannot be found in other regions in Myanmar and the encased group of stupas can be only viewed at Bagan. Archaeological evidence conducted by the DANM at Bagan indicates that the bases of the encased stupas are mostly circular, square, octagonal, and rectangular in shape, while the bases of the encased temples are mostly square and rectangular in shape. Most of the outer stupas at Bagan have been concentrically built around the inner stupas, while some of them are not concentrically built around the inner stupas. Most of the outer temples at Bagan have been symmetrically built around the inner temples, but a few of them are not symmetrically built around the inner stupas. In Bagan, the bases of the inner stupas built between 9th to 10th centuries CE are mostly circular in shape, while the bases of the inner stupas built from 11th century CE onwards are mostly octagonal, and square in shape but a few of them are rectangular in shape. Among the eighty-three encased monuments at Bagan, there are sixty symmetrical encased monuments and twenty-two non-symmetrical monuments. The quantities of the encased monuments on each area at Bagan mention that Taungbi area is the richest encasements, while the Tantkyi area is the least encasement among the eight areas. The Myinkaba area is the second richest encasements at Bagan. Taungbi and Myinkaba areas are very close to the last palace site of Bagan where the twenty-two Kings ruled and lived there. Epigraphic records indicate that many royal families and rich people lived in these two areas during the Bagan period. In Tantkyi area, there are only fifteen Buddhist monuments built in the successive periods inside the World Heritage Site of Bagan, while there is only an encased stupa called Tant kyī Taung stupa. Therefore, there are numerous encased monuments, which may have been built and encased by the royal families and rich people in the Taungbi and Myinkaba areas. Besides the encased monuments at the Taungbi and Myinkaba areas are situated near the Ayeyarwady river and these encased monuments in these areas are normally older than the monuments located at other areas. So the secondary donors understand that they need to cover and encase the original inner monuments to be stronger, durable and more elaborate for these reasons in these areas.

According to the analysis, based on epigraphic and chronicle records as well as abundant *in-situ* evidence, the main religious ideology of the encasement is to protect the relics of the Buddha enshrined into the inner monument encased and enlarged by the outer monument. This idea of making them be safer is seen in Myanmar and other countries such as India, Sri Lanka and Thailand as well (Soni, 1991, pp. 37-47; Byrne, 1995).

While all these countries share a strong encasement tradition, the specifics differ. In contrasting the encased monuments between Myanmar and other countries like India, Sri Lanka, and Thailand, the inner stupas are mostly discovered at the centre of the outer stupas in India and Sri Lanka and some inner stupas are encased by the centre of the outer stupas in Thailand. Some of the inner ones are located at the centre, at the corner, and in the wall at Bagan, Myanmar. Some inner ones are visible, while some are invisible in India, Sri Lanka, Thailand, and Myanmar. The bases of the outer stupas are mostly circular in shape in India and Sri Lanka, while the bases of the outer stupas are circular, square, and rectangular in shape in Thailand and the bases of the outer stupas are circular, square, rectangular, and octagonal in shape in Myanmar. These differences are important to note in relation to form, while as highlighted in this dissertation, the underlying motivations and purposes are similar.

Archaeological excavations and explorations in India, Sri Lanka, Thailand, Myanmar, the relics of the Buddha, Buddhist saints, and heroic kings were enshrined at the centre and floor of the stupas in India and Sri Lanka and the relics of the Buddha, and the ashes of heroic kings were also enshrined at the stupas in Thailand. The shrine room and secret cavity beneath the stupa were found at Wat Pa Kaeo, while the square cavity was found at Wat Phra Si Sanphet, Ayutthaya, Thailand.

The outcome of this dissertation on encasement can contribute to our understanding the impact of patronage on the archaeological remains of Bagan. It can provide a revision of the chronology of the site at Bagan in showing an earlier phase of construction at the encasements, the continuity of donor traditions, customs and religious beliefs. Furthermore, it aids understanding of the relationship between primary and secondary donors, from the new temporal and spatial hypothesis

described in the typology of this dissertation. It also defines architectural typologies of encasement and donors, socio-political practice, and religious practice through ink and stone inscriptions, the *Great Chronicle of Ceylon* (Mahavamsa Text), and some Myanmar chronicles. Regionally, it can contribute the development and distribution of the encasement in the South and Southeast Asian Archaeology and Buddhist Archaeology. It can also add knowledge on the development of artistic works such as stone and brick masonry works, stucco decorations, glazed works, and iconography of the Buddha images on encasement (Myo Nyunt Aung, 2021). This dissertation has focused on the art history and architectural evidence for the encasement of Buddhist monuments and images from the *circa* 9th to 13th centuries CE at Bagan.

The earliest Buddhist monuments in India can be found during the reign of King Asoka, who attempted his energies and resources for the propagation of Buddhism. He is a renowned ruler who has had lasting religious and architectural impact with three principal types of monuments: pillars, stupas, and rock-cut caves built in various parts of the Buddhist sites in ancient India during his reign. Krishna Deva suggests that the stupa originated as a piled-up burial-tumulus and comprised the most characteristic monument of Buddhism (ASI, 1996, pp. 85-88). Most of the Buddhist stupas in India and Sri Lanka in the early periods are circular hemispherical domes. Inscribed reliquaries record the name of Buddha Gotama, the chief disciples of the Buddha like Shin Sariputta and Shin Mahamoggallana, the names of monks like a group of Hemavata teachers led by an individual named Gotiputa (Mitra, 1971) and the names of the heroic well-known Kings like Elara, Duthagamani in Sri Lanka (Ministry of Cultural Affairs, 1981). According to the inscribed reliquaries, it can be seen that most of the donors were motivated by both religious and political concepts, wanting to see the relic-imbued stupa be more celebrated for veneration but also to enhance the associated social and economic benefits (Myo Nyunt Aung, 2022). Epigraphic records and archaeological evidence indicate in these sites that these are very important discoveries in Buddhist archaeology, showing the religious and socio-political ideas.

According to ancient chronicles like the Mahavamsa and archaeological excavations in India and Sri Lanka, and Thailand the relics of the Buddha like hair, tooth, collar bone and the Lord Buddha's larynx were placed in the encased Buddhist monuments. The enshrining the relics of the Buddha, the relics of the Buddhist saints, and the ashes of the heroic kings in the Buddhist stupas was in order to worship and venerate for the religious ideals in these countries with the numerous aspects of the ideals set out in Chapter 1. In Myanmar, the relics of Buddha like tooth relic duplicate supplied by the King of Sri Lanka of hair, collar bone, and frontlet relic, the ashes of the Buddhist saints like a monk named Shin Arahan, Mon monk from lower Myanmar, the ashes of the celebrated Kings and Queens at Sriksheetra, Myanmar are enshrined in the Buddhist stupas (Aung Thaw, Myint Aung, Sein Maung Oo, and Than Swe, 1993) in order to worship and venerate the stupas for religious purpose.

Archaeological evidence in India (Mitra, 1971) describes that there are some encased stupas like Sanchi, Satdhara, Bharhut, Buddha's relic stupa at Vaishali in India. In these stupas, the relics of the Buddha, and the relics of the Buddhist saints like the chief disciples of the Buddha, a group of Hemavata teachers are enshrined and placed inside the inner stupas in order to worship and venerate for religious ideals. According to the archaeological excavations in India and Sri Lanka, most of the reliquaries made of the various substances, were always discovered at the centre of the stupas, in the midst of the relic chamber and buried at the bottom of the stupas or the platforms. The original stupas, mud and brick structures, were usually built in the pre-Asokan times and Asokan period.

The inner stupas in the Mauryan period are built most frequently of mud which deteriorated easily; others were brick structures. In later times, subsequent donors out of concern for damage and disappearance of the original mud structures, encased and enlarged with stones or bricks to strengthen and enlarge, often five or six times by the subsequent kings. The socio-political ideas framing their actions are an essential part of the growth and prosperity of Buddhism and Buddhist structure. The original structures built in the Mauryan period are simple in design but in the later times, more decorated (Mitra, 1971; ASI, 1996, pp. 85-88). Inner stupas are older and smaller,

while outer stupas are younger and bigger in size. Thus another motivation of the next donors was to erect more elaborate, strengthened, enlarged structures than the original ones built by the primary donors for socio-political purposes.

Archaeological Excavations in India and Sri Lanka indicate that there are some relic caskets such as a large round stone box with a green marble reliquary inside recovered in Dharmarajika stupa, a copper relic casket found in Nandangarh stupa, a soapstone relic casket found in a Buddha's relic stupa at Vaishali, gold, seven crystal and ivory relic caskets found in Amaravati stupa, some relic caskets found in Ruwanweli Dagaba. All of these reliquaries were found at the centre and bottom of the stupas, clearly to protect the relics and ashes from natural disasters and vandalism. As seen in the examples, reliquaries developed alongside the concepts of encasement in India and Sri Lanka. This dissertation has documented the origins and development encasement through six stupas in India and five in Sri Lanka through the chronology, architecture, reliquaries and essential royal patronage of these structures. These provide a unique *in-situ* record of this vital concept in the ancient Buddhist record and its sustenance today. In addition, they establish a comparative context for better understanding the origins of encasement at Bagan, showing clearly the close links between Myanmar and India and Sri Lanka over many centuries.

This dissertation has also highlighted a range of encased stupas and their history as recorded by various authors. For instance, Soni noted that Phra Pathom stupa is an example of encasement enveloping the original shrine with a space fulfilling King Mongkut's wish to protect the relics (Soni, 1991). According to the Royal Chronicles of Ayutthaya, Wat Pa Kaeo was built by King U Thong (1350-69 CE) and encased and enlarged by King Naresuan (1590-1605 CE). The Nan Chronicle describes that Wat Phra That Chae Haeng comprises a number of encasements by successive governors (Byrne, 1995, pp. 226-281). The history of the Wat Phra That Hariphunchai describes that a hair of the Buddha was placed inside the original stupa and it may have been encased in 1443 CE by King Tilokaraja of the Lanna Kingdom, Chiang Mai (Gray & Ridout, 1995). Archaeological excavations conducted by the Fine Arts Department in 1932 recorded an encased stupa below the eastern chedi at Wat Phra Si

Sanphet, Ayutthaya and eight miniature stupas (Vandenberg, 2016). In many cases, relics were described, likened to the seeds (*bija*) of the whole ‘garden’ of religious culture. The rarest of these relics should be ashes, bones and teeth or tiny gem-like balls or pellets. In Indic languages, they are called *dhatu* or *sarira* (Skilling, 2018, p. 4). As the examples mentioned above, relics of the Buddha are considered the most sacred for Buddhist worship, determining patterns of patronage as the relic generated circuits of material and spiritual exchange (Myo Nyunt Aung, 2022).

According to the legend, among the 84, 000 relic stupas donated by the King Asoka (Bo Kay, 1981, pp. 220-222), the moathtaw stupas in Myanmar are mostly encased and enlarged by successive Myanmar kings in the different periods. Archaeological excavations in Thailand indicate that relics of the Buddha have been enshrined and placed in stupas at important temples throughout Thailand over the centuries. The relics of the Buddha in Thailand were found from the nine major archaeological sites of the Dvaravati, Sukhothai, Lanna, Ayutthaya and Rattanakosin periods. Some of them are now kept in the Ratchaburi National Museum in Ratchaburi, the Ramkhamhaeng National Museum in Sukhothai, the Chiang Mai National Museum, the Chao Sam Phraya National Museum in Ayutthaya and the National Museum in Bangkok (Myo Nyunt Aung, 2022). Among these relics were seven fragments of the Buddha's bones, the size of a cabbage seed and broken rice grain, were enshrined in a round gold casket dating to the Dvaravati Period (8th-9th centuries CE) and two pieces of the Buddha's bone in a round shape. Colored off-white and brown they were kept in a triple-layer covered round casket, and a gem-studded gold miniature stupa dating to the Ayutthaya Period (15th century CE) that is among the exhibitions in the various national museums of Thailand. Another is a gem-studded gold miniature stupa found at Wat Ratchaburana, Ayutthaya, and the Lord Buddha's relics in a glass miniature stupa found at Sri Suriyothai Pagoda, Ayutthaya (Svasti, 2016). As in all Buddhist countries, the relics of the Buddha found in Thailand are mostly placed inside the different layers of the relic caskets which diminish till to the innermost casket and they are enshrined in the stupas. Sometimes they are put inside miniature stupas, which are made of the different materials. The relics of the Buddha found in India, Sri Lanka, and Myanmar, are also enshrined and placed in stupas in similar

reliquaries made of different materials that diminish in size to the innermost layer (Myo Nyunt Aung, 2022).

However, the existing evidence suggests differences in the recording of consecration deposits and relics between Myanmar and Thailand, with the prevalence of relics from different parts of the stupas also found in a study of relic containers at the Bagan Archaeological Museum (Theint Theint Aung, 2022 (forthcoming)). Pichard also discusses that the three superposed relic chambers dating 13th century CE were found at monument No.319 at Bagan with different levels of the stupas in 1984 before repair. Numerous small Buddha statues were discovered in the relic chambers in this stupa (Pichard, 1993, p. 95, Vol-2). In Myanmar, most of the encased monuments have no space between inner and outer monuments, while a few of them have a space or corridor between the two monuments. According to the designing form and space as seen in the examples, some of the stupas in Thailand have no space between two stupas, while some of them have space or corridor between two of them. Thus, variation is the norm in both Myanmar and Thailand with designs reflecting donors, architects and other tangible and intangible elements (Myo Nyunt Aung, 2022). This dissertation compares examples alongside the customs and beliefs that underpin the function and meaning of the encasement. Archaeological evidence of encasement in Thailand is complemented by the presence of relics of the Buddha, kings, amulets, precious stones, and possibly consecration deposits reviewed through the chronology, epigraphy, architecture, art styles and reliquaries of five Buddhist stupas dating from the 15th to 19th centuries CE.

In contrasting the stupa encasement between Thailand and Myanmar, in common is seeming motivation that it was a deliberate practice for already sanctified buildings. The Buddhist practices of stupa encasement in both countries can thus be understood as one of long evolution in religious practices and traditions (Myo Nyunt Aung, 2022).

According to the written references in Thailand, encasements of different periods used materials like brick, stone, stucco, and gold and miniature stupas made of stone, iron, tin alloy, gold, silver, gilt bronze and crystal. Thai records describe the shapes

and measurements of the enshrined relics in the reliquaries. These show how in Thailand, chedis enshrine the relics of the Buddha, the ashes of kings and royal families, numerous amulets of gold, silver and other materials, votive tablets, all sizes of Buddha images made of various substances, miniature stupas and reliquaries made of the different materials (Byrne, 1995, pp. 226-281). The relics of the Buddha with the reliquaries are mostly discovered at the centre of the stupas on the floors or platforms in India and Sri Lanka, possibly consecration deposits (Revire, 2015, p. 183). However, the majority of recorded relics in caskets found at relic chambers at Bagan are discovered at various parts of the Buddhist monuments including finials, sikharas, bell-shaped and hemispherical domes and Buddha images in brick (Aung Kyaing, 1984; Pichard, 1992-2001, Vol-1-8). The relic chamber in sandstone in a central vaulted room measuring 4 x 4 meters with long corridor on zig-zag plan recorded as approximately 2.20 meters wide, which has been now blocked, was only discovered at Saytanagyi stupa dating 13th century CE, built by the King Nadaungmya in Bagan by the DOA (Pichard, 1994, Vol-4, p. 27). This archaeological finding is very important at Bagan in contrasting the relic caskets found at the centre of the stupas on the floors or platforms in India and Sri Lanka for enshrinement and placement of the relics of the Buddha together with relic caskets. In Thailand, the relics of the Buddha in the inner chambers included votive tablets, some gold and silver amulets, and small Buddha images enshrined as consecration deposits at the time of stupa construction (Byrne, 1995, pp. 226-281). This dissertation has included upon the varied customs of relic enshrinements and has documented the development of encasement through five monuments in Thailand drawing on the chronology, epigraphic records, architecture, art style, and reliquaries. Overall, the examples profile the varied designs of encasement at Buddhist monuments in Thailand compared to Myanmar examples. These demonstrate a different record in relic deposits and in some cases, provision of a devotional space between the inner and outer stupas. This dissertation compares the design of encased stupas in Thailand along with examples from Myanmar in order to highlight the shared custom of encasement alongside the differences which developed over time. Archaeological evidence of stupa encasement is plentiful, particularly in Thailand, and shows variations in the design of space and patronage. In both these countries, the second or

new donor sometimes left a gap between the original inner and new outer structure for patrons and pilgrims to move around the inner structure in veneration. These are compared with examples from Myanmar, where some encasements have a space between inner and outer stupas and relics have been recorded. While there are many similarities, in Myanmar the relic deposits from research to date have been found in many parts of the stupa, which is somewhat different from Thailand. Together, these comparative and contextual aspects contribute to a deeper understanding of the relationships in patronage traditions and also differences in encasement design between the neighboring countries of Myanmar and Thailand (Myo Nyunt Aung, 2022).

However, while sharing religious traditions, based on present evidence there are both differences in the recorded evidence of consecration deposits and relic deposits and the presence or absence of a space between inner and outer stupas with encasement despite the long-term continued links with Myanmar over many centuries (Myo Nyunt Aung, 2022).

When the inner Buddha statues at Bagan have been recovered at the inner monuments, the iconography of the Buddha images regarding the successive periods can be researched and compared with those found at other sites. The purposes of the encased monuments built by the second donors is to make them last five thousand religious years, to make something bigger and more elaborate than the previous donors, to make as a new builder or donor, to protect from the natural disasters and vandalism, and to attain merit for the good deeds of protecting the inner monuments donated by the primary donors. The purposes of the outer stupas with a circumambulatory corridor built by the secondary donors are to facilitate their worship, to meditate in front of the inner Moathtaw stupas built by the King Asoka in the 3rd century CE, to move around the inner and outer stupas, and to observe the architectural decorations on these stupas. Besides the secondary donors also have ideas to enshrine the inner Buddhist stupas in order to get good merit (Myo Nyunt Aung, 2015).

Numerous epigraphic records in Myanmar included curses and prayers written underneath the donatory commemoration. It was recorded that one who takes care of the donor's meritorious deeds will also acquire merit, to be reborn in the celestial realms, to come into the presence of Maitteyya (Future Buddha) and finally to attain nibbana. If someone eradicated the donors' meritorious deeds, they may descend to hell. Sometimes they described the name of the hells on the epigraphic records in Myanmar. Inscriptional evidence describes that most of the donors of the inner stupas were their ancestors and relatives of the secondary donors. The secondary donors as the Buddhists would not like to remove and destroy the inner Buddhist structures and images built by the primary donors. As a result, a number of the encased Buddhist monuments from the successive periods can be found in various parts of Myanmar.

In summary, this dissertation has addressed the Objectives described in Chapter 1:

1. To understand the concepts and technological developments of encasements
2. To document the ritual customs and beliefs of encasements in epigraphic records
3. To analyse the chronology and distribution of the encasements at Bagan
4. To compare the encasements found at other archaeological sites in Myanmar, India, Sri Lanka and Thailand

In relation to the second item above and to support all the points, existing and recorded inscriptions have been used in this thesis to elaborate the material or tangible encasements. The concepts of encasement have been described through the twenty-two epigraphic records, the Chronicle of Ceylon (Mahavamsa Text), and some Myanmar chronicles, and technological developments of encasements situate them within religious concepts and the ancient socio-political ideals. The epigraphic records are particularly rich in recording the ritual customs and beliefs of the encasements and so have been documented in detail. In addition, for item-3, the chronology and distribution of the encasements at Bagan have been analysed in chapter 4 with tables showing the estimated centuries of inner and outer structures, the dividing three phases (Phase-1 to Phase-3), the quantities of the encasements at Bagan within the eight areas and architectural typologies. Comparative case studies of the encased monuments in India, Sri Lanka, Thailand, and other places outside Bagan in

Myanmar have been described in chapter 3 with tables showing the name of monuments, location, date of the first establishment, characteristics of the original stupa, date of encasement, characteristic of the encased stupa, enshrined objects, and photos of monuments. Thus while this thesis begins with the geo-spatial recording and mapping of encasements, numerous other sources of data have been drawn in to interpret these structures.

The underlying conceptual framework that these tangible and intangible attributes is used to classify the form and textual records of motivations for encasement. These provide a new understanding of the tradition of encasement to balance the existing descriptive literature. In a wider context, this dissertation has documented evidence in-situ, from epigraphy and beliefs that inform us on the ideology and expression of Buddhist religious patronage, Bagan with its high density of monuments and images and Myanmar with its unbroken tradition of Buddhism for the last two millennia (Myo Nyunt Aung, 2021).

The encasements make a unique, innovative, and deliberate Buddhist practice – addition to our understanding of the development of Buddhism, tangibly present in the repeated patronage of the inner structure with an outer one. This is further supported by the epigraphy of the 11-18th century, multiple encasements of Buddhist reliquaries, and inscribed reliquaries. The role of religious ideology and the socio-political significance of kingship in the development of Buddhist archaeology from the rise of the Pyu cities in the early centuries CE were recognised in the UNESCO inscription of the Pyu Ancient Cities. However, the encasements at Bagan add a new dimension, showing the further development in the context of the historical archaeology of the region that is detailed for the first time in this dissertation. This dissertation further contributes to the field of Buddhist archaeology in opening up future documentation on encasement, religion and state. Further areas to explore are the chronological implications of the dissertation in re-evaluating in future the chronological development of Bagan, and its relationship to other Buddhist sites and cities in Myanmar and the region.

This work is the first to attempt a comprehensive overview of encasement in Myanmar as summarized above, contributing a fresh perspective on both the chronology of Bagan and the living traditions of Buddhism active in Myanmar. And while the much fuller documentation on Thailand and South Asian examples has been used here, it is hoped this dissertation can enable the Myanmar encasements to be better known both in the country and the region.



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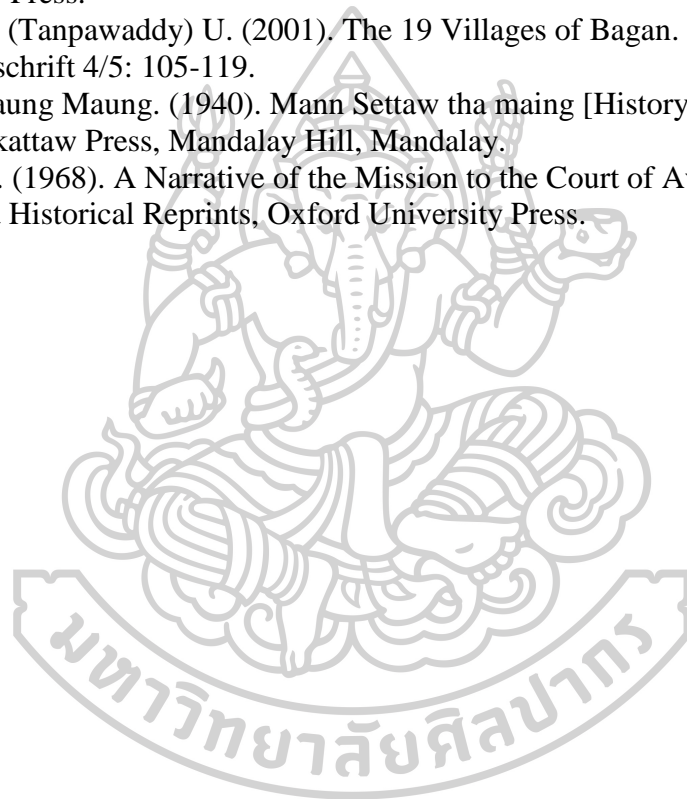
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APPENDIX

APPENDIX – A
List of the Encased Monuments at Bagan

Serial No.	Number of Area	Number of Monument	Type of Encasement	Hollow/Solid (Inner)	Hollow/Solid (outer)	Shape of Inner Base	Shape of Outer Base	Estimated Period (Inner)	Estimated Period (Outer)
1	Area-1	No.1	Encased Stupa	Solid	Solid	Octagonal	Square	11th Cen	11th Cen
2	Area-1	No.194	Shwe Moathlaw Stupa	Solid	Hollow	Circular	Circular	Pre-Bagan Period	13th Cen
3	Area-2	No.235	Encased Buddha Image	Hollow	Hollow	Square	Rectangular	12th Cen	13th Cen
4	Area-2	No.272	Encased Stupa	Solid	Solid	Circular	Square	11th Cen	13th Cen
5	Area-2	No.280	Encased Stupa	Solid	Solid	Circular	Octagonal	10th Cen	11th Cen
6	Area-2	No.289	Encased Stupa	Solid	Hollow	Circular	Rectangular	9th Cen	13th Cen
7	Area-2	No.329	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
8	Area-2	No.345	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
9	Area-2	No.347	Encased Temple	Hollow	Hollow	Rectangular	Rectangular	12th Cen	13th Cen
10	Area-2	No.348	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
11	Area-2	No.404	Encased Stupa	Solid	Solid	Circular	Rectangular	11th Cen	13th Cen
12	Area-2	No.445	Encased Stupa	Solid	Solid	Square	Circular	12th Cen	13th Cen
13	Area-2	No.717	Encased Stupa	Solid	Solid	Square	Square	13th Cen	13th Cen
14	Area-2	No.1754	Encased Group of Stupas	Solid	Hollow	Circular	Rectangular	9th Cen	12th Cen
15	Area-2	No.1755	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
16	Area-3	No.1503	Encased Stupa	Solid	Solid	Circular	Circular	11th Cen	11th Cen
17	Area-3	No.1689	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
18	Area-3	No.1690	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen

Serial No.	Number of Area	Number of Monument	Type of Encasement	Hollow/Solid (Inner)	Hollow/Solid (outer)	Shape of Inner Base	Shape of Outer Base	Estimated Period (Inner)	Estimated Period (Outer)
19	Area-3	No.1696	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen
20	Area-3	No.1697	Encased Stupa	Solid	Solid	Octagonal	Square	11th Cen	11th Cen
21	Area-3	No.1704	Encased Temple	Hollow	Hollow	Square	Rectangular	11th Cen	11th Cen
22	Area-3	No.1722	Encased Stupa	Solid	Solid	Circular	Circular	12th Cen	13th Cen
23	Area-3	No.1757	Encased Stupa	Solid	Hollow	Square	Rectangular	12th Cen	13th Cen
24	Area-3	No.1796	Encased Temple	Hollow	Hollow	Rectangular	Rectangular	13th Cen	13th Cen
25	Area-3	No.1827	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
26	Area-3	No.1838	Encased Stupa	Solid	Solid	Square	Square	13th Cen	13th Cen
27	Area-3	No.1855	Encased Stupa	Solid	Solid	Square	Square	12th Cen	12th Cen
28	Area-3	No.1870	Encased Group of Stupas	Solid	Solid	Square	Square	12th Cen	13th Cen
29	Area-3	No.1872	Encased Stupa	Solid	Solid	Circular	Octagonal	12th Cen	13th Cen
30	Area-3	No.1905	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen
31	Area-3	No.1956	Shwe Moathtaw Stupa	Solid	Hollow	Circular	Square	Pre-Bagan Period	17th Cen
32	Area-3	No.1962	Encased Stupa	Solid	Solid	Square	Square	13th Cen	13th Cen
33	Area-3	No.2004	Encased Stupa	Solid	Solid	Square	Circular	11th Cen	12th Cen
34	Area-3	No.2014	Encased Stupa	Solid	Solid	Square	Square	11th Cen	13th Cen
35	Area-3	No.2065	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
36	Area-3	No.2084	Encased Stupa	Solid	Solid	Circular	Square	10th Cen	15th Cen

Serial No.	Number of Area	Number of Monument	Type of Encasement	Hollow/Solid (Inner)	Hollow/Solid (outer)	Shape of Inner Base	Shape of Outer Base	Estimated Period (Inner)	Estimated Period (Outer)
37	Area-3	No.2129	Encased Stupa	Solid	Hollow	Square	Rectangular	12th Cen	13th Cen
38	Area-3	No.2132	Encased Group of Stupas	Solid	Solid	Square	Square	11th Cen	13th Cen
39	Area-3	No.2133	Encased Group of Stupas	Solid	Solid	Square	Square	11th Cen	13th Cen
40	Area-3	No.2143	Encased Stupa	Solid	Hollow	Square	Rectangular	12th Cen	13th Cen
41	Area-4	No.1603	Encased Stupa	Solid	Solid	Circular	Circular	9th Cen	11th Cen
42	Area-4	No.1612	Encased Temple & Image	Hollow	Hollow	Square	Square	11th Cen	12th Cen
43	Area-4	No.1626	Encased Stupa	Solid	Solid	Circular	Circular	10th Cen	11th Cen
44	Area-4	No.1631	Encased Group of Stupas	Solid	Solid	Circular	Square	10th Cen	11th Cen
45	Area-4	No.1632	Encased Group of Stupas	Solid	Solid	Circular	Square	10th Cen	11th Cen
46	Area-4	No.1638	Encased Temple	Hollow	Hollow	Square	Rectangular	12th Cen	13th Cen
47	Area-4	No.1639	Encased Stupa	Solid	Solid	Circular	Square	10th Cen	16th Cen
48	Area-4	No.1663	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen
49	Area-4	No.1666	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
50	Area-5	No.1155	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
51	Area-5	No.1158	Encased Stupa	Solid	Solid	Circular	Octagonal	10th Cen	11th Cen
52	Area-5	No.1171	Encased Temple	Hollow	Hollow	Rectangular	Rectangular	12th Cen	12th Cen
53	Area-5	No.1182	Encased Temple	Hollow	Hollow	Rectangular	Rectangular	11th Cen	12th Cen
54	Area-5	No.1183	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen

Serial No.	Number of Area	Number of Monument	Type of Encasement	Hollow/Solid (Inner)	Hollow/Solid (outer)	Shape of Inner Base	Shape of Outer Base	Estimated Period (Inner)	Estimated Period (Outer)
55	Area-5	No.1186	Encased Temple	Hollow	Hollow	Square	Rectangular	12th Cen	13th Cen
56	Area-5	No.1193	Encased Stupa	Solid	Solid	Octagonal	Square	11th Cen	12th Cen
57	Area-5	No.1219	Encased Temple	Hollow	Hollow	Square	Rectangular	12th Cen	13th Cen
58	Area-5	No.1225	Encased Stupa	Solid	Hollow	Circular	Square	11th Cen	13th Cen
59	Area-5	No.1240	Encased Stupa	Solid	Hollow	Circular	Rectangular	11th Cen	11th Cen
60	Area-5	No.1313	Encased Stupa	Solid	Hollow	Square	Rectangular	12th Cen	13th Cen
61	Area-5	No.1339	Encased Stupa	Solid	Solid	Circular	Rectangular	9th Cen	11th Cen
62	Area-5	No.1367	Encased Stupa	Solid	Solid	Square	Untraceable	13th Cen	13th Cen
63	Area-5	No.1369	Encased Temple	Hollow	Hollow	Square	Rectangular	12th Cen	13th Cen
64	Area-5	No.1390	Encased Buddha Image	Hollow	Hollow	Square	Rectangular	11th Cen	12th Cen
65	Area-5	No.1397	Encased Stupa	Solid	Solid	Circular	Square	10th Cen	12th Cen
66	Area-5	No.1456	Encased Stupa	Solid	Solid	Circular	Square	9th Cen	13th Cen
67	Area-5	No.1469	Encased Stupa	Solid	Solid	Square	Square	12th Cen	12th Cen
68	Area-5	No.1492	Encased Stupa	Solid	Solid	Circular	Square	11th Cen	13th Cen
69	Area-5	No.1547	Encased Stupa	Solid	Solid	Circular	Square	12th Cen	12th Cen
70	Area-5	No.1550	Encased Stupa	Solid	Solid	Square	Square	13th Cen	13th Cen
71	Area-6	No.996	Encased Temple	Hollow	Hollow	Rectangular	Rectangular	9th Cen	11th Cen
72	Area-6	No.1003	Encased Stupa	Solid	Solid	Circular	Square	10th Cen	11th Cen

Serial No.	Number of Area	Number of Monument	Type of Encasement	Hollow/Solid (Inner)	Hollow/Solid (outer)	Shape of Inner Base	Shape of Outer Base	Estimated Period (Inner)	Estimated Period (Outer)
73	Area-6	No.1037	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen
74	Area-6	No.1059	Encased Stupa	Solid	Solid	Octagonal	Square	11th Cen	12th Cen
75	Area-6	No.1065	Encased Stupa	Solid	Solid	Square	Square	11th Cen	13th Cen
76	Area-6	No.1086	Encased Stupa	Solid	Solid	Square	Square	12th Cen	12th Cen
77	Area-6	No.1132	Encased Temple	Hollow	Hollow	Square	Rectangular	13th Cen	13th Cen
78	Area-7	No.531	Encased Stupa	Solid	Solid	Circular	Circular	13th Cen	13th Cen
79	Area-7	No.805	Encased Stupa	Solid	Solid	Square	Square	11th Cen	12th Cen
80	Area-7	No.819	Encased Stupa	Solid	Hollow	Square	Rectangular	12th Cen	13th Cen
81	Area-7	No.855	Encased Stupa	Solid	Solid	Square	Square	12th Cen	13th Cen
82	Area-7	No.920	Shwe Moathaw Stupa	Solid	Hollow	Circular	Rectangular	Pre-Bagan Period	13th Cen
83	Area-8	Tant Kyi Taung Stupa	Encased Stupa	Solid	Solid	Octagonal	Square	11th Cen	12th Cen



APPENDIX – B
Database of the Encased Monuments at Bagan

Sr No	Number of Monument	Name of Area	Measurement (Inner)			Measurement (Outer)			latitude	Longitude
			Diameter (metre)	Length (metre)	Breadth (metre)	Diameter (metre)	Length (metre)	Breadth (metre)		
1	No.1,	Nyaung Oo Area		37.20	37.20		48.80		94.894	21.195
2	No.194,	Nyaung Oo Area	1.50				6.20	3.40	94.911	21.186
3	No.235,	Wetkyi-in Area		4.20	4.20		24.20	13.30	94.882	21.186
4	No.272	Wetkyi-in Area	4.10				5.30	5.30	94.887	21.182
5	No.280	Wetkyi-in Area	5.30				6.20	6.20	94.889	21.183
6	No.289,	Wetkyi-in Area	4.00				16.60	9.40	94.892	21.184
7	No.329,	Wetkyi-in Area		3.00	3.00		8.00	8.00	94.888	21.178
8	No.345,	Wetkyi-in Area		4.30	4.30		7.40	7.30	94.887	21.176
9	No.347	Wetkyi-in Area		13.30	5.90		15.30	9.10	94.887	21.176
10	No.348,	Wetkyi-in Area		2.20	2.20		8.60	8.60	94.887	21.176
11	No.404	Wetkyi-in Area	2.30				8.30	6.90	94.884	21.176
12	No.445	Wetkyi-in Area		5.40	5.40	8.30			94.890	21.172
13	No.717	Wetkyi-in Area		3.30	3.30		9.00	7.00	94.892	21.169
14	No.1754	Wetkyi-in Area	1.50				16.00	8.00	94.882	21.173
	No.1754		3.90							
15	No.1755	Wetkyi-in Area		2.80	2.80		4.80	4.50	94.882	21.173
16	No.1503	Taungbi Area	5.50				10.00		94.868	21.168
17	No.1689	Taungbi Area		4.00	4.00		8.50	8.50	94.871	21.166
18	No.1690,	Taungbi Area		5.2	5.2		7.40	7.40	94.871	21.166
19	No.1696	Taungbi Area		4.30	4.30		6.40	6.40	94.871	21.167
20	No.1697	Taungbi Area		5.80	5.80		6.80	6.80	94.871	21.167
21	No.1704	Taungbi Area		5.80	5.20		17.00	9.90	94.874	21.168
22	No.1722	Taungbi Area	5.50			7.50			94.874	21.169
23	No.1757	Taungbi Area		5.30	5.30		20.80	7.80	94.880	21.173
24	No.1796	Taungbi Area		10.00	6.10		10.90	7.30	94.878	21.174
25	No.1827	Taungbi Area		1.10	1.10		4.90	4.80	94.876	21.179
26	No.1838	Taungbi Area		8.40	8.40		11.10	10.70	94.875	21.178
27	No.1855	Taungbi Area		3.10	3.10		11.40	11.40	94.874	21.177
28	No.1870	Taungbi Area		1.80	1.80		7.60	7.60	94.876	21.175
	No.1870	Taungbi Area		2.30	2.30					
29	No.1872	Taungbi Area	3.10				5.20	5.20	94.875	21.175
30	No.1905	Taungbi Area		5.70	5.70		7.40	7.40	94.870	21.175
31	No.1956,	Taungbi Area	2.50				8.00	7.50	94.866	21.173
32	No.1962	Taungbi Area		11.60	11.60		13.00	13.00	94.867	21.173
33	No.2004	Taungbi Area		1.50	1.50	3.30			94.866	21.179
34	No.2014	Taungbi Area		2.00	2.00		14.00	14.00	94.865	21.178
35	No.2065	Taungbi Area		2.60	2.60		5.50	5.00	94.869	21.181
36	No.2084,	Taungbi Area	13.20				22.70	21.70	94.876	21.184
37	No.2129	Taungbi Area		1.30	1.30		8.60	7.70	94.875	21.182
38	No.2132	Taungbi Area		2.80	2.80		12.10	12.10	94.875	21.182
39	No.2133	Taungbi Area		5.00	5.00		12.10	12.10	94.875	21.182
40	No.2143	Taungbi Area		1.80	1.80		5.40	4.40	94.874	21.179
41	No.1603,	Old Bagan Area	10.80			15.30			94.861	21.169
42	No.1612	Old Bagan Area		6.00	6.00		8.00	8.00	94.858	21.168
43	No.1626	Old Bagan Area	4.00			4.70			94.855	21.168
44	No.1631,	Old Bagan Area	2.20				9.40	9.40	94.855	21.171
45	No.1632,	Old Bagan Area	2.30				9.40	9.40	94.855	21.171
46	No.1638,	Old Bagan Area		8.00	8.00		17.40	12.50	94.858	21.172
47	No.1639,	Old Bagan Area	29.60				34.50	34.50	94.858	21.172
48	No.1663	Old Bagan Area		4.00	4.00		7.90	7.90	94.860	21.175
49	No.1666	Old Bagan Area		6.50	6.50		10.00	10.00	94.861	21.175
50	No.1155	Myinkaba Area		3.50	3.20		4.70	4.50	94.855	21.144
51	No.1158	Myinkaba Area	5.00				24.10	24.10	94.854	21.145
52	No.1171	Myinkaba Area		6.00	5.00		13.90	8.20	94.857	21.147
53	No.1182	Myinkaba Area		4.00	4.60		16.30	9.10	94.863	21.147
54	No.1183	Myinkaba Area		3.70	3.70		8.40	8.40	94.862	21.147
55	No.1186	Myinkaba Area		3.70	3.70		7.40	5.70	94.858	21.147
56	No.1193,	Myinkaba Area		3.80	3.80		4.70	4.70	94.858	21.147
57	No.1219,	Myinkaba Area		2.50	2.50		23.30	17.00	94.861	21.150

Sr No	Number of Monument	Name of Area	Measurement (Inner)			Measurement (Outer)			latitude	Longitude
			Diameter (metre)	Length (metre)	Breadth (metre)	Diameter (metre)	Length (metre)	Breadth (metre)		
58	No.1225	Myinkaba Area	2.00			8.20	8.20	94.859	21.152	
59	No.1240,	Myinkaba Area	2.00			39.20	25.60	94.859	21.153	
60	No.1313	Myinkaba Area		3.00	3.00	8.60	5.90	94.865	21.157	
61	No.1339,	Myinkaba Area	8.20			44.00	43.10	94.853	21.158	
62	No.1367	Myinkaba Area		4.60	4.60	7.40	6.50	94.870	21.157	
63	No.1369	Myinkaba Area		6.30	6.30	18.50	12.20	94.867	21.155	
64	No.1390	Myinkaba Area		1.50	1.50	11.10	8.30	94.860	21.159	
65	No.1397	Myinkaba Area	4.40			7.30	6.80	94.862	21.160	
66	No.1456	Myinkaba Area	3.40			8.70	8.70	94.860	21.162	
67	No.1469	Myinkaba Area		5.30	5.30	11.50	11.50	94.863	21.162	
68	No.1492	Myinkaba Area	7.60			10.00	10.00	94.862	21.166	
69	No.1547	Myinkaba Area	2.20			5.10	5.10	94.867	21.160	
70	No.1550	Myinkaba Area		3.20	3.20	5.10	5.10	94.866	21.161	
71	No.996,	Thiripyitsaya Area		8.80	6.50	24.80	14.10	94.854	21.122	
72	No.1003	Thiripyitsaya Area	3.30			4.90	4.90	94.858	21.125	
73	No.1037	Thiripyitsaya Area		2.50	2.50	5.40	5.40	94.855	21.135	
74	No.1059	Thiripyitsaya Area		5.70	5.70	8.70	8.70	94.857	21.138	
75	No.1065	Thiripyitsaya Area		1.50	1.50	6.40	6.20	94.855	21.139	
76	No.1086,	Thiripyitsaya Area		22.30	22.30	25.00	25.00	94.859	21.142	
77	No.1132	Thiripyitsaya Area		9.10	8.60	16.20	10.60	94.870	21.140	
78	No.531	Minnanthu and Phwasaw Areas	4.40			5.60		94.901	21.161	
79	No.805	Minnanthu and Phwasaw Areas		1.20	1.20	6.90	6.90	94.889	21.161	
80	No.819	Minnanthu and Phwasaw Areas		3.50	3.50	10.70	7.70	94.886	21.161	
81	No.855	Minnanthu and Phwasaw Areas		3.50	3.50	6.70	6.70	94.880	21.156	
82	No.920,	Minnanthu and Phwasaw Areas	3.00			13.10	12.00	94.888	21.144	
83	Tant Kyi Taun	Tant Kyi Area	2.00	15.00	15.00	20.90	20.90	94.788	21.155	

APPENDIX – C
List of Kings who ruled in Bagan Dynasty

No.	Name Traditional	Relationship	Period CE	Remarks
1	Thamudarit		107-152	Founder of Bagan
2	Yathekyang	Pyusawhti's preceptor	152-167	
3	Pyusawhti	Son-in-law of Thamudarit	167-242	
4	Htiminyin	Son	242-299	
5	Yinminpaik	Son	299-324	
6	Paikthinli	Son	324-344	
7	Thinlikyang	Son	344-387	
8	Kyaungdurit	Son	387-412	
9	Thihtan	Son	412-439	
10	Thuyai	Usurper	439-494	
11	Tharamunhyapa	Grandson of Thihtan	494-516	
12	Thaiktaing	Son	516-523	
13	Thilikyaungnge	Son	523-532	
14	Thinlipaik	Brother	532-547	

No.	Name Traditional	Relationship	Period CE	Remarks
15	Hkanlaung	Brother	547-557	
16	Hkanlat	Brother	557-569	
17	Htuntaik	Son	569-582	
18	Htunpyit	Son	582-598	
19	Htunchit	Son	598-613	
20	Popa Sawrahan	Usurping priest	613-640	
21	Shwe Onthi	Son-in-law	640-652	
22	Peitthon	Brother	652-660	
23	Peittaung	Son	660-710	
24	Minhkwe	Brother	710-716	
25	Myinkywe	Usurping groom	716-726	
26	Theinkha	Court's nominee of the blood	726-734	
27	Theinsun	Son	734-744	
28	Shwelaung	Son	744-753	

No.	Name Traditional	Relationship	Period CE	Remarks
29	Htuntwin	Son	753-762	
30	Shwemauk	Son	762-785	
31	Tun Lat	Brother	785-802	
32	Sawkhinhnit	Son	802-829	
33	Khelu	Son	829-846	
34	Pyinbya	Brother	846-878	
35	Tannet	Son	878-906	
36	Sale Ngakhwe	Usurper of the blood	903-915	
37	Theinkho	Son	915-931	
38	Nyaung-U Sawrahan(Taungthugyi)	Usurper	931-964	
39	Kunsaw Kyaunghpyu	Son of Tannet	964-986	
40	Kyiso	Son of Nyaung-U Sawrahan	986-992	
41	Sokkate	Brother	992-1017	
42	Anawrahta	Son of Kunsaw Kyaunghpyu	1044-77	

No.	Name Traditional	Relationship	Period CE	Remarks
43	Sawlu	Son	1077-84	
44	Kyansittha	Brother	1084-1113	
45	Alaungsithu	Grandson	1113-67	1113-1160
46	Narathu	Son	1167-70	1160-1165
47	Naratheinkha	Son	1170-73	
48	Narapatisithu	Brother	1174-1211	
49	Htilominlo	Son	1211-34	
50	Kya-Swa	Son	1234-50	
51	Uzana	Son	1250-55	
52	Narathihapati	Son	1255-87	
53	Kyawswa	Son	1287-98	
54	Sawhnit	Son	1298-1325	
55	Sawmunnit	Son	1325-69	

APPENDIX – D
Translation of the Twenty-two

Translation of the Twenty-two Epigraphic Records regarding the parts of the Encasements found in Myanmar

1. Name of Inscription: Manuha Stone Inscription

Inscribed Year: 429 Sakkaraj (Myanmar Era), 1067 CE

Reference: Nyein Maung, 1972, Vol-1, pp.322-323

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number Line: Front 26, Back-23

Original Place: Bagan

Present Place: No.9 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

Due to King Manuha named Thathon Mingyi titled Sri tri bavana-ditra-pavara-thudhammaraja, who defeated by the enemy, he wishes to go to Nivana, Therefore he sold his ring with a precious stone named Manawmaya to the rich man from Myinkaba and he received six bullock-carts loaded with silver. The large Buddha images including the demise of the recumbent Buddha image were built on the land called Sri Zeyabhum (victorious land) to the northeast of Lokananda harbour where the tooth relic of the Buddha was received by the King Anawrahta. In 429 ME (1067 CE), firstly he built a small stupa called moathtaw stupa enshrining the relic of the Buddha covered and encased by the larger Buddha image in six months and six days. In order to last the five thousand religious years, King Manuha donated lands and slaves for this these Buddha images after getting the permission from the King Anawrahta, and he planted coconut, toddy palm, mango, jack fruit, and flowers around these Buddha images.

2. Name of Inscription: Hlai Htaung Phaya stone inscription

Inscribed Year: 473 Sakkaraj (Myanmar Era), 1111-CE

Reference: Nyein Maung, 1972, Vol-1, pp.331-332

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 21, Back-19

Original Place: Taung Byone Gyi region

Present Place: No.4 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

In Taung Byone region, originally there are two small stupas called Mahtaw stupas built by the King Alaungsithu, grandson of King Kyansittha who is a son of King Anawrahta. There was a battle with China in this region during the reign of King Alaungsithu. There was a small stupa called mahtaw stupa surviving in this region during the battle. In 473ME (1111 CE), it was encased and enlarged by a temple (gu), donated by King Alaungsithu. He also built a huge Buddha image in this region. He also built a small stupa (mahtaw stupa) and two temples (gu) at the Hli Htaung region in 1111 CE. In order to offer the rice for this Buddha image donated by him, he also donated the lands for it.

3. Name of Inscription: Shwe Kon Cha Temple Stone Inscription

Inscribed Year: 503 Sakkaraj (Myanmar Era), 1141-CE

Reference: Nyein Maung, 1972, Vol-1, pp.143-151

Language: Old Myanmar

Number of Face: Four faced inscribed stone

Number of Line: Front 43, Back-45, Right 26, Left 40

Original Place: Inside an inscription shed to the northeast of its temple, Taungbi village,

Bagan.

Present Place: Inside an inscription shed to the northeast of its temple,
Taungbi village,

Bagan.

Description regarding the encasement on this stone inscription:

King Alaungsithu, the grandson of King Kyansittha donated and enshrined the gold, silver, copper, stone Buddha images, and other rare material Buddha images in this temple in 1141 CE. He placed and enshrined the relics of the Buddha in the two golden *patho* (miniature stupas), two silver *patho*, four sandalwood *patho*, two ivory *patho*, two cinnabar *patho*, five orpiment *patho*, five stone *patho*, together with three golden umbrellas and nine white umbrellas inside the reliquary in this temple. He built and donated (gu) two temples and five gilded finials of the stupas. He also made and donated twenty-six pitaka texts, two monasteries with offering robes in this temple. He also donated lands and slaves for this temple.

4. Name of Inscription: Anantathuya Couple Stone Inscription

Inscribed Year: 585 Sakkaraj (Myanmar Era), 1223-CE

Reference: Nyein Maung, 1972, Vol-1, pp. 151-163

Language: Old Myanmar

Number of Face: Four faced inscribed stone

Number of Line: Front 58, Back-55, Right 58, Left 58

Original Place: Lemyethna Temple, Minnanthu Village, Bagan.

Present Place: No.2 of the inscription shed of Lemyethna Temple, Minnanthu village,

Bagan

Description regarding the encasement on this stone inscription:

This stone inscription described that Mahathenapati (General) named Anantathu couple wished the King with royal families like princes, princesses, ministers, queens and attendants including the all creatures like human beings, deities, and animals living in the universe in order to reach the nirvana without hells and he would like to

wish to be a Buddha himself. In order to fulfill their wishes, so he built a temple (gu) with two urn profile-shaped walled enclosures (kalasa pot in shape) at the Amana quarter where the lake was dug. He planted toddy palm trees as fences around the monastic complex.

In 585 ME (1223 CE), the donors enshrined the relics of the Buddha put and encased by eight multiple layers of the relic caskets made of various substances such as sandalwood, glass, red sandalwood, gold, silver, gold with jewellery, ivory, and copper. All these relic caskets were placed in the stone *patho* (miniature stupa).

5. Name of Inscription: ink inscription of Kyazin Temple

Inscribed Year: 585 Sakkaraj (Myanmar Era), 1223-CE

Reference: Bo Kay, 1981, pp. 336-338

Language: Old Myanmar

Number of Face: One faced ink inscription

Number of Line: 7-lines

Original Place: Located at the western wall of the vestibule on the southern side in this temple.

Present Place: Same location

Description regarding the encasement on this ink inscription:

The primary donor of the temple named Barusi died in 487 ME (1125 CE), after he began the temple but did not complete constructing the temple (gu). The secondary donor named Thindra-o entirely enshrined the Barusi's temple in 579 ME (1217 CE) and his temple was completed in 585 ME (1223 CE). The original name of the outer temple was called Tre-Loka-Luwalbo.

6. Name of Inscription: ink inscription of Thetkyamuni Temple

Inscribed Year: 13th century CE

Reference: Bo Kay, 1981, pp. 220-222

Language: Old Myanmar

Number of Face: One faced ink inscription

Number of Line: One line

Original Place: Inscribed on the western wall of the southern vestibule at Thetkyamuni temple.

Present Place: Same location

Description regarding the encasement on this ink inscription:

The ink inscriptions from Thetkyamuni temple mention that King Asoka built eighty-four thousand stupas in Jambudipa Island.

7. Name of Inscription: Kan Swet Kyaung Stone Inscription

Inscribed Year: 686 Sakkaraj (Myanmar Era), 1324-CE

Reference: Nyein Maung, 1983, Vol-3, pp.299-300

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 14 lines

Original Place: Taung Pulu Pagoda to the northeast of Nga Toe gyi Village, Kyaukse

District

Present Place: No.94 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

The Taung Pa Min stupa at Taung Pa was enshrined and encased into the Kan Swet Kaung monastery in the Kyaukse region in 686 ME (1324 CE). The donor offers money, and lands in order to donate the rice and fire for this monastery. The donor also offers the different places of the lands, water tank, toddy palm trees, and slaves for it.

8. Name of Inscription: Shwezigon Stupa Stone Inscription

Inscribed Year: 687 Sakkaraj (Myanmar Era), 1325-CE

Reference: Moe (Kyaukse), 2008

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 21 lines

Original Place: Shwezigon Stupa, Ancient City of Makkhaya, Kyaukse District

Present Place: Shwezigon Stupa, Ancient City of Makkhaya, Kyaukse District

Description regarding the encasement on this stone inscription:

King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to be larger attaining (102 taung or 153 ft) 46.63 metres in diameter at Makkhaya region and gilded the finial of the stupa in 687 ME (1325 CE). He donated two hundred-seventy lands and forty slaves for this stupa in order to last the five thousand religious years. Besides he also donated four hundred-fifty lands for the monastery. In 716 ME (1354 CE), Myatswa Shin Mahathe, the donor from south monastery planted one thousand five hundred toddy palm trees and he also donated lands and toddy palm trees for Thein Phaya Gyi and golden Buddha image in order to offer the rice and fire.

9. Name of Inscription: Nan Oo Stupa Stone Inscription

Inscribed Year: 691 Sakkaraj (Myanmar Era), 1329-CE

Reference: Nan Oo Stupa stone inscription, 2007

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 21 lines

Original Place: Nan Oo Stupa, Ancient City of Myinsaing, Kyaukse District

Present Place: Nan Oo Stupa, Ancient City of Myinsaing, Kyaukse District

Description regarding the encasement on this stone inscription:

King Uzana enlarged and encased a previous small stupa to be larger reaching 103 taung or 154.5 feet (47.09 metres) in diameter in 691 ME (1329 CE). He donated lands and slaves for this stupa in order to last the five thousand religious years. He

donated lands and slaves for Kyettin stupa. He donated lands and slaves for Taung Phyu stupa. He donated Hta Hnaung Kyi village, lands, toddy palm trees, and slaves for Lettheshe stupa. He donated Pintalai village, lands, and slaves for Taung She stupa. He donated Hta Hnaung Kyi village, lands, toddy palm trees, slaves, water tank, and banana trees for Taung Myauk stupa.

10. Name of Inscription: Mahtaw Zedi Stone Inscription

Inscribed Year: 697 Sakkaraj (Myanmar Era), 1335-CE

Reference: Nyein Maung, 1983, Vol-3, pp-351-352

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 10 lines

Original Place: Tapekon village, Myin Khone Taing, Kyaukse District

Present Place: No.101 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

King Uzana enlarged and encased a previous small stupa (Mahtaw stupa) to be larger measuring 63 taung or 94.5 feet (28.80 metres) in diameter at the Myin Khone Taing region in 697 ME (1335 CE). He donated lands and slaves for this stupa in order to last the five thousand religious years.

11. Name of Inscription: Thayegu Phaya Stone Inscription

Inscribed Year: 698 Sakkaraj (Myanmar Era), 1336-CE

Reference: Nyein Maung, 1983, Vol-3, p.357

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 6 lines

Original Place: Thayegugyi Pagoda to the east of Kinton Village, Myin Khone Taing,

Kyaukse District

Present Place: No.114 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

In Myin Khone Taing region, there was a small ruined Thayegu stupa rebuilt and encased by King Uzana to be larger stupa measuring 61 taung or 91.5 feet (27.89 metres) in diameter in 698 ME (1336 CE). In order to last the five thousand religious years, he donated lands and slaves for this stupa. If someone take cares my meritorious deeds, someone may get similar good merit like me. If someone destroys my meritorious deeds, one may reach to the hell.

12. Name of Inscription: King Uzana Stone Inscription

Inscribed Year: 702 Sakkaraj (Myanmar Era), 1340-CE

Reference: Nyein Maung, 1983, Vol-4, p.13

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 16, Back 6

Original Place: It was found between the farmyard of U Tha Paw and Daw Tin May,

Tadaoo Township.

Present Place: No.5 of Maw Kun Phaya Inscription shed, Saga Inn village, Tadaoo

Township

Description regarding the encasement on this stone inscription:

In order to last the five thousand religious years, King Uzana donated 2010 lands for the Eain Nein monastery in 702 ME (1340 CE). He encased and enlarged the inner stupa which has been built and donated by his son named Saw Htwe up to 30 taung or 45 feet (13.72 metres) in diameter. In 702 ME (1340 CE), King Uzana donated lands for this stupa in order to last the five thousand religious years. If someone take cares

my meritorious deeds, someone may get similar good merit like me. If someone destroys my meritorious deeds, one may reach to the eight layers of the hells.

13. Name of Inscription: Thaman Star Stone Inscription

Inscribed Year: 705 Sakkaraj (Myanmar Era), 1343-CE

Reference: Nyein Maung, 1983, Vol-4, pp. 50-54

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 35, Back 33

Original Place: Thaman Star Temple, Chaung Oo Township, Monywa District

Present Place: Thaman Star Temple, Chaung Oo Township, Monywa District

Description regarding the encasement on this stone inscription:

The rich man named Thaman Star came from Majjima region and lived at Lettawya in 618 ME (1256 CE). He took from Maha U Palawun the place where he would like to build the monastery to the east of the ordination hall. Maha U Palawun gave a permission to build it where he would like to select. He also built a temple and a monastery in order to live for Mahathe and made a Buddha image 7.5 feet (2.29 metres) to house in this temple. Maha Upalawun had a relic of the Buddha and Thaman Star also had a relic which was brought from the Mahabodhi temple, India. These two relics were placed and encased by three layers of the reliquaries: a golden relic casket, the silver casket, and a small stone stupa with a golden umbrella enshrined at Thaman Star temple. He made the gilded Buddha image flanked by the gilded Muslinda naga in this temple.

14. Name of Inscription: Nga Kausg yan Thin couple, Headman of Pareinma

Stone Inscription

Inscribed Year: 706 Sakkaraj (Myanmar Era), 1344-CE

Reference: Nyein Maung, 1983, Vol-4, pp. 56-59

Language: Pali / Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 33, Back 29

Original Place: Shwe Moathtaw Stupa, Pareinma Village, Monywa District

Present Place: No.110 of Mandalay Nan Twin Inscription shed, Mandalay

Description regarding the encasement on this stone inscription:

Nga Kausg Yan Thin couple, headman of Pareinma describe that in order to last the five thousand religious years, they donated a monastery at Pareinma which is my native place. There were a small stupa (Moathtaw stupa) which may have been built by King Asoka and an ordination hall built by Sithumingyi in this region. The renowned monk named Maha Kassapa also lives in this place. Therefore, my native place called Pareinma is a glorious and celebrated land.

15. Name of Inscription: Zigon Phayagyi Stone Inscription

Inscribed Year: 714 Sakkaraj (Myanmar Era), 1352-CE

Reference: Nyein Maung, 1983, Vol-4, pp. 89-91

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 20, Back 20

Original Place: Zigon Phayagyi

Present Place: No.1 of Htupa Yon Inscription shed, Sagaing

Description regarding the encasement on this stone inscription:

In 714 ME (1352 CE), King Thihapati and queen, the grandson of King Thiha Thuya built Zigon Taw Zedi which is similar to Yadana Zedi (stupa) built by King Dutthagamani, at Sagaing called Zeyapura in ancient times. In this stupa, he enshrined the relics of the Buddha placed and encased by four multiple layers of the relic caskets, made of gold, silver, ivory, and stone substances. All of the relics donated and encased by the reliquaries together with over one hundred silver Buddha images and three baskets of the Buddhist scriptures (Tripitakas) were placed into the stone

relic chamber, celebrated together with monks, generals, ministers, queens, and royal families, etc.

16. Name of Inscription: Shwe Moathtaw Stupa Stone Inscription

Inscribed Year: 1126 Sakkaraj (Myanmar Era), 1764-CE

Reference: Nyein Maung, 1983, Vol-6, pp. 18-21

Language: Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 49

Original Place: Near Shwe Moathtaw Zedi Thein, Nagabo village, Depayin Township,

Shwebo District

Present Place: Same place

Description regarding the encasement on this stone inscription:

Natkabo Theindaw Phaya, one of the eighty-four thousand stupas was originally built by King Asoka and subsequently it was enlarged and repaired by King Alaungsithu in the Bagan period and then successive Myanmar Kings in the different periods. When King Narapatisithu from the Bagan dynasty visited and found this stupa built by the King Asoka. He patronized and enlarged an earlier stupa, with enshrining the moathtaw stupa together with relics of the Buddha and a small golden Buddha image. There are nine moathtaw stupas enshrining the golden Buddha images, where the Natkabo Theindaw Phaya is located at Depayin. These nine moathtaw stupas have been repaired by the king, ministers, and monks in the Inwa period. Natkabo Theindaw Phaya was crowned with umbrella by Maha Atulapavara Dhammaraja Guru in 1126 ME (1764 CE). This stone inscription was inscribed by him.

17. Name of Inscription: Shwe Intein Stupa Stone Inscription

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHR, 2012, Vol-4, pp. 20-25

Language: Pali/Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 26, Back 15

Original Place: Shwe Intein Stupa, Intein village, Nyaung Shwe Township

Present Place: No.306 of Western Inscription shed in the walled enclosure of Mahamuni

Stupa, Mandalay

Description regarding the encasement on this stone inscription:

Shwe Intein stupa was originally built by the King Asoka over 200 religious years and it was encased and enlarged by the King Anawrahta in the Bagan period and he donated lands and slaves for this stupa. Subsequently, this stupa was again donated by the successive Myanmar Kings like King Narapatisithu, (Saw) Mingyi, Mohnyin Mintayagyi, Minye Kyawswa, Min Khaung, and Hsin Phyu Shin. They inscribed again on the stone inscriptions that mentioned as previous donations like money, lands, and slaves in order to confirm. This stone inscription describing as their previous donations was inscribed by King Bodaw in 1147 ME (1785 CE).

18. Name of Inscription: Lemyethna Stupa and Monastery Stone Inscription

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHR, 2012, Vol-4, pp. 37-43

Language: Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 34, Back 37

Original Place: Shwe Sawlu Stupa, Phaung Lin village, Salin Township

Present Place: No.415 of Western Inscription shed in the walled enclosure of Mahamuni

Stupa, Mandalay

Description regarding the encasement on this stone inscription:

King Sawlu, son of King Anawrahta built Lemyethna stupa with four arch-pediments and a monastery in 1078 CE and he donated the rice and lands for this stupa. King Thadoeminphyia and his Queen worshipped the Lemyethna stupa and a Rakhine monk who lived at Phaung Lin in 1364 CE. He repaired the stupa and monastery and constructed the thein (ordination hall) and donated the rice, flowers, slaves and lands for this stupa. He asked the Rakhine monk that how many lands are there to offer the rice for this stupa. The monk said Phaung Lin people moved the stone inscription mentioning the list of the lands to the river. There are no lists from the inscription for this stupa. Therefore, he donated lands in order to offer the rice for this stupa.

19. Name of Inscription: Gudaw Phaya (Temple) and Shwe Moathtaw Stupa Stone Inscription (Thakyin and Letpanyin Village)

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHRNL, 2013, Vol-5, pp. 216-219

Language: Pali/Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 36 lines

Original Place: Gudaw Temple and Shwe Moathtaw Stupa

Present Place: No.122 of Western Inscription shed in the walled enclosure of Mahamuni

Stupa, Mandalay

Description regarding the encasement on this stone inscription:

King Anawrahta built a temple (gu) and he donated the lands for this temple in Thakyin village in 426 ME (1064 CE). Prince Kalakya Minsithu (Narathu) donated the lands in 537 ME (1175 CE). There are two moathtaw stupas built by the King Asoka and these two stupas have been encased and repaired by the Minmaha Kaungsin from Than village in 667 ME (1305 CE). He donated the lands for these two moathtaw stupas. Originally these people erected the stone inscriptions describing their meritorious deeds and donations of the lands. In order to become a Buddha, this

stone inscription describing as their previous donations was erected and inscribed by King Bodaw Phaya in 1147 ME (1785 CE).

20. Name of Inscription: Moathtaw Phaya Stone Inscription (Makkhaya Myo)

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHRNL, Vol-6, 2014, pp.35-38

Language: Pali/Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 34 lines

Original Place: Moathtaw Phaya (Stupa), Makkhaya Myo

Present Place: No.425 of Western Inscription shed in the walled enclosure wall of

Mahamuni Stupa, Mandalay

Description regarding the encasement on this stone inscription:

There was a small moathtaw stupa, Makkhaya region, encased and enlarged by the King Uzana as a larger stupa attaining 105 taung or 157.5 feet (48.00 metres) in diameter in 1325 CE. King Uzana donated slaves, lands and toddy palm trees for the stupa, monastery, and ordination hall. The grandson of King Uzana named Makkhaya also donated lands and slaves and toddy palm trees for this stupa. In order to last the five thousand religious years, King Badaw Phaya donated again these lands and palm trees for these religious monuments. In order to become a Buddha, this stone inscription describing as their previous donations was erected and inscribed by King Bodaw Phaya in 1147 ME (1785 CE).

21. Name of Inscription: Moathtaw Phaya Stone Inscription (Manpaw Village at Myin Khone

Taing)

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHRNL, 2014, Vol-6, pp.94-96

Language: Pali/Old Myanmar

Number of Face: One faced inscribed stone

Number of Line: 24 lines

Original Place: Moathtaw Phaya (Stupa), Manpaw Village

Present Place: No.42 of Eastern Inscription shed in the walled enclosure of Mahamuni

Stupa, Mandalay

Description regarding the encasement on this stone inscription:

There was a small moathtaw stupa encased and enlarged by the King Uzana as a larger stupa attaining 63 taung or 94.5 feet (28.80 metres) in diameter at Myin Khone Taing region in 697 ME (1335 CE). King Uzana donated the lands for this stupa in order to last the five thousand religious years. He erected the new stone inscription describing his donations to confirm. In order to become a Buddha, this new stone inscription describing as previous donations of King Uzana was erected and inscribed by King Bodaw Phaya in 1147 ME (1785 CE).

22. Name of Inscription: Moathtaw Phonemase Stupa Stone Inscription (Maoo Gyi Village at

Alone Myo)

Inscribed Year: 1147 Sakkaraj (Myanmar Era), 1785-CE

Reference: DHRNL, 2014, Vol-6, pp.193-197

Language: Pali/Old Myanmar

Number of Face: Two faced inscribed stone

Number of Line: Front 32, Back 24

Original Place: Moathtaw Phonemase Stupa, Maoo Gyi Village, Alone Myo

Present Place: No.464 (Ka) of Western Inscription shed in the walled enclosure of

Mahamuni Stupa, Mandalay

Description regarding the encasement on this stone inscription:

There is a Moathtaw Phonemase stupa built by the King Asoka, situated at Maoo Gyi village near Chindwin river and King Asoka donated lands for this stupa around these areas. According to King Asoka's donation of the lands, King Narapati donated lands in order to offer light and rice for this stupa in 704 ME (1342 CE). In order to become a Buddha, this new stone inscription describing as their previous donations was erected and inscribed by King Bodaw Phaya in 1147 ME (1785 CE).



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