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Beikthano:
Summary of 2009–2010
Archaeological Excavations

U THEIN LWIN

Translation by Elizabeth Howard Moore and Htwe Htwe Win

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Archaeology Unit
 Nalanda–Sriwijaya Centre
 ISEAS – Yusof Ishak Institute
 30 Heng Mui Keng Terrace,
 Singapore 119614

T

6870 4549

F

6775 6264

F

facebook.com/nalandasriwijayacentre

W

http://nsc.iseas.edu.sg

E

nsc@iseas.edu.sg

U THEIN LWIN

U Thein Lwin is Deputy Director General, Department of Archaeology and National Museum, Ministry of Religious and Cultural Affairs, Myanmar. During the excavations covered in this report (2009-2010) he was Deputy Director of the Department of Archaeology (Bagan Branch), Ministry of Culture, and formerly Principal, Pyay Field School of Archaeology.

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Cover Art Template : Aaron Kao

Layout & Typesetting : Kyle Latinis & Joyce Zaide

For any submissions or inquiries, please refer to the website or contact nsc@iseas.edu.sg.

TRANSLATOR AND EDITOR NOTES

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U Thein Lwin and his team originally prepared this excavation report for internal circulation. We have added references from the online nomination dossier of the Pyu Ancient Cities (UNESCO 2014). U Thein Lwin, the Team Leader of the Beikthano 2009–2010 BTO-30 to BTO-34 excavations, was a member of the drafting committee for the UNESCO dossier.

TRANSLATOR BIOGRAPHIES

Htwe Htwe Win completed her PhD with the Department of History, Yangon University. Her dissertation was titled “Votive Tablets of Myanmar”.

Elizabeth Moore is Professor of Southeast Asian Art and Archaeology (SOAS) and Visiting Research Fellow with the Nalanda–Sriwijaya Centre, ISEAS – Yusof Ishak Institute, Singapore.

Beikthano: Summary of 2009–2010 Archaeological Excavations

ABSTRACT

The report summarizes excavations carried out by the Department of Archaeology, Ministry of Culture, at five sites at Beikthano (BTO-30, BTO-31, BTO-32, BTO-33, BTO-34) in 2009–2010. The sites BTO-30, BTO-31, BTO-33 and BTO-34 are located north of the Beikthano outer city wall, while BTO-32 is located to the southeast of the city. The northern group of excavations complements data from earlier excavations of the Department of Archaeology to demonstrate the varied ritual and production specializations of different areas inside and outside the Beikthano wall.

Keywords: Myanmar, Pyu cities, Beikthano, archaeology, Buddhist structures

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1: INTRODUCTION

Research on the prehistoric and proto-historic periods of Myanmar is an essential part of understanding the development of national culture and history. The discovery of possible early hominid remains in Myanmar further expands our concept of heritage to include earlier eras of human evolution. This is important for a broader understanding of culture and history.

For our purposes here, however, additional archaeological data has been documented on the continued cultural developments from the Stone Age (pre-Neolithic and Neolithic—the latter related to agricultural developments in Southeast Asia), Bronze Age, Iron Age and subsequent complex polity formation through the historic period to include urbanization and state development. For this paper specifically, we are concerned with early historic and early urban periods in Myanmar from the beginning of the first millennium CE with particular emphasis on Pyu sites.

Our studies on the early historic period begin with the Pyu peoples. The remains of Pyu culture date from approximately the 1st to the 9th centuries CE. Aspects of their culture include socio-political complexity associated with kingship; an agricultural based economy augmented with exchange; advanced use of brick, ceramic, iron, bronze and other technological developments; and the construction of large urban areas and architectural features.

The site of Beikthano, situated in Taungdwingyi Township, Magway Division, may be the most ancient urban complex among the Pyu cities in Myanmar. The present excavation of Beikthano Ancient City or Myo Haung continues the research and excavation initiatives of the Department of Archaeology, National Museum and the Department of Library. The intention is to discern Pyu culture history, the nature of sites and site activities, and cultural processes characterizing the ancient Pyu people and traditions. The department also undertakes maintenance of ancient monuments and artifacts obtained from excavation to safeguard against the disappearance or destruction of cultural heritage. In addition, the department aims to support tourism and inter-cultural education. This includes appropriate renovation measures that use ancient standards and plans.

2: OBJECTIVES

The objectives of recent excavations are to examine the economic and social life of the ancient Pyu with significant attention to religious considerations as well. The artistic creativity at Beikthano Myo Haung is researched through the tangible excavated evidence, the remains of ancient monuments, and architectural decoration. These will be more thoroughly compared with evidence from other Pyu cities such as Halin, Sri Ksetra, Waddi and Pinle in forthcoming publications following further analysis.

The excavation results widen our knowledge of Pyu culture seen at Beikthano Myo Haung. This includes conservation of the ancient cultural heritage and the architectural workmanship seen in the development of the excavated monuments. We aim to search again for new evidence of artistic expression, religion and the processes through which the Pyu urban culture was sustained over long spans of time. Subsequently, it is our goal to disseminate this knowledge to the wider public; a key goal with this current translation and research updates.

3: ORGANIZATION

A budget for the excavation was designed on 9 August 2008 using funds from the Department of Archaeology, National Museum and the Department of Library with the cooperation of the Department of Historical Research in financial year 2009–2010. Effectiveness and efficiency with strict measures to prevent budget waste and abuse were leading budgetary considerations; also related to the scope of work. The decision was announced by the Ministry Office, Ministry of Culture on 31 March 2009 in Letter No. 2/3-1/2009(619), with the conservation and excavation team formed as follows:

TABLE 1: EXCAVATION AND CONSERVATION TEAM AT BEIKTHANO MYO HAUNG

U Thein Lwin	Principal	Archaeology Training School, Pyay	Team Leader
Dr. Htar Htar Par	Assistant Director	Dept. of Historical Research	Second Team Leader
U Nay Naing Tun	Assistant Director	Dept. of Archaeology, National Museum and Library	National Finance Officer
U Kyaw Khine	Assistant Lecturer	Dept. of Archaeology, National Museum and Library	Member
U Kyaw Nyi Nyi Htet	Assistant Lecturer	Dept. of Archaeology, National Museum and Library	Member
U Win Swe	Assistant Curator	Dept. of Archaeology, National Museum and Library	Member
Daw Myat Mar Lwin	Research Officer	Dept. of Historical Research	Member
U Aung Soe	Conservator	Dept. of Archaeology, National Museum and Library	Member
U Phyo Pyae Ko Ko	Assistant Researcher Grade 2	Dept. of Archaeology, National Museum and Library	Member

4: BACKGROUND HISTORY OF BEIKTHANO MYO HAUNG

The earliest information about the Pyu cultures and the Pyu “country” [polity] are found in ancient Chinese records (UNESCO 2014:53; Backus 1978; Luce 1985). Not all accounts are based on first hand observation and recording, however. For example, two envoys, K’ang T’ai and Chu Ying, who were sent to the court of Funan in southern Cambodia, possibly around 240 CE, met an emissary from India who provided information about a number of kingdoms to the west that K’ang T’ai included in his report (Briggs 1951:21; Moore 2004:6–7). According to records from the Three Kingdoms period (220–80 CE), a country on the west of Yunan was named Lin-yaung thought by some scholars to refer to the ancient city of Beikthano in the middle region of Myanmar. More powerful Pyu peoples from Sri Ksetra repeatedly attacked and then destroyed Beikthano according to this account.

Regarding origin myths found in many Myanmar chronicle traditions, the story of Beikthano begins with two blind princes, Mahathambawa and Sulatthambawa (UNESCO 2014:66; Pe Maung Tin and Luce 1960:8,13). They were borne by the Tagaung queen of Thatomingyi and cast out on a raft to float down the Ayeyarwaddy (Irrawaddy) River. They were, however, cured of their blindness by the gratitude of an ogress, Sandamukhi, who ate the delectable meal prepared for their journey while they were drifting down the river. Mahathambawa came to marry Bedayi, the daughter of his uncle who had become a hermit and a Pyu queen reigning there. Mahathambawa then governed at this place located near the river port of Pyay. Later, the place became the city of Sri Ksetra. The younger brother, Sulatthambawa became successor to the throne when Mahathambawa died. When he then married his sister-in-law, Bedayi, the ogress Sandamukhi was despondent, as she had served him when he was the crowned prince. According to some accounts, she gave birth in due course to a son of Sulatthambawa who repaired a city called Beikthano on the north of Mt. Popa and reigned there.¹

In the *History of Taungdwingyi Vol. 2* by Nay Myo Min Hla Thirithinkhayar (refer to Pe Maung Htin and Luce 1960) which describes the tradition of Beikthano Myo, the history of Panthwar Pyi or “country of Panthwar” begins with the same story of Mahathambawa and Sulatthambawa, the two blind princes from Tagaung who were set adrift on a raft to float down the Ayeyarwaddy. An ogress named Shwenankind (Sandamukhi as described in the Yazawingyimyā) had been delivering their daily food for days. She became pregnant with a child by Mahathambawa in due course and after curing the blindness of the two princes, she departed to the village of Taungdwingyi, five miles to the west, where she gave birth to a human baby girl (UNESCO 2014:54–55,66; Luce 1985; Pe Maung Htin and Luce 1960).

In the meantime a hermit residing about 10 miles west of Taungdwingyi saw the ogress carrying the child and drove her away thinking she had stolen someone’s baby. He adopted the girl and nurtured her until she came of age. In order that he might be left in seclusion, the hermit assigned the adult (now mature) girl the daily task of drawing water with unbaked earthen pots (i.e., pots that are unable to hold water). Every day the young woman spent time away from the hermit doing her tedious job. Feeling weary and dismayed she often heaved sighs of sadness. Thereupon the god Vishnu, realizing that he had been the girl’s brother in one of his former existences, went to Indra (Thagyamin) for help to reward her for her meritorious deed.

Indra said that the girl (Panhtwar) had donated a palm leaf fan to a monk in the time of Kattapha (Kassapa) Buddha and was foretold that by her prayers she was to stay in a palace on the throne around the palm leaf tree in every future life. Moreover, on the advice of Indra, the time was ripe to bestow a boon upon her as she had requested after doing her meritorious deed in a former incarnation. Vishnu then created a hundred thousand well-fired pots. As a result, the place was called as Oh-thein-taung (“hill of a thousand pots”), a name that has persisted to this day.

¹ The reference to Mt. Popa, a sacred mountain near Bagan, may be an allusion that they fled from the more powerful Sri Ksetra population (Pers. Comm., U Win Maung [Tampawaddy] 30 April 2013).

Vishnu created a city of splendor, 4,000 *tar* wide.² Indra gave the princess a magic drum that when beaten protected the city against invading enemies by raising the water from a stream that came to be called the Yan-pal-chaung (Yanpe Stream). In order to make the princess content, Vishnu also created a large lake (maybe partly artificial) on the west of the city connected by a creek. The Phaung-taw-pauk gu or temple was built on an Inn-taung (“lake hill”) as a place for her mother, the ogress, to live. It was called Gu-inn-taw (“royal cave near the lake”). Due to the prayers of the princess, the city was called Panhtwar and also Beikthano as Vishnu created it.

5: LOCATION AND MORPHOLOGY OF BEIKTHANO MYO HAUNG

Beikthano Myo Haung is situated on the Magwe-Taungdwingyi expressway, 19.3 km east of Taungdwingyi Township, Magway Division. It is between 20°00' N and 95° 23' E (refer to Appendix A, all images). The ancient city wall encloses 8.5 sq km and lies 137 m above mean sea level. The wall is semi-rectangular. The west wall is damaged by erosion and only traces of the wall are still visible.

Beikthano lies in the Yin Chaung (stream) valley with annual rainfall between 875 to 1050 mm. It is located on the north of the Yanpe Chaung and southeast of the Yin Chaung with the junction of the two streams about 1.6 km to the east. Numerous tributaries flow into the Yin Chaung from Bago Yoma (mountain). It is east of Taungdwingyi and west of the junction of the Yin and Yanpe Chaungs. The Sadon Chaung and Taungoo Chaung also flow into the valley.

6: PREVIOUS EXCAVATIONS

The first excavations at Beikthano ancient city were two test excavations of two low mounds south of the city made in 1905 by Mr. Taw Sein Ko, Superintendent of the Archaeological Survey. Subsequently, a Frenchman, General Léon de Beylié came as a visitor of the British Government in 1907 and explored the area of Beikthano while he was excavating at Sri Ksetra. More than 50 years later, archaeologists from the Myanmar Department of Archaeology, excavated 25 mounds from 1959 to 1962 (Aung Thaw 1969; Beylié 1907; Taw Sein Ko 1914: UNESCO 2014:67–69; Annex II). U Aung Thaw, Director of the excavation and Superintendent of the Archaeological Survey published a bilingual Myanmar and English book, *Report on Excavation at Beikthano* (Aung Thaw 1969). The next excavations were conducted in 1967 at brick mounds on the north and south that were suffering extensive erosion. Between 1995 and 2008, officers and staff from the Department of Archaeology excavated 29 mounds. As of 2009, the conservation team of Beikthano unearthed an additional five mounds and conserved another 12 damaged mounds between 19 October and 23 March 2009. Thus, a total of 60 mounds have been excavated at Beikthano as of 2009 (UNESCO 2014:67–68, 149).

Until 1995, the excavated mounds were sequentially numbered prefaced with “KKG” after Kokkogwa village on the west of the site. This site naming designation was subsequently replaced by “BTO” after Beikthano ancient city. Thus BTO-30 is the 30th mound to be excavated since 1995.

² A *tar* equals approximately one meter.

7: INDIVIDUAL SITE DESCRIPTIONS

The following sections describe the sites, features and artifacts. Please refer to Appendix A for all images.

7.1: BTO-30

7.1.1: Location

Mound BTO-30 includes a stupa in the center of the Oh-thein-taung area just north of the Beikthano city wall. It is 64.0 m from the southeast of mound KKG-18 which is in the lower part on the southeast of Oh-thein-taung. On the east of BTO-30 are paddy fields and the Oh-thein-taung Lake (*kan*). The mound measures 18.3 m east-west and 21.3 m north-south and rises 1.8 m in height from the surface of the paddy field.

7.1.2: Plan description of the Structure

The BTO-30 structure has a rectangular shape measuring 14.0 m north-south and 13.3 m wide with a north-east orientation. The building contains 12 rooms (five large and seven small). The brick features or alignments (essentially: low brick walls and/or partitions to chambers) on the outside of building is about 1.1 m thick for the main hall. It is 7.3 m long and 3.7 m wide facing the side of the stupa at the center. This is assumed to be the entrance of building. The main chamber is flanked by two small rooms on either side (2.4 m long and 1.8 m wide).

Bricks exhibit typical Pyu brick dimensions (45.7 x 22.9 x 7.6 cm; see Moore 2004). Bricks were set vertically to give a 22.9 cm thickness to the brick lines forming the room partitions. Four large rooms and four small rooms were constructed on the four sides of building using this method of brick-laying. Altogether, three rooms including one small room (2.4 m long and 1.8 m wide) at the center and two small rooms (2.4 long, 2.1 m wide) were made. They are constructed by extending the two 22.9 cm brick features horizontally. An identical system was used on the east of the large building, seen in the hall (3.6 m long and 2.4 m wide) on the east of a long hall on the west side of the building. The thickness of brick features around the outside rooms is 91.4 cm.

The entrance of the building is considered in relation to the placement of the brick features on the west with a possible stupa at the center. However, there is no actual entrance into the building on the west. Fragments of fossil stone used as a *sima* pillar (often boundary markers with sacred properties also used to demarcate sacred spaces associated with many Buddhist religious sites and structures) were found on the corners of the south-west and north-west of the building, indicating the structure's use for ordination.

A large number of ceramic sherds from fine pots (such as spouted vessels), non-diagnostic pots, cooking vessels, water-carrying pots, two urns, one round bowl and another convex bowl as well as small cup-shaped terracotta lamps were recovered. Of note was the use of a cooking vessel as an urn with a terracotta lid as a cover.

7.2: BTO-31

7.2.1: Location

BTO-31 is located to the north-west of KKG-18, about 30.5 m from the middle stupa among the five mounds at Oh-thein-taung. It is also 36.6 m south-west of BTO-19 and 2.4 m north of BTO-20. Before excavation, the 1.2 m high mound measured 18.3 m in length (east-west) and 12.2 m in width (north-south). The alignment of the brick features indicates its orientation in relation to paddy fields on the north and west.

7.2.2: Excavation

The mound was covered with bushes under which fragments of brick and some brick slabs were found. Site clearing began in October before undertaking excavation of the mound. A total of 12 five-meter grids were laid out and excavated, reserving a one-meter baulk for the grids.

7.2.3: Plan description of the structure

The building after excavation was found to measure 7.9 m north-south and 13.7 m east-west. It projects 4.3 m to the east after curving to the inner part about 45.2 cm after the appearance of the brick features (alignments/low walls) about 9.5 m to the outside on the east from the building on the west. This brick feature has three brick courses but as the feature was damaged, only one course is found in some places. The interior of the building contains numerous partitions that are detailed below. They are arrayed around a brick platform that would have supported a possible central seating area or throne made of solid stone (*palin*, throne, formal seat or ritual platform). The throne measures 1.5 m in length and 91.4 cm in width and is seen on the west at the center of the wall from about 30.5 cm. There is a large entrance hall 7.0 m long and 6.7 m wide on the east of building. There are a series of overlaps; a brick feature on the east of the brick platform from about 61 cm abuts the wall on the west. These may be platforms for steps which were put between the brick features to frame the throne and the entrance hall.

A room measuring 4.9 m east-west and 3.7 m north-south is found at the center of a brick platform on the west. It is assumed to represent a ritual hall. In particular, it is found that the brick features on the east are 1.1 m thick and the brick wall is 45.8 cm thick. The total number of brick courses for these structures is 11.

Two small rooms measuring 1.8 m wide east-west and 1.5 m long north-south were built on each side of a middle hall. A large hall measuring 4.6 m east-west and 7.9 m north-south is found on the west of those small rooms.

7.2.4: Stratigraphy and artifacts

The stratigraphy of BTO-31 reveals a thin (2 cm) humus layer covering the structure, with an additional layer of debris under the humus. This included a compact layer of white pebbles that local people call “phwet-gyi-mye” (stony non-arable) soil that is seen under the plan of the structure. Loose earth was found in some parts of the building.

The stratigraphy of the partition excavated at BTO-31 is similar to the previous finds at mound BTO-30. Also, the construction of the entrance hall is similar, with arms on the east extending the structure beyond the corners on the building. A solid brick structure was interpreted as a throne (or ritual platform) as it was placed at the center of the building as seen in the structure unearthed from mound BTO-28.

The bricks mostly measured 38 x 23 x 7.6 cm but some were larger with dimensions of 45.7 x 23 x 37.6 cm).

Two urns were found in the compact layer of soil near the center of the west wall of BTO-31. Their lids were damaged as well as the body of the urn. They had no specific decoration.

A mass of skeletal remains including human skulls were found close to the burial urn. The skeletal remains are assumed to have represented secondary burials.

A terracotta bead (3 cm in length; 1.8 cm in diameter; tapered at the top with a small hole) was found from grid B3 and another terracotta bead from grid C3.

A total of 23 terracotta lamps were found at a depth of 45.2 cm depth on the north of solid platform within the hall (*palin*, throne, or ritual platform). Of the 23 lamps, 13 were in good condition. Some were scattered pieces of one vessel while others were fragments from several vessels. A total of 15 urns were excavated at BTO-31; 3 in good condition and most with only limited damage.

73: BTO-32

73.1: Location

BTO-32 is located at 19°59' N and 95° 23' E, on the southeast of Beikthano, 3.7 m on the west of the Yanpe Chaung and 183 m northeast of Chokeygonwar Village (Chokeygon, Kyutgon-ywa). The mound (36.6 m in length and approximately 27.4 m wide) was covered in bushes and brush.

73.2: Excavation

After clearing the brush, a total of (72) grids were laid out with 5.0 m grid baulks. The structure was excavated from 29 December 2009.

73.3: Plan description of the structure

Systematic excavation uncovered a building (BTO-32) measuring 54.9 meters long (east-west) and 26 m wide (north-south). An entrance 1.1 m wide is found at the center of west wall of the building. The wall is 1.1 m thick. The inner wall of the entrance was excavated to uncover eight layers or courses of bricks indicating an interior room (8.4 m long and 7.0 m wide) at the inner part of the entrance. The interior room has a wall thickness of 1.1 m that was uncovered to a depth of nine brick courses at the highest point.

The hall is 17.8 m long and 11.2 m wide and with a width of 76.2 cm. Nine brick courses were identified in some places. An additional brick feature is located 3.0 m on the outside of this hall. One wall (76.2 cm) of the structure measures 26.1 m long and 19.5 m wide. Six brick courses are found in some places of the wall.

Two small rooms (3.5 m long, 2.1 m wide) are found on the east and north. Only three courses on the brick features of the rooms were identified in the excavation.

The floors are completely filled with bricks in many parts of building. The large bricks mostly measure 50 x 24 x 8.9 cm.

A total of 40 urns were recovered with a large quantity having been buried in the innermost room. Thus, the room is assumed to have been specifically designated for burial urns. The brick floor was filled in between the building in the inner part and outside of the building. In some places, the floor was composed of brick fragments and in others the floor was constructed more formally using complete bricks. In some cases, bricks were of alternating length and width. There was also a brick platform in one section of the floor. A large quantity of bricks with "finger-markings" was identified. Traces of pits, possibly post holes, averaging about 20.3 cm were found along the inside and outside of the brick wall.

A road measuring 1.7 m wide encircles the outside of the site (exterior of the main building). The external part of the brick features of this road is filled with bricks as flooring/pavement. The probable entrance occurs at the end of the road leading into a large hall on the west of the main building.

Three wide staircases (99.1 cm) are found on the encircling road 2.3 m south of the main building. The staircases (possible ladders) were found only on the south of the main building but not on the north.

73.4: Stratigraphy and artifacts

During the excavation of BTO-32, the floor layer, a debris layer and a humus layer, were discovered with both compact and loose earth found in some places. Stony non-arable soil (locally "phwet-gyi-mye") was discovered under the layer of burial urns.

As mentioned, 40 urns were recovered with most occurring in the innermost chamber. The room is 8.5 m long and 7.0 m wide. The terracotta burial urns were placed together.

Two damaged water pots with spouts and the fragments of cooking vessels were found in grid D6 set on the floor of the "burial room".

Three types of decorated pots were found with black and yellow designs painted on the reddish clay pot. The black painted decorations were very clear. These are rare finds. Painted pottery such as these pieces were excavated from mound BTO-32. It is noted that these types of decorations have not previously been found in Pyu period excavations.

Fragments of iron and iron objects were found near the facade of the building on the west side.

7.4: BTO-33

7.4.1: Location

BTO-33 is located near to BTO-31 to the east of Oh-thein-taung with the small Oh-thein-taung Lake lying between. A structure was identified on the sloping bank of this lake. Some fragments of brick features/walls were projecting from the south-east corner of the mound. They were identified when crossing the area in a local cart used by the present inhabitants. The features measure less than 1.0 m in height from ground level. The total structure is estimated to be 18.3 m long (east-west) and 15.2 m wide (north-south). There were no large trees on this mound at the time it was identified, but many types of wild grass covered the surface.

7.4.2: Plan description of the structure

The BTO-33 structure is semi-rectangular and measures 12.5 m wide (north-south) and 14.5 m long (east-west). Three brick courses approximately 30 cm high and 76 cm thick were unearthed around the plan of the building. According to shape of the mound and the unearthed structure, it is thought that an entrance exists on the west of the building. The base of a staircase, about 5.5 m long, is found at the center of entrance hall. A similar partitioning is not found on the east side. Thus, only one side was divided on the interior.

Overall, the plan of the structure of BTO-33 is similar to BTO-30 although it has only nine or ten rooms rather than the 12 rooms recorded at BTO-30. The BTO-33 structure plan is similar to BTO-30 on the east of Oh-thein-taung except it lacks the two small rooms on both sides of entrance hall. Of note is that these two buildings are constructed in a straight line about 90 meters apart along the bank of Oh-thein-taung Lake.

The large entrance hall of the building is 1.8 m wide and 13 m long. On the west is another large hall, 13.6 m wide and 8.5 m long. Two medium size rooms, 1.8 m wide and 6.1 m long were constructed proportionally by enclosing the corners with two 23 cm brick lines on both sides of the hall. Three rooms, each measuring 2.4 m wide and 3.0 m long were constructed by partitioning the room on the east of this hall with two 23 cm brick walls. These rooms each have six brick courses on the west, north and south walls. They are 76 cm thick. Eight brick courses were unearthed on the east side. Moreover, two small rooms 2.6 m wide and 3.0 m long plus a large hall 1.8 m wide and 7.3 m long, are made on both sides by the partitioning of a large hall on the east with two 23 cm brick walls on the north and south.

During the excavation of BTO-33, pillars of fossilized stone were found bordering the southwest, southeast and northeast corners, similar to the arrangement seen at BTO-30. They may be a line of *sima* or boundary stones. Therefore, the building excavated from the BTO-33 mound is important not only as a monastery, but as a possible ordination hall (*thein*) for Buddhist monks.

7.4.3: Artifacts

Two terracotta lamps, a small urn and two other urns decorated on the upper rim with small Brahminy ducks (*hin: tha*) were found near the wall on the northeast of building.

A particularly finely made pot is decorated with the figure of two deer. One deer is modeled to look back over its shoulder. The pot was excavated from the center of the building. The deer and other stamps were within a rectangular frame, similar to the shape of pots that flowers are put in during the Thinggyan festival today. The other figures were of a conch shell, two fish and a male and female bird. This finely made pot resembles pots and sherds from previous excavations of KKG-3 and KKG-5. It is concluded that the BTO-33 mound was constructed around the same time as the KKG-3 stupa and the KKG-5 palace structure because of the similarities.

75: BTO-34

75.1: Location

BTO-34 lies approximately 275.0 m to the west of Oh-thein-taung and approximately 91.0 m from KKG-13. Before excavation the mound measured 21.0 m in length (north-south), 18.0 m wide (east-west), and stood 1.2 m high from the ground level.

75.2: Site damage

Modern road construction has damaged the southern part of the mound. Additionally, a layer of black charcoal adjoins the mound from a depth of 15 to 20 cm from ground level indicating damaged by fire in the grids on the northwest of the structure. Moreover, a burnt wood pillar was identified between the solid stone platform at the center of the structure and the wall of building at the northwest corner. Both this and the charcoal layer confirms destruction by fire.

75.3: Plan description of the structure

The rectangular building that emerged from excavations measures 17.7 m long (north-south) and 13.7 m wide (east-west) with a 1.5 m thick wall. There is a solid stone platform measuring 2.7 m long, 2.4 m wide and 76 cm thick with eight brick courses on the east and an entrance on the west.

Pits or post holes were identified along all four inner walls. They were probably used to support a roof for the structure. The bricks were bored and each pit averages 1.5 m apart from each other. The pits (bore holes) were constructed more robustly at the entrance on the south to make the door. A total of 23 pits were identified with four on the south, three on the north and eight each on the east and on west sides.

The pits are encircled by a brick wall measuring 61 cm thick. The brick wall had

been damaged by plowing. An external circular brick alignment/feature on the south could not be excavated because it was completely damaged by erosion from the creek.

7.5.4: Stratigraphy and artifacts

A humus layer, debris layer, brown semi-sand layer and sand layers were documented from the excavation. Evidence of wood burning is seen in a black charcoal layer found between the humus and debris layer on the northern part of mound.

Artifacts from the excavation included terracotta lamps, terracotta beads, various clay burial urns, a small smoking pipe and a water-carrying pot. Two terracotta beads were found within one burial urn. The burial urns ranged from 15 to 20 cm tall with some small finely made examples. Most of the burial urns are damaged. The figure of a dove, a swastika (or Wheel of Law), and flower were alternately embossed on the shoulder of one of the finely made burial urns. The data indicates this may have been a ritual structure.

8: EXCAVATED FEATURES AND ARTIFACTS

8.1: Monuments

Altogether five mounds were excavated in 2009–10. The most prominent structures from the excavations are religious monuments. The mounds (BTO-30, BTO-31, BTO-32 and BTO-34) were excavated in the Oh-thein-taung area outside of city wall and surrounding mounds on the north of Beikthano ancient city.

The existing structures unearthed from three previously excavated mounds (KKG-18, BTO-19 and BTO-20) at the stupa in the center of the Oh-thein-taung area were excavated. Mound KKG-18 is a circle shaped stupa that is placed within a square brick enclosure wall with three staircases on the east. Mound BTO-19 is a ritual structure, with a brick platform in a square brick structure. Mound BTO-20 is also a ritual structure with small rooms and a brick platform in the main room. Of note, the plan of BTO-20 is similar to that of the Nagarjunakonda monastery in south India (UNESCO 2014:37, 158, 173-174, 176–177).

The 2010 season excavations included BTO-30 and BTO-31 mounds on the southeast and northwest near the stupa. The BTO-30 mound revealed a square structure constructed with 12 rooms (five large and seven small). Recovered artifacts include terracotta lamps, burial urns with the shape of a round bowl, and cooking vessels. Evidence points to a ritual structure. Moreover, the findings of fragments of fossil wood on the southwest and northwest corners indicate *sima* and suggest its use as an ordination hall (*thein*).

BTO-31 has a large entry hall on the east and a brick platform situated close to the wall. It is a ritual structure with a large hall and three small rooms on the west of an entry chamber. There are five rooms in total.

Mound BTO-32 is a structure on the southeast of Beikthano measuring 26 m wide (north-south) and 33 m long (east-west). It consists of four large rooms with an entrance on the west. Small rooms were constructed at the northeast and southeast corners. It is the largest structure yet excavated at Beikthano.

The BTO-33 mound is likely a ritual structure constructed adjacent to the bank of Oh-thein-taung Lake and separated from the Oh-thein-taung group of monuments. The BTO-31 mound structure is similar to the plan of BTO-30. Additionally, fossil stone pillars set as boundary posts were found at the northeast, southeast and southwest corners of this building. From this data it is suggested that BTO-30 and BTO-33 were built simultaneously.

Mound BTO-34 is also a ritual structure, situated about 91.5 m on the west of Oh-thein-taung consisting of a brick platform on the north of a rectangular hall.

In conclusion, the buildings previously unearthed and the present excavation of mounds indicates that the Oh-thein-taung area was religious area (sacred space; also used for burials among other activities) consisting of clusters of ritual structures, lakes and monasteries.

8.2: Beads

Terracotta beads with one convex and one flat side were recovered from the excavations. The beads have a circle incised on the flat side. A terracotta necklace was obtained from the BTO-31 mound.

8.3: Iron objects

Iron objects such as a crook, a section of a ring, and plates possibly for use at corners of architectural elements (frames, walls, doors, etc.) were discovered from the excavations. These may have been used to fit a wooden door at the entrance.

8.4: Pottery

Finely made terracotta lamps and a substantial mass of potsherds were discovered in every mound. Sorting of the potsherds allowed classification into three dominant classes: lamps, burial urns and water vessels. The burial urns range from about 15 to 76 cm in height. From the BTO-32 mound, a fine spouted pot and other damaged pottery were discovered. Other finds include many fragments of burial urns decorated with figures of birds, lotus flowers and dots as well as circular shapes and arrow shapes.

Of particular note, BTO-32 exhibits pottery painted with floral patterns and motifs. Black vertical border lines discernable from the texture of the pottery are found on the potsherds. These patterns are not natural and indicate a unique representation of creativity and localized design. There are also potsherds painted with yellow and red designs, although the shapes are not clear. This painted pottery is the first to be excavated from the Pyu ancient cities. They also demonstrate decorative variability. It appears Pyu artisans were skilled in painting and design, fitting the proportions of the vessels.

Another pot of particular note was found at BTO-33. Its size is similar to that of Thingyan (water festival) pots. It displays stamped designs of two deer, two fish, a conch shell and figures of male and female birds. Similar stamped potsherds have not been found in previous excavations.

9: FURTHER CONSIDERATIONS

The conservation team carried out works in two main sectors at Beikthano in the financial year of 2009–10. These include the renovation of previous damaged and excavated mounds in addition to new excavation of ancient mounds. A total of five mounds were newly excavated to include BTO-30, BTO-31, BTO-33 and BTO-34 in the Oh-thein-taung area on the north of the Beikthano north wall. These formed a cluster of ritual structures with the stupa, lake and monastery. The pattern elucidates a concept of Pyu spatial arrangement of buildings at Beikthano. Moreover, BTO-32 was identified as a monastery. The Pyu at Beikthano appear to have typically built ritual structures in clusters such as the stupa, lake and monastery seen in these excavations. They were built on slightly elevated mounds both outside and inside the north wall of the city.

Finely made Pyu pottery is found at Beikthano decorated with figures of birds and auspicious motifs such as deer, fish and conch shells. The creativity and artistry of the Pyu is seen in the excavation of painted pottery described above. Further comparative analysis with other material culture will allow more fine-grained intra-site and inter-site understanding of variability and the implications.

10: CONCLUSION

The conservation team discovered the clusters of Pyu ritual structures and monasteries during systematic excavations in the financial year of 2009–10. Conservation work was conducted to carry out maintenance of the buildings from previous excavation. With the present excavations, a total of 12 mounds have received archaeological and conservation attention. Our understanding of Pyu settlement, internal structural patterns and material culture is increasing, although much work remains. The evidence of Pyu culture through excavation and conservation of monuments in this city helps increase awareness, enable long-term preservation, and provide a greater understanding to better inform the public of our cultural heritage.

REFERENCES

- Aung Thaw (1969). *Excavations at Beikthano*. Rangoon: Ministry of Culture.
- Backus, C. R. (1978). *The Nanchao kingdom and frontier policy in south-west China during the Sui and T'ang periods*. Cambridge: Cambridge University Press.
- Beylié, L. de (1907). *Prome et Samara*. Paris: Leroux.
- Briggs, L. P. (1951). *The Ancient Khmer Empire*. Philadelphia: The American Philosophical Society.
- Luce, G. H. (1985). *Phases of pre-Pagan Burma*. Oxford, Oxford University Press.
- Moore, E. (2004). Interpreting Pyu material culture: Royal chronologies and finger-marked bricks. *Myanmar Historical Research Journal*, 13, 1–57.
- Pe Maung Tin and Luce, G. H. (1960) (1923 reprint). *The glass palace chronicle of the kings of Burma*. Rangoon: Burma Research Society.
- Taw Sein Ko. (1914). Excavations at Hmawza near Prome. *Archaeological Survey of India, Archaeology Report 1909–10*. Calcutta: Government of India Central Publication. P. 113–123.
- UNESCO (2014). Nomination of Pyu ancient cities Halin, Beikthano, Sri Ksetra Properties for inscription on the World Heritage List. See <http://whc.unesco.org/en/list/1444> (last accessed 27 July 2016)

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APPENDIX A: PHOTOS AND ILLUSTRATIONS

Fig. 1: BTO-30 before excavation and after cleaning the ground



Fig. 2: Plan of the structures from BTO-30



Figs. 3a–3f: Varying views of excavation units

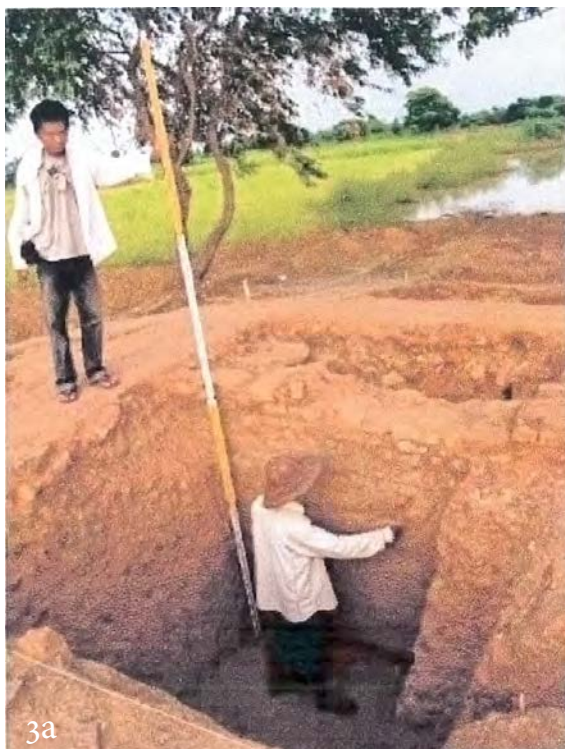


Fig. 4: BTO-30 after excavation, west view



Fig. 5: BTO-30 after excavation, south view



Fig. 6: BTO-30 after excavation, north view



Fig. 7: BTO-31 before excavation



Fig. 8: BTO-31 after clearing ground



Figs. 9a-f: BTO-31 during excavation to show the plan of the brick structures



Fig. 10: BTO-31 after excavation (seen from east side)



Fig. 11: BTO-31 after excavation (seen from south side)



Fig. 12: BTO-31 after excavation (seen from west side)



Fig. 13: Mound BTO-32 prior to excavation



Fig. 14: Mound BTO-32 after clearing



Figs. 15a-e: Mound BTO-32 during excavation



Fig. 16: Mound BTO-32 showing the grid squares (seen from the north)



Fig. 17: Mound BTO-32 showing the grid squares (seen from the south)



Fig. 18: Mound BTO-32 showing the grid squares (seen from the east)



Figs. 19a–b: Mound BTO-32 showing cleaned excavation after completion

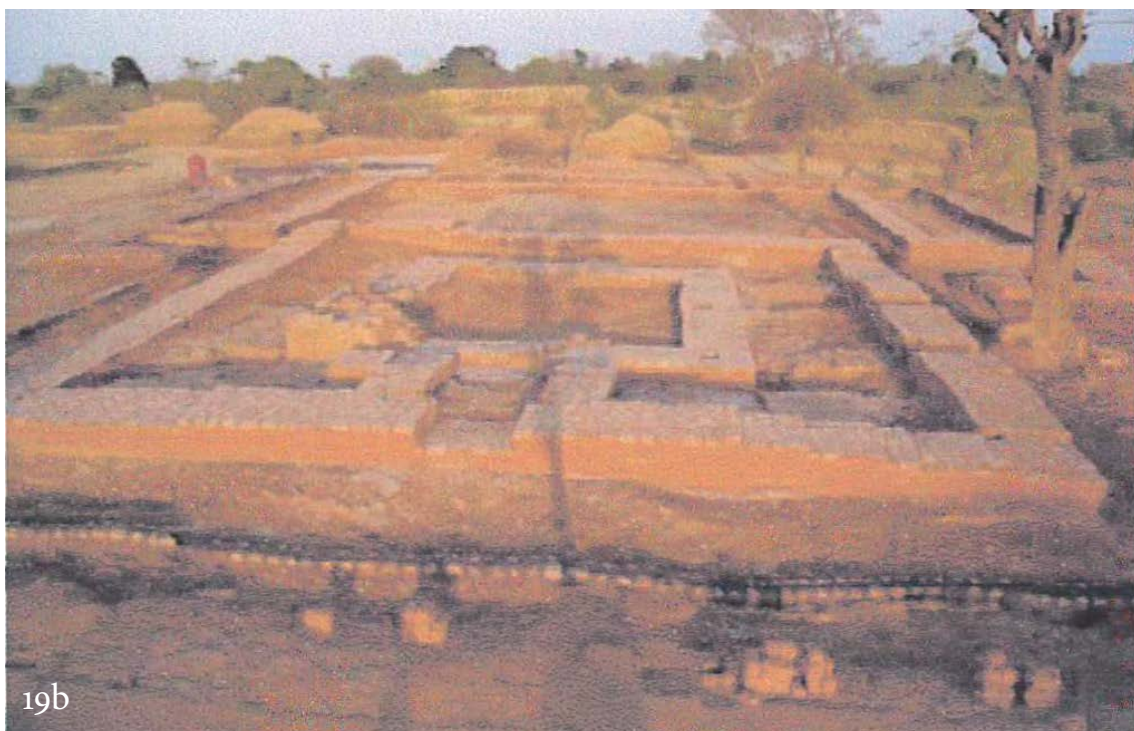


Fig. 20: Mound BTO-32 showing cleaned excavation after completion



Fig. 21: Mound BTO-33 before excavation



Fig. 22: Mound BTO-33 during clearing of the mound and drawing out of grid squares



Figs. 23a-c: Mound BTO-33 showing the emergence of brick walls during excavation

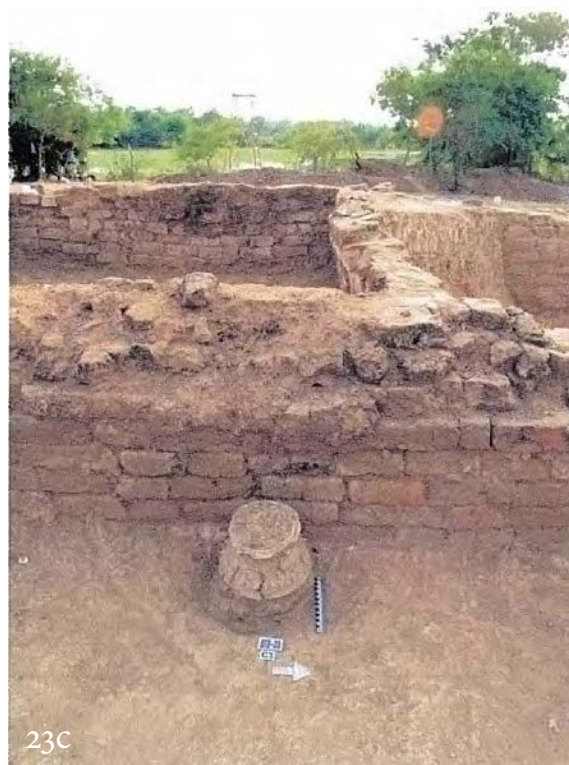


Fig. 24: Mound BTO-33 showing completed excavation (view from east)



Fig. 25: Mound BTO-33 showing completed excavation (view from north)



Fig. 26: Mound BTO-33 showing completed excavation (view from south)



Fig. 27: Mound BTO-34 prior to excavation



Fig. 28: Mound BTO-34 after clearing



Figs. 29a–f: Mound BTO-34 during excavation showing emergence of building and broken brick courses



Figs. 30a–b: Mound BTO-34 during excavation showing emergence of the shape of the building



Fig. 31: Mound BTO-34 after excavation showing maintenance

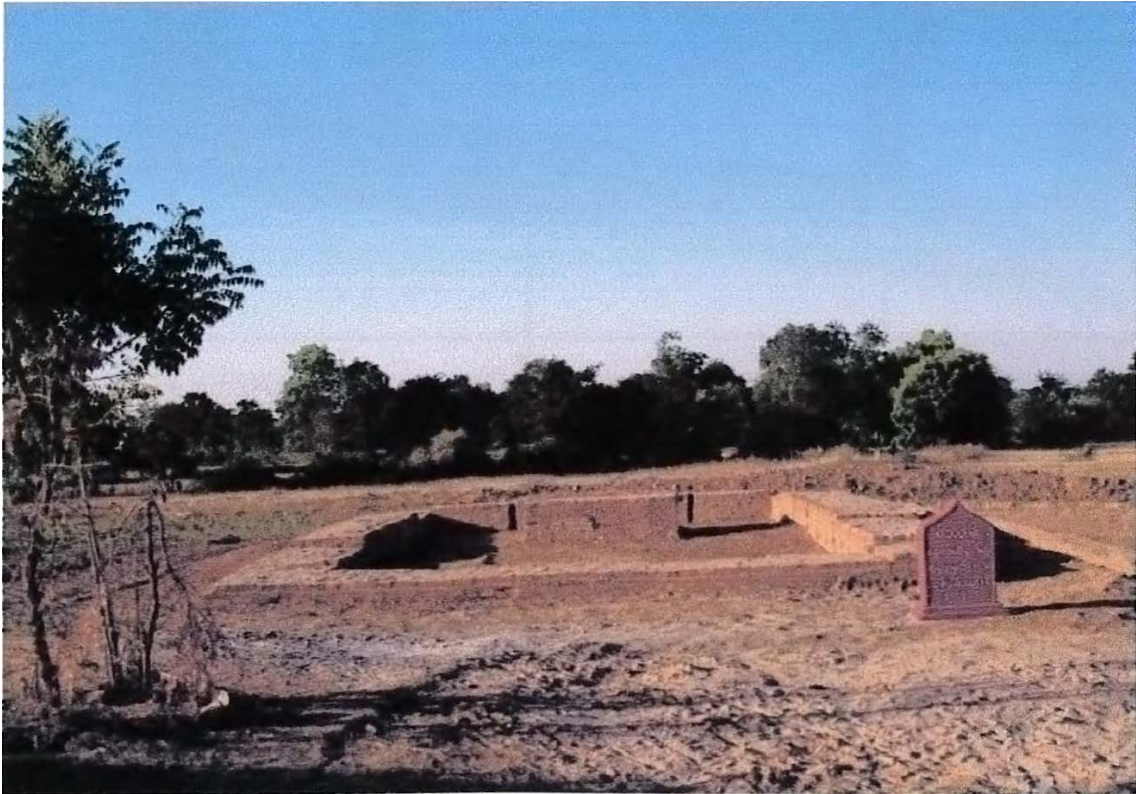


Fig. 32: Plan of BTO-30

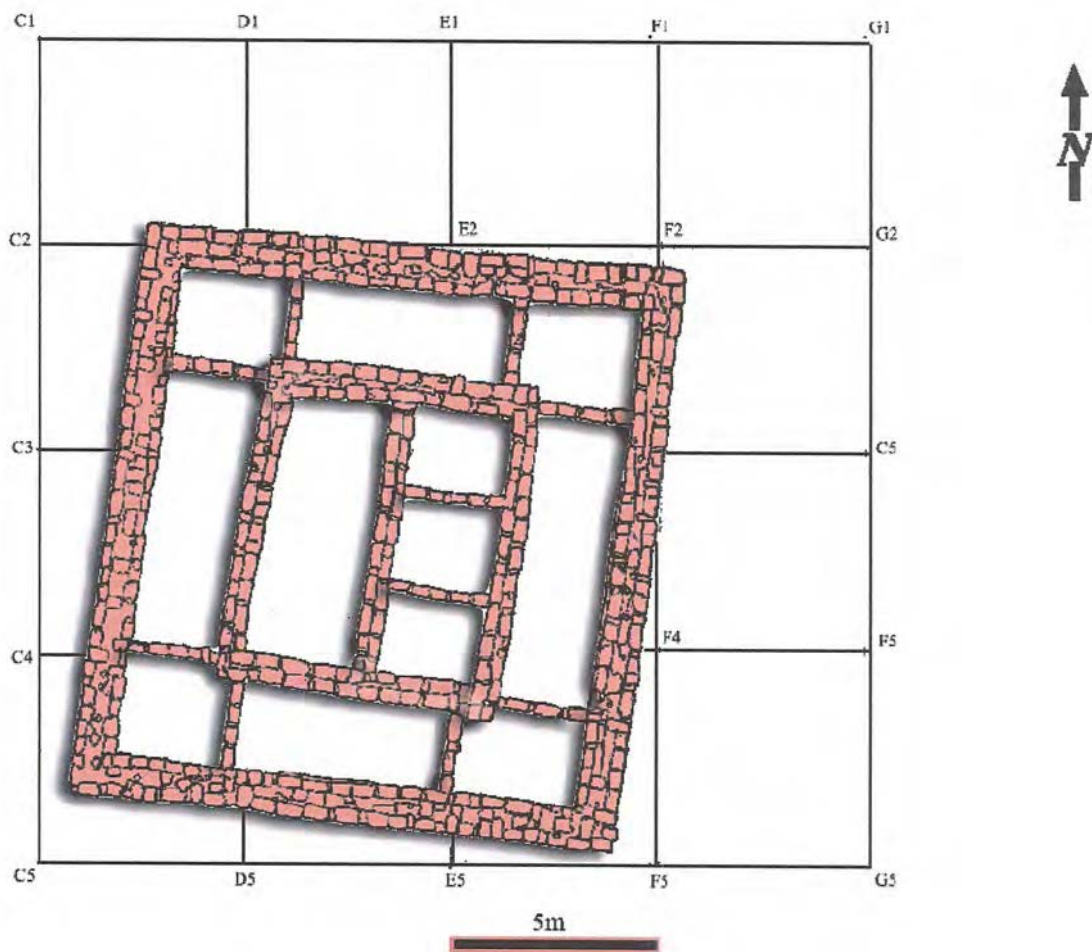


Fig. 33: Plan of BTO-31

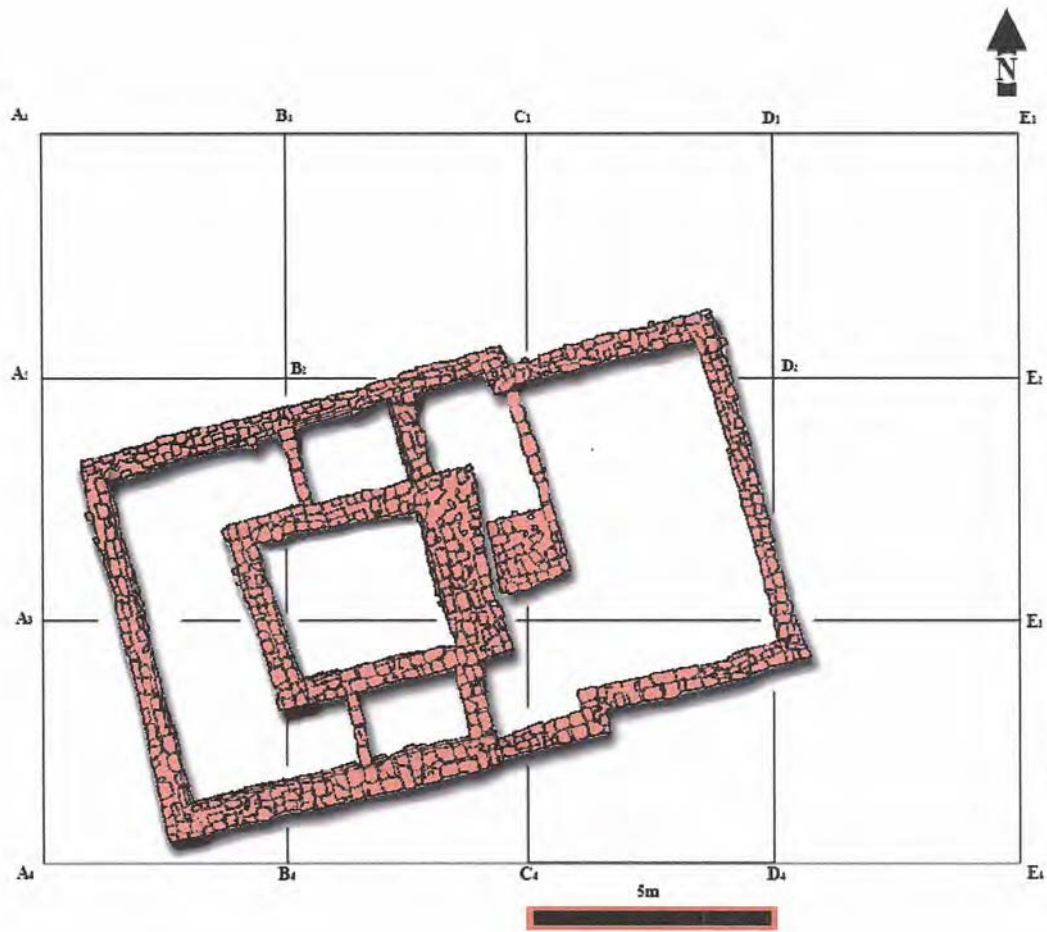


Fig. 34: Plan of BTO-33

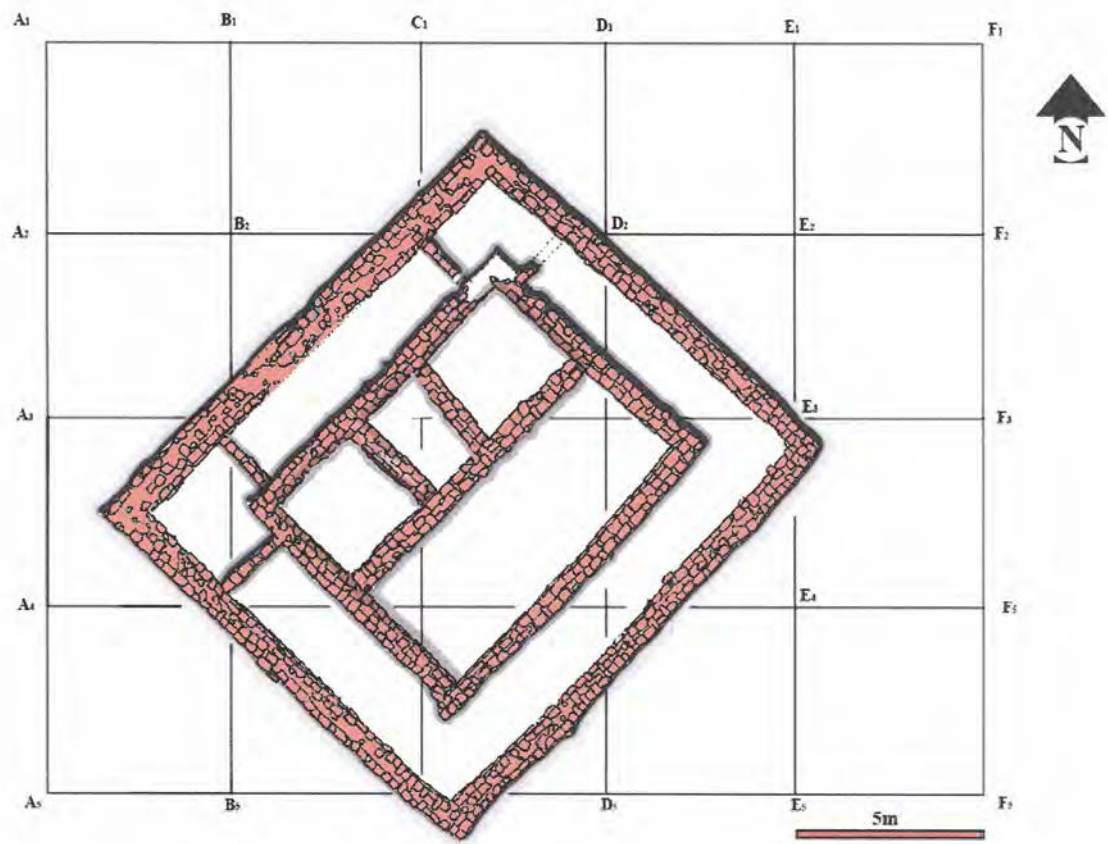


Fig. 35: Plan of BTO-34

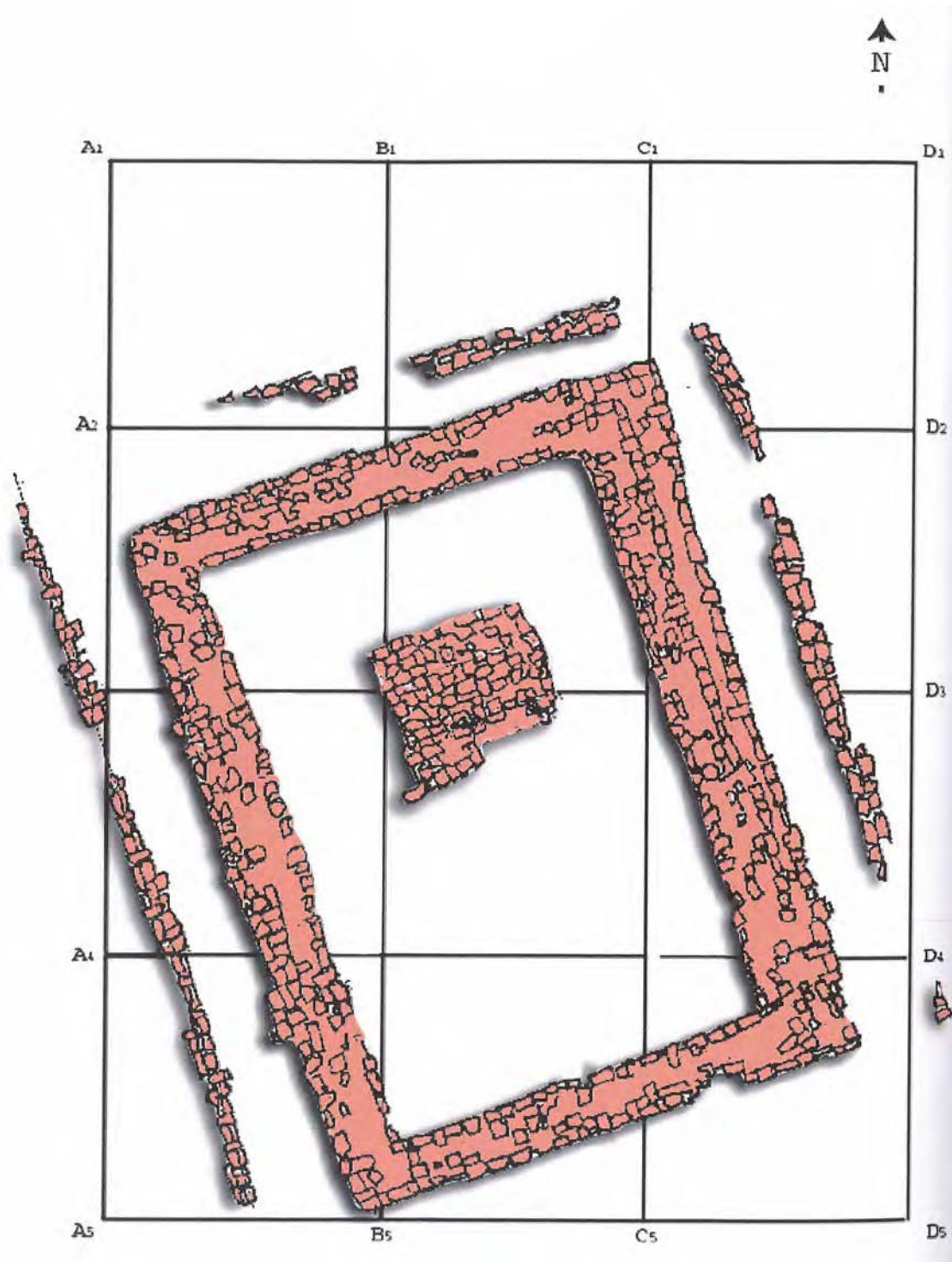
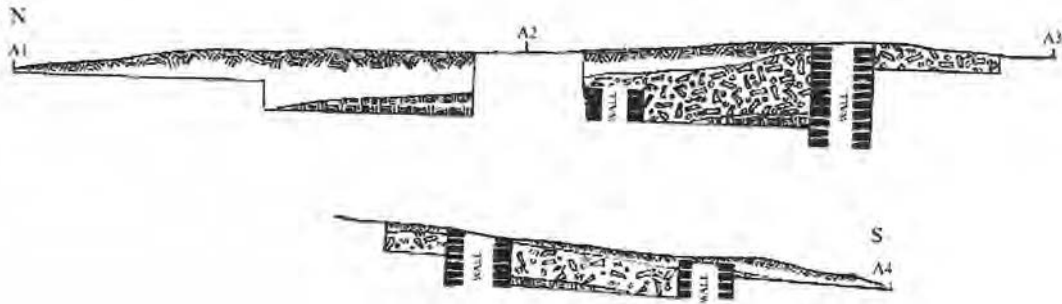


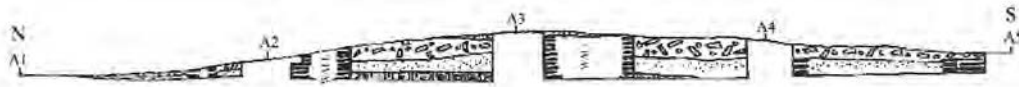
Fig. 36: Section of BTO-31, north-south looking west



Scale - 1m=2cm

- COMPACT EARTH
- COMPACT CALY
- BRICKBATS ETC
- BRICKS

Fig. 37: Section of BTO-34, north-south looking west



Scale - 1m=1cm

- COMPACT CALY
- BRICKBATS ETC
- BRICKS
- SAND
- SURFACE HUMUS

Figs. 38a-c: Terracotta urns from BTO-34



Figs. 39a-b: Spouted pots from BTO-32



Figs. 40a-c: Decorated terracotta burial urns from excavations



Figs. 41a-c: Mound BTO-32 painted terracotta burial urns from excavations

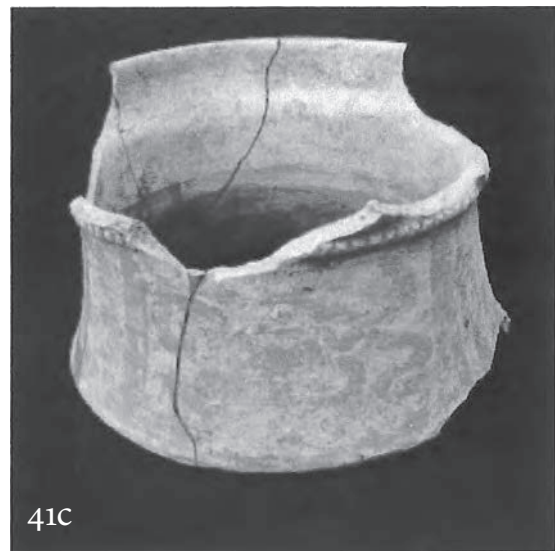


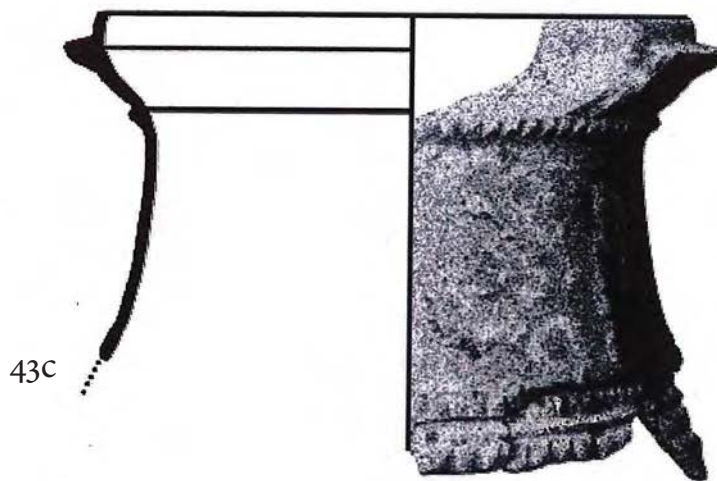
Fig. 42: Examples of terracotta burial urns from excavations decorated with three-dimensional birds or avian figures around the rim



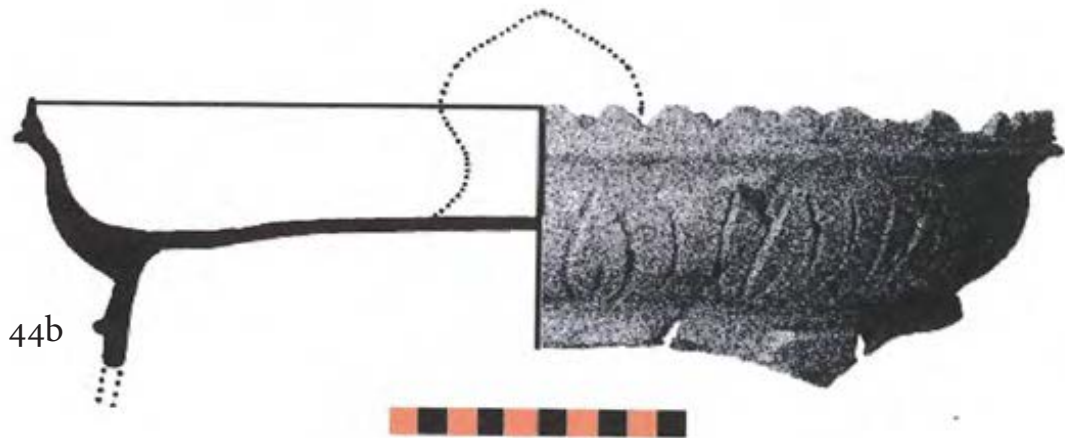
Fig. 43: Painted pottery from BTo-32



43b



Figs. 44a-c: Upper rim of terracotta burial urns with lotus shape from excavation of BTo-32



Figs. 45a–b: Terracotta urns with stamped designed from excavation of BTo-32



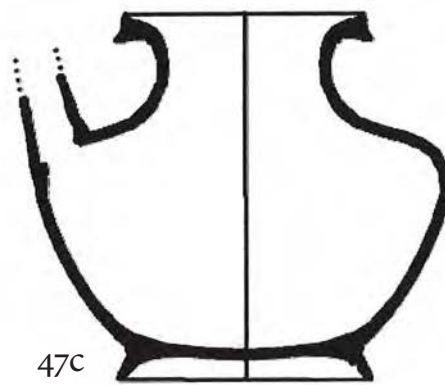
Fig. 46a: Terracotta burial urn excavated from BTo-33 bearing numerous auspicious stamped designs



Fig. 46b: Stamped designs on terracotta urn (Fig. 46a) from BTO-33 mound excavations



Figs. 47a-c: Water pots with spouts excavated from BTo-32

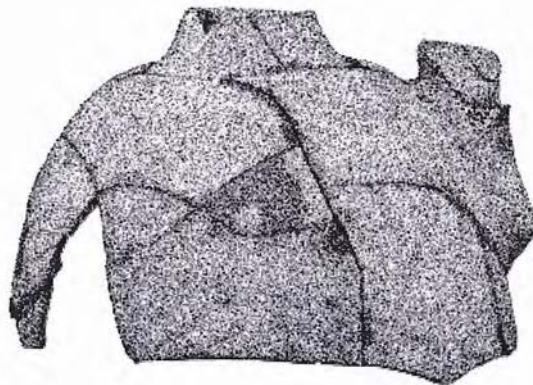


Figs. 48a–c: Reconstruction of water pot with spout excavated from BTo-32

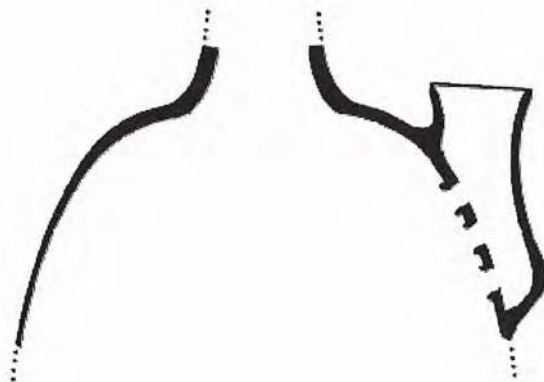
48a



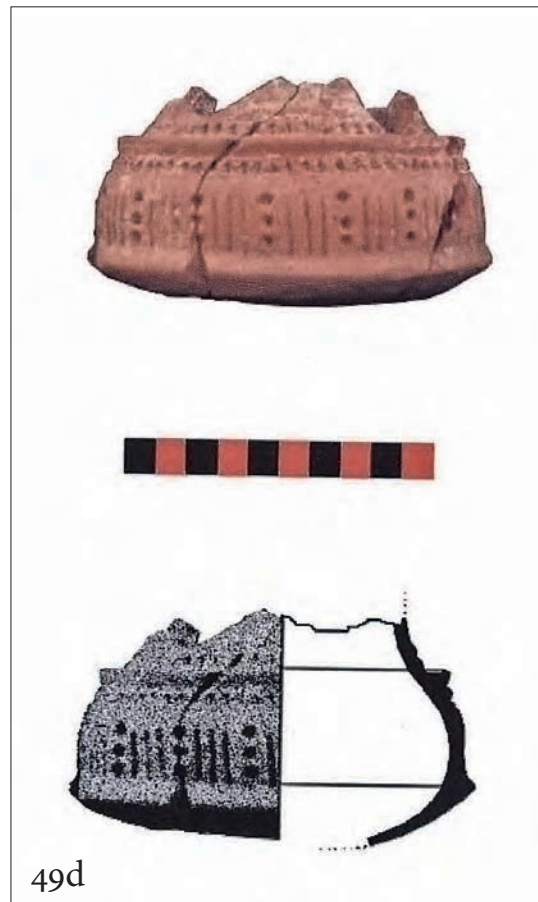
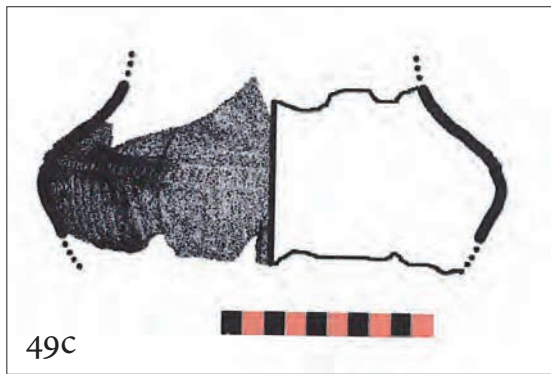
48b



48c



Figs. 49a–d: Stamped and pattern designs on numerous pots excavated from BTo-32



Figs. 50a-b: Bird or avian figures from rim of terracotta burial urns excavated from BTo-32



Fig. 51: Terracotta burial urns excavated from BTo-32



Fig. 52: Begging-bowl shaped terracotta burial urns excavated from BTo-31

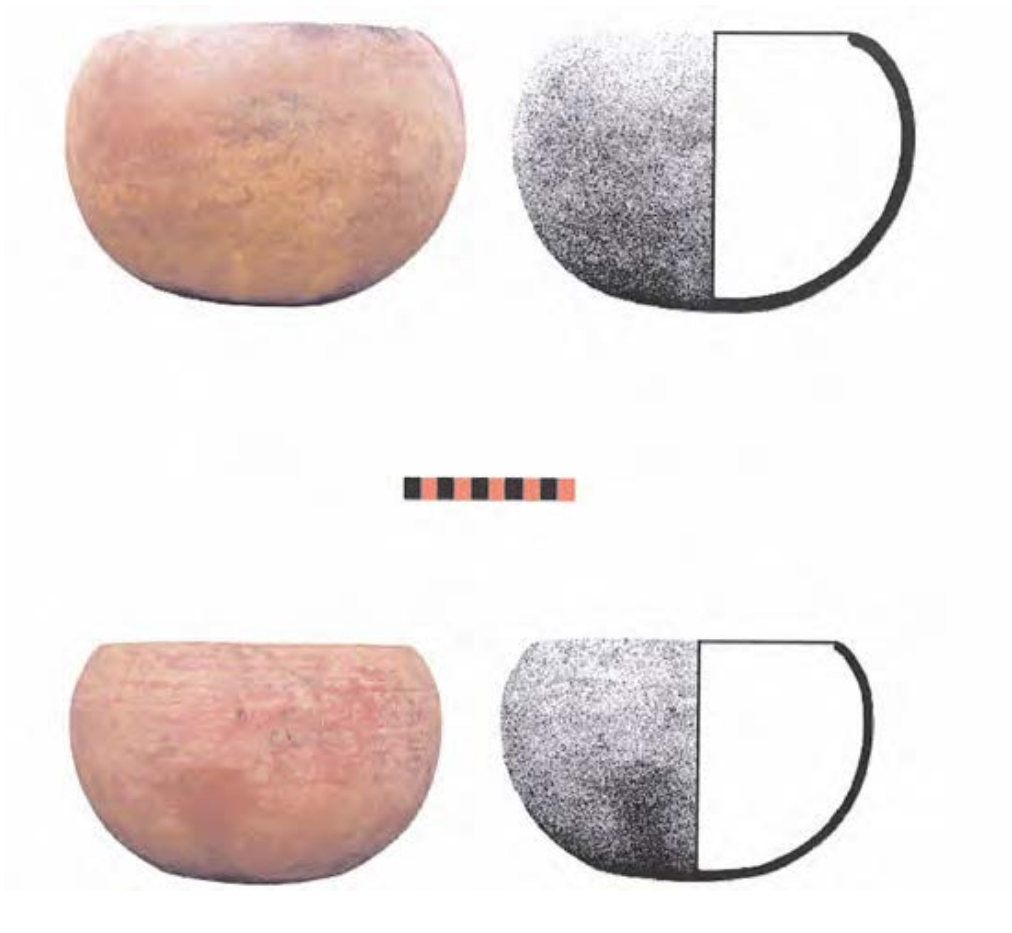


Fig. 53: Pot shaped terracotta burial urns excavated from BTo-33



Figs. 54a-c: Terracotta burial urns excavated from BTO-34

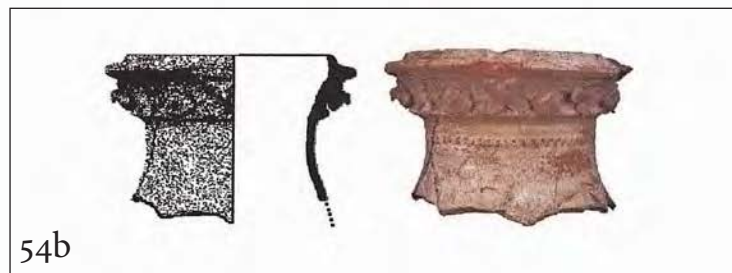
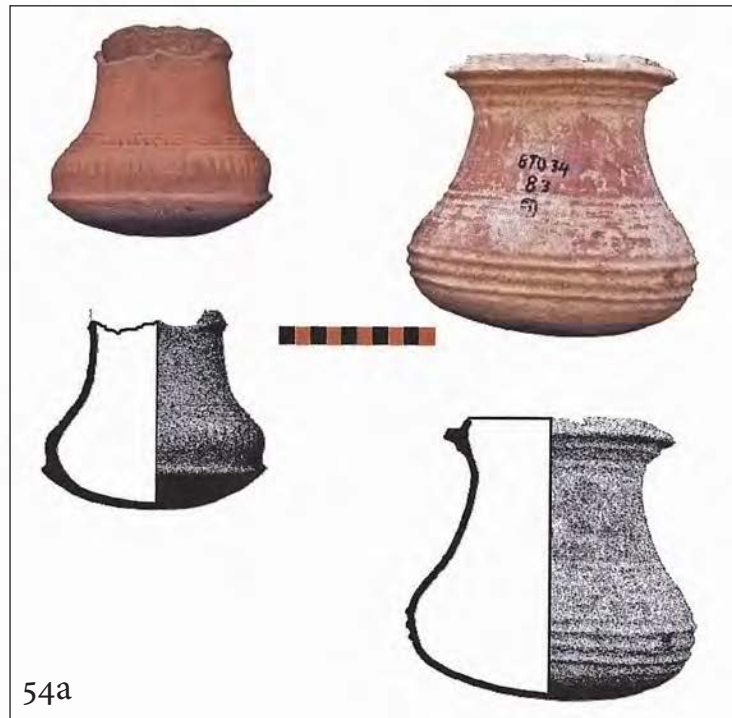
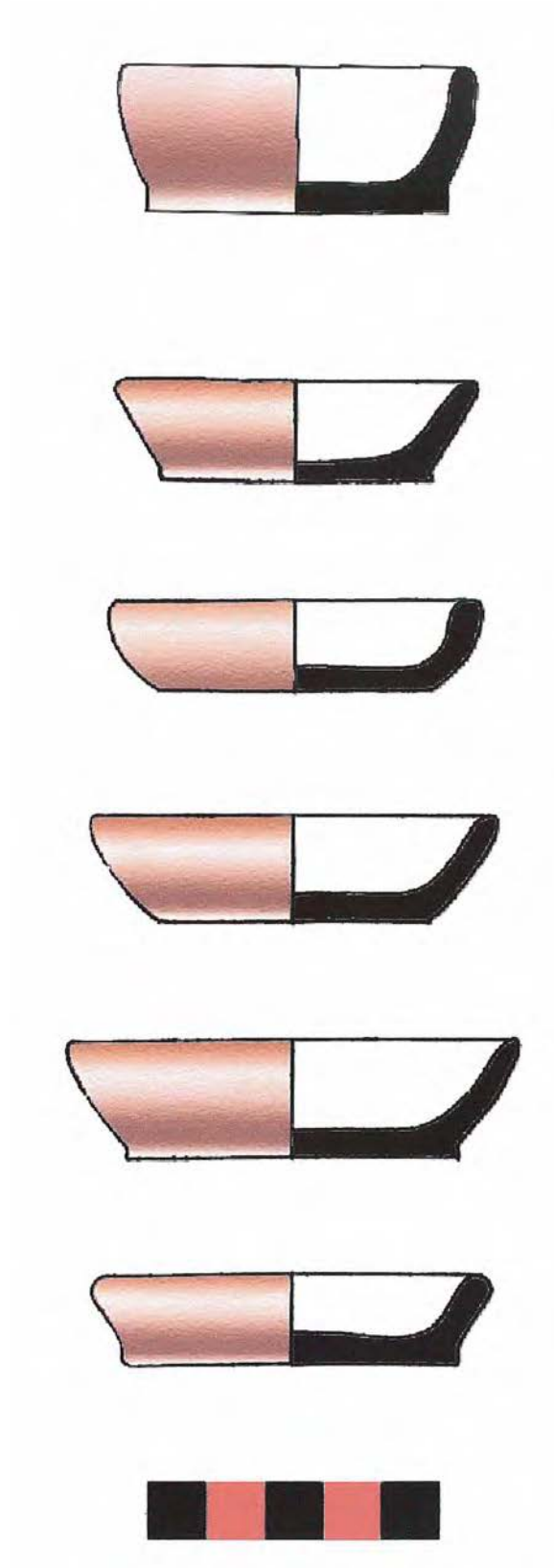


Fig. 55: Oil lamps from Beikthano excavations



Figs. 56a-b: Terracotta burial urns from excavation of mound BTo-34

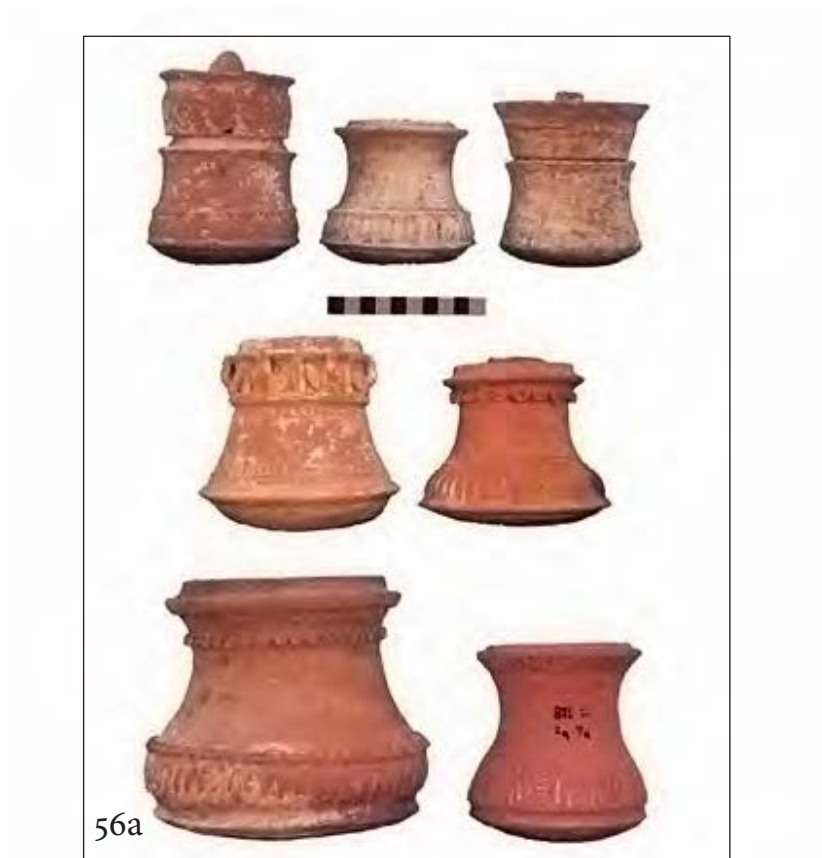


Fig. 57: Terracotta tubular earrings and beads or loom weights from Beikthano excavations

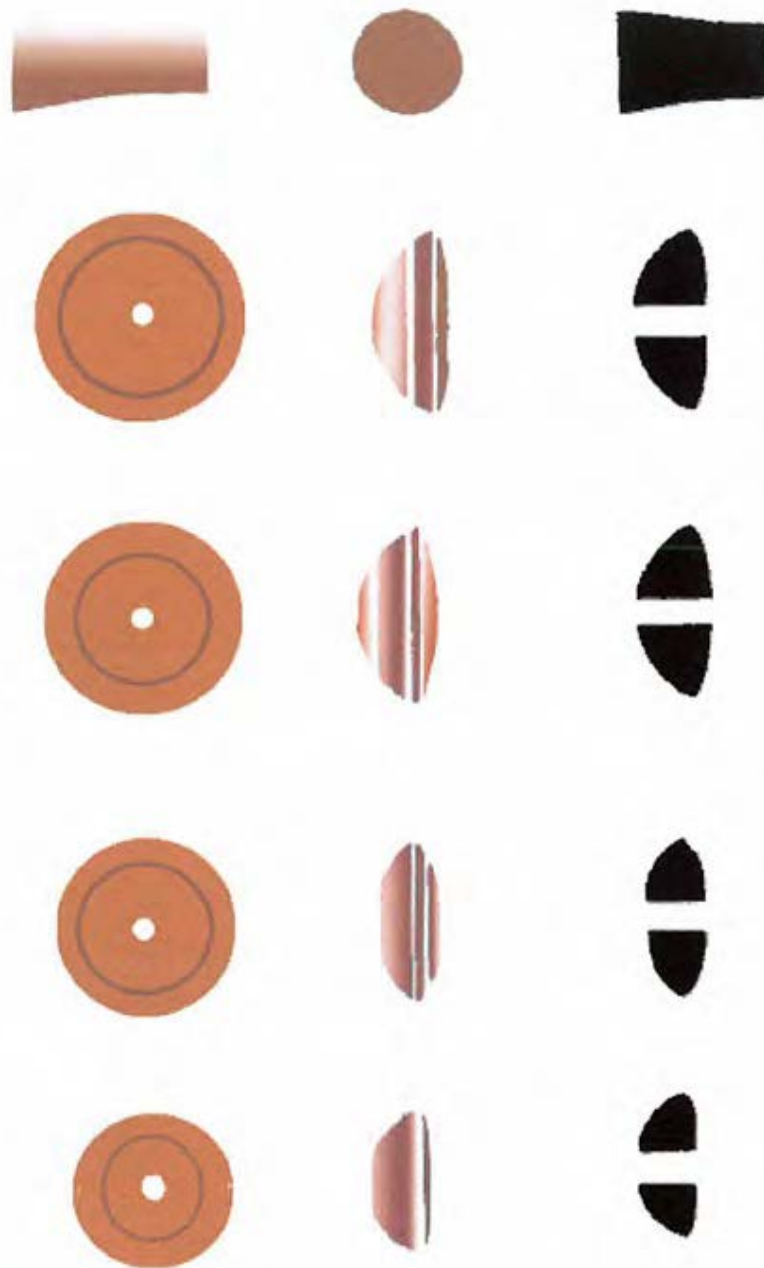


Fig. 58: Iron artifacts and nails from BTO-32 mound excavations



Fig. 59: Numerous terracotta urns from BTO-34 mound excavations



Figs. 60a–c: Decorated terracotta urns from BTO-34 mound excavations

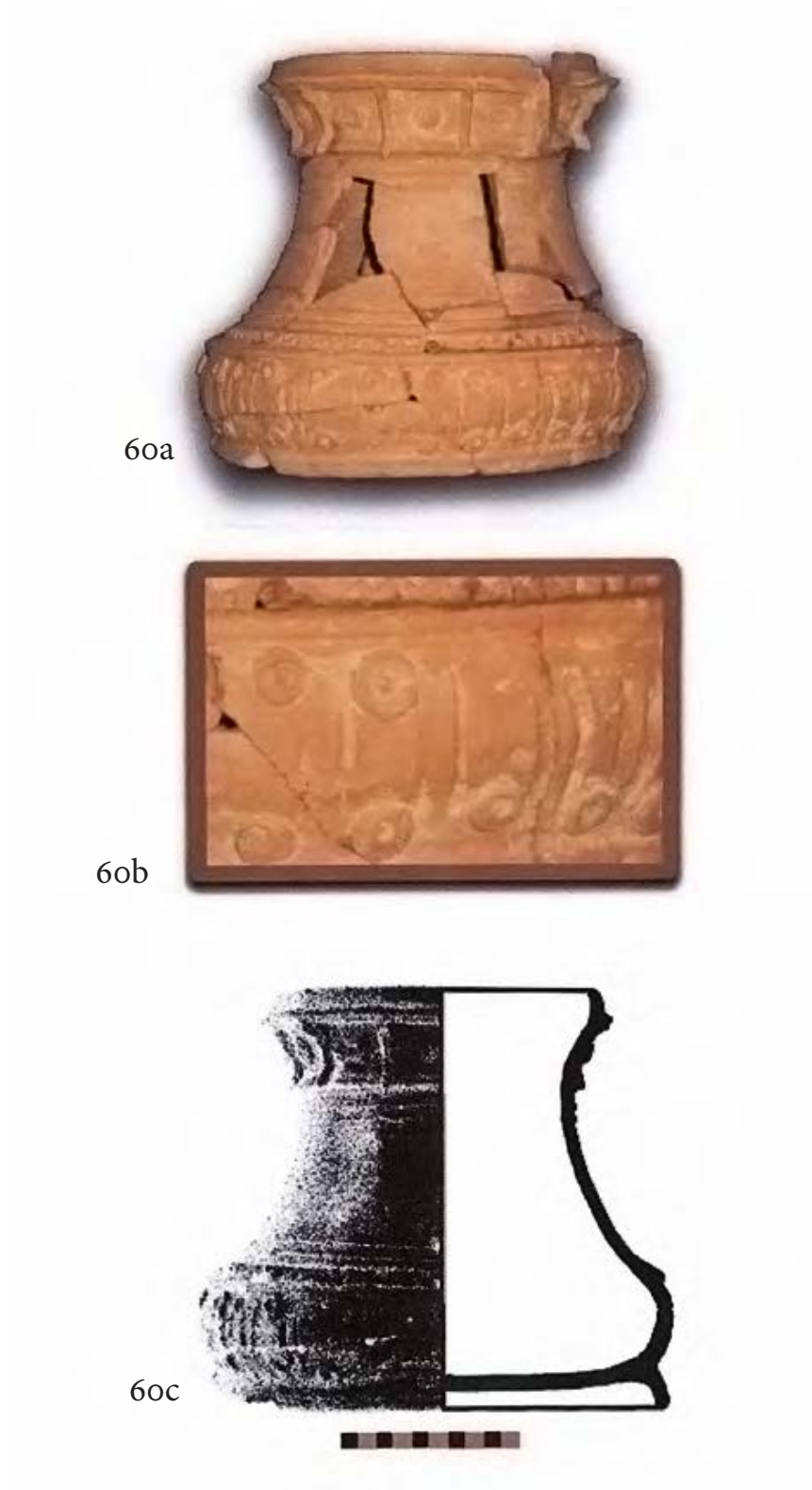


Fig 61: Map of Beikthano

