

**Interpreting Pyu material culture:  
Royal chronologies and finger-marked bricks**

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***Interpretations***

Bricks were used to build walls around Pyu and Mon sites in Myanmar and Thailand during the early first millennium AD if not earlier.<sup>1</sup> Many of these bricks have lines on the ends or across the width, patterns made with the fingers while the bricks were still soft. Unlike many other diagnostic Pyu artefacts such as beads and coins, finger-marked bricks are not easily collected or traded. They are cumbersome to transport over great distances, and even when re-used today tend to remain in the locality where they were first made.

The massive brick walls of Sriksetra, Beikthano and Halin are one of the principal features used to identify these sites as Pyu, although it is now accepted that their occupation pre-dates the construction of walls. Chinese emissaries in the 9<sup>th</sup> century AD described the city-wall of the P'iao (Pyu) capital as being faced with glazed bricks, part of a general perception that walls designate an area as urban. It has been suggested that the armies of the Nan-chao did not think the newly founded kingdom of Bagan worthwhile to raid, as it had no fortified city (Htin Aung 1967:31).

<i>Pyu site</i>	<i>Township</i>	<i>Division</i>	<i>Latitude x longitude</i>	<i>Area enclosed by wall (Aung Myint 1998:18)</i>
Tagaung	Thabaikkyinn	Mandalay	23.10n x 96.01e	
Halin	Wetlet	Sagaing	22.27n x 95.49e	208 ha [512 acres]
Waddi	Natogyi	Mandalay	21.25n x 95.47e	130 ha [320 acres]
Maingmaw (Pinle)	Myittha	Mandalay	21.17n x 96.12e	222 ha [548 acres]
Bagan (Pagan)	Nyaung Oo	Mandalay	21.10n x 94.52e	104 ha [256 acres]
Beinnaka	Pyawbwe	Mandalay	20.36n x 96.12e	
Beikthano	Taungdwingyi	Magwe	20.00n x 95.23e	291.7 ha [717 acres]
Sriksetra	Pyeh	Bago	18.48n x 95.17e	1477ha [c.30 sq.km]

Where there are no brick walls, identifying Pyu site area can be problematic, likewise determining whether the delimited area was a 'city'. This has on occasion led to diagnostic conundrums. For instance, the Pyu status of Beinnaka has been ambiguous in part because outer walls have not been identified. At Beikthano, the walls are similar to those of Sriksetra and Halin, but Pyu inscriptions and Hindu-Buddhist icons are absent, raising questions about the identification of the inhabitants at various points in the site's chronology.

<sup>1</sup> The Pyu language has yet to be deciphered with the earliest inscription dated to the late 5<sup>th</sup> century AD. The greatest number of Pyu inscriptions has been recorded at Sriksetra and at Halin but they have been found in other regions, including southern Yakhine (Luce 1985:50). A main text in working out the language has been a four-sided inscription dated to 1113AD, installed at the Myzaidi pagoda in Bagan. The same text, in Pyu, Mon, Burmese and Pali, is inscribed on the four sides of the pillar written (Blagden 1911). Another, possibly the latest, Pyu inscription found at Bagan has been provisionally dated to 1287-98 (Luce 1960:321).

As this suggests, defensive constructions are one attribute used to assess the relative importance of Pyu centres. A temporal sequence for the rulers of these cities has been established using both absolute and relative dates. Absolute dates are limited to Beikthano and Halin. The four dates from Beikthano were obtained from two similar rectangular structures within the city walls, while the four dates from Halin were obtained from one rectangular structure within the city walls and two gates on the south and southeast walls of the site. These dates testify to occupation at Beikthano from the 1<sup>st</sup> to 4<sup>th</sup> century AD and at Halin from about the 2<sup>nd</sup> to 9<sup>th</sup> century AD.

The radiocarbon dates have also been used in conjunction with relative dating, such as stylistic analysis of structures and motifs, and palaeographic study of inscriptions. These are found principally on stone funerary urns and slabs, silver gilt reliquary caskets, gold plates bearing the Pali canon, votive tablets and images of the Buddha. The inscriptions demonstrate a well-established familiarity with the Theravada canon possibly by the 4<sup>th</sup> century AD. The study of these inscribed materials has focused on an accurate dynastic chronology and identification of the prevailing religious practice. Some consideration has been given to the relationship between the main identified Pyu centres, and also to external factors, such as political, economic and religious relations with South Asia, Nan-chao and China, and other Southeast Asian polities. While a certain amount of this has been in terms of receipt of trade missions and sacred teachings, the pro-active role of Pyu centres in these arenas is also implied by the extent of the sites, the apparently early existence of elaborated religious hierarchies, and the occurrence in some cases, especially to the east, of similar motifs and artefacts.

In contrast to this network of regional activity, the chronicles interpret Pyu material culture in a more personalised framework of internal relations. Unlike absolute dating and stylistic analysis, this tradition does not lie within a similar context of exact resolution. Chronicles display a very different perception about relevant time, the significance of the king and “the fluctuating fortunes of states competing in a geographically circumscribed theatre” (Shorto 1961:71). The aims and morality of those responsible for establishing these states permeates chronicle accounts. This is the case with both royal chronicles encompassing a number of dynasties and localised accounts. They were often written in situations of shifting power, and in order to ensure continuity of ritual and dynastic traditions, employ a complex vocabulary very different from European traditions of historiography (Aung Thwin 1980, Sao Saimong Mangrai 1976).

As these notes indicate, Pyu material culture has been observed and interpreted from widely varied perspectives. The present investigation of these sources began with questions asked by many others: Did an identical ethno-linguistic group inhabit all the so-called Pyu sites or were the Pyu one of a number of Tibeto-Burman groups occupying Upper Myanmar? When did finger-marking bricks start being made and why are they so widespread? Which city did the Chinese visit? What clashes and resolutions are reflected in the chronicles? In sifting through the literature on these subjects, the authors changed every few decades, but the answers for the most part remain enigmatic. The sources are diverse and often scattered, but are abundant in contrast to material on the Bronze Age in Myanmar. It may be that answers have remained elusive in a search for “a compendium of all the circumstances that constitute a ‘given’ context” and a “goal of totalising contexts”(Bal and Bryson 1991: 248). Without abandoning the questions, it is possible to give some idea of the multidimensional ‘text’ labelled Pyu material culture (Tilley 2000:425). In this context, three types of data are summarised here: relative and absolute dating evidence, chronicle accounts, and the use of finger-marked bricks. Particularly in regards to the last of these, the partial view of Pyu material culture sought here is one of individual agency, a consideration first prompted by the immediate and intimate memory obtained when the middle fingers are placed in the imprints of a finger-marked brick.

### *Finger-marked bricks and Pyu walls*

Pyu walls were thick, commonly 2-5 metres wide, and were further reinforced with earthen embankments. Chinese emissaries noted that these walls, combined with the enclosed areas of rice fields, ensured the king's ability to withstand a long siege (Htin Aung 1967:11). Not only outer walls were made of brick, but walls within the city, as well as monastic and ritual buildings ranging from stupa-like structures to rectangular temples and halls. On the interior and exterior of some of these buildings and outside city walls, terracotta funerary urns in a variety of shapes have been found, often in conjunction with skeletal remains. The outer walls were once perhaps 5 metres high, making the volume of bricks needed to build a one kilometre section of wall about 319,147 cubic feet (95,744 cubic metres), calculated using an average size brick used at that time (c. 44-50x 20-26x6.3-7.6cm)(Aung Myint 1998b). This is roughly equal to the volume of bricks needed to build ten large memorial halls (c.25 x 15m) such as KKG9 at Beikthano where the walls were some 1.25m (4ft3in) thick (Stargardt 1995:170). To obtain clay for these varied uses, most particularly building the walls, a vast quantity of soil was displaced adjacent to the walls and in natural depressions, making reservoirs in the form of moats and tanks. The remains of these efforts have formed 'Archaeological scars', recognizable shapes and patterns on aerial photographs likened to the process of scar tissue forming over to a deep cut (Aung Myint 1998a,b; Moore and Aung Myint 1981, 1983).

In the central basin of Myanmar, finger-marked bricks are found at virtually all Pyu sites, and have been found at Tagaung, the earliest capital recorded in the Myanmar chronicles (Win Maung 1997). Preliminary survey of sites in India and Nepal recorded finger-marked bricks in Bihar (Varanasi (Sarnath), Kosambi, Rajagriha, Vaishali), Uttar Pradesh (Kusinara, Saravasti) and at Kapilavastu. In a number of cases the finger-marked bricks were kept as relics, and were believed to have protective power (Win Maung (Tampawaddy) 1991). The finger impressions may be on either end or diagonally across the broad face of the brick, and generally were made using one to three fingers of the hand. Some finger-marked bricks from Sriksetra were marked a second time with stamps bearing Pyu numbers or letters (Luce 1985:140). In the southern parts of the country, finger-marked bricks are found at most 'Mon' sites thought to date to the early centuries AD. Many of these are traditionally associated with the formation of Suvannabhumi, for example at lowland habitation sites and upland ritual centres around Mt. Kelasa in present day Bilin Township, Mon State (Moore 2003, forthcoming). The early significance of this southern area is recalled by a delegation headed by the chief monk of Mt. Kelasa's monastic community said to have attended the consecration ceremony of a stupa built by Duttagamani of Sri Lanka in the 2<sup>nd</sup> century BC (Sao Saimong Mangrai 1976:160, Htin Aung 1967:6). Similar bricks are found at Mon Dvaravati sites in Thailand such as U Thong (San Win 2000). Thus while the use of finger-marked bricks is described here in a Pyu context, finds are associated with the adoption of Theravada practice at sites throughout Myanmar and in Thailand.

Finger-marked bricks, unless re-used, are not found at sites dating beyond the 12<sup>th</sup> or early 13<sup>th</sup> century AD (Moore and Aung Myint 1981). Nor are finger-marked bricks found at earlier or contemporaneous bronze-iron using sites of the Samon valley, described briefly below. Nonetheless, the bronze artefacts associated with the Samon sites are increasingly being reported at Pyu locations, for instance Halin and Beinnaka (Moore 2003, Win Maung 2003). In some instances, differences in the Pyu and Samon bronze-iron finds are difficult to distinguish. Beads of semi-precious stone, glass or fossil wood, are often labelled Pyu and are commonly found in association with finger-marked bricks. However, very similar beads are also found at the Samon sites, where ritual goods such as 'mother-goddess' figures indicate animist rather than Hindu-Buddhist practice (Nyunt Han, Win Maung and Moore 2002).

### *Chindwin and Samon bronze and iron using sites*

A distribution of bronze-using sites is found around the Lower Chindwin region (21.20-22.30n 94.45-95.30e). The site of Nyaunggan is part of this group, one that spans the Chindwin River and stretches south around its confluence with the Ayeyarwaddy. The Bronze Age cemetery northwest of Monywa has been dated comparatively to c. 1500-1000 BC, the time period given for the establishment of a bronze-working tradition in Southeast Asia.<sup>2</sup> However, the start of bronze production in this area and the duration of cemetery use are not yet known.

To the east, along the Samon Valley south of Mandalay, bronze-iron cemetery sites are dispersed (19.40-22.00n x 95.30-96.15e)(see Moore and Pauk Pauk 2001; Nyunt Han, Win Maung and Moore 2002; Moore 2003). Absolute dating is not yet available for these and again an initial date for bronze and iron working there has not been formulated. They may fall within a period of fairly rapid change in Southeast Asia, from about c. 700-400BC, during a transition from unstratified agriculturalist economies using stone tools, to ranked metal-using communities (Glover 1999b: 104). The inception of localised iron production in Southeast Asia is generally placed around 500 BC (Glover 1999a: 87, Higham 2002: 158, 166). Also fitting within this timeframe are thermo-luminescence dates obtained from both pottery and iron excavated in 1982 at Taungthaman, Amarapura (21.53n x 96.05e) by U Sein Maung Oo. From this site, an iron fishhook found on the chest of a skeleton gave a date of 460 ±200 BC (Stargardt 1990: 15-6,29).

A number Pyu walled sites are found in, and peripheral to, the distribution of bronze-iron using sites in the Samon valley. The site of Taungthaman, and Kyaukse, whose ricefields supplied the 9-13C city of Bagan, are located here as well. Halin and Beikthano are on the north and south margins of the Samon bronze-iron distribution. Further south is Sriksetra, by far the largest of the enclosed Pyu sites. Its dating (4<sup>th</sup> or 5<sup>th</sup> to 9<sup>th</sup> C AD) is based on stylistic analysis although its location near the probable ancient shoreline suggests far earlier occupation. Traditional histories indicate habitation of the area long before the founding of the Pyu city (Moore. 2000: 172). Despite clear links to other Pyu sites such as brick walls, finger-marked bricks, and urns, Sriksetra presents a rather different profile in terms of the range of Pyu objects and the paucity of stone or bronze tools. This may well be dispelled with further research and excavation.

As discussed further below, the Pyu sites have been dated to about 200 BC – 900 AD, with charcoal samples from Beikthano yielding the earliest dates (Aung Thaw 1968, Aung Thwin 1982-3). The sequence of 1000+ years bracketed as ‘Pyu’ rests on more information than currently available for the Chindwin and Samon sites. Radiocarbon dates are available from Beikthano and Halin; there is palaeographic analysis of a limited number of inscriptions on stone and on gold plates, and stylistic analysis of bricks, beads, pottery, sculpture, monuments and walls. However, many aspects related to the Pyu remain uncertain. These include deciphering the language and, as discussed below, determining whether the Pyu were a distinct ethnic group that entered the central basin or were one of a number of groups already present. Also important is a clearer picture of developments during the early centuries AD. This was a period of expanding trade with both northern and southern parts South Asia and China, and there are indications that the changes indicated at sites such as

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<sup>2</sup> Attempts to date bone from both Hnaw Kan and Nyaunggan failed to give results due to lack of collagen in the samples. Charcoal was recovered Hnaw Kan, but the results are not available at the time of this writing (Patreau et al.2001: 100; Patreau 2002).

Chansen in Central Thailand during the third century AD (Bronson 1976), were mirrored at Pyu settlements.

The chronological, cultural and ethnic relationship of the Samon valley bronze-iron cemeteries and the Pyu walled sites of Upper Myanmar remains a matter for future research. Both groups, if indeed they prove to be distinct, settled in the arid zone, where irrigation was needed for wet rice cultivation. Both were capable of working in bronze and in iron. Although bronze and iron metallurgy and the firing of clay for pots and beads was already well established, this technology was used in new ways by the Pyu, most notably brick-making as discussed above, to define territory and erect ritual structures. The catalyst for these changes is traditionally attributed to contact with South Asia.

### ***The Pyu: changes, sites, and chronologies***

Assessments vary on the manner in which this South Asian influence was incorporated. Where most authors suggest that both technical and ritual change were corollaries to increased urbanism (e.g. Wheatley 1971: 249), others posit that techniques preceded concept, with for example 'pre-Buddhist' funeral buildings constructed at Pyu sites using locally manufactured bricks (Stargardt: 1990, 1994). As both technical and ritual change occurred gradually, artefacts and epigraphy have not provided evidence for clear precedence of technology, especially one in an isolated context. Often new needs prompt adjustment in a number of spheres so that in this case, polities incorporating Hindu-Buddhist norms are identifiable only with the advent of wall construction at sites of the Tibeto-Burma Pyu. These polities may have emerged in part due to agricultural intensification and also increased trade, with an elite merchant class encouraging royal adoption of Buddhist rule. In this context, new technologies such as brick-making are best understood as part of a wider picture of societal change. That said, the internal chronology of Halin, Beikthano and Sriksetra remains to be clarified. By this is meant not earlier and subsequent habitation, but the succession of brick elements such as walls, gates and buildings that are called 'Pyu'.

The commonly used succession of Pyu capitals places the legendary capital of Tagaung first, followed by Beikthano. The site of Maingmaw has also been mentioned as being earlier than Beikthano, based on the condition of its walls (Than Tun 1979:52). Chronicle accounts suggest that Sriksetra conquered or at least dominated Beikthano. This perhaps influenced conclusions from U Aung Thaw that Beikthano "came to an end in the 4<sup>th</sup> century", after which Sriksetra existed, until the 8<sup>th</sup> century when both it and Halin "perished at the same time (Sao Saimong Mangrai 1976: 158). Reference to Halin is found in separate accounts, however, so a presentation in a chronicle context of the relationship of the sites is absent. Halin is often placed chronologically after Sriksetra and Beikthano, although radiocarbon dates and the inclination of its north south wall suggest early occupation contemporaneous with both these sites to the south. These varied sources are discussed further below, the point here being to highlight the manner in which chronicles, Chinese accounts, radiocarbon dates and stylistic analysis have all contributed to and perpetuate the clear-cut sequence of Pyu sites that characterises the literature on the subject.

The sites that are named in chronicle accounts have given these Pyu centres a pre-eminent place in the historiography of the country. While the abundant remains at Beikthano, Sriksetra and Halin also justify this prominence, a hierarchical site distribution is not yet fully mapped out. While Waddi and Beinnaka are identified as Pyu, they are not included in the sequence of capitals. The search for a single centre stems from the Chinese descriptions and later, mainly Bamar, chronicles. The references to the Pyu in both sources were determined not so much by an interest in the history of the Pyu but subsequent economic and political concerns. Nor has the distribution of Pyu artefacts such as finger-marked bricks been fully plotted, with a view to charting the chronological spread of Pyu influence. When constructing a chronology of Pyu

sites it is also important to remember that while religious structures have been excavated, this has not generally included a stratification of any depth under such buildings.

The Pyu or 'P'iao' capital is referred to in Chinese records, as discussed below. Some authors contend that the general term used by the Chinese can also be applied to specific sites such as Beikthano (Chen Yi-Sein 1999), but in general the Chinese reference is taken to be to a capital. The distance from the Yunnan prefecture capital Yung-ch'ang is usually given, along with a description of the size of the walled site and the customs of its inhabitants. The 7<sup>th</sup> century AD account of the monks, Hsüan Tsang (Xuanzang) and I Ching (Ijing) refer to the kingdom of 'Sriksetra', an honorific toponym ('auspicious land') associated with Puri, in Orissa (Wheatley 1983:173) However, there is little evidence for a unified Pyu 'state' with chronicle references to kings more likely being to rulers of independent polities fluctuating in power.

While chronologies thus probably overlapped considerably, the preservation of a sequence and prioritising of the few available radiocarbon dates has tended to result in a series starting with Beikthano (2<sup>nd</sup> century BC – 5<sup>th</sup> century AD), followed by Sriksetra (5<sup>th</sup> – 8<sup>th</sup> century AD). Halin (2<sup>nd</sup> to 9<sup>th</sup> century AD), commonly thought to be the capital referred to in the 9C AD *Man Shu*, occupies a variable place in arrangements of the three sites. In all cases, both the initial and final dates are open to revision. The terminal date of the 5C AD for Beikthano, for example, is based on the presumption that the site is older than Sriksetra, plus chronicle accounts that Beikthano 'fell' to Sriksetra. This demise has recently been re-iterated, part of a suggestion that Khmer troops occupied Beikthano from 210-225AD, after which the Mon moved in, giving the city the names of Panthwa or Ramañña-pura, Sinicised as Lin-yang. Finally, according to this hypothesis, in the 5<sup>th</sup> C AD, Pyus from Sriksetra destroyed Beikthano, ending the history of the city (Chen Yi-Sein 1999).

However, even if Beikthano waned in political power after the 5<sup>th</sup> century AD, Aung Thaw's second period of occupation at Beikthano, Phase II, dates to the 11<sup>th</sup> century AD. It is difficult to see why the site would merit the construction of a temple in the Bagan period unless it continued to be of religious and political significance. The references to Lin-yang are discussed further below, with the question of change and 'demise' of sites also raised again. First, however, the Chinese accounts of the Pyu are summarised. These are invaluable contemporary records recognising the Pyu, perhaps as both a trading partner and political presence, within a changing political configuration. Even though most of the information was obtained second-hand, the Pyu 'capital' was considered worthy of note over more than six hundred years.

### *The 'Pyu' in Chinese records*

The Pyu are referred to as the 'P'iao' in Chinese texts dated from the 3-9C AD, although they are thought to have called themselves 'Tircul'. Tircul is used, for example, in the 1102 AD palace inscription of Kyanzittha, where Tircul, Bamar and Mon dancing is described (Blagden and Duroiselle 1921). Variants of Tircul are also mentioned by Perso-Arab authors of the 9<sup>th</sup> and 10<sup>th</sup> centuries AD. Bordering Nan-chao, these 'kingdoms are at war with China, but the Chinese come out stronger.' (Luce 1985:46)

### Early accounts

A long established trade route between China and India passed through what is now Upper Myanmar. The Han dynasty establishment of a prefecture at Yung-ch'ang in Yunnan in 69AD prompted increased mention of these areas although reference to kingdoms precedes mention of the P'iao. The earliest note is in the work of two envoys, K'ang T'ai and Chu Ying, sent to the court of Funan in southern Cambodia, possibly around 240AD. There they met an emissary from India who gave them information about a number of kingdoms to the west.

Upon their return home, K'ang T'ai in particular included these stories in his report (Briggs 1951:21). Only fragments of these texts survive, and only in versions copied into later works. One passage mentions a kingdom known as Chin-lin located on a large bay over 2000 *li* west of Funan. Another 2000 *li* west was the kingdom of Lin-yang, accessible only overland, not by water. The people of this kingdom were said to be Buddhist. These descriptions are characteristic of the Chinese accounts, containing information on the location of areas considered significant, along with trade routes, economic products, the appearance of cities and the habits of the populace. Linking the areas named in the Chinese records with names of archaeological sites continues to pose a challenge to academics, as illustrated by the scholarship on the kingdom of Lin-yang described below.

Chen Yi-Sein, formerly Reader in Chinese at Yangon University, has identified Lin-yang with Beikthano, relying on various linguistic conclusions, some elaborated, about a range of dates and associated placenames. From these, he specifies a Khmer period of 205/210-225AD, followed by a 'Monized' habitation until the 5<sup>th</sup> century (1999:86-7). Many of these toponymic links and conclusions are very specific and difficult to verify elsewhere. For instance, there is no corroborating evidence for a Khmer presence at Beikthano in chronicles or the archaeological record. An invasion of Beikthano in 205/210 AD during the reign of the Funan king Fan Shi-Man (Sirimara), with Khmer occupation there until 225AD, is not specified in the rather nebulous accounts of the kings of Funan compiled from Chinese sources. Possible architectural support has been given to the later phase of this sequence, however, as it has been suggested that the stupa-monastery grouping (KKG2, 3, 4) of buildings at Beikthano are distinct, and might be attributed to a 'Monized' phase (San Shwe 2002:29).

Htin Aung identifies Lin-yang with Halin and Chin-lin with Thaton, mentioning only that the Funan king died while preparing to invade the latter (1967:7,9). Luce also suggested Thaton as Lin-yang and the presence of Lopburi Khmer from central Thailand, although in other articles adopted a more conservative conclusion that Chin-lin may have been on the Gulf of Martaban or the Gulf of Siam, which would place Lin-yang in either Myanmar or Thailand (Luce 1965:10, Wheatley 1983: 167). Even if this early Chinese text is identified with Beikthano, Taw Sein Ko refers to two ancient capitals by this name, one in Magwe, and the other in the Upper Chindwin (Aung Thaw 1968:5). Thus as with much else about the Pyu, more data is needed. What is extremely useful in Chen Yi-Sein's explanation is the implied existence of a number of independent polities, and the picture of competition and warfare between these groups.

Other Chinese texts of about the 4<sup>th</sup> century AD describe troublesome groups living southwest of Yung-ch'ang. These peoples grew millet, hill-paddy, cotton trees and cinnamon, and produced saltwells, gold, silver, jade, amber, cowrie and tortoise shell. There were rhinoceros and elephant, and monkey hide was used to make armour. The peoples were alleged to be cannibals, who tattooed themselves and used bows and arrows. Further to the southwest, some 3000 *li*, were "a civilised people, the P'iao, where 'prince and minister, father and son, elder and younger, have each their order of precedence" (Luce 1960:309). They made their knives and halberds from gold, and produced perfumes, cloves, cowries and a white cloth from the cotton-tree.

#### Later accounts

Over the next three hundred years, there is little mention of the P'iao. However, in the 7<sup>th</sup> century, two monks, Hsüan Tsang and I Ching, travelled to India and in both records Sriksetra is mentioned. Neither monk visited the city, and although the P'iao are not specifically cited, they do refer to a capital called Sriksetra, or 'field of glory' located in a country that to the south, "borders on the sea" (Luce 1985: 48).

The later Chinese sources are linked to the fortunes of the kingdom of Nan-chao. As a result of an alliance forged with Tibet in 755AD to defeat the Chinese, the Nan-chao king Ko-lo-feng initiated communications with the Pyu. By the end of the century, however, the Tibetan link was broken as Ko-lo-feng's grandson strengthened ties to the Chinese court. An embassy from Nan-chao to the Chinese court was sent in 800, 802 and 807AD. In 1966-67, five lively bronze figures of two dancers, two musicians and a drummer, averaging 11.5cm high, were found near the Payama stupa outside the northeast wall of Sriksetra. They are thought to represent part of this 9<sup>th</sup> century delegation of Pyu or Mon performers (Luce 1960:317). The figures were found together with an ornate 27.5cm high bronze bell with two *Srivatsa* motifs commonly seen on both Pyu and Mon silver coins.

Due to these shifting alliances, information about the Pyu capital was included in records of the time such as the *Old Tang History* (*Chiu-t'ang-shu*) and the *New Tang History* (*Hsin-t'ang-shu*). Another document of this period is the *Man Shu*, compiled by Fan Ch'o after gathering information from Pyu soldiers during the 862AD siege of Hanoi (Luce 1960:318, 1985:77). All the sources contain details about the Pyu capital.

“The king's name is Maharaja. His chief minister is Mahasena. When he goes on a short journey, the king is borne in a litter of golden cord; when he journeys far, he rides an elephant. His wives and concubines are very numerous; the constant number is a hundred persons. The compass of the city-wall is faced with glazed bricks; it is 160 *li* in circumference.” (Luce 1960:318)

The *li* varied at different periods, and during T'ang is thought to have been about 360 metres. The *Man Shu*, however, remarks that the time to march around the city was a day, generally taken to be about 50 *li* (Wheatley 1983: 193). The tiered form of the *pyatthat* appears to have been used to mark the four corners of the city gates. Inside the walls were more than a hundred Buddhist assembly halls ('*wats*'), whose form was similar to the palace of the king. Pagodas were roofed with tiles of lead and tin and furnished within with embroidered rugs, gold and silver and cinnabar and gum-lac (Wheatley 1983: 177). The population used a silver coinage, and all lived within the city walls. One source noted that there were several tens of thousands of families, a calculation implying up to a 100,000 people. Also recorded in the *Man Shu* is the respect paid to a white image over 100 feet high:

“In front of the gate of the palace where the king of (this) kingdom dwells, there is a great image seated in the open air, over a hundred feet high, and white as snow.

It is their wont to esteem honesty and decency. The people's nature is friendly and good. They are men of few words. They reverence the Law of the Buddha. Within the city there is absolutely no taking of life. Also there are many astrologers who tell fortunes by the stars.

If two persons go to law with each other, the king at once orders them to burn incense in front of the great image and ponder on their faults: whereupon each of them withdraw. If a disaster should occur, or pestilence, or war, or disturbance, the king also burns incense facing the great image, repents of his transgressions, and takes the blame on himself.

The men mostly wear white *tieh*. The women on top of their heads make a high coiffure, adorned with gold, silver and real pearls. They wear for show blue skirts of *p'o-lo* (silk cotton) and throw about them pieces of gauze-silk. When walking, they always hold fans. Women of noble family will have three persons, of five persons at their side, all holding fans.

When there are persons sent to take letters to the Ho-t'an of the Man borders, they take 'river-pigs,' white *tieh*, and glazed jars for barter or trade.” (Luce 1961:90-1)



The ‘river pigs’ were probably river porpoises, and the *tieh* a silkcotton cloth. The ‘white as snow’ image is generally dismissed, although today one of the main images venerated on visits to the Shwesandaw pagoda in Pyay is a 6.4m (212ft) image facing the pagoda and backed by a hill. It is said to have been erected in the early 20<sup>th</sup> century, although locally it is thought to be far older (Khin Myo Chit 1984:53). The *New Tang History* also mentions the image:

“They wear gold-flowered hats and caps of kingfisher feathers strung with various jewels. The king’s palace has two bells, one of silver and one of gold; when enemies are at hand they burn incense and strike these bells, thus obtaining omens concerning their fate in the coming battle. There is a great white image, 100 feet high. Those who are engaged in a lawsuit kneel in front of it, think for themselves whether they are right or wrong, and go away...”

The *New Tang History* and the *Man Shu* make it clear that Nan-chao held the upper hand in these relations with the ‘P’iao’. For example, Pyus were conscripted to fight with the Nan-chao army in the capture of Hanoi in 863 AD. Fan Ch’o did not visit the Pyu cities but had been sent on a mission to Yunnan the previous year, and later wrote of Pyu exiled to this area:

“In [AD 832] *Man* [sc.Nan-chao] rebels looted and plundered P’iao kingdom [sc. Halin]. They took prisoner over three thousand of their people. They banished them into servitude at Chê-tung [approx. Yünnan Fu], and told them to fend for themselves. At present their children and grandchildren are still there, subsisting on fish, insects, etc. Such is the end of their people” (Luce 1985:66).

Luce goes on to note reference by the Chinese to the P’iao as “one of the tribes of the ‘Gold Teeth Comfortership’ (1985:66). The ‘Gold Teeth’ tribes perhaps find authentication in the 1999 finding at Shwegugyi Zeidi south of Halin, of an upper jawbone with eight teeth drilled with a pattern of 102 tiny holes filled with gold foil. The jawbone was from a skeleton found under a large stone slab and an associated pillar about 1.5m long, with gold and silver rings, pottery and iron tools (Hudson 2003:10, Win Maung (Tampawaddy) 1999). As this reference indicates, research on the Pyu bringing together Chinese references, chronicles and artefacts is now ongoing, particularly at Halin, but the identification of the Pyu ‘capital’ among the ‘tribes’ at this time is uncertain. Chinese reference to “hills of sand and a desert tract” suggest Halin rather than Sriksetra (Luce 1960: 317).

Halin is cited also in connection with various references to the exact number of gates at Pyu sites. Chronicles record that the number of gates was thirty-two, “a canonically sanctioned multiple of four” (Wheatley 1983: 194). Descriptions of twelve city gates in Chinese texts are taken to imply a rectangular city wall with regular numbers on each face. However, the number of gates at Halin has not been fully explored, and Beikthano so far appears to have four gates on the north face and two on the east and south sides. In addition, there is no reason that a circular wall such as that of Sriksetra cannot have twelve gates, with nine gates there commonly referred to by name, twelve notes on maps today, and twenty-four named by Taw Sein Ko in his early map of the site (1914a:113). The various accounts are worth noting as the same gate configuration would link what are quite different wall and gate forms at the main Pyu enclosed sites.

The figure of thirty-two is also used in the *New T’ang History*, which lists thirty-two important settlements or tribes subject to the Pyu, eighteen dependencies, and eight or nine garrison towns. None of these have been definitively identified, although one such stockade may have been located near Myingan, near the Chindwin-Ayeyarwaddy confluence. Nonetheless, the name of the capital is not given, only the notation that in Pyu tradition it was the city of the Buddha’s disciple Sariputra, who came from Rajagaha in Magadha. Elsewhere, however, this has been identified as Yazagyo in the Chindwin valley (Wheatley 1983:194). The sense of site domain and hierarchy implied by the listing of settlements or tribes, dependencies and garrison towns is borne out at Halin in the finding of brick ‘fortresses’

demarcating a perimeter zone around the walled enclosure. At one of these, the Sha Gwe fortress, some ten miles to the east of Halin (22.27n x 95.58e), finds included finger-marked bricks as well as variously shaped polished stone rings and pottery. Some vessels were painted with red stripes and large black rectangles, while other sharply carinated black pots (c.25cm high) with lids were found with ash and bone inside (Win Maung (Tampawaddy), p.c.04.03).

At the end of the 8<sup>th</sup> century, a route is described from Yung-ch'ang to the Pyu capital, then going up the Chindwin and on to Manipur. While Luce contended that it made no sense to go as far south as Sriksetra, and that this meant the Pyu capital was at Halin, Wheatley reasons that the trade route between China and India would have not necessarily been the shortest or main route, but would have gone through the capital albeit the somewhat southern location of Sriksetra. He then goes on to note, however, that the *Man Shu* says the capital was seventy-five days journey from Yung-ch'ang, which he estimates as being north of the Chindwin-Ayeyarwaddy confluence (Wheatley 1983:178-9). In all these unresolved hypotheses of capitals and dependencies, it is presumed that only one city is referred to in the Chinese accounts, whereas both Sriksetra and Halin may have had varied relations with Nan-chao. The capture and banishment of some of the populace may have created a power vacuum in which Bagan arose, but later building and donation at Halin and Sriksetra demonstrate continued occupation of both cities. At Beikthano, for instance an 11-13<sup>th</sup> century AD rectangular structure Kyaung-gyi-gon ('Big monastery mound', KKG21) found in the region of the palace-citadel, also had a modern well indicating continued use of the monastery (Aung Thaw 1968:26, San Shwe 2002:9).

At Halin, the remains of a Bagan period brick monastery (HL19) were also found, just outside the southeast corner of the city wall, an area that more recently has yielded a number of Bronze Age artefacts. Although only a monastery has been excavated at Halin, donations of two slaves, three bullocks and plots of land to a *Zeidi* are recorded in an inscription dated to 1340AD. An inscription dated to 1768AD records the dedication of an ordination hall by followers of the Sayadaw Gunabhilamkara, leader of the Ekamsikas or 'one shoulder' sect. Three inscriptions from Halin were re-copied as part of King Bowdawpaya's epigraphic collection, brought to Amarapura in 1785AD. Inscribed brass bells were donated to Halin in 1798AD, including one given by an attendant of the future King Bagyidaw, referring to amicable relations with surrounding countries. These and other references led Myint Aung to emphasize that Halin should be understood not only in the context of Pyu occupation, but for some thousand years following this period (1978).

### ***Absolute and relative Dating***

The finds and references from Halin demonstrate its occupation both before and after the Pyu period. The dating for Halin, Beikthano and Sriksetra, further described below, makes use of both absolute dates and stylistic analysis. Excavations at Beikthano (Aung Thaw 1968, Stargardt 1990, San Shwe 2002) highlighted the massive brick walls demarcating the site, its mortuary custom and variety of ritual structures. In the case of Sriksetra, a wide range of inscribed artefacts has allowed detailed suggestions to be put forward about the chronology of the site, and the ritual affiliation of royal donations and burials. At Halin, excavation of several gates and portions of the fortifications has been complemented by work on a number of stupa-like rectangular structures associated with both urns and inhumation burials.

There is thus a recurring pattern, one long known, of both large scale fortification and extensive burial at all three sites. Burial of venerated monks and possibly royal figures in the area of stupa-like structures may be interpreted within the categories of persons who merit having a stupa raised over their ashes (Stargardt 1990:200). The Pyu continued this tradition, storing the ashes of respected dead persons in urns, collected for eventual deposition in the foundation layer of memorial buildings (San Shwe 1002:17). Despite this

common ground, the disparate nature of the material culture suggests independent and competing polities located, in the case of Halin on an overland trade route, and in the case of Beikthano and Sriksetra, vying for control of the lower reaches of the central plain and access to maritime routes. At Beikthano at least, if not the other two sites, the presence of diverse ethnic groups has been suggested as one reason for this diversity.

#### Beikthano dates and stylistic analysis

Four radiocarbon dates were obtained for Beikthano, all from charcoal. Using these and stylistic analysis, Aung Thaw identified two phases of occupation: Period I from the 1<sup>st</sup> to 5<sup>th</sup> century AD and Period II in the 11<sup>th</sup> century AD Bagan period. As Period II was represented by only one monastery structure (KKG21), the focus of subsequent analysis has been the Period I material.

Two dates were from a large memorial hall (KKG9), south of the citadel-palace, where some forty terracotta urns were found on the interior and exterior of the building. The brick structure consisted of a c. 25 x 14.7m (84 x 49ft) base and walls, with only traces of the wooden pillars and roofing remaining. For KKG9, one date was 1950±90 BP, and the other 1880±95 BP. Two further dates were obtained from KKG11, of similar proportions to KKG9 (c.26.4 x 14.4m (88 x 48ft)), where terracotta urns were also found inside and outside the rectangular building. The dates from KKG11 were 1725±95 BP and 1650±85 BP. From these results, Aung Thaw placed KKG9 in the 1<sup>st</sup>-2<sup>nd</sup> century AD and KKG11 to the 3<sup>rd</sup> to 4<sup>th</sup> century AD (Aung Thaw 1968:20,23,62).

No Pyu inscriptions were found at Beikthano, leading to a suggestion that the site was occupied by a Tibeto-Burman group preceding the Pyu, and that this group was later displaced by the Pyu (Than Tun 1965:12). This echoes reference by Taw Sein Ko that natives of Taungdwingyi identify with the Tibeto-Burman Kadu, a group that also peopled the ancient capital of Mahamyaing in the Chindwin, while Pyu and then Burman groups settled at Prome (Sriekstra) (Aung Thaw 1968:5). Although this suggestion was made many years ago and has not been elaborated, it stands as a reminder of the lack of archaeological evidence for the other Tibeto-Burman groups such as the Chin, Kadu and Thet, recorded in chronicles and whose early presence is supported by linguistic evidence (Luce 1985).

The absence of images recovered from the site is also notable. Without a body of sculpture or epigraphy, Aung Thaw's stylistic analysis was based primarily on the form of buildings and pottery, a brief script on a seal, and motifs. The form of the stupa and pillared halls at Beikthano has been likened to those at Nagarjunakonda, although it has been pointed out that the resemblance is mostly in the form of the monastic building (KKG2) rather than the stupa (KKG3), with this being closer to possibly earlier Taxila buildings. Following the 'Lin-yang' proposal of Chen Yi-Sein described above, with a period of Khmer occupation at Beikthano followed by a Mon phase, San Shwe suggests that the grouping of KKG2, KKG3, and KKG4 was built by Indianised Mons after 225AD (2000:18,28-9).

One focus of study has been buildings with a stupa-style monument on a square base likened to domed structures at Nagarjunakonda and Taxila. At Pyu sites, these have been designated as memorial structures, generally built using semi-circular and mango sprout bricks, and associated with finds of urns and skeletons from both the interior and exterior areas (San Shwe 2002). Aung Thaw cites instances at Nagarjunakonda where remains of monks or priests were enshrined in terracotta water pots within monastic stupas (1968:65), a practice perhaps extended to royalty.

An abundance of burial urns links all Pyu sites, their ubiquity highlighting questions about the interface between this and other burial customs. With the ceremonial rings of the Chindwin Nyaunggan cemetery and bronze 'mother-goddess' figures of the Samon bronze-

iron sites pointing to a variety of animist and ancestral practices, an integration of at least some aspects of these into the Hindu-Buddhist tradition that was being assimilated, is to be expected. For instance, large pots excavated at the Nyaunggan bronze cemetery indicate that secondary burial of some sort may have been practiced, although full analysis of the excavated pottery has yet to be undertaken. From other areas of the Nyaunggan site, pottery has been recovered that may represent different phases of occupation, some vessels being similar in form and finish to those from Sha Kwe, the ‘fortress’ site east of Halin described above. As mentioned, some of the Sha Kwe pots were filled with ash, suggesting a transitional occupational period as Pyu culture took root. A subsequent transition, from Pyu to Bagan phases, appears to have signalled the abandonment of urn burial although a thin walled terracotta pot c.25cm high, found at Pyeh Son Kon west of Maingmaw, may support later cremation (Win Maung (Tampawaddy) p.c. 04.03). Certainly given the flourishing presence of the Sangha at Bagan, the memorial veneration practices developed by the Pyu could have continued in some form.

The 2<sup>nd</sup>-3<sup>rd</sup> century AD clay sealing recovered from the monastery residence (KKG2) was dated from the inscribed Brahmi script, the inscription similar to names inscribed on stone donor slabs found at Amaravati, Andhra. This object has been more precisely described by Stargardt as “the imprint of an intaglio seal” (1990:291), although wider conclusions about the presence of various inscribed materials at Beikthano in the 2<sup>nd</sup> century AD have been queried (Norman 1992:116).

Spouted sprinkler vessels from Beikthano with a pouch-like bulge on the base of the spout have been compared to examples from a number of South Asian sites such as Rang Mahal, Arikamedu and Brahmapuri. South Asia is again cited in relation to motifs found on uninscribed ‘coins’ from Beikthano. These are close to those found at a range of early sites in South and Southeast Asia. Find spots include Pyu, Yakhine and Mon sites in Myanmar, with motifs at Beikthano ranging from *srivatsa*, *baddhpitha*, and rising or moving sun, to twin fishes. Although their origin can be traced to South Asia, the depiction of the motifs and their arrangement on the coins differs at Pyu and Mon sites. In addition, the use of these motifs on stamped pottery from Beikthano suggests local production and a possible production origin at this site (Bronson 1968).

Other authors propose Funan production and the presence of early trade routes to explain the distribution of similar silver coins at sites to the east of Beikthano such as U-Thong in Thailand and Oc-ao in southern Vietnam (San Shwe 2002). Given the diversity of coins, the existence of common currency along such a trade route is doubtful, but the concept offers a useful sense of economic fluidity and shared worldview across mainland Southeast Asia at this time. In this configuration of centres, the finds from Sriksetra present a particularly rich glimpse of the synthesis of ritual and royal priorities that shaped the material culture.

#### Sriksetra dating

The dating for Sriksetra is mainly based on palaeographic analysis of Pyu inscriptions on gold, silver, terracotta and stone objects. These include inscribed terracotta votive tablets, stone urns inscribed with royal names, a gilded silver reliquary casket with inscriptions on the rim and foot, verses from the Theravada canon inscribed on gold leaves, and an inscription on the base of a stone image of the Buddha. These objects suggest a syncretic ritual adherence, one where a prevailing Buddhist practice meshed with local mortuary custom and also incorporated Brahmanic elements in an increasingly elaborated royal ritual. The Sriksetra evidence is considered at length here as it has prompted the most detailed literature, it is the site around which Pyu chronologies most often centre, and it is the Pyu site most strongly linked to Bagan.

#### *Terracotta votive tablets*

Terracotta votive tablets from a number of different periods have been recovered from Pyu sites and have also been used to estimate a chronology. Some of these have been stylistically dated based on the depiction of the Buddha or the form of the stupa (Guy 1999). However, a votive tablet discovered at Beikthano, was inscribed with Pyu language and Sanskrit of Northern India and contained royal names such as Satu (Catu), Anuradha and Marn. This has been dated paleographically to the 6-7<sup>th</sup> century AD (Hla Tun Pru 2003b), and often forms part of the dating sequence for Sriksetra.

Later votive tablets have been useful in setting chronologies as well as they provide support for the continued occupation of Pyu sites. Tablets found at Sriksetra, for instance, are used to place 11<sup>th</sup> century AD donations of Anawratha. In the early 12<sup>th</sup> century, Kyanzittha installed a Mon inscription in the Shwesandaw pagoda at Pyay to the west of Sriksetra. At Bagan, a votive tablet inscribed on the reverse with six lines of Pyu was found in the relic chamber of the 1060AD Shwesandaw pagoda of Anawratha (Aniruddha) (Luce 1985:66). Thus the early Bagan kings appear to have maintained ties to the traditions of their Pyu predecessors, particularly the lineage of Sriksetra. The degree to which this heritage can be seen in other artefacts from Bagan remains unclear. One area well worth investigation in this regard is mortuary practice such as the five inscribed royal urns from Sriksetra.

*'Megalithic' Stone urns, thrones and basins (and white pebbles)*

Five stone urns inscribed with names of kings have been recovered from Sriksetra. The urns are thick-walled (some 50cm) rings of stone, one with an inside diameter of 72.5cm. Some of these were set in a layer of white pebbles "abundantly scattered around them", Duroiselle concluding that the presence of such white pebbles in large quantities always indicating an urn (Duroiselle 1913:15, Luce 1985:52-3). At Beikthano, white pebbles were inlaid into moonstones, likened to those at Anuradhapura, found on each side of the doorway between the main entrance hall and the corridor of the monastery structure (KKG2) (Aung Thaw 1968:14). White pebbles were also placed inside urns, one terracotta or copper urn found together with a royal stone urn containing earth, bones, bits of broken silver ornament and white pebbles both inside the vessel and scattered around it (Luce 1985:127).

While the moonstone use of the pebbles may link to Sri Lanka, the use of large burial slabs, and also the association of pebbles with burials may derive from earlier indigenous custom. As mentioned above, stone burial slabs and in some cases pillars, have been recovered from Halin. Megalithic evidence of earlier habitation has been found at a range of sites: in the south part of Bagan, at Htauk Ma Kon, Salingyi Township (21.58n x 95.05e), near Myohta, Ngazun Township close to Myingan (21.25n x 95.23e), and at Kok Ko Kha Hla, Wundwin Township (21.12n x 95.51e). At Myohta, some forty sites with slabs and pillars have been recorded, and at both Htauk Mee Kon and Myohta, upright slabs are part of an arrangement of stone elements marking inhumation burials. Preliminary survey around Myohta noted square structures, some five feet in height, adjacent to upright slabs and a layer of pebble stones. And although the small white pebbles of the Pyu have not been found, concentrations of smooth black pebbles was seen in the burials at Ywa Htin Kon, Pyawbwe Township (20.34n x 95.56e) (Win Maung (Tampawaddy), Hla Gyi Maung Maung, p.c. 04.03).

The 'megalithic' use of stone was not restricted to urns but is seen also in thrones or bases for images, carved basins and steles. Although only a few of these bear inscriptions, their size, style of carving and use has contributed to stylistic definitions of this period. Some of the steles from Sriksetra were found in triads, six at Kyaukka (Settaing) Thein Kyaung south of the railway station. These measured 120-180cm (4-6ft) in height and over 150-180cm (5-6ft) in width. Another large stele, some 245cm (8ft2in) high, 187.5cm (6ft3in) wide, and 37.5cm (1ft3in) thick, was found at the Bebe Zeidi (Taw Sein Ko 1914:120). Most of the steles are carved with images of the Buddha, although some depict Bodhisattvas and a one (*circa* 1.5m)

bears a figure variously identified as a *dvarapala* and as a *garuda* or *galon* (Aung Thaw 1972: 27, Guy 1999:26).

Another use of massive units of stone at Sriksetra are curved or rectangular thrones and ceremonial stone basins. One arc-shaped throne or image base measures over 60cm in height, and nearly 300cm (10ft) in length. Four basins were found at the 'Beikthano Queen's cemetery' (Peikthano Mibaya Thingyaing), south of Sriksetra. The basins were made of three tall interlocking stone rings 67.5cm (2ft3in) in diameter, one with a total outside height of some 195cm (5ft6in). These were placed at the corners of a 600cm (20ft) bed of brick (Luce 1985: 128-129). A brick platform is seen at Beinnaka, a multi-period Pyu site near Pyinmana, south of Mandalay (Moore 2003), and U Myint Aung reported a brick platform at the burial ground labelled HL8, outside the southern city wall of Halin. Burial pottery was found at this site, as well as charred human bones, and gold ornaments (1970:58). A brick platform was also found between two buildings with stupa-like forms on a square platform (BTO6-7) just north of the citadel-palace at Beikthano (San Shwe 2002:10). This arrangement bears some resemblance to a platform located southeast of the 12<sup>th</sup> century Khmer temple of Prasat Hin Phimai in Northeast Thailand, which has been linked to pre-Khmer occupation of the site, possibly Dvaravati Buddhist or an earlier culture (Siribhadra and Moore 1992:229).

As the above paragraphs indicate, the use of large pieces of stone and their association with mortuary custom is not restricted to the Pyu. Nonetheless, Sriksetra is the only Pyu site where stone urns have been found. The size of the urns, one some 240cm (8ft) in circumference, suggests inhumation or secondary burial without cremation. However, there are other smaller urns of terracotta or metal, and most of which contained ash and bones. As a group, the Sriksetra urns help to establish a common cultural matrix with other Pyu sites, and within this group the dates on the inscribed Sriksetra stone urns provide a unique set of data with which to establish a chronology.

#### *Royal names on stone urns*

Although royal names are found on objects such as the terracotta votive tablets mentioned earlier, the Sriksetra urns have been the principal guide to a dynastic line. As might be expected, the names on the urns differ from chronicle accounts, which begin the Sriksetra lineage in 444BC with King Duttabaung in the 101<sup>st</sup> year after the passing away of the Buddha. This date has been questioned, with archaeological data suggesting that the city was built about the 2<sup>nd</sup> century BC. However, dates are few, and it is likely that the site was inhabited long before this. Given this rather amorphous timeframe, the dates inscribed on the urns are important markers of points in the chronology of the site. The urn dates, however, do not specify an era. One solution has been to use the 'Burmese' era, starting in 638 AD. Another reading suggests that the Gupta era was employed, the result being a different sequence of names, one placed in the 4<sup>th</sup> century AD (San Win 2001, cited by Than Tun 1994). A review of this evidence is given here, as the urns give the clearest existing *in situ* confirmation of the sequence of rulers during at least one period of the site's occupation.

Four of the stone urns were unearthed in 1911-12 from a grave some 63m (70yds) south of the stupa but within the precincts of the Payagyi, located outside the northwest sector of the city wall. When two urns were first unearthed, one had previously been rifled. The other contained white pebbles, bone ash, and red earth (Duroiselle 1915:147). The fifth was found more recently, in 1976 at the Hpaya Htaung. This is a solid square structure some 11.4m (38ft) per side, surmounted by a stupa. It is located inside the city wall, to the northeast of the citadel-palace area (Hla Tun Pru 2003b, San Win 2001).

The Pyu writing on the four initial finds was first deciphered by O. Blagden, and found to give the names of kings of the Vikrama and Varman dynasties (1917). Each urn is inscribed on the upper rim with what was thought to be a name, date and age of death. One, the urn of the

relative of Suriyavikrama, also has 8 lines inscribed on the rounded bottom, although Blagden did not publish this inscription. The writing here and on the rims is in Pyu with interlinear Brahmi, stylistically dated to the 7<sup>th</sup> century AD (Luce 1985: 48, 126-7). The names and dates derived from this reading, and the measurements of the stone urns, are given below:

- In 35/AD 673 a relative (?) of Suriyavikrama died  
[Urn ht. 71cm (2ft 4 1/2 in), circumference 267.5cm (8ft 11 in)]
- In 50/AD 688 Suiryavikrama himself died, at the age of 64  
[Urn ht 95cm (3ft 2in), circumference 210cm (7ft)]
- In 57/AD 695, 2<sup>nd</sup> month, 24 days, Harivikrama died, aged 41 years, 7 months and 9 days.  
[Urn ht 92.5cm (3ft 1in), circumference 182.5cm (6ft 11in)]
- In 80/ AD 718, 2<sup>nd</sup> month, 4<sup>th</sup> day, Sihavikrama died, aged 44 years, 9 months and 20 days  
[Urn with lid ht 62cm (2ft 3/4in), circumference at top 186cm (5ft 2 1/2in); lid ht 212cm (7 3/4in)]

The Hpaya Htaung urn is inscribed with five lines of writing on the outer surface. It is the largest urn, measuring 105cm (3 1/2 ft) high and 260cm (8 2/3ft) in circumference, found close to the Hpaya Htaung Zeidi (HMA31). On the four Payagyi urns, each urn is inscribed with the name of a king and a sequence of numbers read in 1911 as being the date of death followed by the age at death. On the Hpaya Htaung urn, however, there are five lines of writing containing six names, all beginning with the prefix 'Sri' and end with 'Vam'. Although scholars have some differences in how they read the names, all agree that these record a sequence of six royal titles. The first name has been read as 'Devamitra' (Deva Mikra Vam), identified with Vishnu. This is followed by Harivikrama (Hri Vikrama), Sihavikrama (Singha Vikrama), Suriyavikrama (Suuriya Vikrama), Cirihtuuvikrama (Grimhtuu Vikrama), and Adityavikrama ((Aa)ditya Vikrama) or Sri Dhammvikrama.

Taking advantage of the serial order on the Hpaya Htaung urn, it has been suggested that the 1911 reading of the numbers should be changed, to give the age at death followed by the date. In addition, the Burmese era is replaced by the 4<sup>th</sup> century AD Gupta era, based on palaeographical similarities between the four Payagyi urns, the Hpaya Htaung urn and the 'Buddha's Throne Inscription' described below (San Win 2001). Using this method of conversion, the Payagyi urn inscriptions are translated as:

- On the 9<sup>th</sup> day of the 7<sup>th</sup> month in the (Pyu) year 41 (AD 360) King Hri Vikrama died. His age was 57 years, two months and 24 days.
- On the 20<sup>th</sup> day of the 9<sup>th</sup> month in the (Pyu) year 44 (AD 363) King Singha Vikrama died. He was 80 years old.
- The beloved wife of King Suuriya Vikrama (the queen) died. She was 35.
- In the (Pyu) year 64 (AD 383) King Suuriya Vikrama died, at age of 50 years and 5 months.

The interpretation of these inscriptions has focused on the dating of this group of rulers and the ritual significance of the suffixes. The 'vikrama' suffix is taken to suggest adherence to Vishnu, a practice going back to the 1<sup>st</sup> century BC but used most extensively by Guptan kings of the 5-7<sup>th</sup> century AD (Hla Tun Pru 2003b). Sculpture depicting Vishnu has been found at Srikestra, in Yakhine, in southern Mon regions and to the east in Thailand and Cambodia (Gutman 2002:41). Many of the Vishnu statues are large pieces suggesting elite patronage and a reminder of the association of temporal rule with divine authority (Gutman 1999:36, Guy 1999:18). However, the provenance is not sufficient to reconstruct their original location. For example, Luce notes that a broken stele (ht 1m) depicting a four-armed image of Vishnu standing on an upright Garuda with Lakshmi on his left standing on a lotus was recovered from the garden of the Deputy Commissioner of Prome (Pyay). Two other large sculptures, both broken, of Vishnu were found in the hole of a monitor lizard or iguana near Kalagangon in 1920. One shows Vishnu standing on Garuda (ht 40cm/16in) and the other Vishnu Anantasayin (39x36cm/15 1/2 x 14 1/2in). The lotus stem rising from Vishnu's navel divides unusually into three stems, forming, from left to right, thrones for images of Brahma,

Vishnu, and Siva (Luce 1985:148). Another relevant piece of evidence is seen in the use of the conch thought to be the earliest among the Pyu examples of the silver coins (Luce 1985: 62).

*'Buddha's Throne Inscription'*

Another inscription with 'vikrama' and 'varman' is found on the four sides of a headless sandstone image (57cm high), found at Wet-gaung-kan hill at Sriksetra in 1927-28 (Duroiselle 1931). Prince Jayacandravarman, the donor of the statue, refers in the text to his younger brother Harivikrama. The Sanskrit and Pyu inscription mentions the creation of two cities in one day, probably referring to the timing of ceremonies on a similar day of the week or at an auspicious time. In the last verse, it is hoped that friendship between the two cities, based on the common adherence to the Buddhist teachings of their hermit-teacher, will continue to the end of the world.

The Harivikrama in this inscription is taken to be the same ruler as the Harivikrama named on the stone urns described in the previous paragraphs. Since the urns are presumed to be for the rulers of Sriksetra, this second mention of Harivikrama has created a problem in the identification of cities. Sriksetra, the largest of the Pyu walled sites identified to date, is presumed to have been the capital at the end of the 7<sup>th</sup> century (Wheatley 1983:175). But if Harivikrama was paying tribute to his elder brother at a more powerful site, what were the two rival cities? Luce had no ready solution for this, speculating as to "whether they were big cities like Sriksetra itself or Beikthano *myo* near Taungdwingyi, or small isolated moated enclosed sites such as are still to be seen outside and inside the walls of Sriksetra, is a mystery." (1960: 312). As the younger, tribute-paying brother, Harivikrama is often thought to have been less powerful, although it has been suggested that he was younger but mightier (Than Tun 1964).

Thus the link of Harivikrama to Sriksetra is generally preserved, with the use of both 'vikrama' and 'varman' suffixes in this inscription frequently cited to support the palaeographic analysis of the stone urn inscriptions. In addition to the Vikrama and Varman rulers suggested by the stone urns, further royal figures are inscribed on other finds from Sriksetra, notably a silver reliquary casket where the 'varman' suffix recurs. The inscription on the upper rim of this casket has been linked to the Theravada texts inscribed on a find of twenty gold plates from the same relic chamber.

*Silver Reliquary*

An inscribed silver-gilt cylindrical reliquary casket 66cm (26in) high was part of finds in 1926 at the mound of a villager named Khin Ba (Khin Ba Gon) in the village of Kalagangon. Investigation of a number of mounds in this village followed the unearthing of fragments of Hindu sculpture by a villager while digging for bricks in his house compound. One piece was a hand of Vishnu, with later objects excavated at this village including a stele of Vishnu reclining on Ananda, another of Vishnu on his mount Garuda, and a 35cm (14in) high Siva linga.

The results of Duroiselle's excavation at Khin Ba Gon were first published in the 1926-27 report of the Archaeological Survey of India (Duroiselle 1930). The main relic chamber measuring one cubic metre, was found under the remains of a brick stupa. Covering it was a stone slab measuring 190cm (5ft 4in) long by 137.5cm (4ft 7in) wide and 15cm (6in) thick. The slab was carved in relief, depicting a cylindrical stupa topped by a rectangular *harmika*, 5-tiered *chattravali*, and streamers. The sun and moon are seen on the top corners, and niches with images of the five Buddhas of the present era are along the base of the stupa. This has been dated to about the late 5<sup>th</sup> century (Guy 1999:16). A second, similar slab was found nearby (Luce 1985:136, Pl.27).



The significance of the deposit is shown by the offerings, many gold and silver, found in the relic chamber (Duroiselle 1930, Luce 1985). Among the metal finds were petalled silver lotuses, plates of gold and silver, silver boats, gold and silver butterflies, a tiny silver 'chinlon' ball, 33 small gold and silver bells, and a ball of greyish earth covered with small beads of gold and silver. The four Buddhas of this era are depicted on a hollow cubic silver stupa, found without a top or bottom. There were individual images of the seated Buddha in gold and in silver, two hollow silver stupas some 23cm (9 1/4in) high, and a gold plate with a seated Buddha on a lotus, slightly more than 7.5cm (3in) in diameter. Another seated image of the Buddha is worked in gold 16.25cm (6 1/2in) high, with the 8.12cm (3 1/4in) stand being silver. Fragments of a green glass image of the Buddha were found, the head being some 5cm (2in) high. There were a number of stone beads in the Khin Ba trove, including jadeite elephants and a chalcedony tortoise (Duroiselle 1930:179, Luce 1985:136-39).

Other embossed silver plates, up to 18.65cm (7 1/2in) high, depict guardian figures, one hand on hip, the other holding a large pendant. They are shown singly, with full face and body, legs covered with close-fitting patterned trousers. The thick hair curls form a nimbus-like shape behind the head of one figure. The repoussé images of *dvarapala* have a similar "robust physique and posture" to a 'warrior-ruler' and attendants depicted on a 1.5m high stele found within the city walls in the 1970's (Guy 1997:90). The standards held by these two guardians bear a cakra or wheel, and a *garuda*, the mount of Vishnu. The association of both these symbols with Vishnu is linked to other evidence of Vaishnava affiliations among the first rulers of Sriksetra mentioned earlier.

In the centre of the chamber was the hollow reliquary casket with a flat cover supporting the trunk of a *Bodhi* tree. The branches and leaves of the tree were found on the floor of the relic chamber. On the sides of the casket are images in high relief of the four Buddhas of this *bhadra*kalpa or era, a convention seen in a range of other structures such as the Shwedagon, the Ananda at Bagan, and at Nga-hsu Hpaya, Amarapura. On the silver casket, each image of the Buddha is flanked by smaller figures of disciples (Kassapa, Moggallana, Sariputta, Ananda). The order of the images of the Buddha is unusual: Konagamana, Kakusandha, Kassapa, Gotama (Luce 1985:137). A 'spiky' nimbus surrounds the heads of the images of the Buddha. On both sides of the nimbus are rearing *makara* forming a throne back, similar to that seen on the reverse of a large stele depicting a 'hero-warrior' (Guy 1999:19, 1997:88).

The names of the Buddhas are inscribed on the upper rim of the casket and those of the disciples and the donors, Sri Prabhu Varman and Sri Prabhu Devi, on the lower rim. The use of the suffix 'varman' is thought to signify Pallava influence, and was a convention adopted in a number of rulers in Champa, Funan, and Cambodia from the 5-6<sup>th</sup> century onwards. The upper inscription is in Pyu and Pali, and the lower in Pyu and Sanskrit. Finot dated these to the late 5<sup>th</sup> or 6<sup>th</sup> century AD (Luce 1985: 137). Recent scholarship suggests that two texts describing the wisdom of the Buddha that are missing from the gold manuscript leaves found with the casket, were inscribed in abbreviated form between the names of the Buddhas of this era on the upper rim of the casket (Stargardt 1995b: 207).

### Gold leaves

Analysis of text has also been the focus of study on gold plates. Two sets of gold plate manuscripts have been found in the region of Sriksetra, both inscribed with extracts from all three books of the Pali canon. Although long dated to the 7<sup>th</sup> century AD, more recent work suggests a late 5<sup>th</sup> century date. While sculpture recovered from Sriksetra indicates a mixture of Theravada, Mahayanist and Hindu images, the gold plate texts are knowledgeable selections from the Theravada canon.

Two gold plates were found at Lebow village, Maunggan, 11.5km (7 miles) south of the walled site at Sriksetra. Each was inscribed with three lines of Pali. The writing on these

plates was edited by U Tun Nyein (1898) and later by Finot (1912, 1913). The text was identified as the “Ye Dhamma” and other verses, and dated to the 6<sup>th</sup> century. A single gold plate was found at the village of Kyundawzu, within the walls of Sriksetra, in 1929. This was inscribed with two lines of Pali, the text from one of the dialogues of the Buddha being the same as one of the eight excerpts found on the twenty gold plates found with the Khin Ba Gon treasure in 1926-7.

The Maunggan and Kyundawzu plates have been used more recently to re-assess the Khin Ba Gon plates (Stargardt 1995b). Also used in this study were two inscribed stones found on a terrace of the Bawbawgyi stupa identified by Finot (1912) as Pali texts from the *Abhidhamma Vibhanga*, dated to the 6<sup>th</sup> century (Stargardt 1995b: 201). That Buddhist practice seems well established by this time is shown both by the use of texts from the *Abhidhamma*, and also two inscribed stones found at the Shwedaga gates of Srikestra with lines from the protective *Paritta Suttas* such as the *Mingala Sutta*, the *Mora Sutta* and the *Ratana Sutta* (Sao Saimong Mangrai 1976:160).

Twenty numbered gold leaves were recovered from Khin Ba Gon trove, most inscribed with three lines of text in of Pali. The inscribed texts are eight excerpts from all three main canonical texts, including the chain of causation, praises of the Buddha, and qualities of Enlightenment. No *Jataka* stories or commentaries were found. U Lu Pe Win, then Superintendent of the Archaeological Survey of Burma, first published the texts in the Report of the Superintendent of Archaeology for the year 1938-39. The script is similar to those of 5<sup>th</sup> century AD Pallava Copper Plate Grants, leading to a provisional mid-to-late 5<sup>th</sup> century date. As explained above, the texts inscribed on the gold plates may link to the inscription on the upper rim of the silver reliquary casket from the same relic chamber (Stargardt 1995b: 204,210). The leaves (16.5x3.1cm each) were contained within two gold covers. The covers and leaves each had two holes, through which a thick gold wire passed to bind up the manuscript. When found, the wire was fastened to the covers with sealing wax and small glass beads (Luce 1985:139).

#### *Sriksetra object inscribed with royal names: summary*

As described above, four types of artefacts inscribed with royal names have been found at Sriksetra: a terracotta votive tablet, five stone urns, a large gilded silver reliquary casket, and the “Buddha’s Throne Inscription” image. Only the stone urns have calendar dates, and the era used continues to be a subject of debate. All the inscribed objects were found at Sriksetra, but in different locations and contexts. As generally provenanced and paleographically similar references to rulers of Sriksetra, they have been considered as a group. However, the resulting dynastic sequences vary, one focusing on ritual sects of rulers and another on their temporal context.

In one, put forward by Hla Tun Pru, the writing has been used to assign a rough chronology starting with the silver ‘varman’ casket in the 5-6<sup>th</sup> century, the votive tablet of the 6-7<sup>th</sup> century, the ‘varman + vikrama’ image of the Buddha in the 7<sup>th</sup> century, and the four ‘vikrama’ Payagyi urns in the 7-8<sup>th</sup> centuries AD. This covers roughly two hundred years, and places the Saivite ‘varman’ sequence first, followed by the Vishnu ‘vikrama’ group. Two large sculptures from Sriksetra dated stylistically to the 8<sup>th</sup> century have been cited in support of this general trend: one depicting Vishnu standing on *garuda* (ht c.1m) and another of Vishnu reclining on the serpent Ananta (Hla Tun Pru 2003b, Luce 1985:148, Ray 1932).

In an alternative sequence proposed by San Win (2001), the purpose is not analysis of the suffixes but verifying Harivikrama as founder of Sriksetra and the Vikrama dynasty. With the stone urns dated to the late 4<sup>th</sup> century AD in this proposal, and the sequence of rulers re-ordered, the ritual implication somewhat altered. Here, the 4<sup>th</sup> century Vaishnava ‘vikrama’ kings on the stone urns could be seen as preceding the 5-6<sup>th</sup> century Saivite ‘varmans’ on the

reliquary casket, seemingly donors of the gold Pali texts and possibly rulers of the city at this time (Guy 1997:93). In either case, the references to ‘varman’ are in a Buddhist context, e.g. the silver reliquary casket bears images of the Four Buddhas of this era, and the reference to the twin cities is on the base of an image of the Buddha. The earlier dating of the stone urns, by some three hundred years, is based on the additional evidence provided by the 1993 finding of the Hpaya Htaung urn and the use of the Gupta (+319 years) rather than the Burmese (+638 years) era for the dates on the urns. This gives a far firmer foundation for the founding of Sriksetra by Harivikrama, bringing together all the urns and the ‘Buddha’s Throne Inscription’.

If this hypothesis is accepted, however, the previous 7<sup>th</sup> century attribution of the ‘Buddha’s Throne Inscription’ is either pushed back to the 5<sup>th</sup> century or refers to another Harivikrama, which weakens the argument. However, the 5<sup>th</sup> century AD date for the Khin Ba Gon set of twenty gold plates also implies a re-dating of sculptural material found in the trove. Much of this, like the ‘Buddha’s Throne Inscription’ image, falls within a body of material variably dated from about the fifth to eighth century. In the absence of many firm dates within this period, the dating of such often must rest on previous scholarship, as illustrated by the following:

“It [the Buddha’s Throne’ image] bears an undated bilingual inscription in Sanskrit and Pyu which can be linked by the common appearance of the name ‘Harivikrama’ to an inscribed stone funerary urn, dated AD695. Accepting that this is the same person as that named on the bilingual inscription, then the sculpture can be accepted as late seventh century. This date stands as a solitary landmark in the chronology of Pyu sculpture” (Guy 1997:91).

An earlier date of the 2<sup>nd</sup> century AD for the Vikrama dynasty, based on the Sakra (Saka) era, was put forward by Htin Aung (1970:9) and re-iterated by Sai Saimong Mangrai (1976:159). In any case, if the use of the Gupta era is accepted for the stone urns much of the chronology of the Pyu must be reconsidered. The re-dating of the stone urns means that the epigraphically supported chronology of Sriksetra is extended from its previous 5-8<sup>th</sup> century AD to the 4-8<sup>th</sup> century AD. This predates the earliest known Mon inscription found in the Dvaravati site of Nakhon Pathom in Central Thailand and an unedited inscription dedicated to Sri Paramesvara at Kawgun cave in southern Myanmar (Luce 1974:130-31). It also predates the earliest Sanskrit inscriptions of Yakhine, which date to the 6<sup>th</sup> to 8<sup>th</sup> centuries.

Although not raised in the articles cited above, the location of the Hpaya Htaung urn near to the citadel-palace area is in contrast to the four urns found at the Payagyi outside the wall. This lack of distinction between ‘inside’ and ‘outside’ is seen again in the abundance of structures outside the southern sector of the Sriksetra wall, a pattern continued at Bagan. It is probable that a certain number of the vaulted structures at Sriksetra are best attributed to a late Pyu or Bagan period (Guy 1999:17). However, the finding of the dated stone urns at stupas both inside and outside the wall suggests that even if this feature was rebuilt over time, that its gates were only closed in times of military offensive or siege, and that like Bagan the political domain of the Pyu reached far beyond the brick walls. The size of these fortifications in this context become more an assertion of power than evidence of a need to retreat behind walls. Like the finding of brick fortress sites demarcating a perimeter around Halin mentioned earlier, a comparable defensive role has been proposed for Thegon (18.32n x 95.58e) to the south of Sriksetra. In this sense, the walled area, large as it was, was within a defensive perimeter of guard-sites indicating the type of dispersed yet obligated population implied by Chinese accounts of the Pyu.

Again, although not raised by San Win, his hypothesis replaces the ascendancy of Siva over Vishnu with a ritual environment where royal Brahmanic attributions and a certain amount of veneration was accorded to Hindu deities within a predominantly Theravada and Mahayana practice. This is echoed in the mixture of deities, including representation of both Siva and

Vishnu, and in the chronicle account of the founding of Sriksetra summarised below. This syncretic tradition continued at Bagan, well illustrated by the biographical inscriptions of Kyanzittha and the continued presence of Vishnu, but in a subordinate position to the Buddha, in the early 12<sup>th</sup> century (Ray 1932:21).

### Halin dating

Indications of a varied ritual tradition are also present in the finds from Halin, notably with a range of artefacts suggesting animistic practice. For instance, a number of objects diagnostic of bronze-iron sites in the Samon valley south of Mandalay have been recovered at Halin. These include blue glass rings, fragments of a bronze 'mother goddess', bronze *kye doke* and floral 'coffin' ornaments. They have been found within the Pyu period wall, and also have been particularly abundant around villages southeast of the brick perimeter. Other finds include a number of bronze axes and highly polished stone rings typical of Chindwin sites, described above and typed against the Bronze Age site of Nyaunggan, Budalin Township, Sagaing Division (22.24n x 95.04e)(Moore and Pauk Pauk 2001). From the same areas at Halin, Pyu beads, including carnelian 'tiger' beads, painted pottery, and broad petal-shaped iron swords set in finely decorated bronze hilts have also been found (Win Maung 2002, Moore 2003).

The Halin association of bronze weapons with an earlier period and bronze prestige goods with a later phase tallies with an apparent transition from stone to bronze to iron, where materials initially used for weapons subsequently become material for prestige or ritual goods. Thus the traces of terracotta ringstones recovered from Stone Age sites such as Shwezayan, are replaced by stone rings at Bronze Age sites such as Nyaunggan and glass rings at Samon Bronze-iron sites. Likewise while the weapons from Nyaunggan graves are made of bronze, those from the Samon are iron, with bronze prestige goods including *kye doke* (packets), floral ornaments, and 'mother-goddess' figures (Win Maung (Tampawaddy), p.c., 15.04.03).

### Inscriptions and sculpture

At present, it is unclear how such a rhythmic transition between weaponry and ritual goods correlates to epigraphic mention of rulers, although presumably the royal figures mentioned in inscriptions exerted a major influence over the ritual life of the city's immediate and peripheral inhabitants. Several Pyu inscriptions from Halin include royal names, although dates are not given. These are found on stone slabs, not urns as at Sriksetra, although there are some links in the use of motifs. For example, at the top of one slab, a sun and crescent moon were carved, similar to motifs seen on the relic chamber slab from Sriksetra. The Pyu inscription, with no interlinear Brahmi, as was often the case, refers to Queen Candradevi. This was found near the large Nagayon tank, southeast of the city wall, near the spot where in 1904, Taw Sein Ko recovered a slab marking the internment of the bones of a King Ruha. Queen Candradevi is possibly mentioned again on another fragment reportedly found within the city walls of Halin and a large stele (ht 210cm/7ft, width 132cm/4ft5in, thickness 21cm/81/2in) found in the northeast part of the site names a King Sri Trivigrama (Luce 1985:66, 149).

Another example is seen with two large fragments over a metre high unearthed in 1929 to the southeast of the city wall near the find spot of the inscription mentioning King Ruha (Aung Thaw 1972:12). At the top of this slab just below the broken edge, can be seen the feet and right hand of a figure of a Bodhisattva or Mettaya (Maitreya, the future Buddha). Below are three rows of 53 devotees in a posture of veneration, some with head turned upwards, others facing forward. Some figures have long ears, others earrings and many wear necklaces. Some

wear peaked caps, others have coiled hair, and a few wear coronets. They are ordered in tiers but the arrangement is not rigid, and those in the front row are seated informally, reminiscent of a group portrait (Luce 1985:150). Although the sculpture is broken, this arrangement of figures, the expressiveness and detail of the carving, the size of the stele, and the posture of the upper image all make it significant. In addition, an eight-line Pyu inscription (without any interlinear Brahmi) was carved on the middle of the stele, underneath the large image. This mentions another royal figure, Sri Jatrajiku, perhaps the name of a queen.

### Radiocarbon dates

Radiocarbon dates were obtained from three sites at Halin: (HL9) (HL10) and (HL17). One was from an assembly hall (HL9) measuring 11.4 x 36m (38 x 120ft) near the palace-citadel. The charcoal sample for this date was taken 1.07 metres below ground level, from posts in the hall that had been destroyed by fire. The date (NZ894) obtained was  $1370 \pm 59$  bp, calibrated to 540-780 AD. The second sample was from charcoal as well, taken from a gateway (HL10) in the south wall, 377m from the southeast corner. The date (NZ895) was  $1810 \pm 60$  bp, calibrated to 60-390 AD. The third sample was from another gateway (HL17), also on the southeast part of the wall, close to the southeast corner. Both gates were curved and some 5.1m (17ft) in width. The date (NZ896) from HL17 was  $1740 \pm 60$  bp, calibrated to 120-430 AD. A group of about 40 skeletons was excavated from the southeast gate (HL17) (Myint Aung 1970:57).

A fourth date, possibly from this burial, was from a bone rather than charcoal sample. This was submitted to the laboratory in 1967 but not published by Myint Aung, having been obtained from a collective burial 86cm below ground level. It gave a date (NZ898) of  $1440 \pm 85$  bp, calibrated to 420-870 AD. All dates were recently recalculated by the Rafter Radiocarbon Laboratory, New Zealand (Hudson, forthcoming). These dates range from a possible late 1<sup>st</sup> century AD to the 9<sup>th</sup> century, in line with U Myint Aung's previous conclusion that the dates demonstrated occupation at Halin during the 2<sup>nd</sup> to 9<sup>th</sup> century AD (1970:62). The earlier centuries in this spread are supplemented by pottery design, building plans and inscriptions. For instance, rouletted wares found at Halin are thought to be similar to those at Arikamedu and dated to the 2<sup>nd</sup> century AD while the similarity of the plans of structural remains to those at Nagarjunakonda indicates a 3<sup>rd</sup> to 4<sup>th</sup> century AD date. Finally, palaeographic dating of writing on potsherds and a stone seal is placed around the 4<sup>th</sup> to 9<sup>th</sup> century AD (Myint Aung 1970).

### **Chronicles**

The memory of Pyu culture has long been preserved in Myanmar chronicles and epigraphy, and in the case of Beikthano, Halin and Sriksetra that memory adds further support to the epigraphic and artefactual record. The chronicles have been rewritten over the centuries, incorporating many principles and traditions, particularly Buddhist ones, which have affected the choice of material and the form used to record events. As with the Chinese sources, chronicle accounts tend to refer to groups that were important as allies, or presented a threat. This does not discount their archaeological value but does mean assessing them in the context of the chronicle tradition and using them in conjunction with other sources. And whatever the outcome of archaeological efforts to verify the chronicles calendrically, they preserved the memory of ancient cultures centuries before archaeology was considered an academic discipline (Aung Thwin 1980:173). Pyu sites are mentioned in many but not all of the standard chronicles that bring together traditions of various dynasties and also in a range of local histories or *thamaing*. These have been summarised by Tet Htoot (1963) and aspects reviewed by Htin Aung (1967, 1970) and Lieberman (1986). Pe Maung Tin and Luce note that while the founding of Sriksetra is detailed that Tagaung is already established in chronicle descriptions (1960:xviii).

Halin, but again neither Srikestra nor Beikthano, is cited in the *Jambudipa Uchon Kyan*. This source dates to at least the mid-17th century and lists the towns bordering Halin. These include Nyaunthamya, tentatively identified as a village on the east bank of the Chindwin. To the north was Mokhsogyon-pho-ma, the male-female ‘pho-ma’ of the suffix suggesting a plural or pair. As the ancient name of Shwebo, located northwest of Halin, was Mokhsobo, a relationship between the cities may be indicated (Myint Aung 1978, Hla Tun Pru 2003a). In an early Inwa chronicle, the *Zabu Koncha*, the main point of interest is the indication of the Pyu at some twenty different sites spread north and south of the Chindwin-Ayeyarwaddy confluence. It is notable in this account that Halin, the first settlement cited, falls three times. The first fall is to Yakhine, the second to peoples of Lower Myanmar, and the third to the Dawei (Tavoy), also in the south. Tagaung is also settled three times, and Inwa (Ava) is twice mentioned as a Pyu site (Win Maung (Tampawaddy), pers.comm.1998).

Preservation of town names in chronicles sources such as these has guided investigation of sites not previously identified with Pyu remains. The numerous and widespread placenames also are a reminder of the geographical spread of Pyu finds, well beyond the limits of the main sites. For instance, investigation of towns west of Halin led to finds in Ayadaw township, near the Mu River. These ranged from silver coins to a gold cubical ‘dice’ engraved with a bull, lion, elephant and *garuda* on the four faces. Likewise, examination of the southern areas bordering Halin led to finds of a silver bowl with a Pyu inscription on the rim, and a gold armband shaped as a dragon, and funerary urns, all from Myinmu Township near the Ayeyarwaddy-Chindwin confluence (Myint Aung 1978).

As mentioned earlier, more intensive archaeological investigation has been carried out at Srikestra, Beikthano and Halin as they are cited in the principal standard chronicles. Monasteries and trustees of many sacred sites and increasingly academics at regional colleges have preserved and often transcribed early manuscripts recording the foundation and history of settlements, many of which date to this period. Of the Pyu sites, the focus in the royal chronicles is Sriksetra. The founding of the city is recorded in a number of accounts, including the *Glass Palace Chronicle (Hman Nan Yazawin)*. This source, compiled for King Bagyidaw from 1829-32, drew mainly on U Kala’s 18<sup>th</sup> century chronicle (Tet Htoot 1963: 53). It was translated in part by Pe Maung Tin and G.H. Luce in 1923, and reprinted in 1960. The *Taungdwingyi Thamaing*, compiled in the 19<sup>th</sup> century, has one chapter on Beikthano or ‘Peikthano’, Vishnu. This records the triumph of Sriksetra over Beikthano, a memory preserved in a hillock at Sriksetra whose name translates as the ‘Cemetery of the Queen of Beikthano’. This separation in the chronicle tradition is further emphasised in Luce’s summary of excavations at Beikthano:

“But apart from elaborate brick buildings with moonstone entrances, urns with ashes, ironwork, and a few coins and beads, there is little to connect the site with Sriksetra: no megaliths, no Vishnu temples or images, no Buddhism, and meagre evidence of Indian culture. At Sriksetra, on the other hand, almost every mound excavated provides evidence of Buddhism or Vaishnavism” (1985:50).

### Sriksetra

The chronicles commemorate the early history of the Sriksetra in political and sacred contexts, linking it to the ancient capital of Tagaung. According to the *Glass Palace Chronicle*, the Buddha foretold the founding of Sriksetra during a visit to a mountain top site on the riverbank opposite Sriksetra, Phoe Oo Taung [‘mole mountain’]. This account involves three revered sites in the area: Sriksetra, Phoe Oo Taung, and just south of this, Shwebonthamuni Zeidi, thus placing the ancient city in a wider geographical domain. The history related that in the time of the Buddha, two moles were living on the 270m (900ft) mountain, moles later reborn as King Duttabaung of Sriksetra and Queen Panthwa of Beikthano. The Buddha, on a trip to the Phoe Oo Taung, prophesied five events that would

occur when the new city was founded: the sea-courses would dry up around the foundations of Thareh kittara (Sriksetra), the volcanic cone of Mt. Popa would rise to the southeast of Bagan, the Samon and Samyeit Rivers would arise, a great lake would appear, and there would be a great earthquake (Luce and Pe Maung Tin 1960:7). The landscape is at the heart of this prophecy of the Buddha, a record of manmade and natural change, and a reminder of unanswered questions of territorial control at this time. A second theme recorded by the chronicle is that of the formation of the Sasana, the Buddhist monastic community, at Sriksetra. Given the need for a flourishing Sangha to the build of the city, monastic groups may well have existed earlier at Shwebontha and Phoe Oo Taung, accounting for their preservation in official accounts (Moore 2000).

Also related in the *Glass Palace Chronicle* is the marking out of the circular site of Srikestra by Sakka (Indra, Thagyamin) in 544BC, the year of the Buddha's bodily demise. Holding the tail of the Naga King, a circular perimeter of 3 *yojana* was marked out, the remains of which measure 8 1/2 miles in circumference. A *yojana* or *yuzana* is a measurement of Indian origin, varying from 4 1/2 to 9 or 12 miles. Even the smaller calculation is larger than the remains, although the Sriksetra walls encompass a larger area than any of the other known Pyu sites. The city had moats, ditches, barbicans, thirty-two main gates and thirty-two smaller ones and four-cornered towers. Many of these necessary elements of the city are in multiples of four, ensuring cosmological correctness for the site. Some of these, such as gates, may have been symbolic, depicted possibly by false doors or niches in the wall. (Wheatley 1983:176). This convention later became incorporated into the seven features necessary to consecrate a site as a new royal city: wall with gates, moat, pagoda library, monastery, ordination hall, and rest places (Moore 1993:335)

The founding of the Sriksetra is also preserved in the biographical inscriptions of the Bagan King Kyanzittha. One of these, written in Old Mon, was installed in 1093AD at the Shwesandaw pagoda in Pyay. One of the small Zeidi at the Shwesandaw is said to have been built by King Duttabaung. Like the founding of Sriksetra, the origin of the Shwesandaw dates to the time of the Gotama Buddha. Its story is similar to that of the Shwedagon, with two merchant brothers travelling to receive the teachings of the Buddha and returning with golden or sacred hairs, the 'shwe-san' in the name of the pagoda. Unlike the merchants bringing the hairs of the Buddha to the Shwedagon by ox-cart, the Shwesandaw relics were brought by boat, perhaps recalling a former shoreline closer to Pyay than at present.

The 11<sup>th</sup> century AD inscription records another prophecy given by the Buddha Gotama to Bisnu [Vishnu], Kyanzittha in one of his previous lifetimes. This foretells that Kyanzittha will be reborn as Duttabaung and found Sriksetra, following which he will be reborn as a king of Bagan. Luce's interpretative gloss on the participants present at the founding is given below:

“the hermit Bisnu (Vishnu, of whom Kyanzittha claims to be an avatar) shall join ‘my son Gavampati [‘Lord of cattle’, patron saint of the Mons], Indra [King of the gods], Visvakarma [the celestial architect], and Katakarma [‘Doer of the Deed’], king of the Nagas [representing the ancient Earth-cults]...”

The panoply of auspicious figures present upon the occasion situates the king in relation to a host of different powerful forces. Ray notes that the Naga is also cited in Mon records as having helped to found Sriksetra (1932:17). The significant point here is the legitimising of Kyanzittha's lineage in part through the ancient city of Sriksetra but not including other Pyu cities. As noted above and seen again below, the chronicle traditions surrounding Beikthano and Halin are also each very different. The story of Beikthano is preserved in relation to Sriksetra, linking them both back to Tagaung. This site (23.10n x 96.01e), located north of Halin, is recorded in Chronicles as the most ancient of the cities in Upper Myanmar. As indication of its great antiquity, its founding is placed not in the time of the Buddha Gotama, but that of previous Buddhas, and its rulers established the lineage of the later kings as

Sakiyans of the Sun dynasty (Luce and Pe Maung Tin 1960:1,6). Its Buddhist and dynastic origins are thus established, a legacy carried forward primarily by Sriksetra. However, as seen in the history of Beikthano below, this third city was also played a role in both religious and political arenas.

### Beikthano

The *Taungdwingyi Thamaing* does not recount the founding of Beikthano, but rather its subjugation by Sriksetra. The episode centres on King Duttabaung and Princess Panthwa, descendants of Mahathambawa and Sulathambawa from an earlier ruler of Tagaung. The *Glass Palace Chronicle* also traces Queen Panthwa's lineage to Tagaung. Here, her father, heir to the kingdom of Tagaung in the fortieth year after the Buddha's *Parinirvana* killed a great boar threatening the kingdom. The heir became a hermit near to the later site of Sriksetra, at Yatheit-myo or 'hermit city', a name often given to Sriksetra. A young doe living here gave birth to a daughter named Bedayi, after happening to lick up the hermit's urine left in a cup in the rocks (Luce and Pe Maung Tin 1960:8,13).

At around this time, two blind princes were born to the chief Queen of Tagaung. The two sons were fathered by the queen's lover, a Naga prince (Khin Myo Chit 1985:57). They were banished from Tagaung to float down the Ayeyarwaddy and eventually regain their sight with the help of an ogress, Candamukhi. The brothers meet Bedayi and her father on their journey, bringing the two stories together. The elder brother marries Bedayi, and then dies, although Bedayi bears his child. She is given to the younger prince, and bears a son, Duttabaung. In the *Taungdwingyi Thamaing*, the ogress gives birth to a girl, taking her to live on the sacred Mt. Popa near Bagan where a hermit cares her. In the *Glass Palace Chronicle*, the ogress builds a village around Mt. Popa and lives there her son Peitthano, who had been fathered by one of the princes (Luce and Pe Maung Tin 1960:14). Indra (Thagyarmin or Sakka) learns that the girl had been the sister of Vishnu in a previous life, and requests that Vishnu build her a city. This city is then called Panthwa ('request') or Vishnu (Chen Yi-Sein 1999:76). King Duttabaung hears of the Beikthano's wealth but fails to take the city due to Princess Panthwa's magic drum that she had received from Sakka. When beaten, the drum made the waters of the Yan Pe stream to the south of Beikthano rise, drowning any invading troops.

King Duttabaung, ruling at Sriksetra, had a third, divine eye and is identified by some with the Hindu deity Siva. Beikthano, on the other hand, takes its name from Vishnu. Thus, the chronicle account is often taken to record the ascendancy of a Saivite kingdom over adherence to Vishnu (Wheatley 1983:180). Chen Yi-Sein instead gives an Indian derivation for Panthwa, as the name of a Dravidian tribe settled in Mon areas around the Gulf of Martaban. This group was later one of the pioneers in a 'Monized' occupation of Beikthano, which also led to the city being called Ramanna-pura, linked to Mon areas of southern Myanmar (1999:77).

The above paragraphs present several accounts relating to the founding of Beikthano. It is not necessary to resolve a single 'true' version from the sometimes conflicting stories, as the significant point is the multiplicity of accounts and their preservation the memory of ancient capitals as part of a much later historical tradition. The Tagaung dynasty is explicitly incorporated into the story of Duttabaung's mother and father; the lineage of the Queen of Beikthano is less consistent, but always intertwined with that of the Sriksetra rulers. In all of these, links are made between territorial control, royal patronage of Hindu or Buddhist sects, and supernatural events. The stories of Tagaung, Sriksetra and Beikthano are intimately related, with Sriksetra eventually dominating but not necessarily bringing an end to Beikthano.



Conclusions about the relationship of these sites grounded in the sources such as Chinese records, inscriptions and excavated objects are equally mixed, although in several instances Beikthano's material culture is similarly distinguished from that of Srikestra, and considered closer to that of Halin. This was mentioned earlier in citing a hypothesis that the inhabitants of Beikthano may have been a different Tibeto-Burman group than the Pyu of Srikestra (Than Tun 1965). Analysis of a funerary structure (HL20) excavated at Halin in 1995, while noting similarities to both Beikthano and Srikestra in burial custom and funerary urn shape, suggests a closer cultural affinity between Beikthano and Halin (Hla Tun Pru 2002). In giving names to the generalised references in Chinese records, Halin is often identified as a garrison town, with Sriksetra the capital of the Pyu kingdom. Although this in theory should signal communication and interchange between the two cities and similarities in material culture, such parallels have not been drawn. The brief chronicle history of Halin cited below credits its founding to an Indian prince and its demise to a fire breaking out during rebellion and royal conflicts, none of it relating to other known Pyu sites.

### Halin

There is one reference to Halin in the *Glass Palace Chronicle*, but in the time of King Naratheinhka in the late 12<sup>th</sup> century AD. This mentions a messenger of the king crossing the Chindwin, and then making "straight for Hanlin", although a description of Halin is not given (Luce and Pe Maung Tin 1960:136). The founding of Halin is recorded in the Halin Chronicle in verse compiled by Aung Hpyo (Sithu Kyaw Htin) in the late 18<sup>th</sup> century. It records the founding of the city by King Karabaw well before the time of the Buddha Gotama. Karabaw attempted to dam the Ayeyarwaddy to the east of Halin. This failed, and he constructed the Nagayon tank to the southeast of the city wall. His reign was followed by 799 kings, ending with the reign of the brothers Pyu Min and Pyone Min. Although on harmonious terms at first, they eventually quarrelled and Pyu Min took the life of his brother. The populace rebelled and killed the king. A fire broke out, burning down the city, and ending the city of Halin (Myint Aung 1970:56).

### **Conclusion**

The conflagration at Halin has been cited repeatedly to explain the charred wooden pillars that provided material for radiocarbon dating. As described, this apparent resolution of the site's history, and the situating of it within a primarily Pyu context is belied by evidence of successive occupation: Bronze Age *kye doke*, Pyu brick walls and royal inscriptions, the equerry of a Bagan king, and Konbaung monastic and royal donations. Recalling the absence of Halin in the Tagaung-Srikestra-Bagan chronicle sequence, these successive occupations demonstrate the site's significance in a proliferation of contexts yet to be fully reconstructed. "The world we know is not this ultimately simple configuration where events are reduced to accentuate their essential traits, their final meaning or their initial and final value. On the contrary, it is a profusion of entangled events." (Foucault 1977) These events include settlement and ritual use of land as well as agricultural areas and specialised manufacturing zones inside and outside the city walls.

Little is known about the institutions which regulated Pyu society or the agricultural and political domain outside the walled area. Facets of the material culture have been recorded and re-iterated, creating a sense of temporal and geographical positioning at the expense of an awareness of the "multiple transformations and relationships between different aspects of material culture and between material culture and society...Such an analysis is undeniably difficult, but it does at least have the merit of trying to capture the sheer complexity of what we are trying to understand." (Tilley 2000:421) In this context, therefore, Pyu material culture neither simply mirrors that society nor serves as a window through which we can scrutinize it.

Comparison of the remains of walls at the Pyu centres of Beikthano (Vishnu), Sriksetra and Halin show a similar approach to territorial demarcation. The massive walls and gates, and offer a viable indicator of a centrally organized social hierarchy capable of mustering labour to construct and maintain fortifications. Given the number of buildings associated with urn burials and their probable association with a growing monastic community, the nature and relationship of an early *Sangha* and Pyu kingship is a theme perhaps offers a paradigm within which these sites may be understood. While they are often discussed as a sequence of capitals of a single kingdom, there is little to support this scenario. As suggested above in discussing the epigraphic and chronicle records of the Pyu, the differences in many ways outweigh the similarities between Sriksetra, Beikthano and Halin. Each seems to have followed its own development trajectory, with Sriksetra and Halin most likely profiting from respective control of seaward and overland trade.

In addition, the material culture of Pyu sites is distinct from that of Dvaravati sites in Central and Northeast Thailand. While the two areas were clearly in communication and share a number of traits from walled enclosure, stylistic features of images of the Buddha, silver coins and beads, the building forms and mortuary practice of the Pyu is not seen at Dvaravati sites. These contrasts are further highlighted in the context of the growing body of data on occupation of 'Pyu' areas by other cultures, either contemporaneously or prior to the building of the brick walls by which Pyu cities are most commonly identified. This premise of 'same but different' underlies the discussion above of Chinese sources, relative and absolute dating and chronicle accounts. As documentation on the Pyu increases, the conflation of a politically and linguistically distinct domain with a start and finish, can hopefully be replaced with use 'Pyu' in a cultural sense, similar to that which has evolved in regards to the preference of Dvaravati over 'Mon' for the art of first millennium AD central and Northeast Thailand (Woodward 2003:54).

While much of the discussion above is within a framework of the Pyu period, reference has also been made to the growing body of new information on pre-Bagan habitation of Upper Myanmar. Prior to the 1998 excavation of the Bronze Age cemetery near Nyaunggan, Budalin township, comparative study of Pyu artefacts looked outside the country for contemporary material from South Asia and areas to the east linked to the 'Dvaravati' cultures of present day Thailand. Analysis of the Pyu period remained within the paradigm defined by Myanmar chronicles and later scholarship that approached the early history within an ethno-linguistic framework prioritising textual sources. While attention was given to population groups other than the Pyu (e.g. Luce 1985), defining their presence archaeologically was not feasible, leaving the Pyu in isolation as the sole or dominant root with which to define the emergence of Bagan. The information now available is different, offering an opportunity for new interpretations and for defining new contexts. At the same time, "If meanings are contextual, how do we know what the relevant context in the past was?" (Hodder 2000:90). The answer of course is that we cannot fully reconstruct past attitudes, we can only construct a present meaning from the accumulated body of data. The point here is that there is new data, and that the context is shifting. All these aspects illustrate the increasing need to re-contextualise Pyu centres. The existing framework has to be flexible enough to embrace the range of materials described in the preceding paragraphs. It further highlights the need to be aware of the types of evidence previously used (and not used) to define 'Pyu' culture.

Despite the implications of stability and structure implied by a Pyu 'city' or 'kingdom', it is probable that relations were persistently fluid, "not state as institution, but as 'part of a discourse of contested political claims, as an aspect of social relations, rather than as a structure in and of itself'..." (Day 1996:386). As mentioned, existing chronologies present a sequence of capitals for a Pyu kingdom. As yet, there is no sense of how and when different elements, particularly royal and monastic ones, were introduced into the society. The population densities were centres of authority, protection, teaching and sustenance but the degree of competition and movement of individuals between nodes is not yet clear. Bonds to

place, of birth and livelihood, balanced the sense of boundary implied by brick walls, with steady mobility between the two contexts. In a prehistoric paradigm, this means considering the movement of peoples between villages and the flow of traders and religious figures across the landscape. In this way we do not lose a spatial referencing that accommodates cities, their rulers, priests and monks, and the makers of finger-marked bricks.

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