

Burma Before Pagan: The Status of Archaeology Today

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INTRODUCTION

FEW WORKS IN English on archaeological developments in Burma ever reach the West. Of these, fewer still address the larger issues and problems in Southeast Asian archaeology. While a summary of the past 20 years of archaeological work in Burma would be a contribution, its relationship to the context of a larger Southeast Asian picture might prove to be even more significant. Not an archaeologist, I am wary of dilettantism. My specialty involves epigraphy (one of the more productive branches of the Archaeological Survey), while my interest in the origins of the state in Burma has invariably drawn me closer to prehistory and particularly early Southeast Asian history (preclassical/urbanized Southeast Asia) in general. I wish therefore to briefly trace the development of archaeology in Burma, summarize its findings, and place it in a larger Southeast Asian context. My focus is on the so-called "Pyu" culture of Burma, the extensive, urbanized predecessor to the Kingdom of Pagan stretching from the dry central plains of Burma to the Isthmus of Kra, a culture that seemed to have occupied Burma roughly between 200 B.C. and the ninth century A.D., a period long shrouded in myth and legend.

THE ARCHAEOLOGICAL SURVEY OF BURMA AND ITS DEVELOPMENT

Prior to 1902, when the Archaeological Survey of Burma was officially founded, archaeological work in Burma was administered by the Indian Archaeological Department, Burma Circle. Most of what was done was highly selective. Much of the work published in the first 15 years of this century can be found as "Report of the Superintendent, Archaeological Survey, Burma." From 1926 until 1947, these reports became part of

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the Archaeological Survey of India. From 1947 to approximately 1965, they appeared as “Report of the Director, Archaeological Survey of Burma”; many, particularly those after 1960, were published in Burmese. The first Director of the Survey in Burma was Emil Forchhammer, epigraphist, Pali scholar, and student of Burmese law. He was succeeded by several noted scholars: Taw Sein Ko, who was followed by Charles Duroiselle, and in 1940, U Lu Pe Win. After the disruption of World War II, the Survey once more began to make significant gains in the 1970s under U Aung Thaw. U Oak Gar was the most recent director.

During those early years, the epigraphy section of the Survey received priority in people, funds, and projects assigned to the Survey as well as in the personal preferences of the most competent scholars. This priority was understandable, since the many surviving lithic inscriptions that represented the only primary data concerning the origins of the first Burmese state needed to be read, catalogued, protected, and permanently housed. Moreover, the sentiment of the public lay with preserving the more important (and clearly visible) temples and their inscriptions, rather than with excavation. As a result, volume after volume of (mainly unedited) inscriptions—along with a few edited versions by notable scholars such as G. H. Luce and Pe Maung Tin—were published under the auspices of the Archaeological Survey. Because there was so much material that needed to be preserved and collected above ground (as well as overwhelming social reasons for doing so), very few systematic underground excavations were carried out during the first half of the twentieth century; epigraphy developed more rapidly than archaeology.

Unfortunately, these nonacademic factors created some of the “academic” issues of Burmese prehistory and history that emerged later. For instance, the study of the Pagan period preempted that of its predecessor, as if the Pagan Kingdom had suddenly sprouted from the dry, inhospitable plains of central Burma. As a result, scholars looked for some catalytic factor that would turn an arid, semidesert area into one of the region’s most productive civilizations, competing with the magnificent civilization of Angkor in nearby Cambodia in irrigation technology, material wealth, and artistic development, if not in political power. The obvious answer was Theravada Buddhism; religion provided the catalytic factor. Another answer was human migrations. If such a civilization as Pagan emerged suddenly, the argument went, surely the stimulant was external. No doubt, Theravada Buddhism was a major factor in the emergence of Pagan and migrations were plausible. Yet the adoption of these interpretations, even if tentative, left some of us uneasy. In both explanations, the questions themselves assumed a sudden change, probably because of our biases for linear history and because the period before Pagan was so devoid of information. Yet there were a few tantalizing pieces of evidence for the existence of a well-developed urban civilization prior to Pagan that bothered us. For example: (1) the presence of Sanskrit Buddhism (Sarvastivadin) as early as the sixth century A.D.; (2) a silver coinage system that permeated this area, suggestive of trade and economic activity on a significant scale centuries before Pagan emerged and the existence of neighboring Southeast Asian urban sites where this coinage was found, showing economic relations among them; (3) the mention in Chinese accounts of a thriving city in central Burma whose walls were built of green glazed bricks and whose people built monumental images of the Buddha; and (4) the confirmation in the Burmese chronicles of several such early kingdoms prior to the emergence of the Kingdom of Pagan in the mid-ninth century.

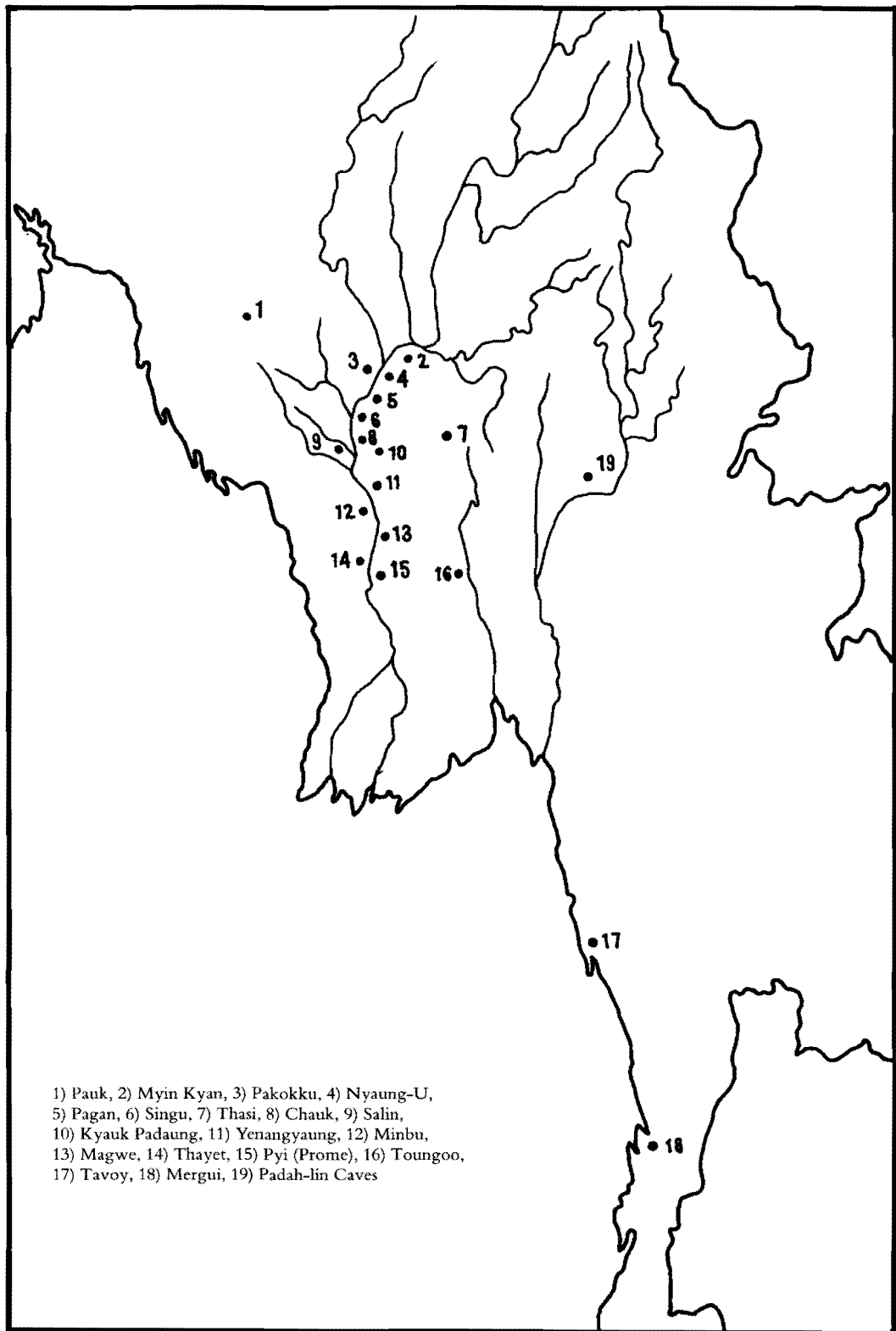
By the late 1950s and early 1960s, systematic excavations of potentially productive sites were commenced. The most promising were Sri Ksetra (Old Prome), Hanlin, and Beikthano, all located on or near the Irrawaddy’s meandering path. Of these, only

Beikthano was subjected to a relatively detailed study, with 25 test pits excavated, most during the so-called “digging season” between 1959–1963. At first, the excavations were meant to determine if an unobtrusive mound topped by trees and shrubs would yield a legitimate site, and, if so, to proceed with the collection of data. Although the first excavation was carried out by Taw Sein Ko in 1905, it was not until 1968 that a *Report on the Excavations at Beikthano* was published under the direction of U Aung Thaw. Some of the material for this article is taken from a detailed excavation report. In 1972, another work by the Department of Archaeology, *Historical Sites in Burma*, was published. To date, no similar monograph-size work has been published in English on this period. Several articles have appeared in the *Working Peoples' Daily*, and one in a journal called *Shiroku*, of Kagoshima University in Japan, by U Myint Aung, one of the Survey's more productive members. Several short accounts exist, but they are in Burmese and unavailable to most scholars abroad. These include a fairly detailed but preliminary account of Binnaka, also a central Burma site, which I shall discuss below. What was becoming clear from these preliminary excavations was that the so-called Pyu society that preceded Pagan was not a tribal precursor of urbanized society, but was highly urbanized itself.¹

THE “STONE AGE” CULTURE OF BURMA

The study of the “stone age” culture of Burma was begun prior to and after World War II, largely by foreigners, whose findings were published in the West in the 1940s (De Terra and Movius 1943, 1948). In addition to these publications, several others were published in the *Journal of the Burma Research Society* between 1931 and 1936 by students of archaeology including Coggin Brown and T. O. Morris. In the late 1960s an article was published in the *Journal of the Burma Research Society* on the Padah-lin Caves, but because of the journal's obscurity, not much international exposure was received. At the same time, in the mid-1960s, several accounts appeared in the *Working Peoples' Daily* on both the “neolithic” and the “chalcolithic” in Burma. When the government published its multi-volume standard history on Burma entitled *Myanma Naingnan Yei Thamaing* in 1970, some of the details on these cultures were included—but lay buried there until 1971 when U Aung Thaw introduced them to a larger audience in *Asian Perspectives* (Aung Thaw 1971). These “early neolithic” finds in Burma, especially those of the Padah-lin Caves, are truly exciting, in terms of their relationship both to the “Hoabinhian” culture of Southeast Asia and to the international context of the neolithic age.

Although the earlier studies of De Terra, Movius, and Morris may be dated, their apparently sound methodology and systematic recording of the evidence enabled later archaeologists with more recent dating procedures and equipment to bring their findings up-to-date.² From these studies it appears that central Burma was inhabited by man 400,000 years ago, and was named the Anyathian culture (from *anyatha*, Upper Burma man). The principal sites were located on the east bank of the Irrawaddy between Maghwe and Nyaung-U. The people there used silicified tuff as raw material, along with some quartzite and fossil-wood implements. To date, no hand axes have been found in this culture; rather an abundance of the chopper, chopping-tool, hand-adze variety has been excavated. Palaeolithic(?) tools were also found in an area that ranges from the Kachin Hills in the north to the Shan States further south and east.³ The hand tools, according to T. O. Morris, are contemporary with those found in Mainland Southeast Asia. From our own perspective, in light of more recent studies, these tools seem to connect Burma's stone



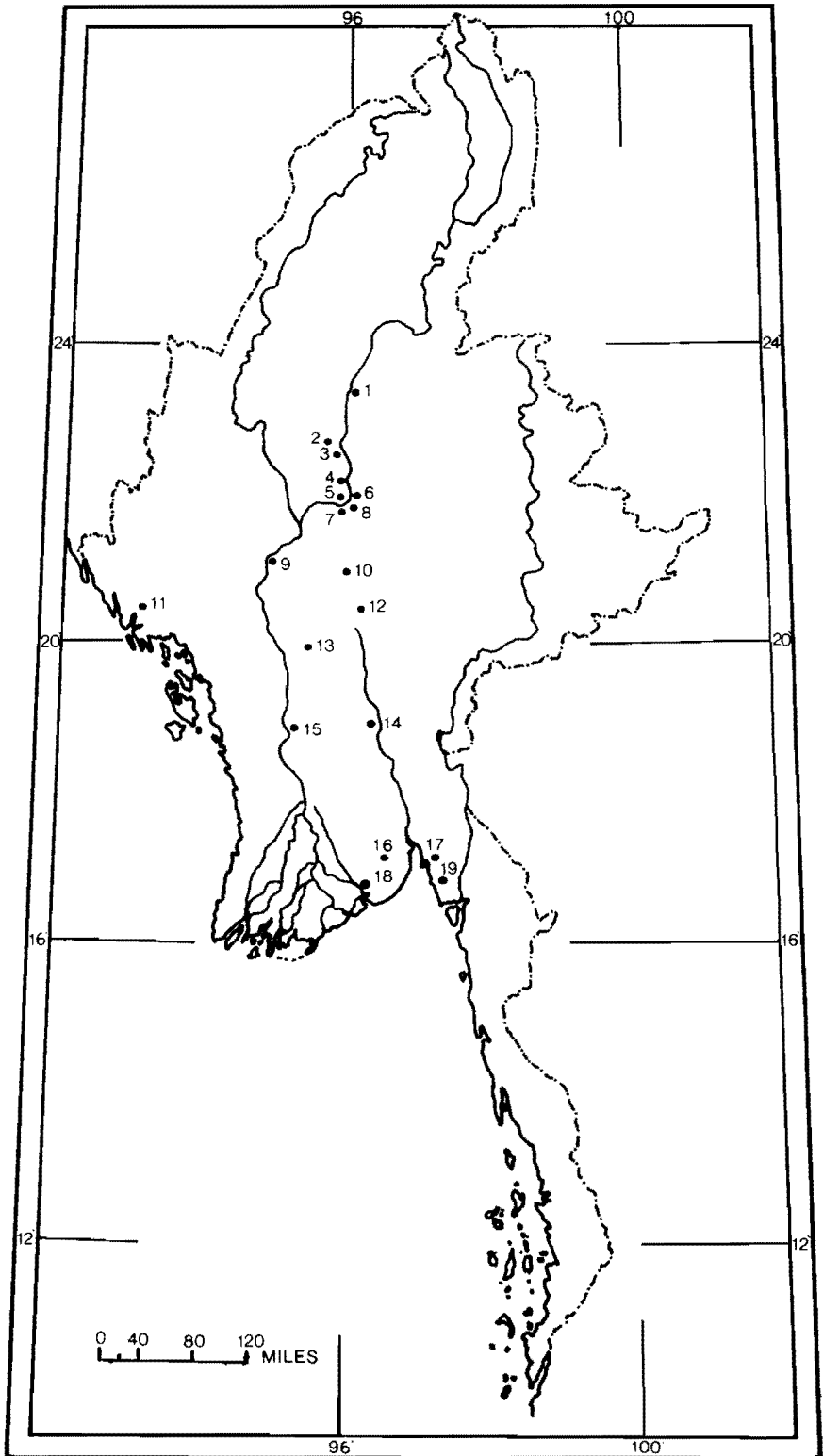
Map 1A Sites of Burma's stone culture

culture specifically to the early and late "Hoabinhian" of Vietnam. The largest number were of the wood-chopping hand-tool variety. The stone implements included finished and unfinished polished and rough tools, some of which are faceted, some chipped, others edge- or completely ground. There were also scrapers, hammers, choppers; wedges, chisels, and gouges; short-handled, splayed, and shouldered axes; as well as stone weapons easily identified as swords and daggers. The consensus of evidence suggests that Burma's "palaeolithic" culture faced East, to those of Thailand, Malaysia, Indonesia, and China, rather than to those of the West, that is, India, Africa, or Europe. Most of these sites in Burma tended to cling to the course of the Irrawaddy. All but one were located in the dry zone. This is significant because in historic periods these areas became the important political, economic, and cultural centers of Burma (Map IA-B).

Burmese archaeologists also conclude that this and subsequent "neolithic" cultures followed a sequence that moved from simple horticulture to limited food production. The people had the skill to produce pottery, to weave rope and mats, and to paint aesthetically pleasing scenes on their cave walls. There are several caves thought to be "neolithic," located west of the Shan plateau, about 1000 feet above sea level (for example, Maung Pa Cave in the Shan Hills, explored in 1937; Tin Ein Cave near Taung-gyi; and the most famous, the Padah-lin Caves, also in Taung-gyi district). (See Map IA, no. 19.) This particular cave complex seems to have been one of the many "Hoabinhian" factories that produced stone implements. There is evidence of chipped remains, tool makers, and various types of stone quarries in the vicinity. In addition, there are unfinished stone tools such as shouldered adzes along with piles of their chipped parts as well as mounds of choppers and other unfinished pieces, many of which had been sharpened and dented. For the most part these pieces have been left undisturbed by modern intruders. The tools were made largely of pebbles with evidence of grinding techniques. A beveled-edged flake scraper as well as a thin scraper flaked in the "Levalloisian" technique were found. There were sharp edge ring stones as well as flat whetstones used to polish those edges and pebbles used as hammerstones and anvils (Union of Burma 1970). Approximately 1600 stone tools and implements were found. The cave seems to have been a tool-making workshop whose industry showed a transitional phase from flaking and chopping to grinding and polishing.

At the same level, cord-impressed and other potsherds apparently turned on the potter's wheel have been discovered. Shells of land molluscs, animal and human bones, molar and canine teeth of mammals, charcoal (carbon dated at 7740 ± 125 years B.P.), and bone collagen (dated between 11250 ± 200 and 13400 ± 200 years B.P.), chunks of red ochre used for the red pigment in the cave murals, and wild boar bristles, apparently used as paint brushes, were among the other finds. The wall paintings were the most exciting discovery. They are intrinsically significant (in terms of the conceptual level of the creators) and, in terms of style and subject matter, are similar in some ways to the Lascaux Cave drawings (Fig. 1). This similarity is particularly true of the wild animals and palm prints. One can also see the sun with its rays rising between two mountain ridges. The paintings include animals apparently giving birth, wild cattle, a half-eaten fish, deer, elephant, bison (gaur?), and wild boar. Like the Lascaux Cave palm prints, those of Padah-lin seem to express a desire for creating writing (Union of Burma 1970).

Following the early phase of the "Hoabinhian," late "Hoabinhian" sites continued in some areas. Middle and late neolithic sites and cultures using bronze were found in other areas, which were contemporaneous with the late "Hoabinhian" sites though of as yet unknown cultures and dating. The work done thus far, in at least 11 different sites mostly



Map IB Major Political and Cultural Centers of Burma: 1) Tagaung, 2) Shwebo, 3) Hanlan, 4) Mingun, 5) Sagaing, 6) Mandalay, 7) Ava, 8) Amarapura, 9) Pagan, 10) Mongmao, 11) Mrohaung, 12) Binnaka, 13) Beikthano, 14) Toungoo, 15) Śrī Kṣetra (Old Prome), 16) Pegu, 17) Winka, 18) Dagon, 19) Thaton



Fig. 1 Reproduction of paintings in Padah-lin Cave No. 1. (after Aung Thaw 1971 : Fig. 4): a) sun, b) fish remains, c) palm prints, gaur (?), d) gaur (?), e) cow and calf, f) cow and calf, g) pig (wild boar?), h) pig (wild boar), i) elephant, deer)



Fig. 2 Artifacts from Burma: A) stone tools (after A. H. Dani 1960—left-Plate 55, right-Plate 56); B) socketed bronze tools from :1) western Yunnan, China; 2, 3, 5, 9) Northern Shan State; 4, 12) Southern Shan State; 6, 10) Thayetmyo District; 7, 8) Trans-Salween, Shan State; 11) Lower Chindwin District.

in the Shan States, suggests that the remains may be about 5000 years old. Among them are mostly socketed weapons and implements, bronze adzes, axes, wedges, spear points, and rings similar in size and shape to their stone counterparts (Fig. 2A–B). These show a stylistic (design and size) and also suggest a social (geographic proximity) relationship. It appears that Burma did possess an equivalent to the early and later “Hoabinhian” of Southeast Asia.

However, there is a gap between the late “Hoabinhian” and the beginning of the urbanized sites of the so-called Pyu culture (approximately to 200 B.C.). This gap is obviously the result of archaeological work still to be done, rather than a sudden disruption of society at the time. When the “Pyu” culture appeared, both iron implements and bronze were being used simultaneously, especially in the urbanized sites of Hanlin (or Halin) and Sri Ksetra. Many of these bronze implements continued to be used contemporaneously with the later iron, silver, and gold implements of the Pagan period. The difficulty in Burma, as in the rest of Southeast Asian prehistory, is the continuous presence and apparent use of “neolithic” and “chalcolithic” implements in subsequent historic periods; in fact, one could argue, until modern times (Hutterer 1976).

BEIKTHANO

U Aung Thaw and his associates, U Myint Aung, U Sein Maung Oo, and U Bokay, have directed a detailed, scientific, and carefully envisioned excavation at Beikthano; their data and conclusions have been published in both Burmese and English.⁴ In many ways, Beikthano is a model site, for what is found there very often represents the cumulative finds of the other urbanized sites. To date, it is the only urbanized site with published radiocarbon-tested data. Thus it is the only site to have this test confirmed by other data with an occupation date of around the first century B.C. and later.

The archaeological data include structural remains, pottery, artifacts, bones, and skeletal evidence (Aung Thaw 1968). The structures include fortifications, large portions of city walls, shaped in a rectangle, approximately two miles long on each side and about 20 feet thick. The charred remains of the massive gateways were the basis of the radiocarbon tests. The entranceways curve inward rather than stand at right angles to the fortification walls, as if to guide chariots or other fast moving wheeled vehicles into the fort quickly and easily (Fig. 3). These entrances are about 15 feet wide, with sentry niches and double-leafed wooden gates. Similar to most subsequent Burmese cities, the main entrance leading to the palace enclosure faces east. Along with the walls and unique entranceways, many residential structures were excavated, including the palace, monastic buildings, and *stupas* of different styles. The design of the solid, cylindrical *stupas* may have been influenced by those at Nagarjunakoṇḍa and Amaravati, especially the *ayaka* platforms at the cardinal points (Fig. 4). Another type of structure was found whose ground plan may have been the prototype for the smaller Pagan *stupas* (Fig. 5).

At present, our reconstruction based on these finds may not be of much help to the art historian searching for detail. Nevertheless there are several important points to be made about these structures that tell us something about the society at large. First, burial urns and human skeletons are associated with the structures, though they were not placed in the buildings themselves. Second, the same (virtually identical) type of structure is found in several of the other “Pyu” sites. The oblong, pillared halls, apparently with wooden supports now gone, were monastic establishments, according to the Archaeological De-

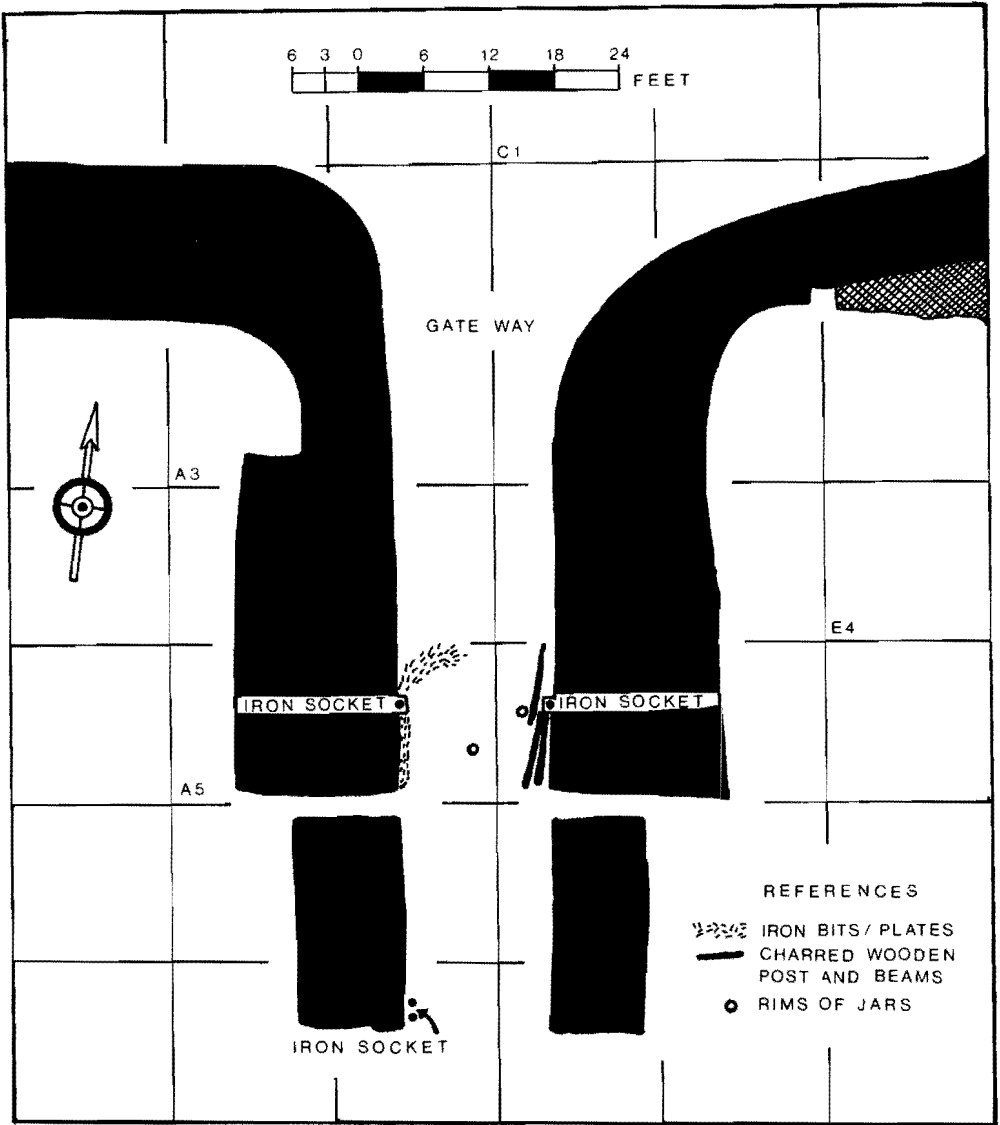


Fig. 3 Curved gateway.

partment. One of the monasteries north of the palace site has been excavated and found to have been built of well-burnt rectangular bricks, with an entrance hallway in the middle of the structure, facing east. The floor plan includes ten rooms arranged mostly on the west, opening into the corridor (Fig. 6). This structure is reminiscent, with minor variations, of the twelfth-thirteenth century Somingyi brick monastery at Pagan. One of the more interesting features found in the former building is the presence of two so-called moonstones—similar to those at Anuradhapura—at the doorways of rooms eight and seven. Room seven was northernmost and was probably the abbot's cell. The entire site of 25 excavated areas at Beikthano resembles the typical fortified city of Burma—almost to

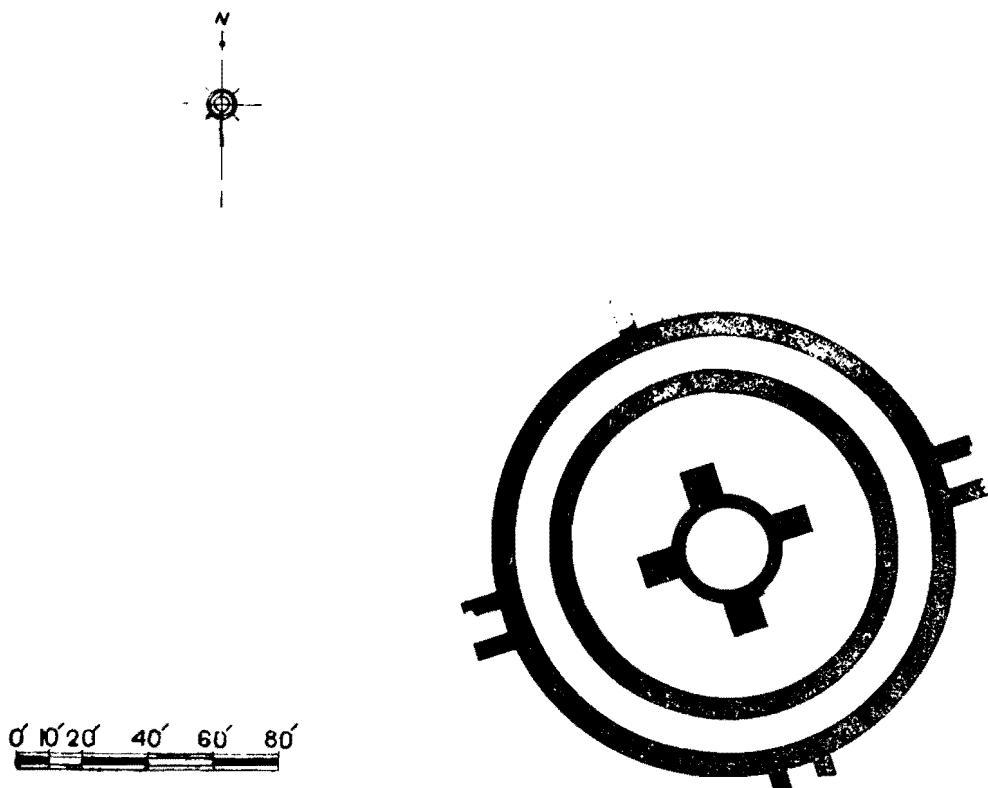


Fig. 4 Stupa.

the thickness and height of the walls—especially when compared to the configurations and dimensions of the nineteenth century city of Mandalay.⁵

Aside from buildings, there are other features of Beikthano that tie it at least with Sri Ksetra, if not with the other “Pyu” cities. The most significant link is probably the practice of burying the ashes of the dead in urns, a scattered Southeast Asian practice during the so-called preclassical period. These urns as well as other pottery remains appear to have been made on the fast wheel, were well fired, and used for a variety of purposes (Fig. 7A–B). Storage jars, spouted vessels, cooking pots, clay lamps, sprinkler vessels, and bowls with several different patterns were excavated. A small percentage of these belong to the Rouletted Black Ware of northwestern and southeastern India (especially those of Ari-kamedu), as well as to those of western Java, showing the relationship Burma had with the Roman sea trade in Asia and its routes within Southeast Asia. Sherds with figures of *srivatsa* and other symbols of the Hindu-Buddhist-Jain culture, as well as beads made of carnelian, also found in other “Pyu” sites, have been discovered. On one terracotta piece of clay, a circular seal with the letters *sangha siri* was inscribed in Brahmi script of the second century A.D., apparently referring to the name of a lay donor or a religious personage. The letters are preceded by a cursive *swastika*, which dates (in western India) to the pre-Christian period. Stucco objects, especially heads of *devas*, demons, women, animals, and decorative moldings depicting the lotus petal and other leaf designs, as well as ornaments that decorated arch pediments, have also been found. Metal artifacts excavated include an

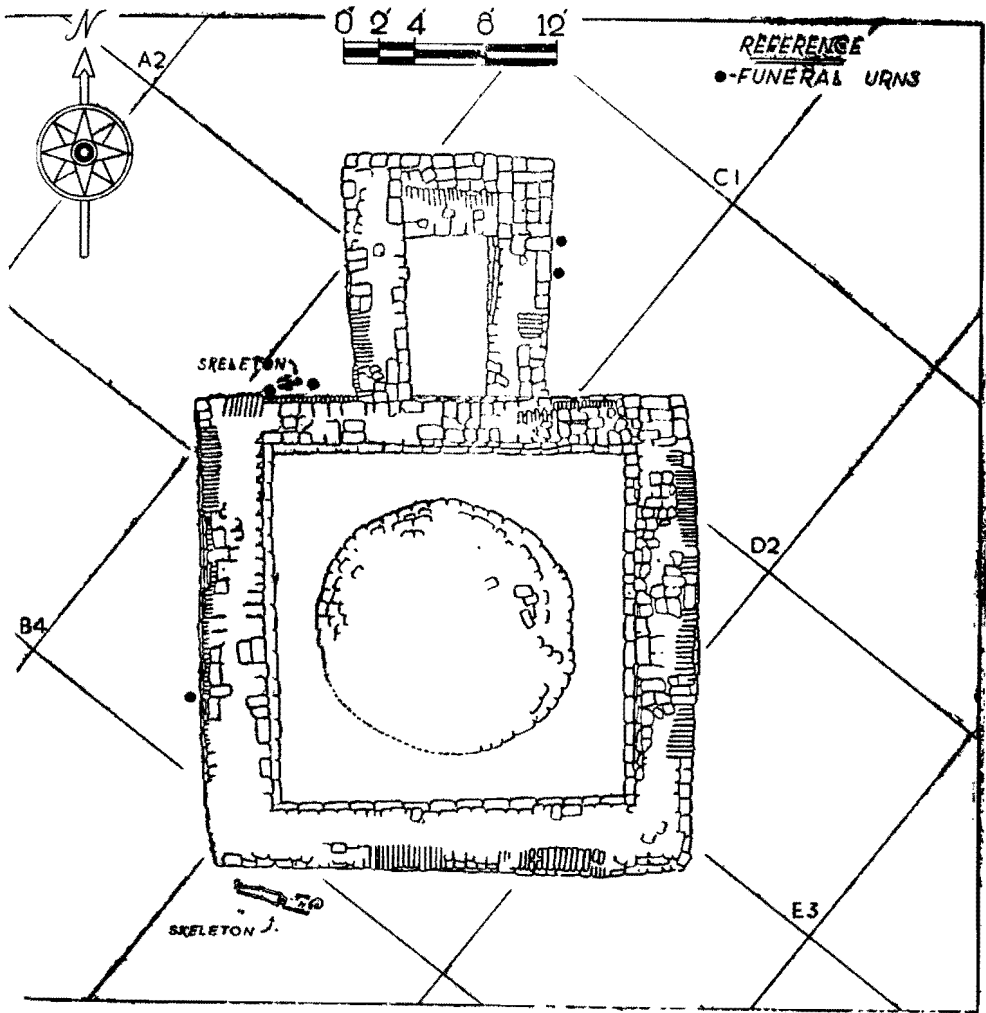


Fig. 5 Stupa ground plan.

iron *yoni*, iron nails, sockets, and iron strips weighing some 500 pounds; silver coins; lead money; bronze lions, *hamsas*, and rings; copper rods and rattles; and a few gold objects.

SRI KSETRA

Sri Ksetra lies on the east bank of the Irrawaddy about 180 miles north of Rangoon, the southernmost city of the dry zone (Aung Thaw 1972). In the literary sources, Sri Ksetra's origins are attached to a Vaishnava myth and it is said to have been a political rival of Beikthano. (It is significant that the accounts are found in a fifteenth-century chronicle, written long after Beikthano had physically disappeared, giving some credence to the antiquity of the chronicle tradition in Burma.) Sri Ksetra is thought to have achieved its glory between the fifth and seventh centuries A.D. The city is circular, $8\frac{1}{2}$ miles in circum-

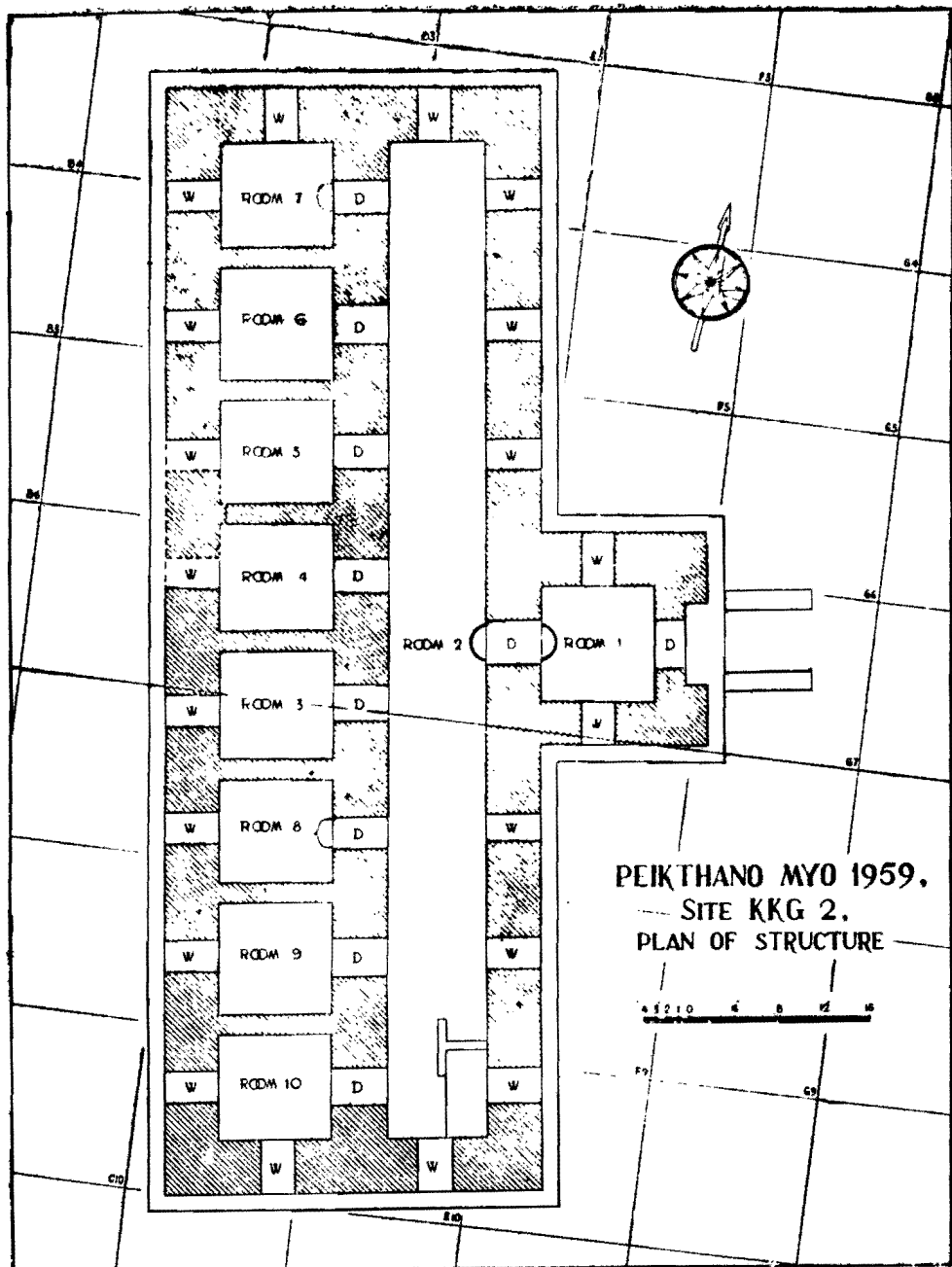


Fig. 6 Monastery.

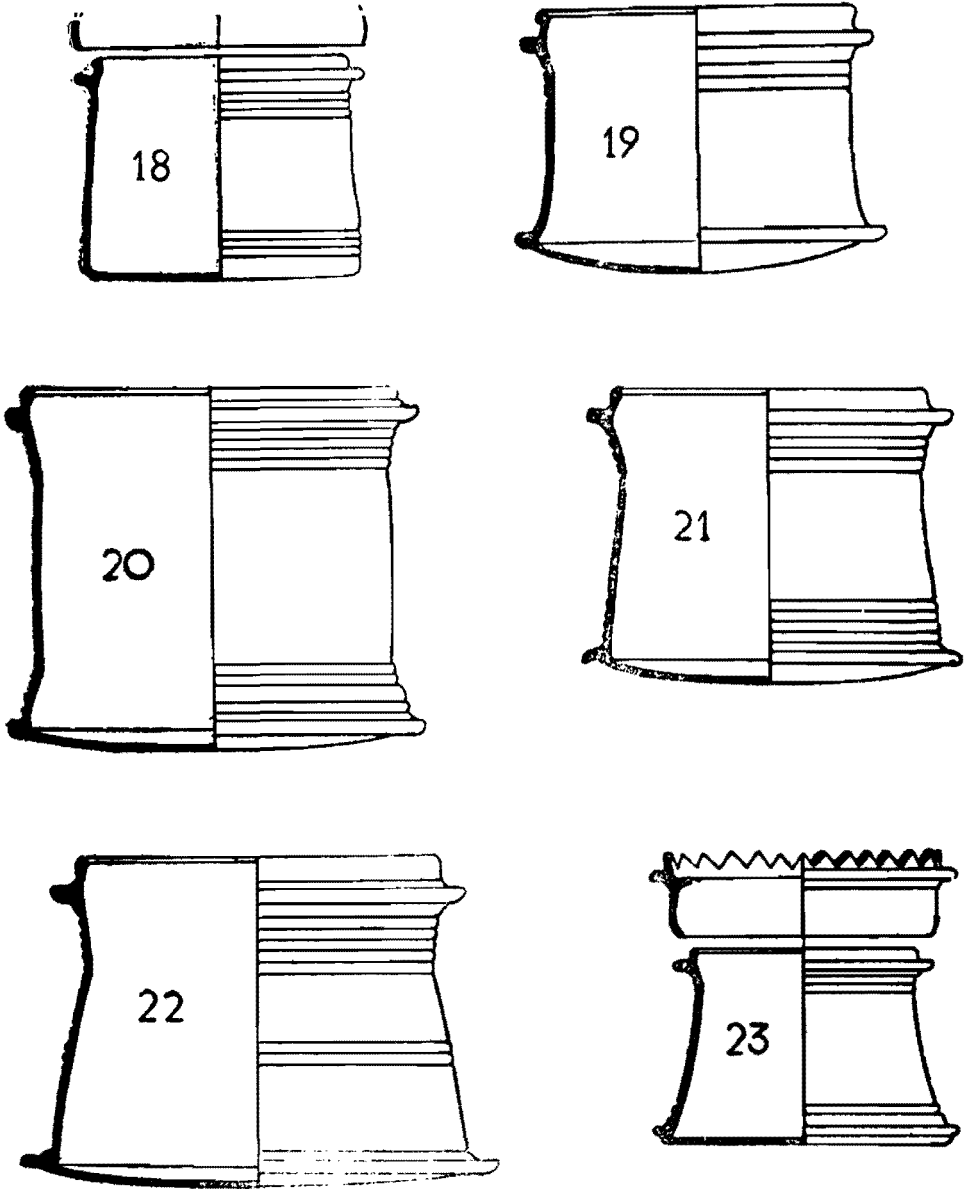


Fig. 7A Burial jars from Sri Ksetra

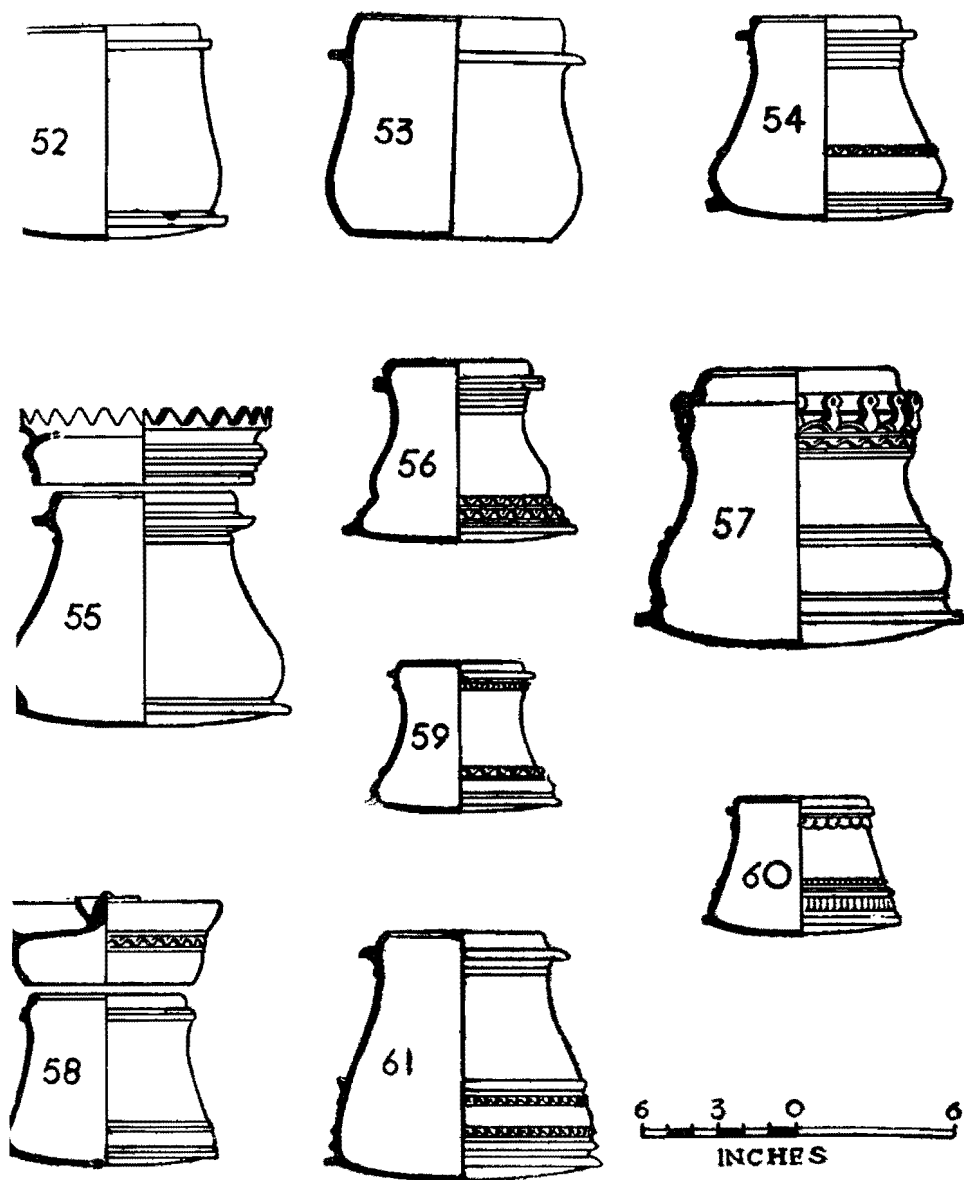


Fig. 7B

ference, the brick walls, even today, rising to 15 feet at some points. The entrances, like those at Beikthano, had curved corners. The palace enclosure within the city walls measures 1700 ft × 1125 ft.

The writing found at Sri Ksetra was largely on stone, with some on gold plates and gold leaf, on silver vessels, and burial urns. This "Pyu" language of the Tibeto-Burman family was written in what were apparently South Indian scripts, Kadamba and Pallava, as well as in Pali and Sanskrit of the sixth and seventh centuries A.D. The inscriptions are parts of verses derived from the *Vinaya Pitaka*, *Abhidhamma*, and the different *Suttas*. One

inscription mentions a dynasty called the Vikrama, including several kings with Indian regnal titles, a common practice in much of Southeast Asia among indigenous monarchs at this time.

Most of the monuments are Buddhist *stupas* of various designs. The Bebe and Baw-bawgyi, two of the better-preserved monuments, seem to have been prototypes of certain Pagan temples. Also excavated were two brick monasteries with vaulted roofs—a characteristic more distinct to Burma than to other places in Southeast Asia—and three entrances, similar to those found at Beikthano and Winka in Lower Burma, as well as to the later Somyingyi monastery at Pagan. The sculptures include Buddhas in largely *bhumispasa mudra* (again typical in Burma), depicting the “nativity,” the “deer park,” and other well-known episodes in the Buddha’s life. The Bohisatva Maitreya (identified by an accompanying inscription) and Avalokitesvara (with Amitabha in his crown), *dvarapalas*, Vishnu (one on Garuda and one reclining on Ananta), and Lakshmi, most of bronze, have been discovered. In the 1966–1967 season, the prize find was a group of bronze figurines about 4½ inches in height. One figure was playing a flute, another the drums, a third cymbals; the fourth was a dancer and the fifth appeared to be a clown.⁶ Other bronze objects included five Buddhas and a bronze bell 11 inches high with the *srivatsa* emblem. This symbol, along with the *vajra*, conch, *bhaddapitha*, sun, moon, and ocean, are commonly inscribed motifs on coins uncovered from all the “Pyu” sites (Wicks 1985). One of the artifacts discovered earlier that casts some light on Theravada Buddhism was a cylindrical, gilded silver receptacle whose relief showed the last four (Theravada) Buddhas of this *kalpa* in lotus position and *bhumispasa mudra*, accompanied by their disciples. The entire frieze was identified by a “Pyu” inscription on the rim of the receptacle. (The Theravadin version of the Four Buddha theme was a critical component of the Pagan and post-Pagan conceptual system.) Other less significant artifacts excavated included elephants of jadeite and necklaces of carnelian crystal, agate, and quartz beads.

BINNAKA

Binnaka is southeast of Pagan, near the railway line from Rangoon to Mandalay, in the dry zone of Burma, in the township of Pyaw Bwe.⁷ Because its history had been recorded in a *sittan* (local register), a search was made to determine if Binnaka was a legitimate site. The word Binnaka was also the name of the last king of the mythical “first” dynasty of Burma, the Tagaung Dynasty, overthrown by outsiders called Tayuk and Tayet centuries prior to the founding of Pagan. This destruction was said to have divided the dynasty into three parts: one leaving to establish the Nineteen Kharuin of Kyaukse, another (the “Pyu”) going down the Irrawaddy, and the last (the Kan Yan and Thet) reaching and founding Thunapayanta, where Pagan later emerged. Both the *Hmannan* (the Glass Palace) and the *Mahayazawingyi* (the Great Chronicles) mentioned this king. As a result of these literary references and other telling surface finds in the vicinity, the Historical Research Department, led by U Maung Maung Tin of Mandalay, conducted preliminary excavations in 1980 and early 1981. These excavations were carried out at Binnaka, Puti Kong, and the villages around Kyaukse.

The excavators found a large masonry slab that measured 18 ft × 8 ft, with an estimated 20 ft still buried. Similar slabs have been found in other nearby “Pyu” areas and are said to be either plinths of temples or foundations of city walls. A figure of a *deva* or demon with a third eye in the forehead, gold ornaments, “Pyu” coins, and a line of “Pyu”

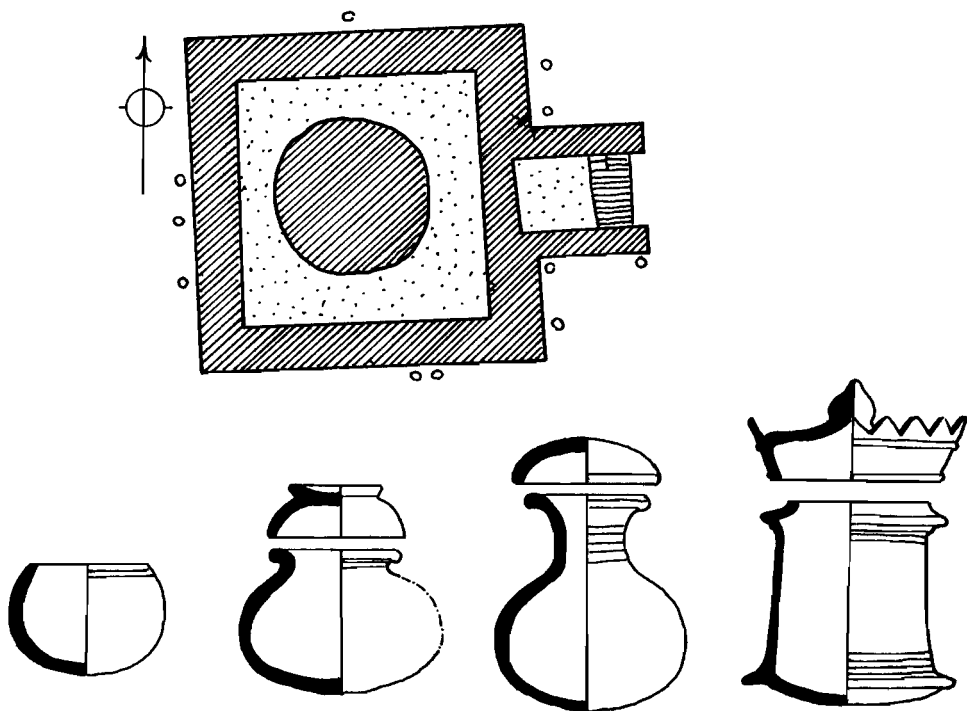


Fig. 8 Binnaka structure and pottery.

on a piece of brick were discovered. Burial urns and other clay pottery, distinctly “Pyu,” along with terracotta tablets with some “Pyu” writing on them, have also been uncovered. So many bone and clay beads of various colors and shapes were found that the village adjacent to Binnaka has been called the Mound of Beads. Some of the structures excavated were virtually identical to those found at Beikthano and the other “Pyu” sites (Fig. 8). Other artifacts uncovered at Binnaka include copper images, cups and bowls, a double lotus throne two inches high with *sinaya* written at the back in Devanagiri, and several other copper objects dated to the early Pagan period. Although the “Pyus” were thought to have been conquered and mostly removed by Nanchao’s forces in the mid-ninth century, pockets of them must have remained to perpetuate their culture; their inscriptions have been found as late as the thirteenth century A.D. Apparently, Binnaka was one such continuously occupied site, at least since the urbanized period, for we find not only “Pyu” artifacts, but those of the Pagan, Ava, and Konbaung periods here as well.

MONGMAO

Mongmao (also spelled Mongmai) is another site located in the dry zone of central Burma in the Kyaukse plain (Sein Maung 1981). The city walls, roughly circular like those of Sri Ksetra, are $1\frac{1}{2}$ miles in diameter. Mongmao is the largest of the ancient cities in the dry plains. It is at present dated tentatively to the first millennium B.C. As an urbanized city, Mongmao may predate Beikthano; it is clearly earlier than Hanlin or Sri Ksetra.

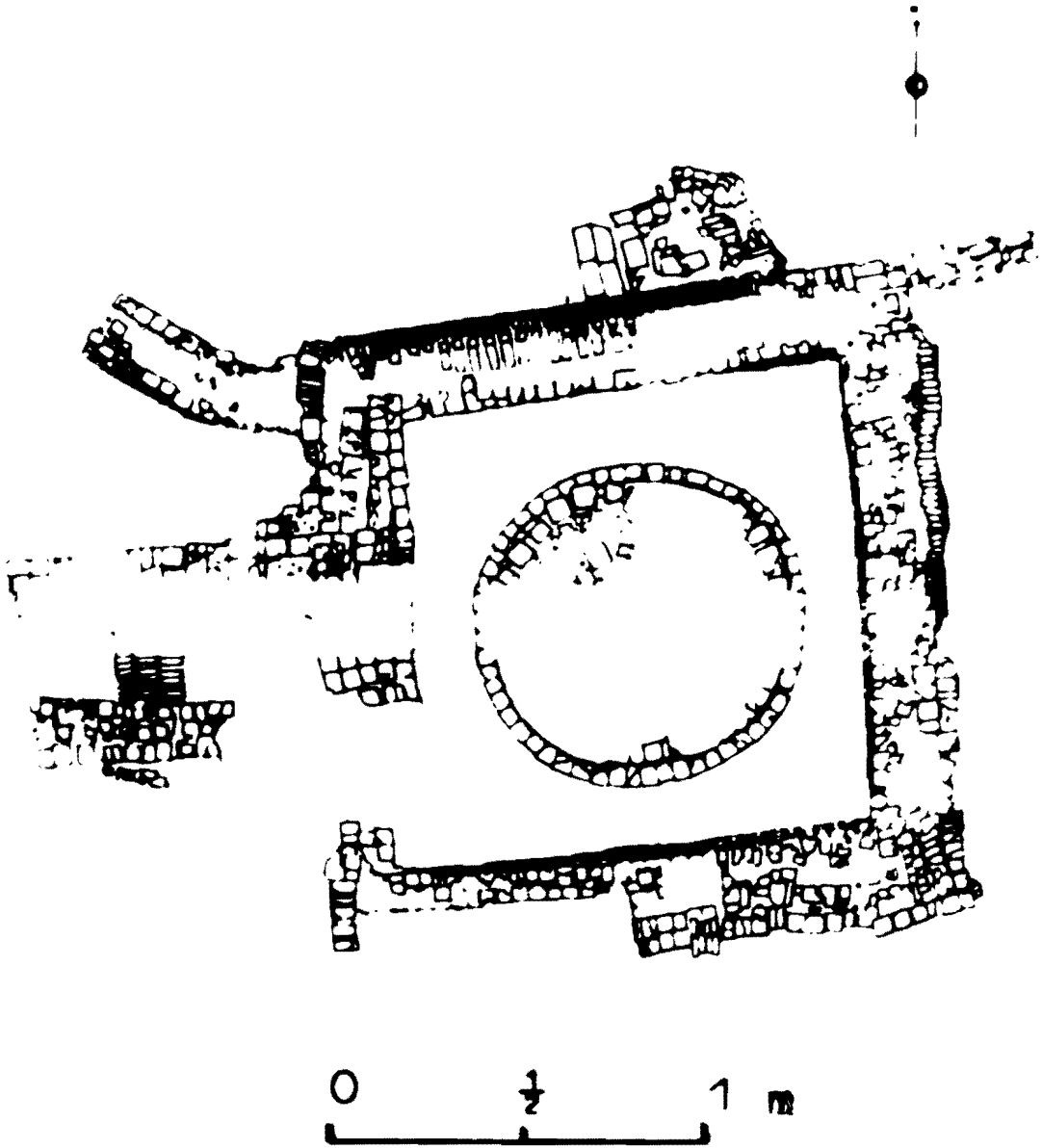
Mongmao also yielded two distinct types of silver coins: one with the *srivatsa* emblem and one with the rising sun. Stone molds for casting gold into thin ornamental flowers were also unearthed. A silver bowl with gold ornaments and one inscribed line of "Pyu" was found at nearby U-Hnangon. The bowl was palaeographically dated to the sixth century A.D. At Kume, five miles west of Mongmao, a similar find was made. Nearby, at Taungthaman, also an urbanized site similar to the others, were found so-called acid-etched onyx beads. In fact, all the types of beads found at Beikthano, Sri Ksetra, and Hanlin, along with the characteristic funeral urns and the same type of rouletted ware, were also uncovered at Mongmao. The bricks of the structural remains are identical to those at Sri Ksetra with the same *budhapitha* relief on some of them. The structure so far excavated was virtually identical to some of those found at Beikthano. It is cylindrical, probably a solid *stupa*, resting on a high square platform, which has a projection of stairs on the western side (Fig. 9). More intensive and well-planned excavations at Mongmao and Binnaka comparable to those conducted at Beikthano are needed to make more meaningful conclusions.

WINKA, HSINDAT, WAGARU, AND AYETHEMA

These villages north of Thaton, north of the Isthmus of Kra, were examined in 1975 and 1976. (See Map IB.) Winka is located at the foot of the Kelatha Range in Bilin township; the area is well known for the ruins of Taikkala, often mentioned in early geographies (Myint Aung 1977). All the villages were walled fortresses, each surrounded by a moat. In 1976, the Archaeological Survey sank test pits near these walls. Wagaru's walls measured 1700 ft in length and 40 ft in height above ground level. Panels on Hsindat's walls have been sculptured in bold relief, showing lion and elephant figures (Hsindat means "elephantry" or "elephant corps"). Hsindat also showed signs of having once had a brick *vihara* with 14 rooms, 69 ft in length, surrounded by a square courtyard. The bricks on this structure are similar to those found at Pagan. The interior is nearly identical to the *vihara* at Beikthano and Pagan. There were 350 "Pyu" coins found in the general vicinity of nearby Kyaikkatha. The earliest artifacts seem to be the ceramic ware, especially the beads and vessels, similar to those found at Beikthano. The vessels are similar to those found in second century B.C. to third century A.D. Hastinapur, the Deccan's Brahmapuri (A.D. 106-130), and Rangpur in northern India. Similar vessels were also found in Yeleswaram close to Nagarjunakonda (first-second century A.D.).

CONCLUSIONS

Several general conclusions can be tentatively suggested, based on the results of archaeological excavations of the past several decades. First, the chronology of prehistoric and urbanized Burma now appears to be: (1) "Palaeolithic" to "Hoabinhian," ?-4000 B.C.; (2) Late "Hoabinhian" and contemporaneous "neolithic" and metal manufacturing cultures, 4000-2000 B.C.; (3) fully metal manufacturing cultures contemporaneous with some late "Hoabinhian" sites, 2000-1000 B.C.; (4) a gap between 1000-200 B.C.; (5) urbanized states, 200 B.C.-ninth century A.D., the so-called Pyu period; (6) the Pagan Kingdom, from the mid-ninth century A.D. to the end of the thirteenth century A.D. This chronology suggests that cultural development in Burma prior to the "Pyu" stage could have "moved" from north to south (as the Chronicles suggest) as some of the earliest agricultural sites of the



The ground plan of the brick building at Mongmao

Fig. 9 Mongmao stupa.

bronze age are now known to be located in central rather than lower Burma. These communities seemed to have persisted here until the rise of the urbanized societies—those we have called the “Pyu” culture—prior to the beginning of the Christian era. In fact, the entire dry zone may well have been the nucleus of the origins of civilization in Burma. Second, the “Pyu” culture is far more extensive than heretofore realized. It consists of at least 11 (all partially excavated) sites, stretching from central Burma to north of the Kra Isthmus. Moreover, because Mongmao and Binnaka were not only clearly related culturally to Sri Ksetra and Beikthano—if not contemporaries then predecessors of the latter two—and because Beikthano has been satisfactorily dated by Carbon-14, the presence of a unified (or at least a distinctly similar) culture is pushed to a period that is much earlier than we had suspected. Third, if the Red Polished Ware found at Winka were indeed Roman (it could also be Northwest Indian), Lower Burma and Burma’s segment of the Isthmus may have been a part of the Rome-India-China sea trade route. The rouletted patterns on water vessels and the so-called acid-etched onyx beads found in a number of these sites further tie central and coastal Burma with Northwest India on the west and Udon Province of Northeast Thailand on the east, while the coins link Burma with early Buddhist sites in India, Arakan, and other coastal Southeast Asian states from Oc Eo to present-day Saigon (or Ho Chi Minh City). Fourth, these new finds suggest that our previous notions of a sudden eruption of Burmese civilization at Pagan (made even more dramatic by the sprouting of several thousand temples in approximately two centuries), may have to be revised. The process now seems to have been far more gradual and locally generated than originally thought. That a prototype of one of Pagan’s temple styles may have been found at Mongmao, in central Burma itself—a site far closer to Pagan than known previously—seems to confirm the general scheme of indigenous (at least architectural) development in that early period better than other suggestions centered around external influences that are removed both in time and space.

What these conclusions do to the discipline of Burmese history, even if tentative, is very exciting. For the first time, the general pattern of historical development and early appearance of the first cities in Burma suggested by archaeology, link Burma more firmly with other contemporary and better-known social, political, and economic centers in Southeast Asia. This link, it is hoped, rescues Burma from being “the black hole” of Southeast Asian studies, especially during this period, and allows its inclusion more fully in our teaching of and research on the region. Furthermore, it brings into sharper focus the areas we can meaningfully include in our study of the region and partially addresses some of the issues raised recently as to “what is Southeast Asia.”⁸ For Burmese studies itself, these finds and the new chronology demand a serious reassessment of Burma’s cumulative historical tradition, for they partially confirm the versions found in the Chronicles with regard to Burma’s general developmental patterns in time and space. These texts are now placed in a better light, so that, for a change, historians can, with a little more reassurance, focus on the information in them rather than on the issues concerning their status as legitimate historical sources. We are freed, at least to a degree and for certain purposes, to write history more confidently than we could have done earlier.

NOTES

1. The reader should bear in mind that the designation “Pyu” for this pre-Pagan culture is arbitrary and its legitimacy derives from traditional usage. Paul Wheatley, however, argues (1983) that as far as the available Chinese and Arabic evidence is concerned, the designation “Pyu” used in this fashion is probably correct.

2. The results of these efforts were summarized in the *Working Peoples' Daily* accounts and Aung Thaw's article mentioned above.
3. Although Karl Hutterer's recent article suggests the absence in Southeast Asia of a true Palaeolithic, the general point being made here is not so much a chronological one that does or does not follow the Western model, but the general geographic direction to which early stone culture in Burma, Palaeolithic or not, appears to be related.
4. Given the means at their disposal, the results are quite remarkable. Burma's archaeological budget each year is as large as one of our annual graduate student fellowships. Compared to the human and material resources that Thailand and Vietnam put into archaeology, Burma's budget is miniscule.
5. Burma's royal cities invariably possessed a moat, 12 main gates on the city walls, a centrally located palace, residential buildings for their ministers, and religious structures usually within and without the city walls in auspicious directions to provide protection to the inhabitants.
6. How these figurines were stolen while on display at the site museum, then later returned to Burma, is summarized by Bryan Hodgson (1984: 121). See also the Editor's comments in the same issue, page 1.
7. My source for Binnaka is a mimeographed paper circulated in Burma, a copy of which was kindly given to me by F. K. Lehman. It is written by Maung Win Maung (n.d.).
8. A few years ago in Canberra, at the Australian National University, and more recently in the *Journal for Southeast Asian Studies*, questions have been raised as to the meaning of Southeast Asia. See for example, Donald Emmerson's article "'Southeast Asia': What's in a Name" (1984). This has produced a response by Wilhelm G. Solheim II (1985). Both are pertinent to the point being made here.

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