

The Subsidiary Temple of Nekhtnebef at Tell el-Balamun

Jeffrey Spencer

In spite of the extensive building programme of the Thirtieth Dynasty, the documented temples fail to reflect adequately the extensive resources expended at this period on the redevelopment of religious sanctuaries.¹ There are several reasons why this is so. Many temples have fallen victim to stone quarrying, not only in the Delta where much of the building programme was concentrated, but also in Upper Egyptian urban centres such as Ashmunein, Abydos and Koptos. Elsewhere, Thirtieth Dynasty structures often consist of added elements within an older sanctuary, which fail to attract the attention engendered by an entirely new monument, despite the fact that some of these additions in themselves constituted an outlay of resources greater than that needed for the construction of many a complete temple. Where Thirtieth Dynasty temples were constructed, the demands of the building programme seem to have been such that their decoration sometimes remained to be completed by later rulers, as at Ashmunein, where the Thoth-temple founded by Nekhtnebef (Nectanebo I) was inscribed under Philip Arrhidaeus.² It is probable that some temples regarded as belonging to the Ptolemaic Period on the grounds of their decoration may have been initiated during the Thirtieth Dynasty. This collection of circumstances has left a lack of well-preserved material for the study of Thirtieth Dynasty temples, as a stage in the evolution of Egyptian religious architecture.³ The description of a temple of Nekhtnebef at Tell el-Balamun which follows is a contribution to filling this gap, since in spite of its destroyed condition, it is one of the few which has been excavated in sufficient detail to permit some analysis of its construction and probable design.

The subsidiary temple of Nekhtnebef at Tell el-Balamun (Temple B) was one element of a major Thirtieth Dynasty refurbishment of the temple complex, which also included rebuilding the main temple of Amun and its processional approach, adding what was very likely a Mammisi and surrounding the whole sacred area with a new brick enclosure wall.⁴ As a self-contained individual monument, the subsidiary temple, which was established in the traditional location of a barque-station dependent on the temple of Amun, is the most suitable element in the complex for the study of original Thirtieth Dynasty architecture. Information about this temple was gathered during the excavation seasons of 1992, 2001 and 2004 and is sufficient to establish not simply the dimensions and date of the building, but also some idea of its appearance. Although intended as a barque-station subordinate to the main temple of the site, the subsidiary temple was actually a very substantial monument. The nominal width of the pronaos foundation is 44.5 metres. The size of pronaos which could be built on this foundation

¹ For a list of temples of the period, see Niederberger, *Elephantine XX*, 134.

² Spencer, et al., *Excavations at El-Ashmunein*, II, 71–3; Bailey, Davies and Spencer, *Ashmunein (1980)*, 4; Bailey and Snape, *The Great Portico at Hermopolis Magna*, passim.

³ Niederberger's detailed treatment of the temple of Khnum at Elephantine is a most welcome example of the wealth of information which can be revealed through careful study of the surviving monuments: Niederberger, *Elephantine XX*.

⁴ Spencer, *Tell el-Balamun, 1991–1994*; id., *Tell el-Balamun, 1995–1998*; id., *Tell el-Balamun, 1999–2001*.

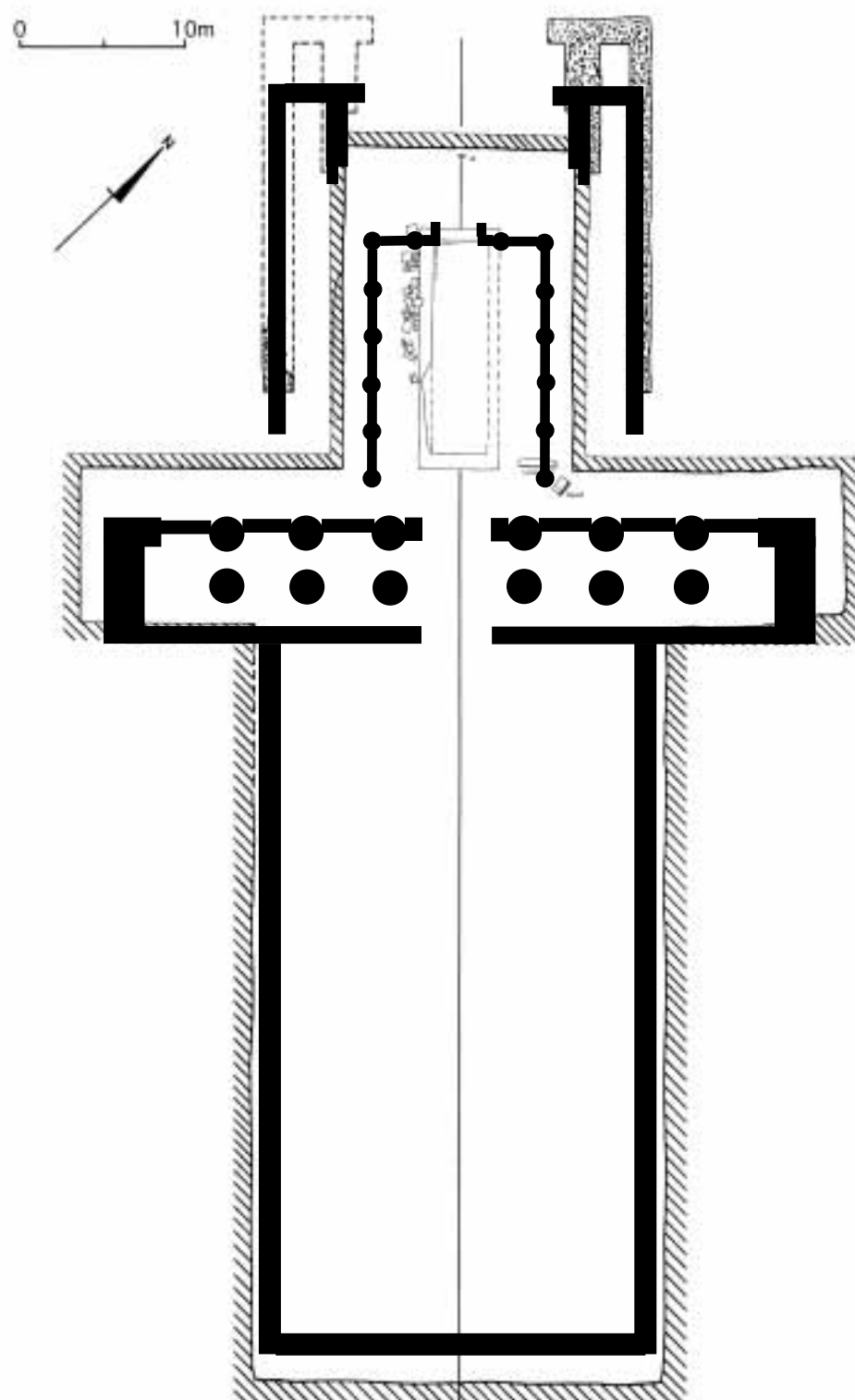


Fig. 1 Plan showing the outline of the foundation superimposed with a reconstruction of the temple.

would be slightly narrower, to allow for the inevitable construction gaps at each end, but even allowing a generous interval of a metre on each side, the width of the pronaos would still amount to 42.5 m (Fig. 1). This dimension is almost equal to the width of the pronaos of the Ptolemaic temple of Dendera (43 m)⁵ and exceeds that of the pronaos at Edfu (40 m), although those examples possess greater depth. The proportions of the pronaos of Nekhtnebef at Balamun are discussed further below.

In common with almost all temples of the later dynasties, the foundation of the temple consisted of an enormous pit which reflected the full size and shape of the monument to be built above. This foundation method, driven more by ritual considerations than practicality, produced a depth of foundation which was far greater than that actually needed. Temples of the New Kingdom were built with much less elaborate substructures but have, nevertheless, often survived in good condition. The total depth of the Thirtieth Dynasty foundation pit is not known and remains inaccessible, since it descends well below the modern water-table. According to ancient ritual requirements recorded in the Edfu texts,⁶ the builders were supposed to excavate the foundation down to the water table, which in antiquity would have been far lower than its present-day level. The measurable depth of the surviving foundation from the highest point on the edge of the pit at the present surface to the maximum depth attained in the subsoil water was 2.60 m. Given that the area of the foundation is 1,712 square metres, even this depth would constitute a volume of 4,451 cubic metres, all of which was filled originally with clean sand as the 'pure medium' for the basis of the temple. Much of this sand remains in place, although the present level of its upper surface varies from place to place depending on the extent to which it has been removed by later pitting. Originally, it rose to the level of the top of the foundation, which has itself been degraded by erosion. The sides of the pit were lined all around with a retaining wall of black mud bricks; the highest part of this lining lies at the outer end of the north-east wing of the pronaos where it attains a relative level of 221 cm over datum, but more typical levels around the perimeter fall between 140 and 180 cm. The bricks in all parts of the foundation were in the size range 38–41 × 19–20 × 12–14 cm. The earth extracted in the original cutting of foundations of this kind would have provided material for the creation of the earth embankments used to raise masonry during construction, but subsequently must have been removed from the site.

The level of the top of the foundation must once have been equal on all sides to present a flat construction site for the temple platform, but the contours of the surrounding ground have created a pattern of erosion which has imparted a slope to the area, descending towards the south west. Surface pitting has done more damage than erosion. The majority of the pits seem to date from Late Roman times when all the temple sites at Balamun were used as stone-quarries, but there are also some deep holes of vaguely rectangular shape which have the appearance of early, unsystematic excavation trenches. One of these lies in the centre of the pronaos and another at the front of the temple. Nearby to the south are some substantial dumps which could well have come from these trenches, but there is no record of when and by whom this work was done. The dumps are visible on the photographs of the site taken by Howard Carter in 1913, but were not created during his work, and so may date from the

⁵ Obtaining reliable and accurate measurements for Egyptian monuments is still problematic. Some of the recorded dimensions differ from each other and in many cases the only sources available are very old publications. The size of the Dendera pronaos, for example, is given variously as 42.6 × 26 m (Arnold, *Encyclopaedia of Ancient Egyptian Architecture*, 180; 43 × 26 m (Cauville, *Le temple de Dendera*, 29; 42.49 × 24.8 m (Mariette, *Dendarah*, tome 1er., pl.2).

⁶ Le Maquis de Rochmonteix, *Le Temple d'Edfou*, I, 23, 4–5.

late nineteenth century.⁷ The effect of all the pits and trenches on the site of the temple has been to replace the upper part of the sand-bed with a mixture of stone rubble and mud.

The shape of the foundation of the temple is illustrated in **Fig. 1**, with a suggested reconstruction of the monument overlaid upon it. The latter is discussed below, but the foundation exhibits three basic components: a large rectangular naos area of 43.5 m × 24.7 m at the back, the wider section for the pronaos and a smaller rectangle in front for the gate and courtyard. The presence of the latter element, only discovered in 2004, helps considerably in understanding the design of the temple. Beyond the edges of this part of the foundation are two narrow sand-filled trenches, one on either side, which had been found in 1992 and considered at that time to be all that existed of building evidence in front of the pronaos. The fact that part of the main foundation-pit extended between these trenches shows that there was more substantial construction at the front of the temple than previously thought. The three sections of the foundation listed above will now be considered individually.

The Naos Area

The limits of this area were first investigated in 1992 when the size of the rectangular space was defined as being 24.7 × 43.5 m.⁸ The foundation was not physically subdivided; the sand bed ran continuously from the naos area through the pronaos to the front. Below the disturbed upper level, which contained evidence of Roman activity, clean sand was found to remain in place at various depths. The date of the temple was established by the recovery of two foundation-deposits, both disturbed to some extent by Roman pitting, from the sand in the rear angles of the naos. These have been fully published elsewhere,⁹ but the dating evidence came solely from the eastern corner in the form of two faience plaques inscribed with the prenomen and nomen of Nekhtnebef. The objects in the deposits lay between relative levels 102 and 70. In the corners of the pronaos and at the front of the temple the undisturbed sand did not survive this high, which might explain the absence of any additional deposits at these locations.

Originally, the sand-bed provided a level surface for the laying of the stone blocks which constituted the temple platform, here in the naos and also in the other sections towards the front of the building. A few blocks of stone were found lying displaced above the sand at the rear east corner, two of limestone and one of basalt, and no doubt there are numerous others scattered within the unexcavated parts of the naos area. The destruction of the temple platform has removed one of the main sources of evidence concerning the positions of the walls and columns within the temple, as these would have been indicated by mason's setting-out marks on the top course of the platform. So far as the design of the rear part of the temple is concerned, it may be assumed that there would have been a central sanctuary, probably containing a monolithic naos. Part of a block of quartzite was noted near the axis which might have come from a plinth below the naos.

⁷ Notes of the work of Howard Carter at Tell el-Balamun are kept at the Griffith Institute, Oxford. See Malek, *RdE* 36, 181–5.

⁸ Spencer, *Tell el-Balamun 1991–1994*, 43.

⁹ Spencer, *Tell el-Balamun 1991–1994*, 43, 84 and pl. 90.

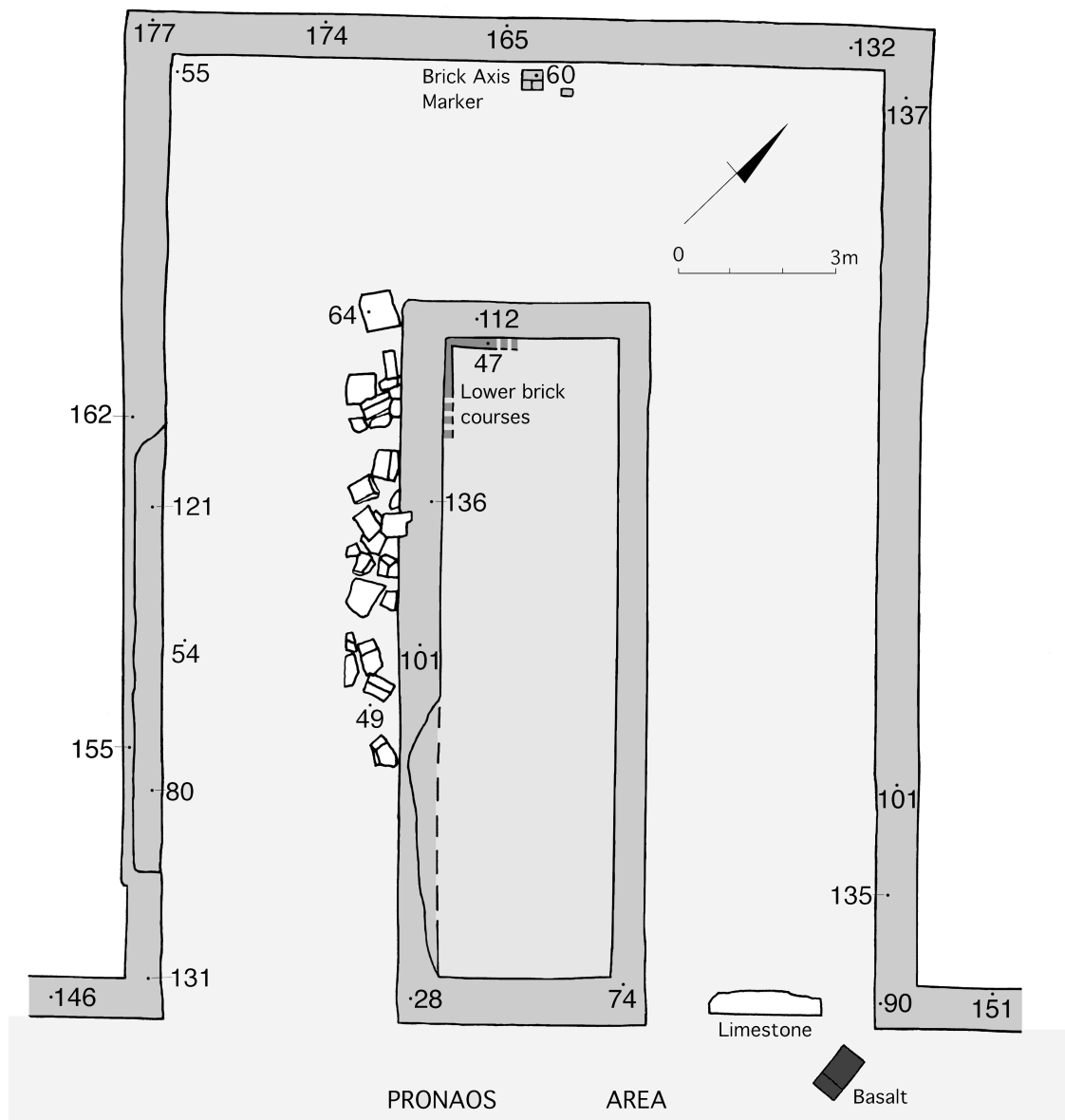


Fig. 2 Plan of the front part of the temple foundation, excavated in 2004, showing the central brick-cased element within the sand-bed.

The Pronaos

The edges of the pronaos were identified in 1992, primarily through work on the north-eastern side, while tracing the opposite half only from surface traces.¹⁰ Excavation of the south-west side in 1999 confirmed the dimensions to be similar on each side.¹¹ Finally, in 2004 some additional work was

¹⁰ *ibid.*, 44.

¹¹ Spencer, *Tell el-Balamun 1999–2001*, 32.

done at the north-east, re-checking the front corner and excavating beside the inner angle where the foundation turns towards the front of the temple. The re-excavation of the front outer corner of the north-east wing in 2004 allowed the foundation sand to be checked for a possible foundation deposit at greater depth than achieved in the cursory excavation of 1992, but nothing was found. The clean sand was encountered at a relative level of 69, contained by exceptionally fine brick lining of the adjacent retaining-walls (Fig. 4). The excavation in 1999 of the angles at the outer end of the opposite wing of the pronaos had likewise proved negative in the search for foundation deposits, probably, as mentioned above, because of the removal of the upper part of the sand through ancient pitting.

The distance from the front to the back of the pronaos foundation in this temple is quite shallow, measuring only around 8.5 m across the ends. Although the central portion of each wing widens to about 9.5 m, the size of the structure which could be built on the foundation is determined by the minimum dimension. Given that any foundation pit is generally somewhat wider than the building it supported, the *external* depth of the stone structure of the pronaos cannot have exceeded eight metres, and was probably more in the region of 7.5 m. Once the thickness of the stone walls at front and back is taken into account, the interior space must have been quite limited, certainly sufficient for no more than a single row of columns in addition to a façade row of engaged columns. The width of the pronaos would suggest that three columns could be accommodated on either side of the axis, as is most common in the preserved pronaoi of other temples.

At the angles where the foundation of each side of the pronaos met the foundation of the naos area and of the portico, the brick lining had been carefully assembled to create good approximate right-angles. The continuous nature of the brick lining emphasised the unity of the foundation as a single construction project. Close to the angle between the inner end of the north-east wing of the pronaos and the front section of the foundation lay two large pieces of masonry, one of limestone and the other of basalt (Fig. 5). Although both had been disturbed, it seemed probable that they had not been moved far from their original locations. They lay on the remaining sand of the foundation, enveloped in redeposited pit-fill, immediately in front of the former position of the facade of the pronaos, as if thrown down during quarrying and then abandoned. The limestone block consisted of a slab, 212 cm long and 85 cm high, with a thickness of 50 cm. The basalt block was more readily identifiable as part of the upper section from one jamb of the doorway of the pronaos, cut to include a short split lintel (Fig. 6). The dressing of the block was unfinished, with a quantity of excess stone remaining below the right-angle where the lintel was to be created. The angle to be cut had been marked out on the faces but never dressed back along the thickness. In the base of the block a dovetail-cramp slot, stained with bronze corrosion, showed that this end had been joined to a lower course of the doorpost (Fig. 7). The joined surface also bore an area of roughened stone measuring 38 × 32 cm to form a key for mortar. The existence of this block shows that the central door of the pronaos, set between the innermost pair of columns of the facade, conformed to the type which became standard in Ptolemaic temples, with a split lintel at a level equal to approximately two-thirds of the height of the columns. The presence of bronze staining at the join shows that the block really was once linked to a lower one, suggesting that the doorway was actually built, but the lack of final dressing and of inscriptions shows that the temple remained incomplete. Since surface dressing was regularly done after construction, this is not surprising. The block was 98 cm high and measured 46 × 52 cm at its base, with the overhanging split lintel designed to project 18 cm beyond the vertical face of the doorjamb.

The front part of the foundation

As mentioned above, the existence of this part of the temple substructure was unknown until 2004. It presents an unusual feature in that it is not simply a rectangular area full of sand, but contains a separate sub-foundation in its centre, the purpose of which is not entirely clear. During excavation, the south-west retaining wall of the foundation was the first to be identified, then traced from its corner with the pronaos until the front limit of the foundation was reached, a distance of 18.3 m. The front retaining wall and parts of the north-east side were then revealed, except for the central part of the latter which had been cut by a large pit. The excavated areas were sufficient to determine the full shape of this part of the foundation, as illustrated in the detail plan (Fig. 2). Lying in the sand in the middle of the foundation, just 8 cm from the inner face of the front brick revetting, were two mud bricks (Fig. 8), which were found to be precisely on the axis of the temple. They were presumably a temporary marker used by the builders as a reference point during construction. These bricks consisted of exactly the same dark clay as those of the lining-walls and they measured 40 × 19 × 14 cm. The sand in which they lay was clean of other inclusions right across the front part of the foundation (Fig. 9), but a search deep into the subsoil water in both the front corners for deposits proved negative (Fig. 10).

Above the level of the remaining sand within the foundation the many pits of Roman and later age, created during the quarrying of the temple masonry, were clearly evident. Remains of this activity were present in the form of heaps of limestone chips and some larger blocks of limestone, lying in a confused scatter as left by the quarrymen (Fig. 11). One of these blocks was found to be decorated on one surface with part of a scene and hieroglyphic inscription, cut in sunk relief (Fig. 12 and Fig. 3). On the left there had been a relief of a seated god holding a *was*-sceptre, probably Amun to judge from the epithets in the text, but only part of the knee and arm of the figure had survived. Above the figure are the lower ends of four vertical columns of hieroglyphs, the first of which (on the right) concluded with the epithet of Amun, 'Lord of the Thrones of the Two Lands.' The remaining columns are difficult to interpret owing to their fragmentary state, but seem to contain parts of the names of divinities. The signs in the first column, with a seated figure determinative, seem to stand for a divine name, 'Pehty', rather than an epithet. The next line contains a writing of the name of Sekhmet, and the effaced signs in the final line may be part of the name of Nefertem.

To the right is a vertical column of hieroglyphs running the full height of the block, reading: '[...] jars of water. Recitation: "twofold purification for Amun-Ra, Lord of the Thrones of the Two Lands..."'. The same text also occurs in the first of two columns on the lower right portion of the block, whilst the second column reads: 'Offerings for the Lord of records' (an epithet of the god Thoth). Above these two short texts is a panel containing, on the left side, repeated occurrences of the phrase, 'all purification', followed by a Thoth-ibis on a standard. It is not clear whether the latter sign stands for the god Thoth or the Lower Egyptian Hermopolite nome, although the lack of a place-name determinative suggests that the god is intended. The opposite side of this panel probably possessed a similar text, but ending with a hieroglyph of a falcon with extended wings above a sign reading 'island of Amun'. If the falcon is being used as a late writing for the definite article, then this would be a writing of the name of the city, Paiuenamun. This block, together with many others lacking inscriptions, was found beside a wall of mud brick located about two metres to the south-west side of the axis of the temple (Fig. 13). Lying amongst the rubble was part of a pottery jar filled with hardened gypsum plaster, presumably a relic of the construction process abandoned by the ancient workers (Fig. 14).

The brick wall was later found to be one side of a rectangular sub-compartment along the axis, built

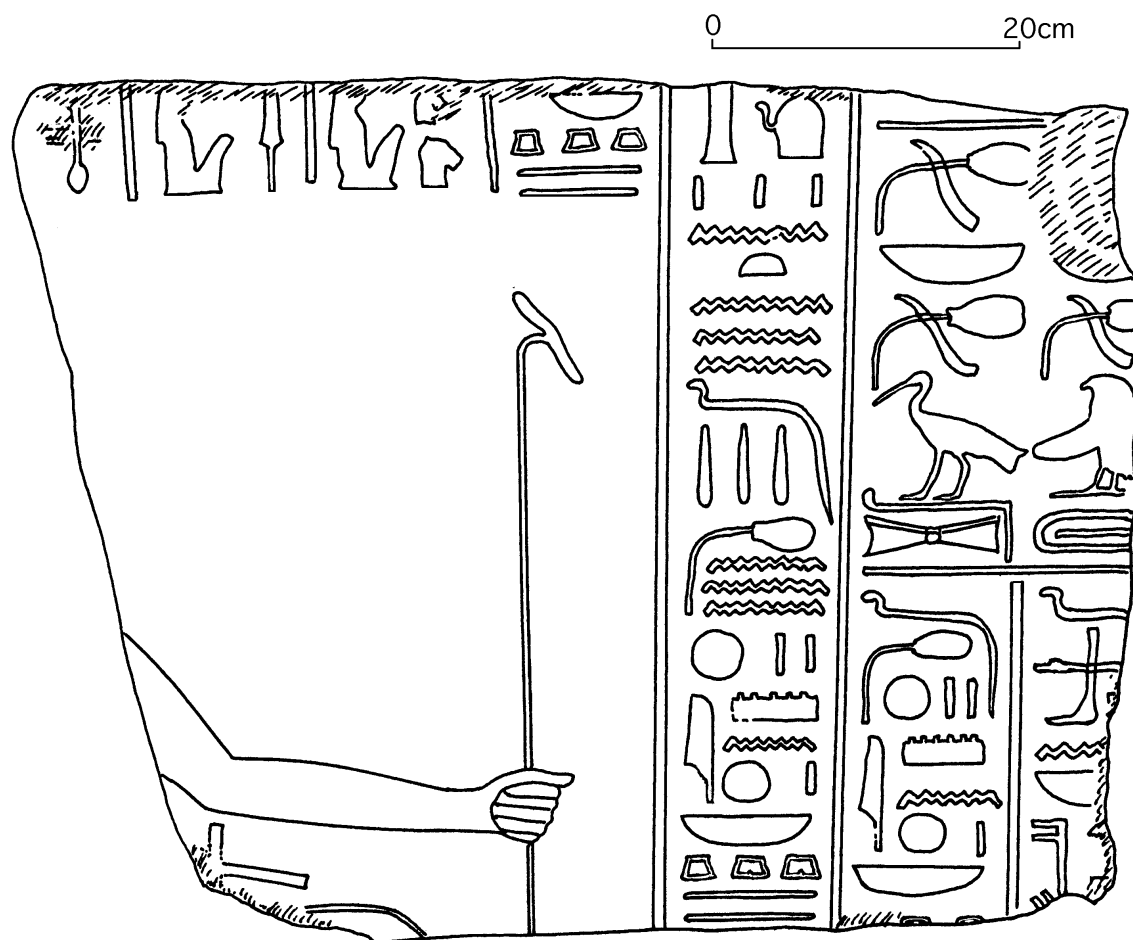


Fig. 3 Copy of a hieroglyphic inscription from a block found in the quarry debris of the foundation.

in the middle of the main foundation-pit. Excavation showed this feature to be 13.6 m long by 4.7 m wide, with the width divided equally across the axis of the temple (Fig. 2). The thickness of the perimeter wall varied from 85 cm on the south-west to 65 cm at the north-east, all built of large black mud bricks of the same sizes as those which lined the main foundation. Fig. 15 shows the west corner of the brick rectangle. The south-eastern end of the feature had suffered considerably from the cutting of a deep robbers' pit, which had removed much of the upper brickwork and subsequently been filled gradually with rain-washed mud. Fortunately, some of the lower courses of bricks remained unscathed, with clean foundation sand in place against the exterior. There was evidence to show that the walls had been built in at least two stages, as the lower courses of bricks were not precisely aligned with those above. Evidence for this was noted at the west and east angles and also at the middle of the south-west wall. It would seem that the walls of this structure had been increased in height incrementally to match the level of the sand filling of the foundation. Although this sand filled the entire area of the foundation around the central brick rectangle, there was none inside it, where the original material seems instead to have been finely-crushed limestone. The purpose of this separate brick-cased foundation on the axis of the building is not clear. In the usual design of an Egyptian temple there was only a pathway along the axis at the front of the building, and it is difficult to explain why this should need an independent

substructure when the pavement could just as well have been laid on the sand-filling of the main foundation. The only suggestion which seems possible is that there might have been a ramp approach to the door of the pronaos.

Outside the limits of the principal foundation lay the two narrow sand-filled trenches found in 1992. The inner edges of these lay ten metres from the axis of the temple, but the two trenches were not of equal width. The dimensions obtained in 1992 were reconfirmed in 2004, when portions of these trenches were again excavated to check their relationship to the new area of foundation discovered at the front of the temple. The two-metre width of the less well-preserved south-western trench as compared with a dimension of only 1.2 to 1.3 m at the north east shows that accuracy was not particularly significant for these foundations and all that was required was a serviceable wall-trench. Since any stone-built features laid on these trenches would almost certainly have been identical on either side of the temple axis, the thickness of the masonry would have been constrained by the lesser width at the north east and so must have been no more than 1.2 m wide, and probably less. The more generous width of the opposite foundation trench would simply have been surplus to requirements. As noted in 1992,¹² the depth of the sand in these trenches was only 90 cm, making them much shallower than the main foundation of the temple. The fact that these trenches doubled back on themselves at the front was already known, but a new detail brought to light in 2004 was that the ends of the return sections impinged directly on the lining of the front of the main foundation-pit. This effect was best preserved at the north-east side (Fig. 16), although sufficient traces of sand were observed at the south-west to confirm that both sides had been the same. This integration of the lightweight sand-trenches with the principal foundation shows that all the elements are part of a single design. Another new discovery was the fact that the sand-trenches did not extend right up to the front of the pronaos as originally thought, but ended three metres distant from it. If the sand-trenches mark the locations of vanished screen-walls, as suspected, then the existence of the gap suggests that there were openings through them beside the façade of the pronaos, possibly service entrances. This discovery necessitates a correction to the information and plan previously published,¹³ which indicated these trenches extended 21.5 m from the face of the pronaos. In fact, this dimension is just the length of the trenches themselves and the three-metre gap is extra, so the true positions of the western or front ends of the trenches lie 3 m further from the pronaos than suggested. The corrected configuration is shown here in Fig. 1.

Reconstruction of the temple

The information collected through the excavation of the temple permits some conclusions to be drawn about its layout. The close similarity between the probable width of the pronaos and that of the temple of Dendera indicates that the building was of significant size in spite of being subsidiary to the temple of Amun. The latter monument was some 150 m long and was also rebuilt as part of Nekhtnebef's ambitious building programme for Tell el-Balamun. The limited depth of the pronaos hall of the subsidiary temple, noted above, is typical of the Thirtieth Dynasty and early Ptolemaic Period, before the development of much deeper halls with up to four rows of columns. Parallels for shallow pronaos, with a one row of engaged columns at the facade and a single row in the interior, are recorded from Ash-

¹² Spencer, *Tell el-Balamun 1991–1994*, 45.

¹³ Spencer, *Tell el-Balamun, 1991–1994*, 45 and pl. 19.

munein and Elephantine. The Ptolemaic pronaos of the temple of Khnum at Elephantine was quite modest in scale, and measured externally 36.75×13.65 m, or 70×26 cubits.¹⁴ The Ashmunein example, founded by Nekhtnebef and decorated under Philip Arrhidaeus, consisted of a particularly fine hall with papyrus-cluster columns, all destroyed before 1826 apart from some of the column bases.¹⁵ The width of this hall was particularly large, measuring 110 cubits according to the foundation-text of Nekhtnebef.¹⁶ This is equivalent to 57.75 m, whilst the depth of the hall was only about 21 m (40 cubits). The design of this pronaos has been studied by Dieter Arnold, who proposed a spacing between the column centres of 12 cubits, expanded to 12.5 cubits at the outermost rows, with a span of 15 cubits across the axis.¹⁷ It is likely that the pronaos at Balamun was of similar proportions but smaller in scale. Assuming a pronaos some 42.5 m in width, the spacing in cubits between the column centres might have exhibited the following sequence across the hall: 9.5 - 9 - 9 - 15 - 9 - 9 - 9.5. This has been used as a basis for the reconstructed plan in Fig. 1, which is shown overlaid on the outline of the foundation. The slightly greater width of the outermost rows of columns not only produces the correct total figure for the width of the hall, but also matches the same feature in the suggested reconstruction of the Ashmunein pronaos. The pronaos of the temple of Dendera, as mentioned above, is of almost the same width to the inferred size of that at Tell el-Balamun and therefore provides an interesting comparison, in spite of its later date and different proportions. The external width of the Dendera pronaos is actually recorded in an inscription on the temple as $81 \frac{2}{3}$ cubits;¹⁸ in metric measurements it is 43 m, which gives a cubit value of 0.526 m. It is interesting that the ancient dimension is not a round number and it is not clear where the fraction was absorbed: possibly in the thicknesses of the side walls or the spacing of the outermost columns. The distance between the column centres running across the width of the hall, however, would seem to best suit a spacing of either 9 or $9 \frac{1}{3}$ cubits, not dissimilar from the suggested layout for Tell el-Balamun. The possible size of the Balamun pronaos of Nekhtnebef is determined by the dimensions of the foundation, leaving little chance that the column spacing could have been other than the suggested figures. In spite of the complete destruction of the monument, the full study of the foundation has supplied the key to the interpretation of its design.

Bibliography

- Arnold, D., 'Zur Rekonstruktion des Pronaos von Hermopolis', *MDAIK* 50 (1994), 13–22.
 Arnold, D., *The Encyclopaedia of Ancient Egyptian Architecture* (London, 2003).
 Bailey, D.M., Davies, W.V. and Spencer, A.J., *Ashmunein* (1980). British Museum Occasional Paper 37 (London 1982).
 Bailey, D.M. and Snape, S.R., *The Great Portico at Hermopolis Magna: Present State and Past Prospects*. British Museum Occasional Paper 63 (London 1988).

¹⁴ Ricke, *Die Tempel Nektanebos II in Elephantine*, 17–8, Plans 1 and 4. Niederberger, *Elephantine XX*, 104, gives the external width of the Thirtieth Dynasty courtyard replaced by the Ptolemaic hall as 36.79 m, calculated as 70 cubits and 2 palms with a cubit value of 52.308 cm.

¹⁵ See above, n.1.

¹⁶ This text is on a stela found at Ashmunein in 1939. Roeder, *ASAE* 52, 316–442, especially 375–426.

¹⁷ Arnold, *MDAIK* 50, 13–22.

¹⁸ Cauville, *BIFAO* 90, 105–6, 111.

- Cauville, S., *Le temple de Dendera. Guide archéologique d'IFAO*. Bibliothèque générale 12 (Cairo, 1990).
- Cauville, S., 'Les inscriptions dédicatoires de Dendera', *BIFAO* 90 (1990), 105–6, 111.
- Malek, J., 'Paiuenamun, Sambehdet, and Howard Carter's Survey of Tell el-Balamun in 1913', *RdE* 36 (1985), 181–5.
- Mariette, A., *Dendarah: description générale du Grand Temple de cette ville*, tome 1er. Planches. (Paris, 1870).
- Niederberger, W., *Elephantine XX. Der Chnumtempel Nektanebos II. Architektur und baugeschichtliche Einordnung*. AV 96 (Mainz, 1999).
- Ricke, H., *Die Tempel Nektanebos II in Elephantine und ihre Erweiterungen*. BeiträgeBf 6 (Cairo, 1960).
- Rochmonteix, Le Maquis de, *Le Temple d'Edfou*, I. MMAF 10. (Cairo 1892), 23, 4–5.
- Roeder, G., 'Zwei Hieroglyphischen Inschriften aus Hermopolis (Ober-Ägypten)', *ASAE* 52 (1952), 316–442, especially 375–426.
- Spencer, A.J., *Excavations at El-Ashmunein, II. The Temple Area. British Museum Expedition to Middle Egypt*. (London, 1989).
- Spencer, A.J., *Excavations at Tell el-Balamun, 1991–1994* (London, 1996).
- Spencer, A.J., *Excavations at Tell el-Balamun, 1995–1998* (London, 1999).
- Spencer, A.J., *Excavations at Tell el-Balamun, 1999–2001* (London, 2003).



Fig. 4 Brick revetting at the front outer corner of the north-east side of the pronaos.



Fig. 5 Limestone slab and basalt block at the inner front corner of the northeast side of the pronaos.



Fig. 6 The unfinished basalt block from the upper part of the doorjamb of the pronaos.



Fig. 7 Copper staining in the dovetail cramp-slot at the base of the basalt block.



Fig. 8 Mud-brick axis-marker in the sand at the front of the foundation.



Fig. 9 View across the front of the foundation, showing the sand within the retaining wall.

Fig. 10 Sand in the west corner of the foundation at the front of the temple.





Fig. 12 Decorated block found in the quarry debris of the foundation.



Fig. 11 Rubble beside the central brick-cased sub-foundation.



Fig. 14 Fragmentary pottery jar full of set gypsum plaster, abandoned in the foundation.



Fig. 13 View along the southwest side of the brick-cased sub-foundation on the axis.



Fig. 16 The north front corner of the main foundation. At the rear is the green sand in the separate high-level trench (partly cut in section), where it impinged on the main foundation.



Fig. 15 The west corner of the central brick-cased sub-foundation.

