



A Study on Kyaikkatha: An Early Urban Settlement in Lower Myanmar



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[Abstract]

Sittaung-Thanolwin region in Lower Myanmar is an ecological niche for human settlement. Evidences of human activities in the region are seen through various archaeological sites or settlements along the coastal area between the rivers Sittaung and Thanlwin (Salween). In Lower Myanmar, scholar, U Aung Myint, discovered one major site Kyaikkatha and other small scale sites, namely, Sittaung, Kawhtin, Kadaikgyi, Kadaikkalay, Katkadit, Kelatha (little Zothoke), Ayethama, Winka, Zothoke (big Zothoke), Lagonbyi (Sampannago), Wagaru, Laming and Ye in present day Mon State. In 1980, U Aung Myint undertook an exploration program at Kyaikkatha. After the exploration, an excavation team conducted systematic digging at Kyaikkatha in March 1986. Excavation continued occasionally at Kyaikkatha throughout the years between 1995 and 2000. It is known that Kyaikkatha, the old city, reveals a kind of monumental civilization exposing four religious structures (a stupa and three monasteries). This essay looks into the distribution of features within Kyaikkatha and infers on its social, political, and religious organization.

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This essay is also about a new discovery of an early urban settlement located at the apex of the Gulf of Muttama (Martaban) where a lost city of *Suvannabhumi* flourished in the ancient days. By means of aerial photographic observations, the site had been noticed recently, which was followed by some excavations. More systematic and detail surveying may be needed to know more about the site and its features for comparison to other similar settlements of through-out mainland South East Asia.

Keywords: Ecological Niche, Urban Settlement, Monumental Civilization, Aerial Photographic Observations

I . Introduction

Ancient civilizations in Myanmar are known to have arisen in three distinct areas: in central Myanmar in the greater Ayeyarwady and Mu River valleys; in Rakhaine on the west coastal alluvium; and on the Southeast coastal alluvia of the Sittaung and Thanlwin river valleys. In these distinctive areas, the Pyu, the early Rakhaine and the Old Mon civilizations existed in Myanmar (Myint Aung 1977: 41-53). Archaeological research has disclosed a pattern of settlement and artifacts that suggest the former existence of these Kingdoms. Their origins may be ascribed to increase long-distance exchange, access to productive rice lands, control of strategic resources such as salt and iron ore, and the expansion of population in restricted river flood plains. The Pyu settlements are known respectively as Beikthano, Halin, Sriksetra, Maingmaw (Panle), and Wadi, which controlled central Myanmar. Early Rakhaine settlements of Dhanyawati and Vesali controlled coastal valleys of Rakhaine and the Old Mon city of Thaton was located on the northern shore of Tanintharyi coast where Sittaung and Thanlwin meet the sea in Lower Myanmar (Aung Thaw 1972: 1-117).

The Sittaung-Thanlwin Region, a coastal plain of the Gulf of Muttama in Lower Myanmar, lies in between (16° 25' and 17° 27' North and 96° 50' and 97° 40' East), and forms part of the present day Mon and Kayin States. The ancient sites extended to

a neighboring region along the same coast in the south to reach the Ye, Dawei and Thanintharyi river in the Peninsula (Tanintharyi Division) - bordering the Andaman Sea in the west and the Thailand border on the east.

About the Mon Civilization of Lower Myanmar, this is what we know from the writings of G. H. Luce:

Rāmaññadesa, "Country of the Mons" doubtless included Pegu (Bago) at the head of the Gulf of Martaban (Muttama), 54 miles north-northeast of Rangoon (Yangon); but the purer Mon region began after the crossing east of the mouth of the Sittaung. Here was the ancient *Suvannabhumi*, "land of gold", around Mt. Kelāsa, the 1100 ft., 30 miles north of Thaton, where Asoka's missionaries, the *theras* Sona and Uttara, are said to have landed, in 253 BC (?) after the 3rd Buddhist Council (*Dipavamsa* VIII 12. *Mahavamsa* XII 6, 44-54). For centuries before and after Christ, this coast had been infested by Malayan Pirates, whose main centre was Sumatra. The local Mons and Indians called them *Rakṣa*, "cannibal monsters" and doubtless they enlisted many of the aborigines, Semang Negritoes and Australoid Besis, to join their sea-raids. The coastline, from Twante' east and south-wards, is still dotted with forts, built near the mouths of rivers against Raksaattack. Not very long before the time of Aniruddha they had been expelled from Thaton, where, after a spell of Brahmanism, Buddhism triumphed, and the city was renamed Sudhamma (= Thaton), "City of the Good Law" (Luce 1970: 21).

According to G. H. Luce we can trace the early settlements in lower Myanmar, namely *Rāmaññadesa* where the capital city called *Suvannabhumi*, "land of gold" and Sudhammapura (=Thaton), "City of the Good Law" flourished at a up to the reign of King Aniruddha of Bagan (11th Century A.D.).

Previously, archaeological discoveries could not prove the existence of old Thaton as a center of the region: some doubts were thrown on Thaton as an Imagined Center. Now, thanks to aerial photographic reading conducted by U Aung Myint of the Forestry Department, we are able to locate many new town sites, large and small, dotted along the coastal plain in the Sittaung-

Thanlwin Region. Kyaikkatha is one of the newly discovered early major settlement sites of lower Myanmar located at the northern part of Thaton region where some minor settlements, such as Stiitaung and Kawhtinare also located. Their existence supports the traditional and local idea of the existence of Ramaññadesa and Thaton in Lower Myanmar.

Very little is known of the inhabitants of the Sittaung-Thanlwin valley in early times. But there is reason to believe that a primitive people of Upper Paleolithic or Neolithic times found their home on the river terraces and in the limestone caves. Their implements made of stone, called "Thunderbolts", are occasionally found in the area since the colonial era (Page 1917: 9). Scholars thought that these stone tool makers were of the Negrito race that gradually migrated southwards to Malaya or elsewhere fleeing better-armed invaders (Aung Myint 1978: 57-60).

The last five to ten years saw area being surveyed for prehistoric and historic site explorations. Many archaeological findings documented by U Aung Myint in last twenty-five years were studies by a team from the Universities Historical Research Centre. In its observation of prehistoric artifacts, many Neolithic settlements were recorded at Kyaikkatha, Mayangon, Hsinbyukyun, located about two miles north-west of Thaton, Kawpayan in Mudon and Thagara in Dawei.

An aerial survey carried out over Myanmar by the Survey Department of Burma (Myanmar) in 1958, disclosed a large number of earthworks in Lower Myanmar. They are irregular in shape, mostly concentrated in the coastal region. They aroused the interest of Forestry Conservator U Aung Myint, who published *Myanmar Ancient Cities from Aerial Photos*.

In 1980s, U Aung Myint undertook an exploration program at Kyaikkatha and later published the results in the *History Journal*, Yangon University (Aung Myint 1985: 131-144). He and his student San Win continued to explore more sites, such as Zokthoke, Taikkala, Thaton, Sanpannago and some other small scale site. The latter reported a preliminary survey report, to the Department of History, Yangon University (San Win 1986: 168).

The Kyaikkatha, exploration continued and in December, 1982. U Aung Myint prepared a preliminary report regarding the site. He circulated it among his colleagues. An excavation team, from the Department of Archaeology was consequently developed to conduct systematic digging at Kyaikkatha in March 1986. Excavation continued occasionally at Kyaikkatha throughout 1995 to 2000.

This paper focuses on the Pre-Bagan culture and civilization of Lower Myanmar by tracing newly observed archaeological sites such as Kyaikkatha, Zokthoke, Kadaiketc; in the region, and comparing them with other Pyu sites of Upper Myanmar and Dvaravati sites of the Lower Maenam basin in Thailand.

II . Background History

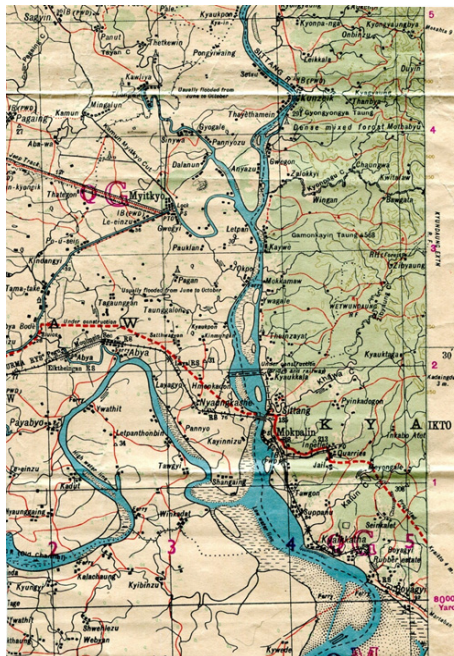
Kyaikkatha is a Mon word which means “the pagoda of Atha Prince.” According to the legend, Wimala ascended the throne of Pegu (Bago) after he had killed Thamala, his elder brother and king, and took the latter's queen to be his wife. At this time she was pregnant and fearing for her offspring, she went into the jungle, where she gave birth to a son. This son, Atha Prince was miraculously cared for by a herd of buffaloes and grew to great strength. Some years later, when his step-father's Kingdom was threatened by the king of Vizianagaram, he came down and defeated the enemy's champion single-handedly. The king honored the prince which made the courtiers to envy him and plot to kill him. Upon hearing this, the prince left the town with his foster-mother, Nan Karaing (Mi-Nan-Gluin) the queen of the buffaloes, and came to a place where he founded the town to be known afterwards as Kyaikkatha, from the pagoda with the same name. A mermaid, Marimingala, fell in love with him and, assuming human form, married him. Atha Prince became more known for he is being the only descendant of the gods (his grandmother was the queen of the dragons) left among human beings. A Princess of Cambodia determined to go to him, and with 1,000 Knights, dressed in gold, set out for Kyaikkatha. But this did not please Marimingala, and as soon as the Princess approached the town, the mermaid killed Atha Prince to prevent him marrying another queen. The

Princess of Cambodia, Ma San Myaing, refused to be comforted, and having built a town close by called Mosomyo (widow), resided there and founded the thousand pagodas in memory of Atha Prince (Tin Gyi 1931: 27-28).

2.1. Location, Size and Shape

Kyaikkatha in the Kyaikhto township is located at 17° 21'30" N Latitude and 17° 55" E Latitude. The Sooppanu and Khalon streams flow on its north and the railway line that runs parallel to the Malaw stream is to be found on the southeast. Along that railway line, there lie the villages of Mokekhamu, Bo Yer Gyi and Kwat Htin. By railway, Kyaikkatha is six miles south of Mokepalin and seven miles of Kyaikhto. The village of Kyaikkatha is situated in the west of the railway line, with Kawtsan in its east. Kyaikkatha is just on the shore line near Gulf of Muttama.

<Figure 1> Map of Burma, 94-C-15, one inch map

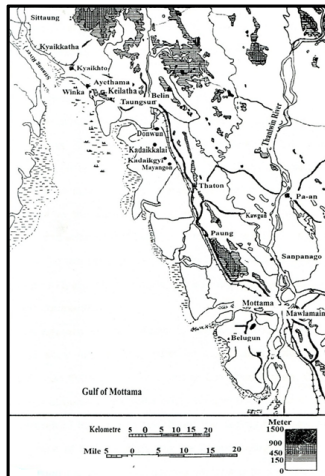


Source: Map of Burma- 94- C - 15

However, Kyaikkatha is as big as Thaton but circular in shape. Within the city there existed a big lake called Ingalaine. The old site is called Kyaikkatha¹⁾ Village. Guided by an aerial photograph U Aung Myint explored the area in January 1981.

Kyaikkatha is almost the same size with the old Bago, Hmawbi (Campānagara) and the Thaton. Two outer walls surrounded it. Because the walls were almost circular, Kyaikkatha might have been built earlier than Bago and Thaton. It is notable too that it was flanked by several forts, namely, Sittaung, Kawthtin, Kakadid, KadikeGyi, KadikeHka Lay, Kelasa, Ayetthama, Winka, Zokethoke and DonWun. The presence of several forts flanking Kyaikkatha supports the fact that Kyaikkatha was an important town (Than Tun 2001: 17-18).

< Figure 2> Map of Kyaikkatha Region



Source: Thin Kyi 1985, Old Thaton Town

- 1) The name Kyaikkatha comes from Mon words KyākAssa; (Kyāk= pagoda; Assa:=a legendary hero of Hanthawaddy – Bago Mon Kingdom) meaning the Pagoda of Prince Assa who was born and who had grown up in the frontier area between Bago and Muttama (Martaban). There is an ancient Pagoda (ceti) called KyākAssa at the South-west corner of the old-town, which suggests why the town was named Assa; this still exists in Mon; village in Mon. Later the new Myanmar settlers called it in their language as Kyaikkatha. In the list of Hanthawaddy 32 Myos (town sites), it is mentioned as Katha-SittaungMyo, adjoining a nearby town site located on the east bank of River Sittaung.

The presumed inner wall has the Kyaikkhanon pagoda in the centre. The enclosed area is not an exactly square in shape, but each side measures approximately half a mile (0.8 kilometer). There are seven walls encompassing the inner wall. It is unlikely that the walls are to protect the Pagoda in the centre. That suggests that the pagoda is not contemporary. All the important people like the chief and his subordinates including armed guards would use it as their residence. In size, the enclosed area is bigger than a similar area in Zokthoke. A strong outer wall, doubled in some places, completely encircled the inner town, leaving a space of nearly a mile between the two walls. The west outer wall is so close to the shore line that one would mistake it for an embankment. Actually these were also used for defense. With the diameter on the south, the outer wall forms as almost semicircular. The south wall is about one and a half mile (2.4 kilometer), with the maximum width of three quarter mile (1.26 kilometer) long. The whole site covers an area of 667 acres (269 hectares). The area within the inner wall is 90.5 acres (36.6525 hectares) (Aung Myint 1998: 110).

< Figure 3> Aerial Photo View of Kyaikkatha



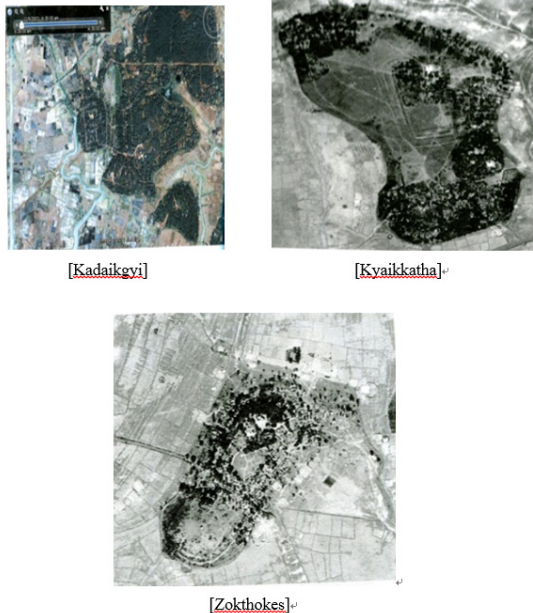
Source: Google Earth

The eastern part of the town is largely laterite highground. Some of the laterite hillock seemed to have been made into forts which are probably the first east outer wall. With the sea forming a natural defense on the west, the people of this town probably expected the enemy coming only from the east (Than

Tun 2001: 17-18). That explains why they had put up scattered forts on the north, east and south of this city.

Typologically, Kyaikkatha and Thaton are the biggest ones in the region, Zothoke (by combining the bigger Zokthoke and the smaller Zokthoke-Kyaikhtisaung), Sanpanango, Sittaung and Ye are medium in size. The rest are smaller. Their patterns are also varied; they may be built in circular form, or may be in oblong with rounded corners - sometimes, one is bigger than another, some rectangular in shapes. This rectangular shape may be seen in the middle part of the bigger oblong ones.

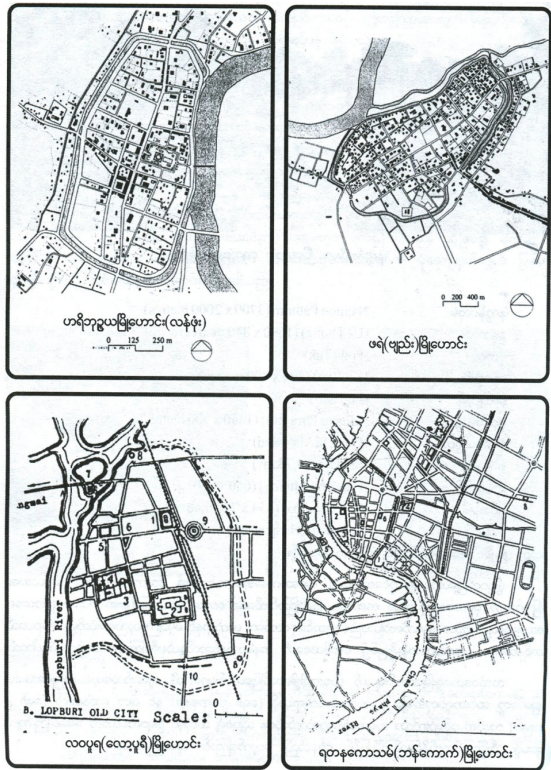
< Figure 4> Comparison Kyaikkatha Old City Plan with Others
Neighboring Town Sites



Source: Google Earth

They form inner enclosures for palace sites or citadel area with double, triple, or more walls and moats. These significant features are extraordinary and may be distinguished with other Pyu settlement sites of upper Myanmar and Old Mon settlement sites of Dvaravati (Old Thailand).

< Figure 5> Dvaravati period town sites in Thailand

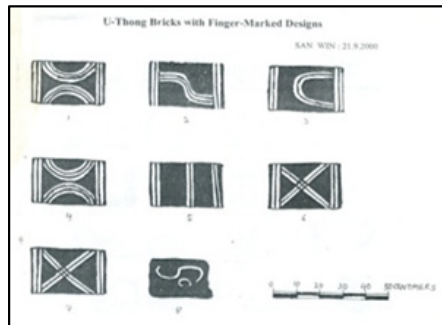
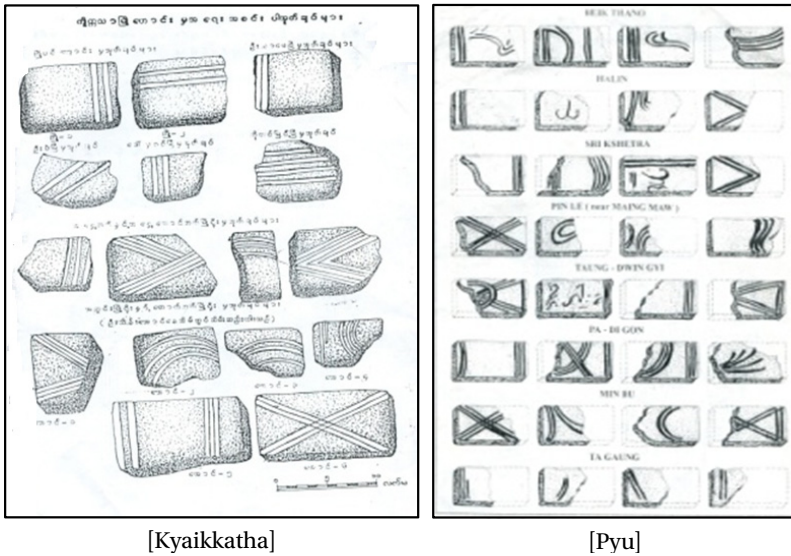


Source: San Win 2010, Suvannabhumi Research

As for Kyaikkatha and Zokthoke one can trace about seven earthworks in the middle, while Kadaikgyi has more than three walls within. Even the smallest town site of Kakadit located at the Mouth of Belin has these three earthworks. At Thaton, six earthworks are visible in the northern part of the old city. The middle part consists of one or two enclosure walls. The outer walls of Thaton, with two or three earthworks forming a rectangle with rounded corners, are very similar in shape with that of Kadaikgyi inner rectangles. Thus, in typology, a tradition of town building patterns is obviously recognized in Thaton region that can be distinguished in patterns that were discovered so far in Upper Myanmar Pyus and central Thailand Dvaravati (Lei Lei Win 2010: 1-42).

The Kyaikkatha wall is made of earth, laterite and bricks (Ko Ko 1987: 1-33). There were fairly big bricks with finger marks, which is the characteristic mark of the Pyu brick-making tradition in Upper Myanmar. Using, two or three fingers, the straight lines, curved or crises- crossing are drawn on both sides of the brick which is about 14"× 2.5"×7". Pyu sites like Maingmaw, Visnu, Halin, Sriksetra, Wadi, Thegon, Taungtwin etc., all have bricks made by Pyu (Aung Myint and Moore 1991: 81-102).

<Figure 6> Comparison Finger-Marked Bricks with Pyu and Dvaravati



[U – Thoung]

Source: After San Win 2000 (A report on visit to U Thoung Suphanburi Province)

Similar bricks (F.M.B)²⁾ are to be found from major Dvāravati sites in Thailand such as U- Thong, Si Mahosot, Prachin-buri Province and Si Thep, Phetchabun Province in Central Thailand (San Win 1999: 1-10; 2000: 1-9). In the north of Thailand the same may be found in Ban Wangdaeng, Thap Khlo District, Phichit Province. In the south, bricks are reported from Dvārarati sites as far as Mokkhalan, Nakhon Si Thammarat Province (Phasook Indrawoot 2011: 72) (See Figure 6). Early Buddhist sites in India and Nepal also have marked bricks, for instance, in Bihar at Vārānasi (Sārṇāth), Kosambi, Rājagriha, and Vaisali; in Uttar Pradesh at Kusinara and Sravasti; and in Kapilarastu (Phasook Indrawoot 2011: 75). In a number of cases the marked bricks were kept as relics, and were believed to have protective power (Moore 2004: 5). Scholars are of the opinion that these bricks are associated with the adoption of the Theravada practice at sites throughout India, Myanmar (Pyu and Mon) and in Thailand (Mon Dvāravati) (Moore 2004: 6).

2.2 Topography

Topographically it stood on a laterite high ground about 100 feet in its height and slopping down to the alluvial plain of Sittaung valley, reaching 25 feet towards in the west. The Khalon stream flows along the rice fields in the north. In the west, another small stream called Malaw Chaung flows from the southeast near Phayata Htaung highground now covered by jungle. All sources of water cascade down the eastern slope of the town site, and drop at the mouth of Sittaung in the west. Some flow down from the south-east direction near the old town that stands across the big lake. There are numerous swamp areas, along the Upper reaches of Malaw Chaung called Inngyi (big lake). They are the Seinkalet Inn, Kalatchat Inn, Kyibin Inn, Aing ma (mother lake) and Inhnama (sister lake) in the south east. They are water sources for the ancient Kyaikkathahydraulic system. Traces of man-made canals are also found around Kyaikkatha.

2) F.M.B is Finger Marked Brick. F.M.B here means artifact which is marking on the burnt brick.

III. Archaeological Observation

3.1 Exploration

In recent years archaeologists have become increasingly aware that a whole process of cultural formation shaped both the way finds came to be buried and what happened to them after they were buried. They also tried to distinguish between process of cultural formation and non-cultural or natural formation processes and their transformations. In discovering archaeological sites and features, they used the Reconnaissance Survey Method in locating sites and in reconstructing the full human use of the landscape. They sought to study settlement patterns and the distribution of sites across the landscape within a given region. This entailed the exploration of the whole region, involving a survey program (Renfrew and Bahn 2004: 56-78). In the last few decades, surveys have developed from being simply a preliminary stage in field work (for instance, in looking for appropriate sites to excavate) to a more or less independent kind of inquiry, an area of research in its own right which can produce information quite different from that achieved by digging. In some cases excavation may not take place at all, for example, due to permit issues, or because of the lack of time or funds excavation. Survey is cheap, quick, relatively nondestructive, and requires only maps, compasses, and tapes. Usually, however, archaeologists deliberately choose a surface approach as a source of regional data in order to investigate specific questions that interest them which excavations could not reveal (Renfrew and Bahn 2004: 78-82).

Reconnaissance survey encompasses a broad range of techniques: it no longer just offers the identification of sites and the recording or collection of surface artifacts, but also enables the study of spatial distribution of human activities, variation between regions, changes in population through time, and relationships between people, land, and resources (Renfrew and Bahn 2004: 82). Since surface survey has vital place in archaeological work, and continues to grow in importance, it is usually supplemented (and often preceded) by reconnaissance from the air, one of the most important advances made by archaeology this century. The

availability of air photographs can be important for surface surveys (Renfrew and Bahn 2004: 83).

A comprehensive knowledge of the ways in which sites appear from the air is essential. Those who use aerial photographs must understand the means by which the evidence is made visible in order to determine the type of features recorded. Conventionally, features photographed from the air are often described according to the way they are revealed, rather than by the archaeological reality they represent. Thus, we have "earthworks", "Soil marks", or "crop-marks". It is more helpful to extend these descriptions, as in, "earthworks" showing the ramparts of an enclosure", or "the soil mark of a leveled burial mound," or "crop-marked ditches of a probable settlement". Interpretation is the process by which features photographed from the air like soil-marks are analyzed in order to deduce the types of archaeological structures causing them (Renfrew and Bahn 2004: 85).

Aerial photos can also be employed to produce a map of known features within a region (for example, Thaton, Sriksetra, Beikthano and Hanlin in Myanmar). Many such records are drawn into transparent sheets that are overlaid on to maps showing topographical or other information, though more up-to-date systems have converted such information as part of Geographic Information Systems (GIS) (Renfrew and Bahn 2004: 85).

In Myanmar, the first major archaeological application of this technique occurred at the middle of 20th century with photographs of Pyu town sites such as Maingmaw (Panle), Beinnaka, and Waddi in Upper Myanmar region. U Aung Myint started to use them to provide their town plan and view of prehistoric monuments. In Lower Myanmar, U Aung Myint, discovered the major site Kyaikkatha and other small scale sites, namely, Sittaung, Kawhtin, Katkadit, Kadaikgyi, KadaikKalei, Kelatha (Little Zokthoke), Ayetthama, Winka, Zokthoke (big Zokthoke), Lagonbyi (Sanpannago), Wagaru, Laming and Ye in present day Mon State. As for Thaton, the late professor Dr. Daw Thin Kyi, Department of Geography, Yangon University (a member of Myanmar Historical Commission) prepared a town

plan map in 1958 tracing from the aerial photograph.

3.2 Surface Findings

Neolithic stone tools and implement are commonly found by farmers working on upland garden plots at Sein Kalat the northeast of the site, but other tools have come up in a laterite rich area within the walls of Kyaikkatha (See Figure 7).

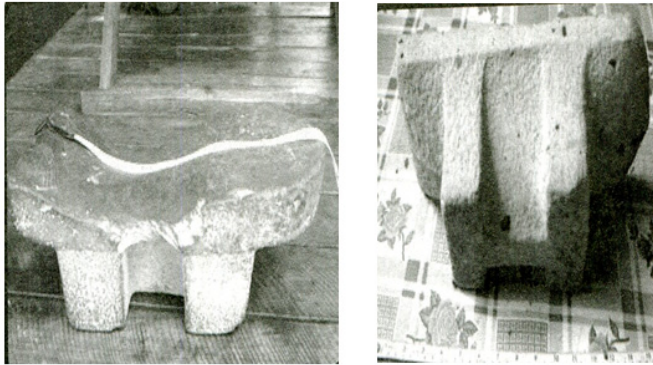
<Figure 7> Neolithic Earthen Bead and Stone Implements Found at Kyaikkatha



Source: Lei Lei Win 2010, Ph.D. Dissertation

Saddle querns and rollers are utilitarian stone objects that are well represented both in Kyaikkatha and Kadaikgyi (See Figure 8). A good number of them have been found in most Dvaravati sites in Thailand. These are domestic appliance which would also be found four fictive feet, often scarcely disengaged from the stone body of the quern which has four feet in lower structure and a carve shape in upper structure. They closely resemble those so commonly found in the Mekong delta, in Champa, and indeed wherever these may be found traces of early Indian influence exit. It is right to consider them to be derived from an Indian prototype which has functional feet, if they have feet at all. They were accepted as an improvement on the old grinding-stone of the Neolithic Culture (San Win 1986: 74-75).

<Figure 8> Saddle Querns Found at Kyaikkatha and Kadaikgyi



Source: Lei Lei Win 2010, Ph. D. Dissertation

At Kyo Bin Kon Kyaung, where the horde of silver coins was found, five bronze images of the Buddha were also recovered although kept today at another monastery, the Don LanKyaung (See Figure 9). The images, ranging in height from 15-25 centimeters, probably date to the 4th to 6th Century AD (San Win 1986: 74-76). Three of the images stand with their right hands in the *Abhayamudra*, and with broad shoulders and a ribbed belt holding the undergarment, recall pieces from Haripuñjaya and late Sukhothai (Moore 2007: 205-206). The head were modeled with strong brow lines, noses, and small knobbed *unisha*, and similar to the closest parallel to two of the images is a seated Buddha found near Maung Di Pagoda at Twante (Luce 1985: 165, Figure 76d). Kyo Bin KonKyaung Monastery also houses a squat Pillar-like stone circa 1 meter in height with a sloping top which has carving of four large faces in the style of a *mukhalinga*. The smiling mouths on these recall 14th century Pinnya images of the Buddha though the carving may be recent -the top is painted gold as the piece is venerated today (Moore 2007: 205-206).³⁾

3) According to San Win, the original carving of the four faces was covered with modern cement by villagers and made it look like a modern monk's faces.

<Figure 9> Bronze Images of the Buddha and Silver Coins
Found at Kyaikkatha 1970s



Source: Lei Lei Win 2010, Ph. D. Dissertation

An important document was found in 1970 by U Mg Mg Thaik of the Burma Historical Commission, at a village called Kunzeik, 15 miles north of Kyaikkatha. This stone inscription, 60 centimeters by 40 centimeters in size, bears 19 lines on the obverse and another 4 lines on the reverse. The lines are extracts of *Abhidhamma- Pitcasamuppāda* with a southern Indian scripts of Pali Language. It is comparable with that of Maunggan gold plate inscription of Hmawza (Sriksetra) (Maung Maung Thike 1970: 1-7). Kunzeik is situated on the east bank of Sittaung River right along Kyaikkatha. The two places are closer and assessable by water than that of Sriksetra, the Pyu capital city.

Not far from Kyaikkatha in the south about 15 miles lies Mt. Keilatha, where Taikkala or ancient *Golamattikanagara* (Suvannabhūmi) was located. By 1978 excavation is this site in (WK-6) in Winka village yielded some terracotta votive tablets bearing old Mon writings of 6th century A.D. (Myint Aung 1977: 22-40).

These finds from the sites near Kyaikkatha and its surroundings stimulated scholarly interests of U Aung Myint in exploring future. On the 1980s, he and his colleagues made many trips to Kyaikkatha in the Kyaikhto town ship, Mon state. They found the old site occupied by of two separate villages, Kyaikkatha and Kawsan, and divided by the railway line passing through the old city from northwest to southeast. The north-eastern part of

old city has no village but a bare laterite high ground where laterite quarry pits are numerous. On one of their exploration trips U Aung Myint and his colleagues found two small sculptures; one made of terracotta and another one made of stone. Both represented horse-riding. The terracotta carving, is a fragment, and has a fully-dressed man riding a horse. He wore a princely garment (San Win 1986: 74-76) (See Figure 10).

<Figure 10> Fragment of Terracotta Carving Found at Kyaikkatha, Depicting a Man Riding a Horse



Source: San Win 1986, M.A. Thesis

The next one is a stone carving, also a fragment showing a horse with two riders, a man and woman. The man on the back side seems to be holding a lance with his right hand and while the left holding the reins. The reverse side has a line of inscriptions which cannot be read anymore (San Win 1986: 74-75) (See Figure 11). However, the exploration teams attempted to decipher it. Without knowing any other information, they determined it to be old writing similar to that of Pyu scripts. Accordingly, one of the team members, Sayagyi U Maung Maung Tin suggested that Kyaikkatha must be a Pyu city. The suggestion was supported by another artifact found at Kyaikkatha, the Pyu type silver coins associated with other artifacts such as the five bronze Buddha statues, old terracotta votive tablets, precious stone beads and finger marked bricks. Finger-marked bricks are

found at to be found in various Pyu old cites of Upper Myanmar such as Vishnu, Hanlin, and Sriksetra so on. The discovery of finger- marked bricks at Kyaikkatha was a pioneering work by U Aung Myint. It was the first discovery in Lower Myanmar town sites. The record of finger-marked brick continued not only from walls and other ruins but also at Zokthoke, Ayetthama, Winka, Kaw Htin, Thaton, and many other sites scattered along the coastal area on the Gulf of Muttama. Further documentation is also needed of Hpaya Tataung (Malawchaung), the one thousand Pagodas' to the east of Kyaikkatha (Tin Gyi 1931: 27).

<Figure 11> Fragment of Terracotta Carving Found at Kyaikkatha, Depicting a Man and Woman Riding on Horseback.

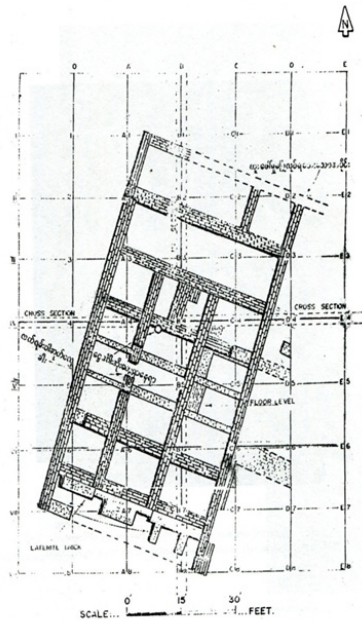


Source: San Win 1986, M.A. Thesis

3.3 Excavation

The Department of Archaeology has conducted excavation at seven sites (K.K.T-1 to 7) within Kyaikkatha. Kyaikkatha excavated mound K.K.T.1 is a rectangular brick structure, with three big rooms and nine small rooms, measuring (100 feet x 50 feet) (See Figure 12).

<Figure 12 > Plan of Exposed Structure at Mound, No: (1) KKT



Source: Ko Ko 1986, Kyaikkatha Report

A big room (hall no.1) measures $27\frac{1}{2}$ feet x $13\frac{1}{2}$ feet, while the small rooms average to 12 feet x 10 feet. The burnt bricks are large, 18" x 9" x 3" in sizes, while the small ones measures 12" x $6\frac{1}{2}$ " x 2". Most of the bricks have finger-marked lines indicating that this structure may be traced to the pre-Bagan or Pyu period. In some part of the brick courses use laterite bricks at the base level, while some laterite bricks are shaped like the Kalasa pot. Small terracotta votive tablets (four complete, six broken and 13 incomplete) are unearthed from this brick structure (K.K.T.1). The four complete votive tablets are comparable to that of U Mya's votive tablets part 1 figures 58 , 59 and 112 showing a type of Buddha-gaya with a *sikhara* mounted on top of the sitting Buddha (See Figure 13). Another religious artifact is a torso of terracotta Buddha sitting on a low pedestal. The left arm of this statue is also broken. The body measures two feet and one inch in height and similar to Bagan period's Buddha statues,

highly influenced by the India, Pala-Sena workmanship of East Bagan. Of the presence of the Buddhist tablets and statues as well the seven pieces of earthen begging bowls, 17 spouts of earthen jars and some pottery vessels, suggests that the structure is a religious building. As an added discovery, the excavator unearthed a pot of silver coins containing 1054 pieces from (K.K.T.1), buried beneath a brick course of a small room. The coins contain the same Sriviitsa and Conch Shell emblems as in previous discoveries of 1970 at Kyaikkatha. Typologically, Kyaikkatha coins are more akin to Dvaravati and OcJEothan Pyu (Coe 2004: 67). Another indication of this structure is an old brick course beneath the square structure show ingits previous function from pre-Bagan period. (Ko Ko 1987: 18-23).

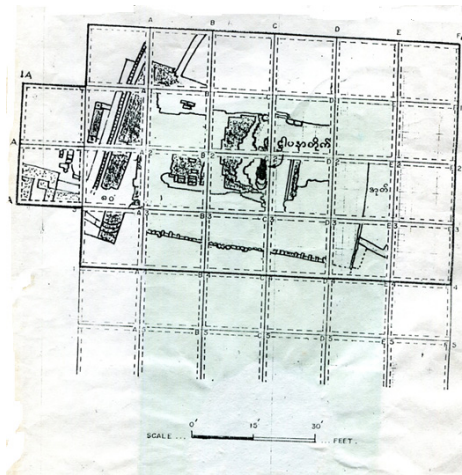
<Figure 13> Buddha Gaya Type Votive Tablet Found at Sittaung, Kyontu, Kyaikkatha and Thaton.



Source: Lei Lei Win 2010, Ph. D. Dissertation

K.K.T.2 is a ruined stupa which has several terracotta votive tablets of early Bagan type inside its chamber cell. While three sides of it are damaged the western sector is in fact, with an entrance and seven terraces of a stupa. The chamber was found in the middle of the structure, about 30 feet from the western entrance, where burnt bricks and laterite bricks of various sizes were used above the compact lateritic ground (See Figure 14).⁴⁾

<Figure 14> Plan of Exposed Structure at Mound, No: (2) KKT



Source: Ko Ko 1986, Kyaikkatha Report

Votive tablets found in the chamber are similar to that of BaganAnawrahta and Kyansittha period mentioned in U Mya's Votive Tablets Volume I. containing "Yedhamma" stanza with old Nāgari script at the base (See Figure 15).

<Figure 15> Two Votive Tablets are from Kyaikkatha.

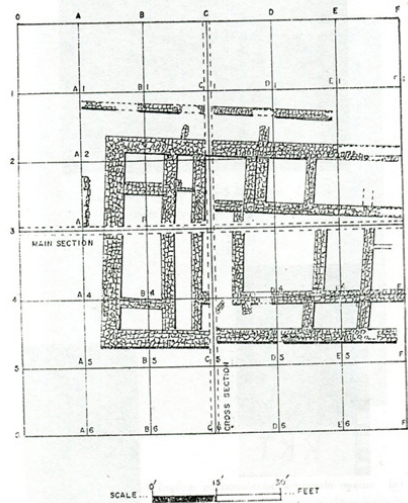


Source: Lei Lei Win 2010, Ph. D. Dissertation

4) The excavation were conducted by U Myo Min Kyaw for the first half of the season. Daw Ngwe Ngwe Soe handled the second half of the season.

K.K.T.3, mound was excavated in the western part of Kyaikkatha old city and a brick structural building with thirteen rooms had been unearthed. It measures 70 feet from east to west and 45 feet from north to south (See Figure 16). The brick walls are about 3 feet in thickness and the bricks are laid well. Average bricks sizes used in this structure are 14" x 7.8" x 2½". Laterite bricks are very few in use in this rectangular structure whereas the brick courses were laid without foundation. An average size of the one big room is 21 feet in length and nine feet in width. The bricks are of finger-marked similar to that of K.K.T.1 and 2 (Ko Ko 1987: 18-25).

<Figure 16> Plan of Exposed Structure at Mound, No: (3) KKT



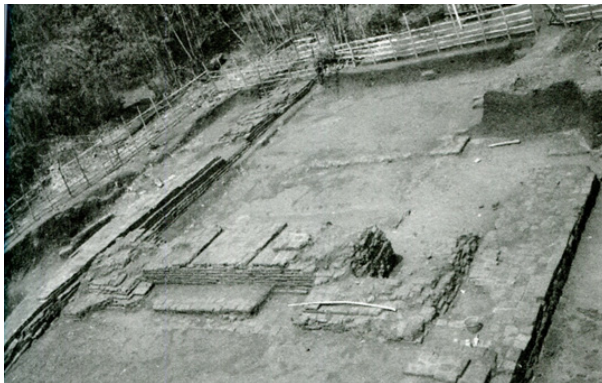
Source: Ko Ko 1986, Kyaikkatha Report

From the potsherds which number to 358 pieces there are 40 glazed ware shreds indicating that the later period habitation continued in K.K.T. (3). Other findings includes sprinkler knots, pottery cover, anvils, broken begging bowls, stone rollers, terracotta snake heads, head-less human figure, and embossed Buddha figures made of lead. This rectangular structure of K.K.T. (3) might also be a religious building. Stratigraphy and archaeological findings show that K.K.T. (1) may be dated not later than the

early Bagan period. The structure seems to be rebuilt three times thus the first phase of construction might have been during the pre-Bagan (Pyu) period. The other two structures, K.K.T. (2) and K.K.T. (3), were not built earlier than early Bagan period (11th century A.D.) (Ko Ko 1987: 29).

Another rectangular structure (K.K.T.7) was unearthed during 2000 the excavations of 2000 (Ngwe Ngwe Soe 2001: 6-7). The mound is extend to 45 meters in length from east to west and 30 meters in width from north to south, exposing a brick structure of 40.6 meters 134 feet in length and 21.5 meters 71 feet in width. The structure orients towards the True North. The structure still remains at the highest part of its brick course about 1.6 meters about the base level with 22 brick courses. It has two corridor rooms outside and two main apartments in the middle divided by a wall of 3.15 meters and 10'4" in thickness (See Figure 17). The corridor wall has traces of post-holes and it is also exposing many terracotta plaques depicting human figures, (See Figure 18) elephant figures (See Figure 19), a crocodile and floral designs. A bronze Buddha statue in sitting posture about 30 cm high was also found from the middle part of the structure. The terracotta reliefs measure 90 cm x 45 cm and 25 cm x 32 cm respectively while their thickness varies from 8 cm to 10 cm. This huge brick structure might have also been used for the religious purpose (Ngwe Ngwe Soe 2001: 13).

<Figure 17> Brick Structure Unearthed during Excavation of 2000



Source: Lei Lei Win 2010, Ph. D. Dissertation

<Figure 18> Terracotta Human Figure from Excavated Site, (KKT-7)



Source: Lei Lei Win 2010, Ph. D. Dissertation

<Figure 19> Terracotta elephant head (fragment) found at (KKT-7)



Source: Lei Lei Win 2010, Ph. D. Dissertation

The bricks used in this building vary 18 x 19 x 3 in to 15 x 6½ x 3½ in and contain finger-marked indications. The excavator suggested that this (K.K.T.7) building might have been 1200 years during the late Pyu period in age (Ngwe Ngwe Soe 2001: 13). This relative dating is based not only stratigraphy analysis but also on the archaeological findings liketerracotta spouts (See Figure 20) such as terracotta relief, pottery vessels, terracotta oil lamps (See Figure 21), glazed sherds (Celadon), stone rollers in black-slate, grinding platform in black-slate, finger-marked bricks and red-slipped potter sherds. Some sherds of glazed pottery (Celadon) may indicate the later Hanthawaddy and Muttama periods (Ngwe Ngwe Soe 2001: 13).

<Figure 20> Terracotta Spouts Found at Kyaikkatha, (KKT-7) (2000)



Source: Lei Lei Win 2010, Ph. D. Dissertation

<Figure 21> Terracotta Lamp Found at Kyaikkatha, (KKT-7) (2000)



Source: Lei Lei Win 2010, Ph. D. Dissertation

By means of these excavations conducted at Kyaikkatha over a decade (from 1987 to 2001), it is known that Kyaikkatha the old city reveals a kind of monumental civilization exposing four religious structure (a stupa and three monasteries).⁵⁾

3.4 Observation and Identification

The archaeology of Lower Myanmar especially in Mon and Kayan State presents a picture of expansion from a core area between the two rivers valleys, Sittaung and Thanlwin, in the Neolithic period with the big or small urbanized settlements spreading around the coastal line in the Gulf of Muttama (Martaban). Kyaikkatha is one of these newly discovered early urban

5) Except for K.K.T-4 and 5 which are of testing pits. Another brick structure (K.K.T-6) is not mentioned in the excavation reports.

settlements located on the apex of the Gulf. The available date for sites yielding polished stone artifacts through surface finds shows that "Neolithic" settlements can be found generally across Lower Myanmar.

The walled site of Kyaikkatha was identified in the 1970s from aerial photographs and explored and excavated in the 1980s. It has a considerable size and interesting shape with multiple walls and moats inside while a strong outer wall, double in some places completely encircled the inner town; this may be compared with the close neighbors Zokthoke and Kadaik-gyi in Belin and Thaton townships.

There are laterite stupas, Buddha images, animal figures carved in laterite blocks such as the face of a lion, elephant head, *grudha* (Mythical bird), as well as terracotta plaques with an affinity to the art of Dvaravati in Thailand. Departmental reports identify the city as a brick construction involving a range of finger marked bricks and confirm that it shares cultural elements with Pyu (Before Bagan) period or early urban period settlements of Upper Myanmar. Coins with auspicious symbols and carnelian, agate and chalcedony beads are still regularly discovered by villages that dug trenches in producing laterite bricks. Some also found fragments of stone carving, terracotta objects and pottery vessels from there.

From the excavated mounds, rectangular brick structures presumed as religious buildings as well as stupas with chambers were unearthed. Votive tablets of Buddha-gaya type and statues were discovered from the chamber. Their relative dating suggests that the religious buildings might have lasted 1200 years BP during the late Pyu period or early Bagan period while the glazed shreds (Caledon), stone rollers and grinding platform in black-slate indicate the later of Hanthawaddy and Muttama periods (15th – 18th centuries).

The architectural landscape suggests that the site forms quite a different system to the walled centers of Upper Myanmar. While there are shared elements such as finger-marked bricks, coins with auspicious symbols and stone beads, there is a key

difference in the way the landscape is modified. The presence of "Pyu Period" materials suggests that these materials are not specific to the Pyu sites, but characteristic of the broader region in which Indian cultural influence dominated the whole area of South-east Asia.

IV. Conclusion

Though the ancient Myanmar was well connected with northern India through land routes, Mon legends tell of Indian influence coming to Lower Myanmar by sea because of the period's seafaring. It is believed that this sea route was regularly followed by sailors of both Kalinga and Andras, the maritime traders of South India. Ptolemy has referred to a direct route from Paloura (Pular) to Sada, frequently used by the Kalingans in the course of their journey to Myanmar. Sada was the first port touched at in Ptolemy's time by ships proceeding from Indian to the eastern coast of the Bay of Bengal. It is most plausible that the people of Kalinga used the south-west monsoon to course their journey to Myanmar, and took advantage of the north-east monsoon when coming home (Benudhar Patra 2005: 29). To conclude, we can say that Kyaikkatha in ancient time had close commercial and cultural contact with India. Different aspects of India cultural influences such as town planning, monumental civilization and Hindu and Buddhist religious practices show this. Thus, it can be inferred that Kyaikkatha, an early settlement in Lower Myanmar, might have been a sea port town along the maritime trade route between India and Southeast Asia.

To know more about Kyaikkatha we may need other archaeological investigation. A Preliminary Excavation Report on the defense system (city walls, moats and gates), burial practice, the art of writing, administrative system, social status, water managements, and ancient belief are essential historical facts. Later systematic excavations on Kyaikkatha must reveal these.

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