



Tell el-Balamun 2010

A. J. Spencer

British Museum Studies in Ancient Egypt and Sudan 16 (2010): 149–68

# Tell el-Balamun 2010

# A. J. Spencer

After the completion of the British Museum research project at Tell el-Balamun in 2008, a small amount of residual work remained to be accomplished. This involved the magnetic survey, begun in 2005 with the intention of mapping the entire area within the great temple enclosure, on the southern side of the site. One small area had not been finished and a particularly good example of a building identified by magnetometry had not been tested. The area was often wet, sometimes with standing water but more often with soft mud half a metre in depth. With unusually dry weather in 2010, the opportunity arose to complete the area. While the magnetic mapping proceeded, the previously identified structure was investigated.

### Introduction

In March 2010 the magnetic mapping of the great temple enclosure at Tell el-Balamun was finally completed by the addition of the last remaining area, completing the survey undertaken between 2005 and 2008. These 0.86 hectares had previously been impossible to survey owing to the waterlogged conditions, but the unusually low rainfall in the winter of 2009/10 resulted in the area being sufficiently dry to walk across. Seizing the opportunity, and hoping the weather would remain dry, the area was scanned over three days of intensive work.<sup>2</sup> The result is that the missing portion of the map to the west of the temple of Amun was completed (Fig. 4). Although few features were revealed in this location, this was not entirely unexpected, because the area is a deep hollow into which all the rainwater has flowed for centuries, bringing with it mud from the higher parts of the site. It is possible that the mud is too deep for magnetometry to reveal any structures below it, or the region may never have been chosen for building. One distinct possibility is that below the mud lie the remains of the Sacred Lake of the Dynasty 30 temple complex. This lake has not been found anywhere else, and the location at the side of the main temple of Amun is certainly a likely place for its construction. The presence of a lake would also explain why there are structures around the periphery of the area but not in the centre.

The accuracy of the magnetic survey has been proved repeatedly by the way in which it has identified the presence of structures previously known from the British Museum excavations of earlier seasons. More recently, it has been an invaluable tool for identification of additional areas for investigation, including the East gate in the Dynasty 26 enclosure wall, an anonymous temple of the Third Intermediate Period and the substantial limestone ruins of the Dynasty 26 chapel (Spencer 2009, 50–87). An additional test of the map was made this year and is

<sup>&</sup>lt;sup>1</sup> The magnetic map of the Tell el-Balamun enclosure is a joint project of the British Museum and the Polish Centre for Mediterranean Archaeology, represented by Dr. Tomasz Herbich.

<sup>&</sup>lt;sup>2</sup> Carried out by Artur Buszek.

described below. Many other buildings and features have been revealed by the survey but it is not necessary, or practicable, to excavate them all. Excavation may add stratigraphic context and enable a date to be assigned to a structure, but for many buildings, the map itself is sufficient to show the complexity of the architecture within the temple enclosure and along its borders, particularly to the southeast where there is a heavy concentration of foundations for buildings of the Third Intermediate Period and Dynasty 26.

A small-scale excavation at Tell el-Balamun in 2010 was concentrated on a building (N4) identified from the magnetic map just to the southeast of the temple of Amun (Fig. 5). In fact, this structure was one of the first to be revealed at the beginning of the programme of magnetometry in 2005. It shows clearly on the map as a pale-coloured square, with sides of around 15m in length. Excavation was begun at the north corner and then extended, first to the other corners of the structure and then to the entire length of the southwestern side. The walls were found to be composed of mud brick and to have an average thickness of 1.9m, with bricks of 40-41x19x10-11cm. The northeast and southwest walls had both been partly destroyed by deep pits, which from their contents must have been dug in the Ptolemaic Period. The ground around the exterior of the building and also beneath its foundation level contained much pottery of the early Third Intermediate Period, among which bread moulds were especially common. At the south east, this material had accumulated around a mud brick wall which may itself date back to Ramesside times. The presence of Third Intermediate Period material in this part of the site, and at the level of the present ground surface, is a new discovery. The foundation of Building N4 had been cut into this older material, and so must date to an age after the Third Intermediate Period but before the Ptolemies. The most probable date would seem to be Dynasty 30, assuming that the building was associated with the rebuilding of the temple of Amun by Nectanebo I. Only the foundation of the structure was preserved, thus there was no remaining evidence for the positions of any doors or internal rooms. A plan of the building and the adjacent features, showing the location of the excavation trenches, is given in Fig. 1.

#### The excavation of Building N4

# Excavation at the north corner

The initial attempt to locate the remains of Building N4 from its position on the magnetic map was made at the northern corner, where a trench measuring 3x3m, later extended to 3x6m, was set out. The upper fill was extremely hard-packed (it lay under a modern vehicle track) and contained much limestone debris (cover image), thrown out from the stone-robbing of the adjacent temple of Amun. Part of the wall of the building was found in the northern part of the trench, about 30cm below the surface of the ground. It was found to be composed of mud bricks, but there were only two or three courses of brickwork remaining in the wall at this point. The portion of the building which fell within the trench included a part of the northwestern wall and the interior of the north corner. The exterior of this corner was deeply buried under an ancient dump thrown out from the temple and was, therefore, not cleared. Excavation was continued to greater depth within the interior of the corner of the building and into the fill below its foundation level. Under the stone debris encountered at the surface

was a dark earth deposit, in the centre of which a pit soon appeared, delineated by pieces of limestone and containing discarded broken pottery (Fig. 6). The latter was mixed and included fragments of bowls, plates and jars from the Third Intermediate Period and Late Period. Two joining sherds belonged to the neck of a very large silt jar (Fig. 3, no. 4). The tops of two imported amphorae were found, together with part of the base of one (Fig. 2, nos. 7–8). These were made in a very gritty pink fabric, very probably of foreign origin, containing inclusions of limestone; the surface colour was a pink-beige. The shape of the body and the high angle of the loop-handles are features which resemble Etruscan transport-amphorae from the sixth century BC, but the form of the neck differs. Below these, some 90cm below the ground surface, lay a larger amphora in a totally shattered state. The friable pink clay of which it was made had laminated and fractured in the damp and salty soil, but its original form was nonetheless clear (Fig. 7). The vessel was 66cm high and of about 30cm maximum diameter. It is most probably a Corinthian Type A amphora. The pit also contained a simple cubical weight of brown quartzite (Fig. 36).

The fill around the pit was more homogenous. From the east side of the trench came parts of rims from two Third Intermediate Period bowls of the type used as grain-measures. Many similar bowls had been found in the 1998 season among the silos to the west of the Amun temple (Spencer 1999, pl. 70, no. 4; pl. 72, nos. 8–10). Other siltware ceramics included the upper part of a jar (Spencer 1999, pl. 75, no. 4), two cylindrical necks from jars, one with a thin pink slip (Spencer 1999, pl. 73, no. 12), the edge of a coarse platter, and several rims from coarse plates. From the northwest side of the excavation at the deepest level reached came a fragment of an imported Levantine amphora which proved to bear an ink inscription giving the name of the Deputy, Payemkheb (Fig. 3, no. 2 and Figs. 32–33). Part of another amphora of similar type was found nearby (Fig. 3, no. 1). In this trench it was evident that the deposits dated from the Third Intermediate Period, except where cut by the later pit. All of this material was lying just inside the north corner of the Building N4, or rather, just within and slightly below its foundation.

#### The west corner

Work moved on to the west corner of the building, which again was found at a high level, with 60cm, or five courses, of bricks in place (Figs. 8–9). It had been built over an area in which there had been some older constructions, comprising part of a drain made of ceramic pipe-sections, flanked by a row of large mud bricks. These bricks were of mixed mud and sand composition and measured 43cm in length, similar to Saite bricks at Tell el-Balamun. The wall of Building N4 lay some 70cm distant from the drain elements, the foundation trench for the wall having been cut into the ground beside these older remains. Parts of two sections of the drain remained (Figs. 11–12). The northern section was 64cm long and had been placed with a 5cm overlap with the next section; the southern section measured 69cm in length. Both elements were tapered, the northern one from a diameter of 38cm at one end to 30cm at the other; and the southern section tapering from 42 to 30cm. This shape was necessary for the pieces to be fitted together. The inner angle of the wall at this corner of the building had been cut by a Ptolemaic rubbish-pit (Fig. 10), another example of which was encountered a short distance along the southwest wall. Ptolemaic ceramics were recovered from the first pit, including parts of red-slipped bowls with incurved rims and a few sherds with red-line

painted decoration. By contrast, the fill outside the corner to the southwest contained Third Intermediate Period pottery, including many bread-moulds. This type of material was found to extend along the outside of the southwest wall of Building N4 and similar ceramics were subsequently discovered later to the east of the building.

#### South corner and southwest wall

The next corner to be excavated was that at the south, after which the excavation trenches at the west and south corners were linked to reveal the whole length of the southwest side of the building (Fig. 13), and the large Ptolemaic pit (Fig. 14). This pit had cut right through the brick wall to below its foundation level, creating a break in the continuity of the wall that had been visible previously on the magnetic map. A very narrow foundation trench into which the wall had been set was detected at both the west and south corners. The fill outside this trench, comprising the original ground into which the foundation had been cut, was full of pottery of the early Third Intermediate Period, including the bread moulds mentioned above. The layer containing this material continued under the Building N4. A section cut through the Ptolemaic pit in the southwest wall illustrated the various stratigraphic components of the area. From the surface, the Ptolemaic pit descends through the bricks of the wall, to such an extent that the deepest part, in the centre, passes right through the brickwork of Building N4. This brings the base of the pit with its Ptolemaic contents into contact with the original ground below the building, in which the Third Intermediate Period pottery is embedded (Fig. 15). So the sequence began with an area of Third Intermediate Period occupation, overbuilt by (and cut by the foundation trenches of) Building N4, which was itself later destroyed and its ruins cut by Ptolemaic rubbish pits. Excavation at the east corner (see below) revealed the same sequence.

The Ptolemaic pit contained fragments of bowls in Memphis Black Ware (Fig. 2, nos. 2–4 and Fig. 34). There were also a few decorated fragments from Megaran bowls, Fig. 35), a small siltware dish (Fig. 2, no. 1) and parts of red-ware cooking pots and plates. In the areas clear of the Ptolemaic pit, the grey bricks of the wall of Building N4 were well preserved. The thickness of the wall on this side varied from 190 to 200cm. At the south corner there were four courses of brick remaining, amounting to a depth of 43cm (Fig. 16). Below the foundation of this corner were remains of a brick-built storage silo, almost certainly for grain. The walls of this silo were a single brick in thickness and they continued into the section of the excavation at the south west (Figs. 18–19). The original diameter of the silo had been 294cm. Remains of a second example were found a little further to the south west, also partly covered by the wall of Building N4.

#### The east corner

The east corner had been damaged by another Ptolemaic pit, which had destroyed most of the northeast wall close to this corner. This damage had been visible before excavation on the magnetic map and had removed most of the brickwork from the interior of the angle, to leave only a narrow strip remaining on the outer face of the southeast wall. The pottery from the pit comprised characteristic Ptolemaic products like those found in the pit over the southwest wall. There were pieces of red-slipped bowls with incurved rims and ring-bases (Fig. 2, no. 5 and Fig. 38; cf. Spencer 1996, pl. 51, nos. 28–29; pl. 59, no. 4), cooking-pots (cf.

Spencer 1996, pl. 54, nos. 1–2 and 4), silt plates (cf. Spencer 1996, pl. 51, no. 3; pl. 52, nos. 3–4), fragments from bowls of Memphis Black Ware (Fig. 37) and a small vase of the same material (Fig. 2, no. 6 and Fig. 41). There was also a neck from an amphora of Type Dressel 1A and a head from a terracotta horse-figure (Fig. 39).

Outside the face of the southeast wall the intact earlier fill had remained in place, undisturbed by the construction of Building N4 or by later pits. Here there were many more examples of bread-moulds and other Third Intermediate Period ceramics.

#### Summary

The overall result of the excavation of the Building N4 showed once again the accuracy of the magnetic map, which had shown not just the general location of the structure but also the areas damaged by later pits. The measurement of the sides, at 16.05m, is very close to the estimate obtained from the map. But the excavation has added context and dating evidence. The presence of Third Intermediate Period deposits below the building, and Ptolemaic pits above it, place it stratigraphically in the Late Period. Its alignment parallel to the adjacent temple of Amun and the similarity of the bricks to those used in the Dynasty 30 rebuilding of the temple suggest that it dates from the same period, although the purpose of the building remains unknown.

# Work to the southeast of Building N4

The excavation was extended to the south east in order to better examine the ground on which Building N4 had been constructed. The fragments of Third Intermediate Period pottery found around and below the edges of the building suggested that the zone of occupation from this period might be quite extensive. An area of 5.5x7m was investigated to the southeast of the south corner of Building N4. Much more red siltware pottery was found here, immediately under the surface mud, including a large quantity of bread-moulds (Figs. 17, 20). The range of other types of vessel in the assemblage was quite restricted, but included a number of small shouldered jars in red siltware (Fig. 21; cf. Spencer 1996, pl. 75, nos. 1–6) with a few of larger size (Fig. 3, no. 3; see the similar rim profile in Spencer 1999, pl. 71, no. 4). There were a few thick, coarse platters and sherds from simple plates. A single example was found of a vessel with a flared base, a typical Third Intermediate Period feature (Fig. 3, no. 5). An exact parallel to this piece was found in 1998 on the west side of the Amun Temple (Spencer 1999, 62, pl. 70, no. 8). Associated with the layer of pottery were the remains of two ovens, filled with red burned earth (Figs. 24-25). One of these was of rectangular shape and the other circular. The external dimensions of the rectangular oven were 1.2x1.0m, the sides being made of a single row of mud bricks (Figs. 26-27). The interior chamber, full of red burned earth, measured 85x46cm. The circular oven, of similar construction, had a diameter of 1.3m (Figs. 28-29). Only the lower part of each oven had survived, with a preserved height of around 20cm. Both ovens were situated to the east of the angle of a mud-brick wall which extended for a length of 5m through the trench, but as the ovens and associated pottery deposits had accumulated around this wall, it must therefore have existed from some earlier period. The bricks of this wall measured 38x20x9.5cm (Figs. 22-23). The foundation level of

the wall was not reached because it extended below the subsoil water-table. In a test-trench cut to search for the base of this wall, an older oven was identified at a lower level in the ground than the two noted on the surface. Its presence indicates continuous baking activity over some considerable time. This oven had been a smaller version of the rectangular one found at surface level, with sides a single brick in thickness and an external width of 69cm. It was preserved to a height of 43cm (Figs. 30-31). The pottery in the area dated from the early part of the Third Intermediate Period, and included a very large number of bread-moulds of various types, made in coarse red silt pottery. The most common shape was in the form of a narrow cylinder about 23cm high, tapering slightly to the base (Fig. 3, no. 6 and Fig. 40),<sup>3</sup> but others were shorter with flared sides and distinct marks from scraping around the base during manufacture (Fig. 42). Examples of this same type had been found in the area of silos to the west of the temple of Amun (Spencer 1999, 60-62). The Third Intermediate pottery was not restricted to our small trench, but clearly covered a much larger area, as shown by the finding of similar sherds and bread-moulds all around the walls of Building N4 in any areas not cut by the foundation trench for that structure. The quantity of bread-moulds was too great for domestic use so it is likely that the area was the site of an official Third Intermediate Period bakery for the bread-offerings to be presented in the nearby temple of Amun. The circular brick silos for grain storage under the foundation of the south corner of Building N4 lie within the Third Intermediate Period level and must have been connected with this large-scale bakery.

## **Bibliography**

Jacquet-Gordon, H. 1981. A tentative typology of Egyptian bread-moulds. In *Studien zur Altägyptischen Keramik*, D. Arnold (ed.), 11–24. Mainz.

Spencer, A. J. 1996. Excavations at Tell el-Balamun, 1991–1994. London.

Spencer, A. J. 1999. Excavations at Tell el-Balamun, 1995–1998. London.

Spencer, A. J. 2001. Excavations at Tell el-Balamun, 1999–2001. London.

Spencer, A. J. 2009. Excavations at Tell el-Balamun, 2003–2008. http://www.britishmuseum.org/research/research\_projects/excavation\_in\_egypt/reports\_in\_detail.aspx (31 October 2010).

<sup>&</sup>lt;sup>3</sup> For some similar moulds of late New Kingdom to Third Intermediate Period date see Jacquet-Gordon 1981, 19–21, Type D, fig. 5.

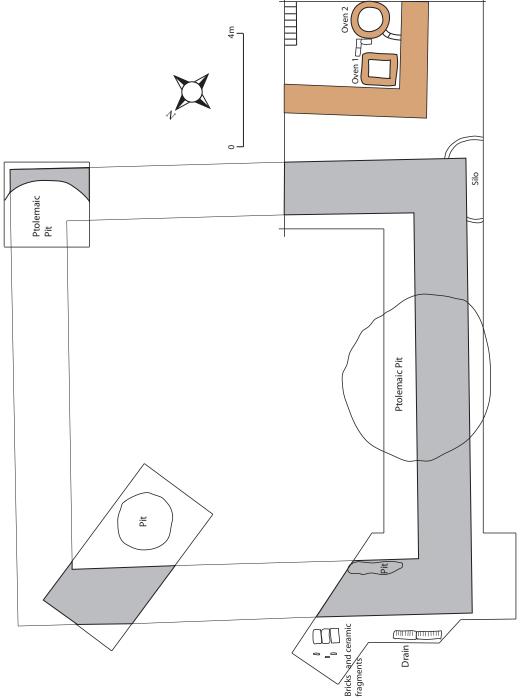


Fig. 1: Plan of the excavation: building N4 and adjacent features.

 $http://www.britishmuseum.org/research/online\_journals/bmsaes/issue\_16/spencer.aspx$ 

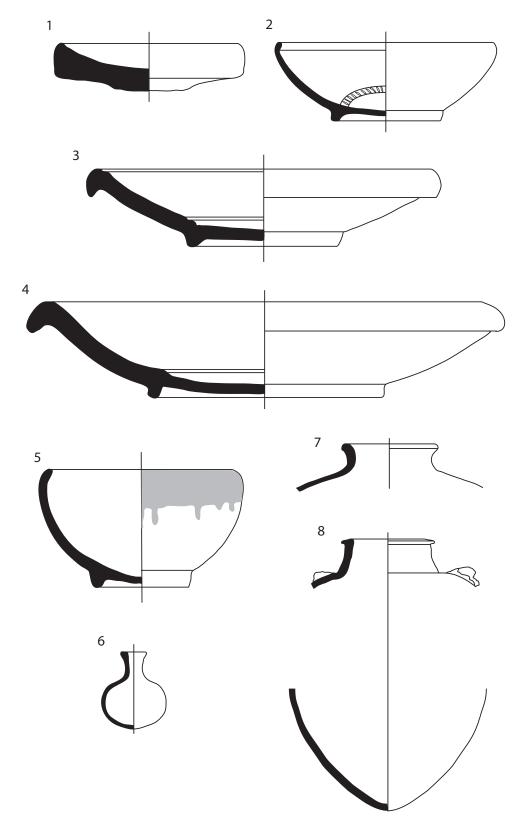


Fig. 2: Ptolemaic and Late Period pottery from pits above Building N4 (Nos. 1–6 at 1:2; 7–8 at 1:4).

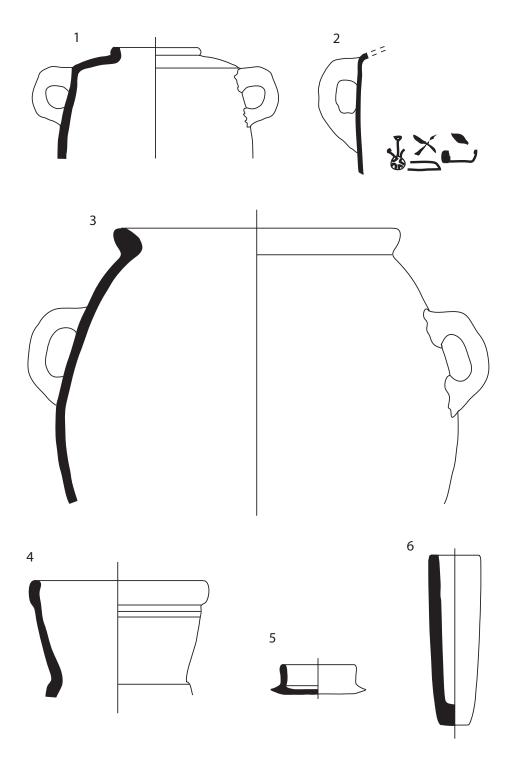


Fig. 3: Third Intermediate Period pottery (1:4).

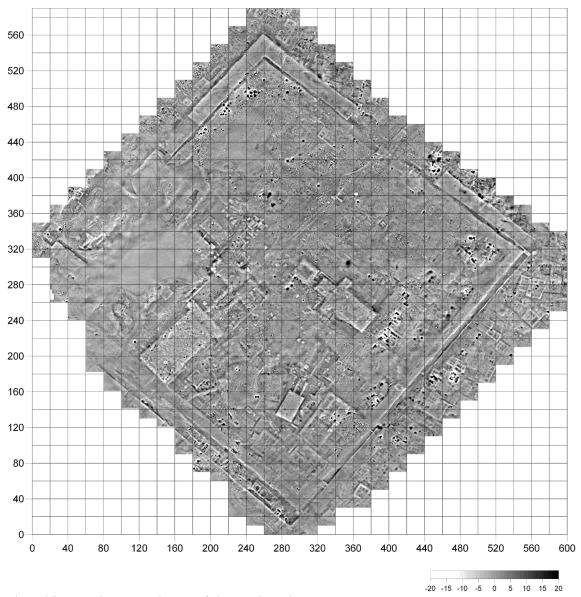


Fig. 4: The complete magnetic map of the temple enclosure.



Fig. 5: Position of Building N4, adjacent to the Amun temple.



Fig. 6: Rubbish-pit within the north corner of the foundation of Building N4.



Fig. 7: Broken Corinthian amphora in the bottom of the pit.



Fig. 8: The west corner of Building N4, with drain elements outside the wall.



Fig. 9: The west corner from the north-east.



Fig. 10: Pit cut into the west corner.



Fig. 11: Drain in fill predating Building N4.



Fig. 12: Detail of drain elements.



Fig. 13: Southwest side of Building N4.



Fig. 14: Ptolemaic pit with the south-west wall.



Fig. 15: Base of the Ptolemaic pit in contact with fill containing Third Intermediate Period pottery.



Fig. 16: Southwest side of Building N4 from the south corner. Note the older silo below the angle.



Fig. 17: Examples of bread moulds.



Fig. 18: Silo under the south corner Building N4.



Fig. 19: Silo under the south corner of Building N4, in trench section.



Fig. 20: Third Intermediate Period jars and bread moulds in the fill under Building N4.



Fig. 21: An example of a common siltware jar, together with parts of two bread moulds.



Fig. 22: Early wall south-east of Building N4 (the southeast wall is visible behind).



Fig. 23: Fill with pottery beside the early wall.



Fig. 24: Area with ovens within the angle of the early wall.



Fig. 25: Area with ovens within the angle of the early wall.





Fig. 26: Oven 1.

Fig. 27 Oven 1.





Fig. 28: Oven 2.

Fig. 29: Oven 2.





Fig. 30: Earlier oven at a deeper level beside the wall.

Fig. 31: Earlier oven at a deeper level beside the wall, with edge of brick oven visble to the left.



Fig. 32: Inscrribed jar fragment from pit at the north corner.



Fig. 33 Detail of the inscription from Fig. 33.



Fig. 34: Memphis Black Ware bowl, from the southwest side pit.



Fig. 35: Sherds from a Megaran bowl, from the southwest side pit.



Fig. 36: Quartzite weight from pit at north corner.



Fig. 37: Sherds of Memphis Black Ware from a pit at the east corner of Building N4.



Fig. 38: Red-slipped bowl from pit at east corner.



Fig. 39: Head of terracotta horse from pit at east corner.



Fig. 40: Bread mould of the most common type.



Fig. 41: Black Ware vase from pit at the east corner.



Fig. 42: Heavier bread-moulds.