

CHAPTER 15

OUTLYING TEMPLES AT AMARNA

by

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15.1 Introduction

The palaces and temples which made up the Central City and the North City represent the principal royal base at Amarna, but, by the end of Akhenaten's reign, at least five royal enclosures had been established at widely separated points across the whole desert bay. As a group they are very unevenly documented, and, even in the two instances where we know a good deal about them, how they were organized remains hard to determine. But their very presence reflects something of Akhenaten's view of his new city, and demonstrates an urge to colonize the sacred landscape of Akhetaten by means of buildings. One of these enclosures, Kom el-Nana, is currently the site of the Amarna expedition's principal research excavation and has now seen four seasons (1988–91) devoted exclusively to its Amarna-Period phase, with supplementary work done in 1994. A detailed account of the results has been held over to the next volume of *Amarna Reports*, but, to set them in their broader context, this chapter has been prepared. It includes a short description of Kom el-Nana as it has so far been revealed.

Although the natural setting of Amarna is readily described as a desert bay, it is not one which spreads equidistantly around the site (Figure 15.1). It has, in fact, two distinct parts which are separated by the low narrow plateau which runs westwards from the cliffs, towards the Main City, and which contains the Workmen's Village. To the north is an almost triangular stretch of desert firmly marked to the east by precipitous cliffs which run towards the river and eventually form the boundary to the North City. These cliffs contain the North Tombs, and are broken by two narrow wadi mouths, the southern of which leads to the Royal Valley. Over this wedge only one royal enclosure was built, the chapel beside the so-called Desert Altars, and this was perhaps the smallest of the outlying shrines (excepting el-Mangara, for which no measurements are possible). The desert to the south is, by contrast, an approximately square plain which covers a much larger area and also appears more open because a rift valley replaces the cliffs for a distance of about two km. It was over this broad flat expanse that four royal buildings were constructed, in a rough arc which may have ended not far from the ancient river bank in the vicinity of the modern village of el-Hawata. This southern stretch of Amarna was evidently of considerable importance, but was not a mirror image of the northern part.

"...it would appear that across the entire amphitheatre of Akhenaten's stelae one great town straggled along the fringe between desert and cultivated river-bank, and though the early discovery of a temple and palace in the centre of the arc has so focused our attention on that quarter as to make it seem for us the city proper, of which all out-lying parts must be merely suburbs, yet this impression may quite possibly be based on erroneous and over-hasty judgements, and we may yet find that the extremities of the long and narrow strip were just as important and as rich as the middle of it" (*COA* I: 109).

These words, written as an introduction to the excavation report on the southerly site of Maru-Aten, were prophetic for both the north and south extremities of Amarna. The importance of the former, now known as the North City, was revealed by subsequent excavations of the Egypt Exploration Society (still published in only preliminary form). With the latter, the south extremity, it is only now that a sketch of the extent and variety of the elements that were built during the Amarna Period is possible. It has suffered much more severely than the North City, and large areas may remain forever blank or the subject of conjecture, but sufficient elements can now be identified to give to this area the distinctiveness and importance which Peet and Woolley considered that it might merit.

In the following notes the important buildings will be described in a south to north order (Figures 15.1, 15.2).

15.2 The “Lepsius Building”

The German Egyptologist K.R. Lepsius paid brief visits to Amarna in September, 1843 and in June, 1845 in the course of his great archaeological survey of Egypt and the Sudan (*Denk. Text* II: 123–8). On a sketch map and in his notes (posthumously published) he referred to the ruins of a temple north of el-Hawata which had recently been cut by a new canal: “Von Haúata wird ein neuer Kanal nach Amarie und Hagi Kandil gezogen. Hierbei hat man nahe bei Haúata ein flaches Ruinenfeld durchschnitten, wo Säulenstücke und Hieroglyphen in weissem Kalkstein zum Vorschein gekommen sind, darunter der Nachname Amenophis’ IV (Äach-en-Äten)” (ibid.: 128). That canal still exists, running from the Nile at el-Hawata to the village of el-Amariya. Apart from a change of line where it connects with the Nile, its course has remained the same, as can be seen by comparing the maps of Petrie and Timme, a set of aerial photographs taken in 1923, and modern maps. This is an important observation, for it excludes the possibility that Lepsius was referring to the site of Maru-Aten, which stood back from the line of the canal at a distance of 300 metres. Lepsius himself did not notice Maru-Aten, but the same later topographic sources, as well as an oblique aerial photograph taken in 1932 (in the EES archives, and reproduced here, Figure 15.4), show that this site was never cut by a north–south canal.

No other visitor to Amarna has left a record of this building; even Timme was ignorant of its existence. The reason must lie in the rapidity with which the farmers cleared the stones and converted the desert soil into a better medium for growing crops. An aerial photograph of the area was taken in 1923 when the canal was dry. Roughly in the position indicated by Lepsius the fields on the west of the canal have a separate set of boundaries and a paler colour, signs perhaps of a later incorporation of this tract into the cultivation. Moreover, a large pale projection can be seen in the canal side, something which it is tempting to identify as a particularly resistant area of stonework or gypsum concrete. Without modern verification, however, these observations do not provide a conclusive case.

The east side of the canal for a distance of about 700 m north of el-Hawata was examined for evidence on 4 February 1989. At the time, the canal was filled with water and irrigating the fields on both sides. Between 250 and 500 m south from the modern bridge which lies directly west from the site of Maru-Aten the beds of the outlet flows from the canal to the fields on the east side were found to be stony and to contain numerous small sherds. Nearly all of the sherds, where it was possible to ascertain a date, were Roman; Eighteenth Dynasty sherds were only rarely present. Over the same stretch, larger pieces of limestone, with edges rounded by water, could be seen both at the edges of fields and along the side of the canal. At about 200 m south of the bridge a rectangular block of stone, roughly worked, lay partly sunk in the fields (locus H13). Its visible surfaces measured 52 by 20 cm. These observations supplied little real support for the existence of a separate Amarna stone building until a fragment of a limestone block was picked from shallow water at the side of the canal at a point about 450 m south of the bridge (locus H12). It is illustrated in Figure 15.3. It measures 14 by 9 cm across the face, is 14.5 cm deep, and bears part of a chevron-design of a kind common on blocks from Amarna temples (e.g. Roeder 1969: Taf. 139, no. 335 – VIII; Taf. 144; Taf. 223, Fig. 8–11). Given that this is the very area which Lepsius marks as the location for the remains of a stone building, the reality of this site does seem to be assured. Lepsius marked it on his plan (we must remember that the original was probably a rapid sketch) as a circular area about 150 m across, and we know from his remarks that it had possessed columns. An area of stone chippings of this size would represent a building perhaps the size of the sanctuary in the Great Aten Temple or a little larger. We are, however, extremely unlikely ever to know anything more about its appearance, and must reconcile ourselves to the fact that, in the Lepsius Building, we have lost a major royal building at Amarna. Some suggestions as to how it might fit into the highly speculative interpretations of textual evidence for Amarna buildings are provided at the end of the chapter.

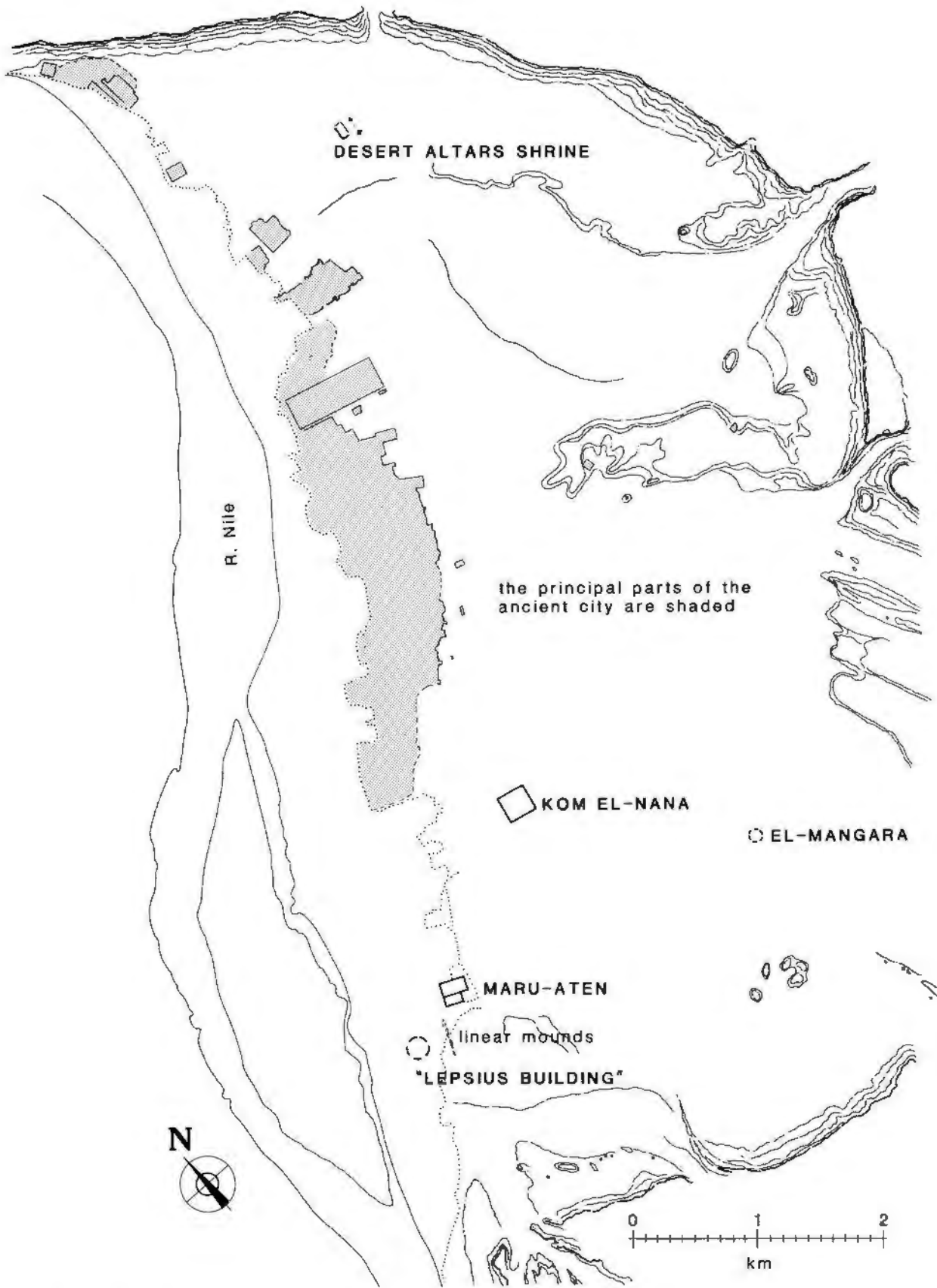
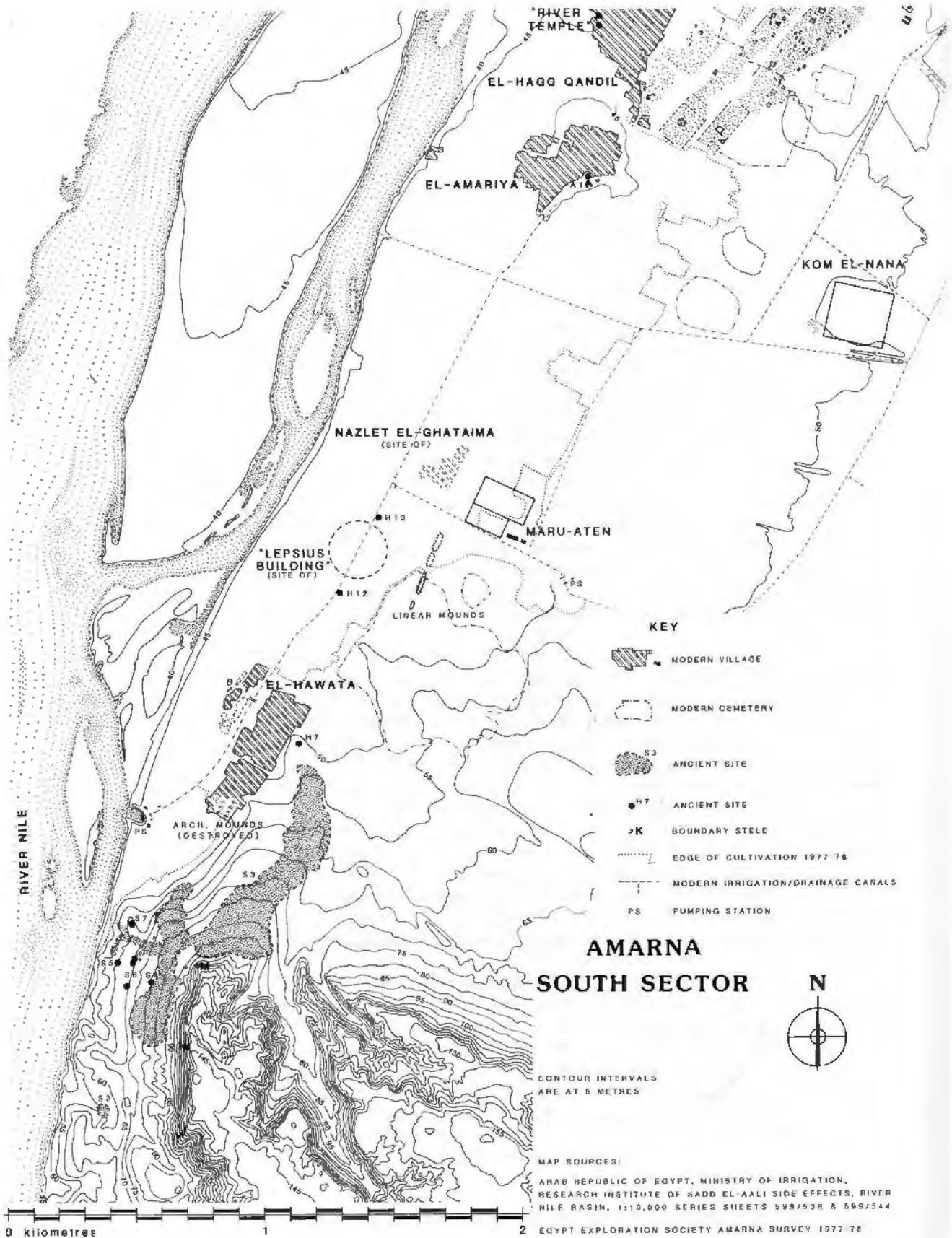


Figure 15.1. Map showing the locations of outlying sites at el-Amarna.



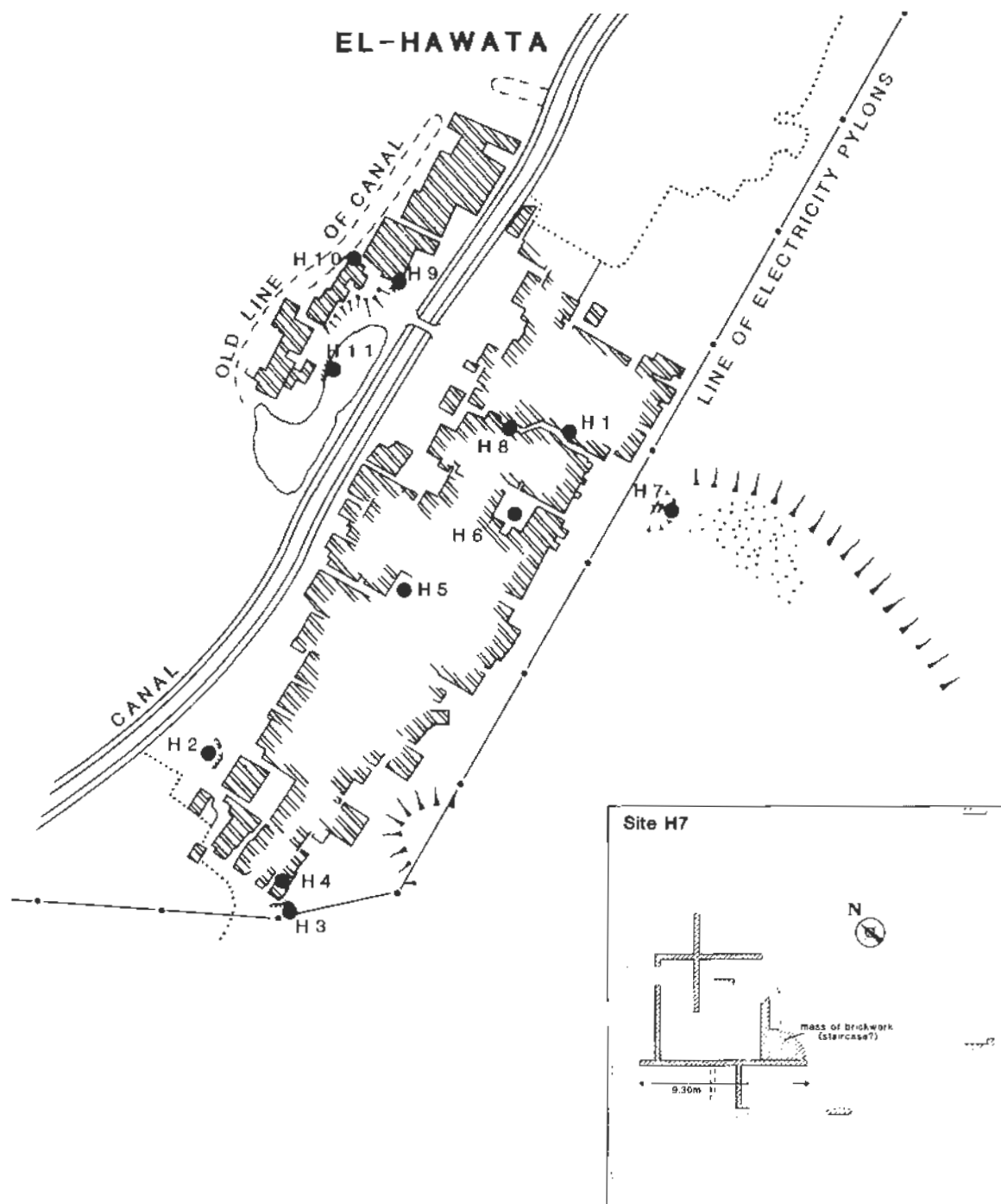


Figure 15.2a (facing page). Map of the area around el-Amariya and el-Hawata; 15.2b (above). Map of el-Hawata showing survey loci, with attached sketch plan of New-Kingdom walls at site H7, east of el-Hawata, made in 1977.

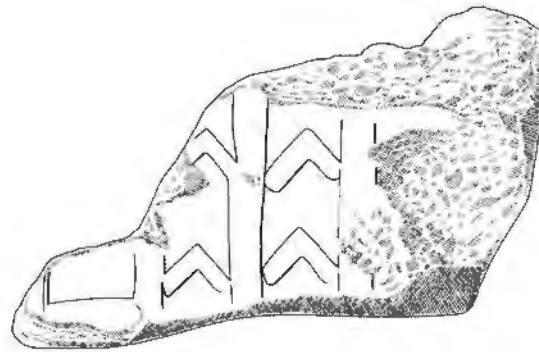


Figure 15.3. Decorated face of limestone block, drawn at half size, from the canal side north of el-Hawata (drawn by A. Boyce).

15.3 Maru-Aten

This was excavated by C.L. Woolley in November–December, 1921, and the results published in *COA I*: Chapter 5. At that time the site stood towards the southern limit of a broad flat expanse of desert formed principally of soft fine calcareous sediments deposited by wadi activity. Beyond, to the south, the desert rose to a low east–west ridge, on which the modern cemetery for el-Hawata is situated, before becoming the foothills for the southern line of cliffs. A decade earlier (to judge from Timme’s map) the cultivation had ended about 100 m from the western enclosure wall, but aerial photographs taken in 1923 show that the edge of the fields had by then advanced much closer, to the line of the road which Timme marks as passing in front of the site, whilst to the north the fields were spreading even further to the east. Even earlier, at the time of the Napoleonic survey, a tiny settlement called Nazlet el-Ghateinah had stood just to the west of the site (*Descr. Carte*: File. 13), but had vanished by the time of Lepsius’ visit. Pendlebury remarked in his diary (EES archive A1.1), after a visit on November 19th, 1931: “Saw Maruaten now entirely ruined by floods & rain.” An oblique aerial photograph taken in 1932 (Figure 15.4), however, shows more or less the same stage of preservation as that of the earlier aerial photograph with many of the building outlines still clear. It also reveals the way in which the site of the central lake had recently been laid out as little agricultural plots fed by two narrow irrigation channels, something to which Woolley himself referred (*COA I*: 110) and a portent of what was to come, for the greater part of the site was destroyed by the huge irrigation project laid out in the 1960s.

On my first visit, in 1977, cultivation had extended across the entire front of the two enclosures and over the central “lake” of the northern enclosure and adjacent ground to north and south. The limits of the fields at this time are marked on the survey map, Figure 15.2. Although a good part of the area of the southern enclosure had not actually been ploughed, its proximity to a major irrigation canal had turned the ground into a patch of coarse grassland, its soil thickly crusted with salt. It is very unlikely that any of the brickwork, which was shallow and badly denuded even in 1922, had survived. With the northern enclosure an area of desert towards the rear, i.e. the east, had escaped the worst of the effects of recent soil moisture. It lay between two sets of Woolley’s spoil heaps and included the key sites MI and MII, where the painted pavement and “kiosks” had been situated. Even so, not a trace remained visible on the surface of walls or of gypsum concrete or stone chippings. Ten years later the site was hardly recognizable. The vegetation cover everywhere was much thicker, a garden laid out north of a line of houses beside the canal had covered part of the rear of the north enclosure, whilst the by-now constantly used vehicular road ran over the remainder (including, presumably, the site of MI). Even the remnants of Woolley’s spoil heaps, now overgrown with coarse grass, were beginning to disappear. Although it is fair to assume that Woolley recovered the main outlines of what was there, it is

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Figure 15.4. An oblique aerial photograph of Maru-Aten taken on 10th March, 1932 by the Royal Air Force.

undoubtedly a building which would have benefited from a re-examination. As it is, its virtual destruction will leave forever unresolved several tantalizing queries and possibilities contained within the published account and scanty archive material.

The whole excavation was carried out very rapidly, within the space of one month, between November 18th and December 18th, 1921. Economy was achieved by limiting the excavation to visible buildings and being very sparing in following the enclosure walls. This much is apparent from aerial photographs. One element of lost information is whether or not the complex was planned and built as a unity, or whether it had a history of enlargement and change. Evidence from the two Aten temples in the Central City and from Kom el-Nana suggest that during the space of the Amama Period major changes could occur, involving rebuilding, constructing new buildings within the large open spaces, and demolition to the foundations of unwanted elements. The last course could leave the ground flat, with no surface features to guide the archaeologist. Differences in the time of construction are implied in the original treatment of the decorated stonework (*COA I*: 147–56) although the tentative results do not quite match expectations derived from the overall plan of the site. The nature of the wall junction between the northern and the southern enclosure walls implies that the southern enclosure was built subsequent to the northern, but the principal stone buildings within them (MII and MVIII) seem to have been built in the reverse order, to judge from the occurrences of “early” and “late” forms of the didactic names of the Aten. In the case of one of the brick buildings (MVII) in the southern enclosure “alterations or rebuilding” are specifically mentioned in the report (*COA I*: 113). A possible early stage in the building of the group MII will be suggested in the ensuing paragraphs.

The archival sources that have survived for Maru-Aten are slight and, together with the brevity of the published accounts, permit very limited scope for re-evaluation. It is, nevertheless, worth making the attempt, not least because Maru-Aten provides the closest parallel to Kom el-Nana. The slender volume of information that we have may well, in large part, be due to the circumstances of the 1921–22 season. Leonard Woolley was director, and his correspondence with

the Society reveals the all-too-familiar related concerns with finance and with making enough attractive discoveries to assure more of it in the future. He was assisted by Battiscombe Gunn, working on inscriptions, P.L.O. Guy as general archaeological assistant with special responsibility for pottery, and F.G. Newton as architect. The excavation at Maru-Aten proceeded simultaneously with work on other areas of Amarna: for the first part at the Workmen's Village and on a group of houses south-west of the expedition house (houses K51.1-4, L51.1), and, for the latter part, on the "River Temple" and a group of houses north of the expedition house, in squares O47 and P47. In between were only seven working days when Maru-Aten was the sole focus of activity (November 30th-December 7th). During part of the time Guy was unwell.

As soon as the excavation began, more of the painted pavement in the north-east corner of the northern enclosure was found, and the recording (by Newton) and removal of the panels became a major preoccupation. The amount of time available to any one of the team for recording the progress of the work was thus very limited, something which can be measured by the small number of photographs taken of the site (apart from photographs of painted plaster, they number only two of building MIV, three of animal burials in MVI, and two of tree pits/roots). There are no photographs or negatives of the building foundations for MII or MVIII, or of the building (MI), with its T-basins, in which the painted plaster was found. The original written accounts of the various parts of the work of that season have not survived but seem to have been made primarily by Woolley during periodic "writing-up" sessions on site. Whether these notes were more extensive than those which appeared in the preliminary report published in the issue of *JEA* for the same year (1922) is now something which we cannot tell. The text for the final report in *COA I* is very close in the descriptive parts to the preliminary report, from which one could deduce that there was not a substantial body of additional records to draw on. A sense of the pace of the work is helpful in trying to envisage just what happened as the excavation progressed and in attempting to reassess the results.

The North Enclosure, with special reference to Building MII.

The northern enclosure of Maru-Aten is a perfect example of the realization of an ideal garden shrine (see the discussion in section 15.10, below). The centre was occupied by a large rectangular depression which had been a metre in depth and floored with mud. How much excavation was done on it we do not know, so that there is no means of checking whether the rounded corners reflect simply the shape of the depression as it was in 1922 or whether an actual perimeter following this course was uncovered. One would have expected right-angled corners. Nevertheless, the few remarks made at the time do seem enough to establish that it was, indeed, a shallow basin with a suspended water table and not a huge excavation down to the natural water table, of the kind to be found at the North Palace or in the grounds of house Q46.1. Woolley painted a charming picture of how he imagined it: "Ample deep enough for the light, painted pleasure-craft of the Egyptians, and shallow enough to have no dangers for the least skilful wet-bob in the royal *harim*, this lake must often have been the scene of such gay picnic parties as we see illustrated on the walls of many New Empire tombs" (*COA I*: 115).

If a lake had been present with a substantial amount of open surface then evaporation, especially in summer, would have created an enormous demand for water to maintain its level. This problem would, however, have been eased if it had been a swamp-garden supporting a great deal of vegetation cover. Over the surrounding area Woolley remarks that wherever they tested the ground trees and garden plots were found. In whatever way one interprets the detail it still leaves Maru-Aten with a substantial need for water, and makes it likely that somewhere within the complex lay a well. Was it the depression, never even tested, beside Building MVIII in the Southern Enclosure? Even if this were the case, if we allow for an interval of time between the building of the two enclosures, we should have to look for another site for the time that the Northern Enclosure stood by itself. Could this have been on the site of the central "lake" before this feature was expanded to its final size?

The lake possessed a quay or viewing platform at the end of a long causeway of stone which ran across the garden and then out into the lake for about 12.50 m, ending probably in a small building. Fragments of the decorated masonry were recovered which showed scenes of Aten worship, of running soldiers and foreign captives, boating pictures, and, on a small scale, a schematic depiction of a building, either a palace or temple. With them went reeded columns with

MARU-ATEN

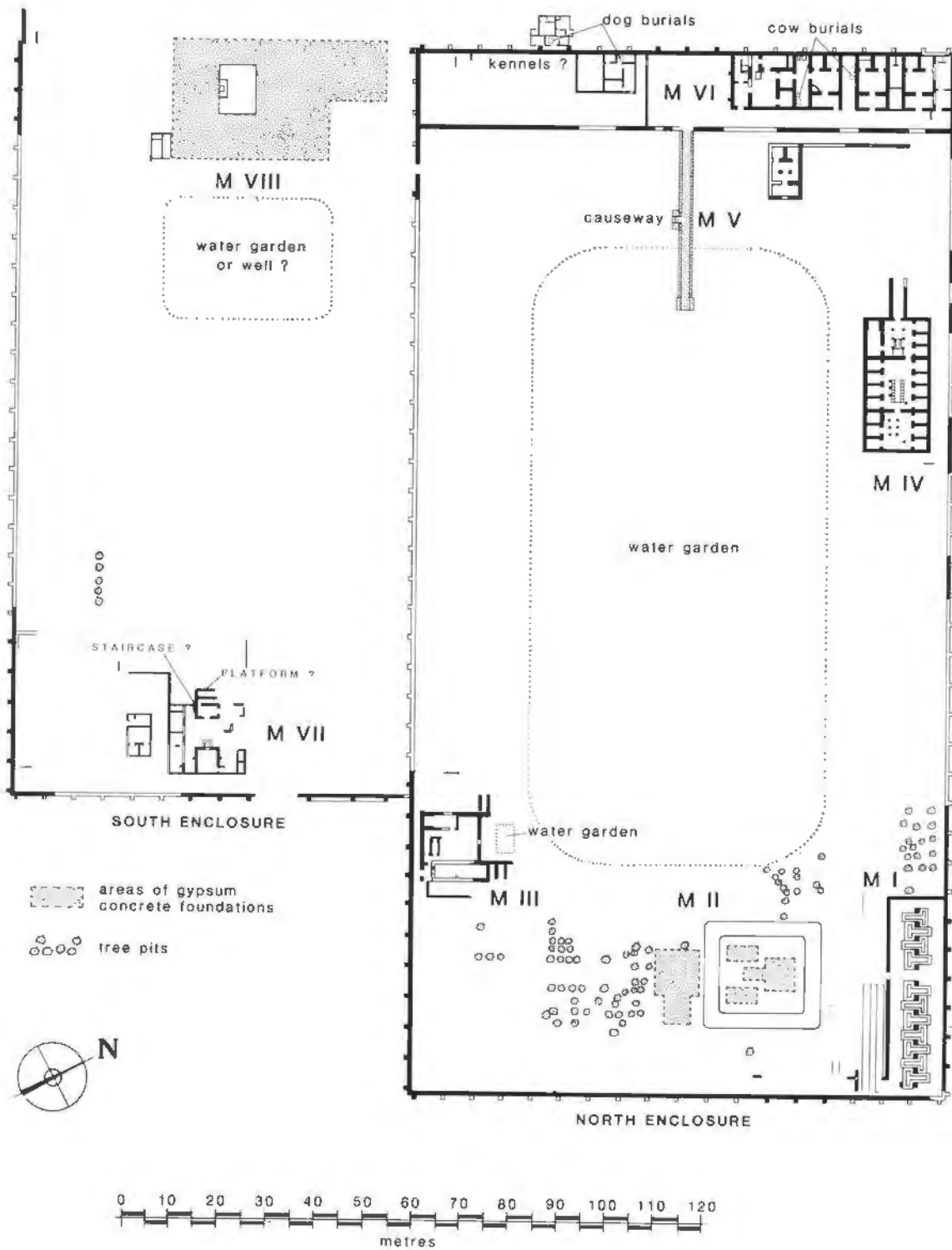


Figure 15.5. General plan of Maru-Aten, after COA I: Pl. XXIX.

palm-leaf capitals, a palmette frieze on a cavetto cornice, and a frieze of uraeus snakes.

In the appropriate focal point for an enclosure which has been laid out around such a prominent axis, towards the rear and on the central line, stood a stone building with an annexe of unique form, the whole designated Building MII. This was the part where the excavation commenced and was the only part which Newton found time to plan in detail (COA I: Pls. XXX, XXXVII). For ease of reference I have used the letters A–D for the individual parts of MII (Figure 15.6). Because, following the general scheme of the ideal type, it was presumably the principal reason for the enclosure's existence, it is worth considering in some detail, not least because it is possible to offer an alternative reconstruction to that made by Newton.

Before excavation, the site of MII was covered with a "litter of stone chippings and sand" (COA I: 120) which must have resembled the covering to the sites of other stone buildings at Amarna, including those at Kom el-Nana. With more than one excavation gang working simultaneously, both the shrine (MIIA) and the edges of the island were tackled more or less at the same time. The first few pieces of sculptured stone were recorded on the object slips (now part of the EES archive) within a few days of discovery and most bear one or two words of provenance, sufficient to indicate that they came from MIIA. The bulk of the stones were, however, recorded near the end of the season, by which time most of the excavation at Maru-Aten had been completed. A few at the beginning of the series were still given annotations as to where they had been found, but the majority were unfortunately treated as a single group coming just from MII. However, even from the very limited additional information on the object slips, it is possible to suggest a significant correction to Woolley's published accounts.

Woolley described (and Newton restored on his drawings) two buildings with columns, MIIA on the south, and MIID in the centre of the island. For the former the evidence is cited (ibid.: 120–1) as being fragments of alabaster drums (22/269 = Cairo Museum JdE 47210) and distinctively reeded sandstone drums illustrated by two photographs (ibid.: Pl. XXXI.5 and 6). The latter appear in the object slips as nos. 22/247 (= Cairo Museum JdE 47199) and 22/248A & B (= Cairo Museum JdE 47200, see Figures 15.8, 15.9), and both were, according to notes on the object slips, found in the canal or ditch on the southern side of the island, thus also against the northern side of MIIA. When Woolley comes to deal with the central building on the island (MIID) he describes a second set of column pieces, namely two "spreading palm-leaf capitals" (ibid.: 122, and Pl. XXXI.3 and 4, but not given object numbers; they are actually open papyrus capitals, cf. Stevenson Smith 1981: 466, note 22) and evidence for reeded shafts which had been engaged in a high screen wall. This last element, however, matches the notes which were appended to the object slip for the column drums 22/248A and B: "The column was engaged in a screen wall, and the sides of the drum are cut away to take the building blocks, & above the slots the surface is left unworked. Slots 025 wide but with thick cement, so that the wall would be 021–023." This drum probably derives, as we have seen, from MIIA. Woolley associated it with fragments from a screen wall decorated on both sides, several of them illustrated (ibid.: Pl. LXII). The object slips give their thickness as 022 (mm), which fits the scars on the drum, but sadly in not a single instance is a note of provenance other than Building II given. However, a number of fragments of torus moulding are also included (22/252 = ibid.: Pl. LXII; 253A–M), which, by their decoration of broad leaves, could well be part of the same screen. One of these (22/252) is said to come from the "south end" of Building II, thus presumably also from MIIA.

In correspondence with the Cairo Museum (EES archives, Woolley to Edgar 29.2.22) Woolley provides a useful summary of the various column parts and how they might relate: "As to its restoration, Newton and I agreed that below the drum with the ducks there was a reeded shaft very similar to this sandstone one, but we did not use this particular drum for our restoration,¹ but a rather similar fragment (very small...) with broader reeding. Our reason was that we found on the same part of the site two large fragments of capitals, papyrus pattern in sandstone, which though they did not fit together or to the drum obviously came from similar columns and as obviously suited the reeded drum and would not go with the duck drum for which we had the alabaster fragments to build up into a capital. But of course our restoration is based on opinion,

¹ He refers to the columns used as a decorative border to the title of the plate in COA I: Pl. XXIX. They also appear in Newton's restoration of the building MIIA, ibid.: Pl. XXX, and see below. A large coloured restoration of one of the duck columns was used in an *Illustrated London News* article (Woolley 1922b: 997).

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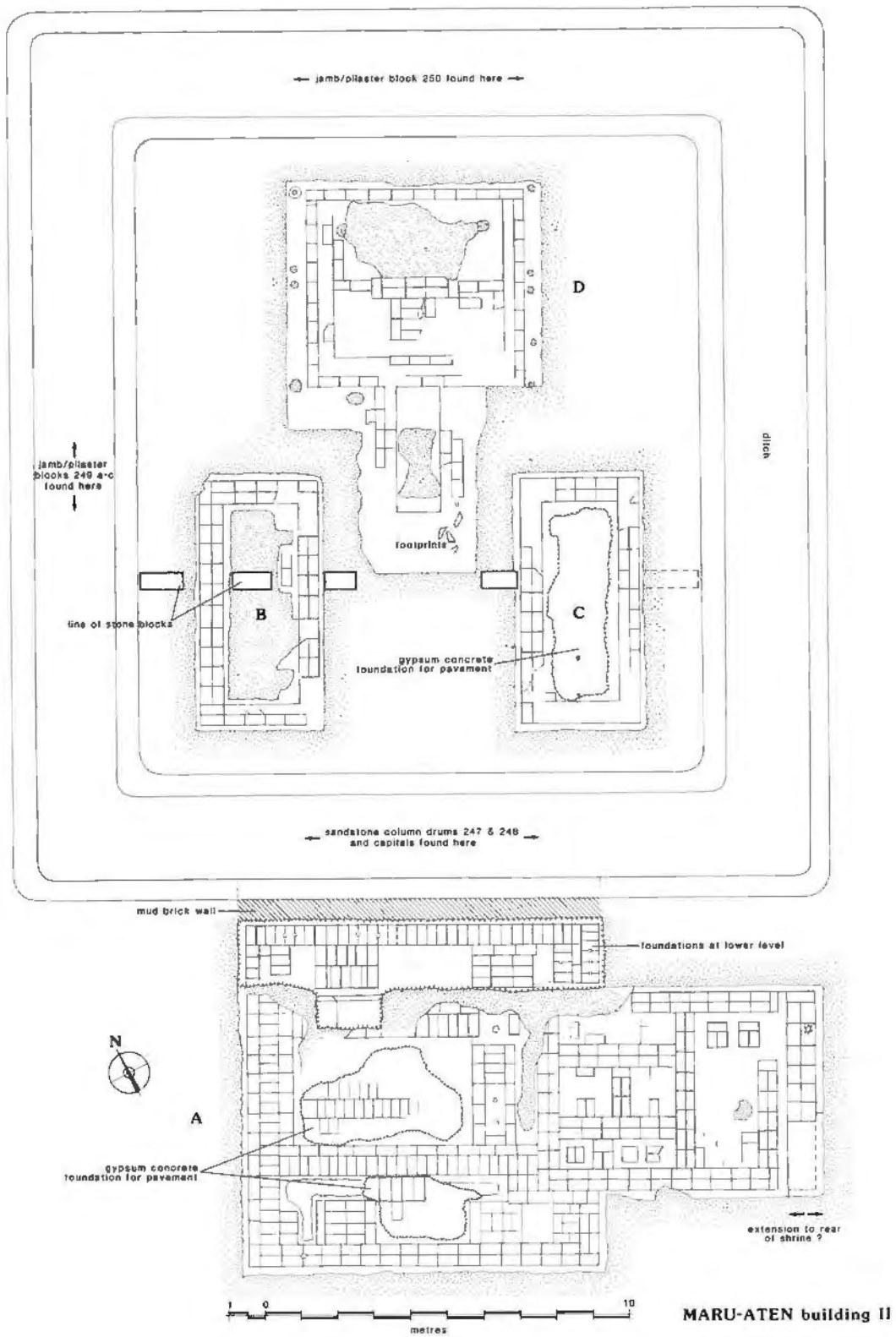


Figure 15.6. The group of buildings MII at Maru-Aten, after COA I: Pl. XXX.

MII D

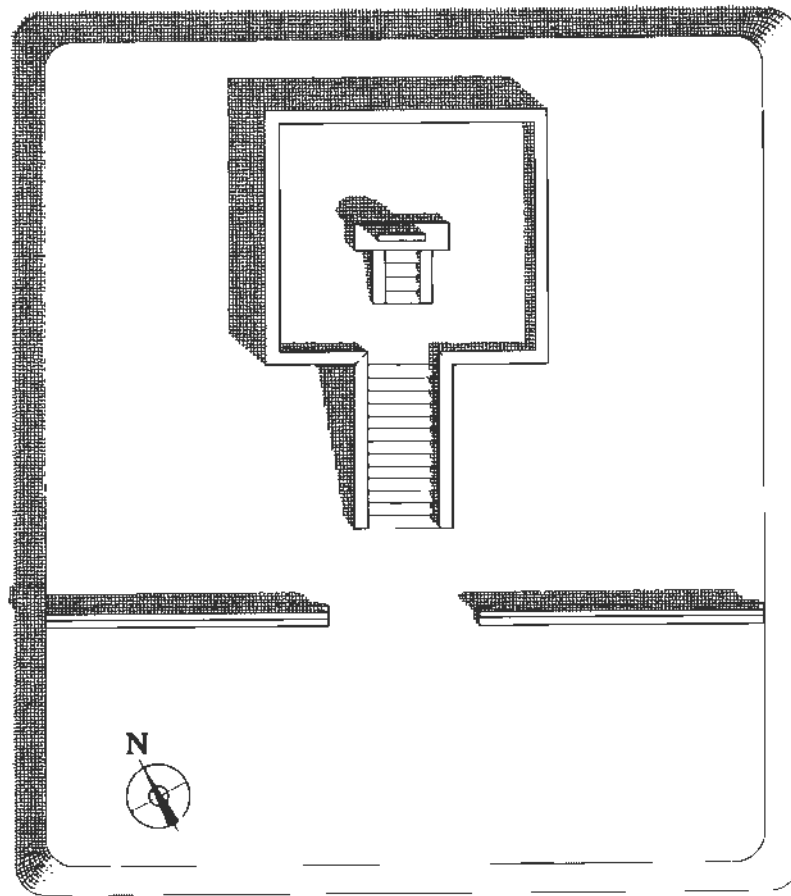


Figure 15.7. Site MII at Maru-Aten at a possible initial stage of use.

and even if it is correct the reeded drum could be attached to the duck drum with very little apparent difference in effect; only it would not be possible to restore over the duck drum the papyrus capital which I feel sure did belong to a shaft like our reeded one." Their solution was to restore two different column designs and place them in the two different buildings, reproducing them at tiny scale in Newton's reconstruction drawing (*ibid.*: Pl. XXX): the duck drum fitting towards the top of a papyrus-bud column of traditional proportions but (presumably) with a capital of alabaster (on which plant motifs were carved) in the shrine MIIA, and the reeded drums rising to the open-papyrus-leaf capitals in the kiosk on the island.

I was able briefly to examine the reeded sandstone drums in a storeroom in the Cairo Museum in September 1989, though under conditions of poor lighting and access. On 22/247 there is nothing significant to add, other than the presence on the upper flat surface of crossed lines to assist the builders in centring the drum and the lack of obvious taper to the column sides (apparent already from the excavator's photograph). The other drum (22/248) is worth studying and recording with somewhat greater precision than I was able to accomplish in the sketches in Figure 15.8. The drum was originally a single piece of sandstone which has sheared along a natural bedding-plane. Almost opposite to one another two shallow grooves or slots have, indeed, been cut (as Woolley's notes describe). The cutting is very rough and bears a layer of gypsum plaster. Above the grooves the surface of the drum has been left as an unworked surface with chisel marks over a regularly defined area (*cf.* Figure 15.9) which, on the one side that I was able to examine properly, can be resolved into the outline of a section through a cavetto cornice

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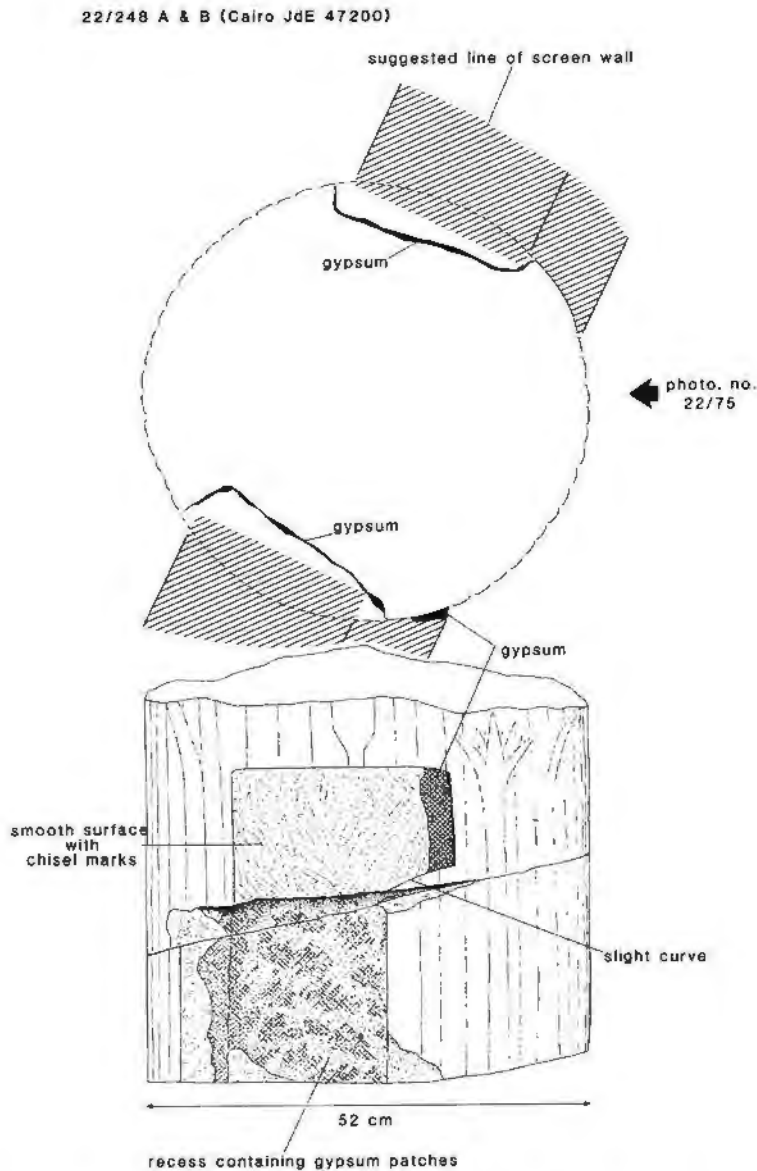


Figure 15.8. Sketch of column drum 22/248A & B = Cairo JdE 47200, made by Kemp in the Cairo Museum.

although the curve of the underside is very slight. A small projecting area of gypsum cement along one of the vertical edges confirms that a block of stone had been attached to the drum over this area. The marks on the sides of the drum are, therefore, from the top of a screen wall with cavetto cornice which must have run on either side of it. As with the other drum fragment, no taper is visible on the sides.

It is hard to detect why Woolley and Newton were so inclined to derive the drums from two different column designs. Both seem to have been found close together, and their diameters were similar, 22/247 at 50–51 cm and 22/248 at 52 cm (though the object card gives the diameter as 55 cm; 52 cm is my own measurement). If the column(s) had a taper at all it must have been very slight, certainly slighter than that given in Newton's drawings (the model for which was supplied by columns in the Amarna tomb of Tutu, RT VI, Pl. XIV). As to where the large



Figure 15.9. Photograph of column drum 22/248A & B taken in 1922. EES archive, negative 22/75, already published as *COA I*: Pl. XXXI.5. Note the column capital in the background, probably that illustrated in *ibid.*: Pl. XXXI.3.

capitals were found, there has to be a suspicion that they, too, came from a place close to the site of the drums. The only reference to their discovery is Woolley writing in his published reports: "In the dried-up ditch we hit upon two fragments of capitals and two broken column-drums, a piece of a lintel and half-a-dozen sculptured wall-blocks" (*ibid.*: 120). If one looks carefully at the photograph of the reeded drums (Woolley 1922a: Pl. XII; *COA I*: Pl. XXXI.5; reproduced here as Figure 15.9) one can actually see one of the capitals (that illustrated in *COA I*: Pl. XXXI.3) lying at an angle and upside down on the desert. Woolley is probably referring to this capital when, in the letter cited above, he writes: "One of these [capitals] was much damaged and so heavy that I have left it on the site." The drums, as we have seen, came from that part of the ditch closest to MIIA. No dimensions for the capitals are given in any surviving record, but the scale which appears in the photograph of one of them (*ibid.*: Pl. XXXI.4) implies a diameter at the base of

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the capital of about 50 cm.

In summary, a good case can be made for considering that the sandstone drums and two sandstone capitals were found close together, probably lying not far from where they fell, and derive from a single set of columns. In design they had a near-cylindrical shaft with only the slightest tapering. They must have resembled the design of column reconstructed by Petrie from fragments from the Great Palace (Petrie 1894: 9, Pl. VII.3; Petrie 1938: 60, Pl. XV.89), but with the reeds arranged uniformly around a continuous plane rather than grouped in bundles (cf. *ibid.*: 10, Pl. VII.1). Petrie restored the diameter as 45 cm. The fragments of alabaster mentioned by Woolley in connection with the sandstone duck columns are best regarded as having come from a different architectural element made entirely of alabaster, the nature of which is not at present clear. Their description in the object slips (22/269) entitles them "Fragments of capital Alabaster" but immediately describes them as "Frs. (i.e. fragments) of drum (probably belonging to duck column ?) with relief design of lotus flowers & long broad pointed leaves: the hollows of the design were filled with paste, blue for the flowers, green for the leaves, the ground & the veinings of leaves & flowers being left white". A photograph (22/149) shows a group of seven fragments, with no scale but seemingly not large. They were selected in division by the Cairo Museum and entered as JdE 47210. The *Journal* entry reads: "50+ fragments of alabaster from a column base with lotus petal design." The entire group is currently stored in the Cairo Museum in a small wooden box, no piece being larger than roughly fist-size. In the absence of a much larger fragment or even complete example which would act as a model the nature of the object from which these pieces came must remain conjectural. Finally it should be noted that three fragments of limestone column drums were also found somewhere in the MII group (objects 22/305A-C, *ibid.*: Pl. LVII.106, 107 and one not illustrated).

The discussion of the evidence for columns leads to a consideration of the overall plan of the MII group and how we should restore its appearance. Newton's plan was the first to be made of a gypsum concrete foundation to an Amarna stone building. Later discoveries have greatly added to our knowledge of this style of building, and have made the meaning of certain elements clearer. It is, indeed, a tribute to Newton's skill that one can "read" the plan better with the advantage of hindsight, although some points would have benefited from a verbal description, something in which Woolley's text is deficient. Each of the buildings will now be considered in turn.

Building MIIA was the largest of the group and possessed the most densely laid out elements. It occupied a pivotal point in the north enclosure, lying simultaneously on the long east-west central axis (which was accentuated by the quay which ran out into the shallow pool), and on the north-south axis of the group MII B-D. This immediately raises a fundamental difficulty of interpretation: along which axis did the building primarily face? Taken on its own, the plan more logically aligns to the west, but Woolley and Newton chose the south, largely, it would seem, on account of an "avenue of trees" which ran to the south. This is marked on Newton's small-scale general plan. The difficulty with evidence of this kind is that one cannot be sure that the trees were exactly contemporary with the building. As noted at the beginning of this section, excavation at other Amarna royal buildings with large enclosures shows that from time to time further buildings were added within the large open spaces originally created. The avenue of trees could have aligned with the island kiosk MIID before MIIA was built. We will return to this possibility later.

We can be reasonably sure that the building did not stand on a platform of any great height but that its floor was almost flush with the surrounding ground. Later excavations of foundations of this type have found them sometimes to be laid out on the floor of a shallow pit cut into the desert surface. The lowest course of stone laid on the gypsum concrete bed was a foundation course, and the intervening spaces were filled with a mixture of gypsum, chippings, and sand over which the stone paving slabs were laid, bringing the floor of the building back up to the local ground level or even above it. The MII buildings, on the other hand, seem to have been built directly on to the desert surface with no appreciable pit. For MIIA this would have given a slightly raised floor level inside but not sufficiently so to merit the term platform. This much is evident from two irregular areas of gypsum concrete bearing the impressions of paving slabs which, according to Newton's sections, were about 20 cm thicker than the gypsum concrete beds beneath the walls. A single layer of flooring slabs would still have brought the floor level no more than about 40 cm above the adjacent ground. We should note, too, the absence of signs of a

ramp entrance to MIIA which, if the building had been on a platform, would likely have been required.

Amama foundations regularly supplied support for walls and for free-standing elements, viz. columns, altars, and probably large statues, though door thresholds were not marked in any special way. Free-standing elements which were to bear no great weight (i.e. small altars) were supported by isolated groups of foundation blocks, but for columns the foundations normally took the form of separate square masses of masonry linked by narrow joining walls (e.g. *COA* III: Pls. III, IV, XIII B, XIV, XL.5; also direct evidence from the Central Platform at Kom el-Nana). It is here that Newton's reconstruction fails.² There are no signs of column foundations for any of the three buildings on the island (MIIB–D), and, as the discussion above reveals, all of the column pieces found for which there are indications of place of discovery came from beside MIIA. At MIIA Newton placed his columns on the small isolated squares in the easternmost room, and along the east–west interior walls of the two divisions further to the west. The four major thickenings along the north and south outer walls of the westernmost part of the building he interpreted as foundations for narrow pylons flanking the doorways in each of these walls. They would have been, however, only 1.60 m wide at the base along their east–west axis (this the side visible from the front, as conceived by Newton), and are much closer in size to the dimensions one would expect for column supports.

Inserting the sandstone columns here, however, raises a problem in itself, for one of the column drums, as described above and illustrated, had stood between a screen wall. If one makes the assumption that all structures of any weight were supported on foundations of limestone blocks rather than on the gypsum concrete platform then the only set of foundations of suitable dimensions is that which forms the western “wall” of MIIA; the four square foundation masses have no provision for the screen walls between them. One should not discount the fact that both the sandstone drums and capitals (and decorated blocks from the screen wall itself) were found lying at a point which is likely to have been fairly close to the north side of MIIA, suggesting that they had fallen from a nearby location, which would be the north side. In placing them on the most obvious foundations — the square masses — on this side, however, one is then obliged to conclude that the screen walls were not considered heavy enough to warrant separate stone foundations. I can find no easy solution to this and to other problems (e.g. where did the limestone columns stand?). The western part of MIIA was evidently a pronaos of peripteral form employing columns and screen walls but in a manner which it is not straightforward to reconstruct.

One of the distinctive elements of Amama religious architecture, known from tomb scenes and from excavated remains, is the open-air court, subdivided into many smaller courts, containing numerous small altars but not, apparently, a single dominant focus of attention. The plan of the eastern section of MIIA fits this design well, and may therefore have been a small version of the standard Aten temple. If one looks closely at Newton's plan, the way that the rear, eastern wall is drawn looks very much as though the building was extended eastwards, involving the demolition of the rear wall (though leaving the block-impressions on the concrete layer) and replacement by another further back, seemingly employing blocks of a different size. The remainder of the interior contains marks from the bases either of altars or, in some cases, perhaps of statues. Where they occur inside small chambers there is an obvious parallel with the rear part of the Gem-pa-Aten building in the Great Aten Temple (*COA* III: Pl. III).

The western part, in addition to the four square bases and a surrounding wall, also has internal wall foundations but not from this kind of layout: a pair running east–west and a single wall of greater thickness running north–south at the east end. The asymmetry of the placing of this last element makes it likely that the western part also faced primarily to the west. One can interpret it as the foundation for an entrance to the eastern court of solar altars, standing at the rear of a central walled area which occupied much of the central space of the western part of MIIA. This

² Newton made a separate reconstruction drawing of the plan of the MII group at the same scale as the plan of the actual remains and the reconstructed elevation. The latter two were included as Plate XXX of *COA* I but the former was omitted. The original is not extant but a large-size glass lantern slide of all three does survive in the archive (no. 116). This version of the reconstructed plan is clearer and easier to consult than the small-scale version included in the Maru-Aten master plan reproduced as Plate XXIX of *COA* I.

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could have been roofed or open to the sky, and perhaps its north and south walls were pierced with doorways on the north-south axis created by the placing of MIIA in relation to the buildings on the island. This whole western part, however it was arranged in detail, thus had the form of a deep portico sheltering and enhancing the dignity of the solar court lying behind. Building MIIA was thus probably an independent temple to the Aten which faced westwards down the principal axis of the northern enclosure.

The discussion of the fragments of columns which has already taken place has much bearing also on the most important building on the island, MIID (the "kiosk"). Its setting, an almost square island measuring 17.40 x 15.40 m, surrounded by a shallow ditch 3.50 m wide and cut into the desert surface, remains unique in Amarna architecture. On its flat top were three patches of gypsum concrete foundation bed bearing the impressions of stone blocks which give the outlines of three buildings (MIIB-D). Woolley and Newton restored MIID as a little roofed building with four sandstone columns from which the reeded drums derived. Both on account of the likely places where the column pieces were found and the absence of square foundation masses on the gypsum concrete foundation layer we can dismiss this reconstruction as highly unlikely. The foundation plan can be resolved far more easily into a square open platform with ramp, similar in essence to others known at Amarna.³ The internal divisions have a parallel in the plan of the Great Altar at the Small Aten Temple. Both may imply a split-level platform, with a raised portion at the rear reached by its own flight of steps, the position of which could be regarded as represented on the foundation layer. Another and more likely interpretation, however, is that the central foundation supported a narrow free-standing object with an offering-slab or set of steps in front of it.

If we are looking for the remains of a narrow free-standing object the material recovered from the MII area contains more than one candidate: (a) fragments from an alabaster stela (or balustrade, Shaw 1994: 126), 11 cm thick, and worked on both sides (22/208 = COA I: 121, Pls. XXXIII.2; LVII.53-60; sent to the Toledo Museum of Art (USA)); (b) fragments from a pink granitic stela (or parapet/balustrade, Shaw 1994: 124) decorated on one face only, no thickness given, its side edges apparently sloping inwards as they rose (22/271 = *ibid.*: 121, Pls. XXXII.2; LVI; Cairo Museum JdE 47201); (c) fragments from another red granite stela (or parapet/screen wall), decorated on both faces, and only 6 cm thick (22/273 = *ibid.*: 121, Pls. XXXIV.1, 2; LVI; Shaw 1994: 122, Pl. X.1, sent to the Ashmolean Museum, as 1922.141, and Boston). Indeed, the platform could have accommodated more than one of them. If one expects a free-standing stela to be round-topped then (b) and (c) must be eliminated; in the case of (a), the alabaster stela, the available evidence suggests that no top portion was recovered at all and so it cannot be excluded on this point (Shaw 1994 identifies them all as balustrade or parapet fragments).

The approach to the platform was flanked by the foundations of two rectangular buildings, MIIB and MIIC. Their foundations describe a simple rectangle, 6.70 x 3.20 m. Much of the slightly raised gypsum foundation for the pavement in MIIC was preserved (apparent from Newton's section C-D), and the lack of marks on it implies that the interior contained no separate architectural features such as an altar. Woolley and Newton again provide an elaborate reconstruction which does not quite fit Newton's plan. "At each front corner was a pilaster, and two other pilasters framed the doorway: between the door and the corners the wall was shown (by the architect's laying-out lines) to be but a thin screen. The ground measurements of the pilasters agreed precisely with fragments found on the spot decorated with long-stalked lotus flowers" (COA I: 121). Newton's plan supports none of this. There are no special indications for pilasters nor is there an alteration in the thickness of the front walls to suggest screens. The only conclusion that one is justified in drawing is that here were two small open courts, presumably reached by doorways in the walls which faced towards the central axis of the whole group. A thickening on the inside of the east wall of MIIB might be taken as the foundation for a pier, but it is not matched elsewhere in this pair of buildings. A possible model for the reconstruction of these buildings is provided by a scene in the tomb of Huya at Amarna (RT III: Pl. XIV, see

³ As illustrated in the rock tombs as a component of Aten temples, and as found in excavation at the Small Aten Temple (AR V: Chapter 7); the Desert Altars (COA II: Chapter V); the altar court of the North Palace (Newton 1924: 295, Pls. XXVIII, XXIX.1); on a tiny scale in the grounds of the house of Hatjey (COA II: 64, Pls. XV, XXIII.3).

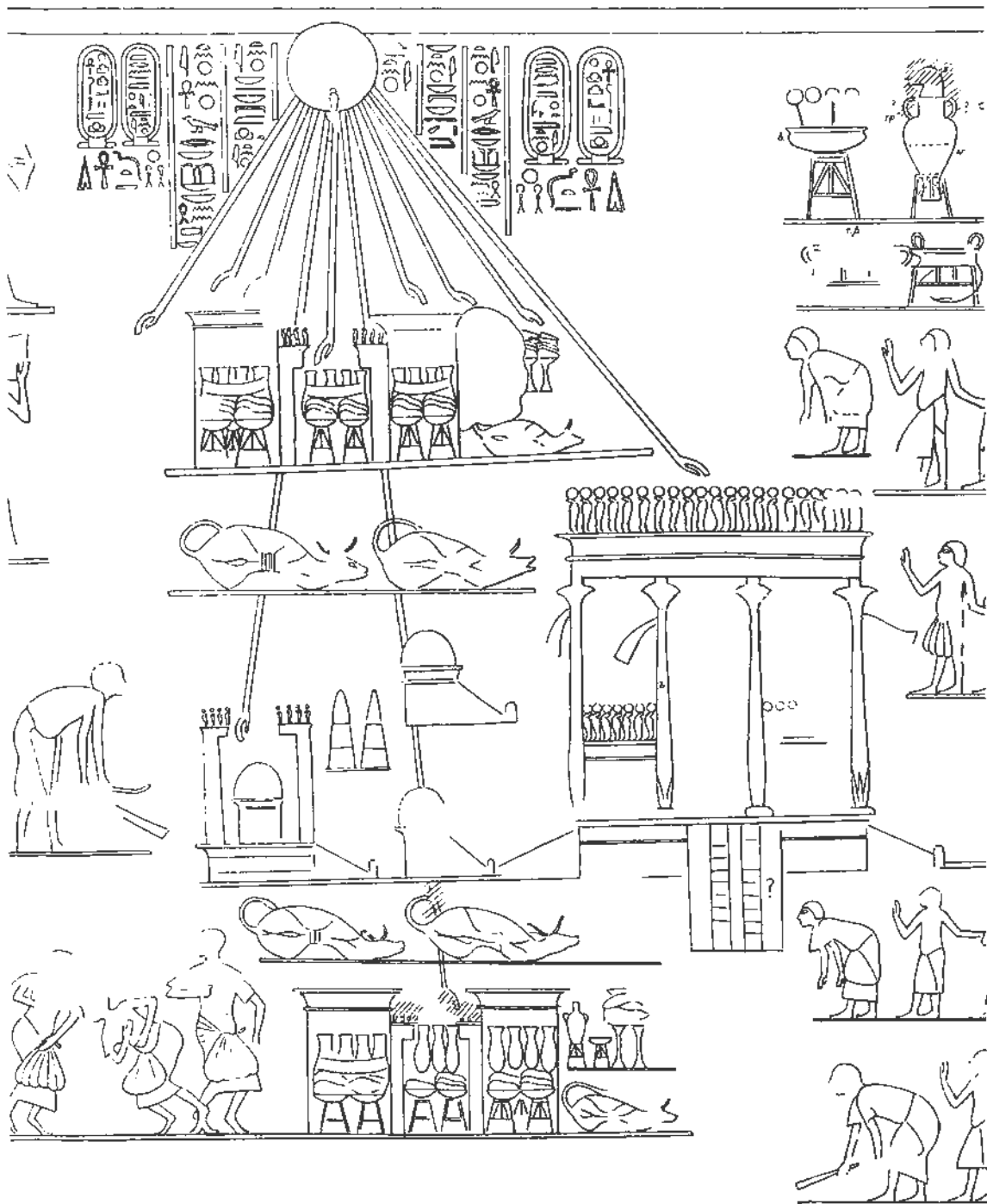


Figure 15.10. Part of the scene of the Reception of Foreign Tribute at Amama, in the tomb of Huya, showing the architecture of the ceremonial area. After *RT III*: Pl. XIV.

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Figure 15.10). The subject matter is the setting for the Reception of Foreign Tribute. The central canopied platform for the king is accompanied by a group of three solar platforms flanked by a pair of buildings which could easily be interpreted as rooms like MIIB and C. Each has a central doorway of broken-lintel form, and is shown as containing offerings resting not on solid altars but on portable wooden offering-stands.

Before considering the pilasters (and other stone elements) some remarks are called for on a curious feature of the island upon which Woolley remains silent. Newton's plan marks a line of rectangular blocks crossing the island from east to west which intersects buildings MIIB and C. His section C-D implies that they were about 25–30 cm thick, and he drew some of the narrow ends with a wavy line as if implying a jagged, broken surface. An important observation is that, whereas one of these blocks stands in the middle of MIIB where the original floor was not preserved, in MIIC, where most of the original floor was preserved, no block of this kind is present. This, together with the general way in which they stand in relation to the walls of MIIB and C, strongly suggests that they are the remains of a feature which stood on the island before MIIB and C were built. The blocks that were left would have been buried beneath the general ground level and thus invisible. Newton himself, in his restoration, took them as marking the edge to a slight terrace covering the northern part of the island, but this does not explain why it ran beneath the floor of MIIB nor why it was not continued around the other three sides. An alternative view is that, in an initial phase, MIID was the only stone building in the MII area, its axis to the south framed by a low east–west screen wall and then further to the south, beyond the island, marked by the avenue of trees. Subsequently the wall was demolished to make way for MIIB and C, and then or at some other moment MIIA was constructed across the line of trees.

It is actually possible to consider that an even more radical change in layout had occurred in this area, for Newton records on his plan remnants of what looks like a narrow brick enclosing wall to the island preserved in short lengths on the east, between the island and the main enclosure wall with buttresses. Were these fragments from an enclosure wall to the island built before the main enclosure wall, implying that the island and its platform MIID actually predated much of what we now call Maru-Aten? It might then, in its initial stage, have resembled the small stone shrine within a brick enclosure with buttressed wall which stood adjacent to the "Desert Altars" in the north of Amarna (see below, and Figure 15.28).

In some way either MIIB–C, or MIID, or all three, were decorated with limestone blocks framed with torus mouldings and carved to represent a reed thicket in which lotus plants grew. Four of these pieces were found (22/249A–C, 22/250 = negatives 22/77 and 22/105) but were not illustrated. They are the pilasters to which Woolley refers. The group of three was found in the canal on the west side of the island, whilst the remaining one was found in the canal on the north side (according to notes on the object cards). They can thus fairly be claimed to derive from the island buildings. In the *COA I* text (p. 121) Woolley illustrates two more "pilaster" fragments, one a "capital" or coping block (Fig. 21), the other a fragment from a block with reed design, vertical torus moulding, and the end of a cavetto cornice which had projected out part way down one side (Fig. 22). Not having examined these pieces, any interpretation of mine which differs from Woolley's and Newton's is bound to be somewhat tentative, but a simple way of assembling them is to make them all the inside face of the upper parts of broken-lintel doorways in MIIB and C, the blocks 22/249 and 22/250 coming between the lintel and the cornice.

To sum up the discussion of MII: firstly, the central structure on the island is likely to have been an open platform of a well-known type used for solar worship; secondly, it may well belong to an initial layout to which the other buildings were added later.

The Northern Enclosure contained several other buildings, all of mud brick. In the north-east corner lay the long sheltered space floored with gypsum (building MI) which had been painted with marsh designs and into which a row of T-shaped basins had been set. (A re-examination of this, by F. Weatherhead, is in progress.) Opposite, on the south side, Building MIII was so ruined that, lacking a close parallel, no real basis for interpretation is possible. Along the west side, a walled-off enclosure sheltered a group of "houses" (MVI) which have a close parallel in the south-east houses at Kom el-Nana (see section 15.5). A further and seemingly isolated house lay beside the causeway (MV) within the garden. The remaining building (MIV) was better preserved than most at Maru-Aten, and was one of the few to be photographed (*COA I*: Pl. XXXI.1). It contained a small throne room, an interior garden, stairs to an upper storey or to the roof, and

store rooms. When Maru-Aten was abandoned, two of the latter were left filled with provisions which, to judge from the hieratic labels, were stored in wine amphorae and meat jars (although no details of this important deposit other than the labels are recorded). The building looks like a rest house stocked in readiness for a feast, but, whether it was part of the original layout and therefore an element in the basic functional and aesthetic scheme, or was erected as an addition for a specific occasion late in the Amarna Period, we have no means now of finding out.

The Northern Enclosure is a fine example of a garden shrine, an ideal type of religious architecture in the New Kingdom (see below, section 15.10). When rendered in the art of the Amarna Period, the idealized portrayals of nature, of which this garden is presumably a realization, contain animals, including young cattle. In the group of houses MVI, in two of the narrow spaces separating individual houses, the complete skeletons of two cattle were found, lying not in pits but apparently on the ancient ground, where they had subsequently been covered by debris (*COA* I: 114, and EES photographs 22/83, 22/84; their positions are schematically marked on the plan, Pl. XXIX). One can only speculate, but perhaps they had been kept at Maru-Aten to populate the garden; no building was identified which resembles the kind of byre in which cattle were normally fattened before slaughter. Nearby, the skeletons of nine dogs were found, but in this case the photograph (22/85) shows that they had been laid in a pit.

The Southern Enclosure.

Much of the Southern Enclosure conforms to the same basic model as the Northern Enclosure. A depression (not tested by excavation) must denote a pool (or, more likely, a well), and one tiny area of the open ground within the enclosure which was tested revealed a few tree pits. On the central axis, towards the back, stood the focal element, MVII, this time built of brick. It seems to consist of two parts: an eastern enclosure (open or roofed?) containing a throne dais, and a western projection into the garden that could well be the foundation for a viewing platform reached by a narrow stairway on the south (preserved only as a thickening of the brickwork at this point). The design of the building, as well as the absence of stonework, implies that it was for ceremony rather than for cult, perhaps designed for the use of a member or members of the royal family, as distinct from being a shrine patronized by royalty. There could be a parallel here with the Central Platform at Kom el-Nana (see below), where I have suggested that perhaps a Window of Appearance was located. Thus the two enclosures of Maru-Aten could have served different needs, though following a similar overall model layout.

A reading of the plan of the Southern Enclosure is greatly complicated by the presence of a large stone building, MVIII, which stood at the western end of the Southern Enclosure, its side running along the line where the enclosure wall would be expected. We are, unfortunately, much more poorly informed about it than is the case with the MII group. The principal reason for this is that Newton did not make a plan of the actual remains, probably being too busy with his work at MI and MII.⁴ The drawing that appears as part of the general Maru-Aten plan (*COA* I: Pl. XXIX) is a restoration of walls and column positions. All that actually survived were "the marks left by the masonry blocks on the bed of cement which served as a foundation" (*ibid.*: 112). In view of the scope for re-interpretation provided by the MII buildings, which applies to the distribution of columns and of internal walls, the Newton-Woolley plan of MVIII should best be discarded. What information do we have left? The aerial photographs show that most of the area was a shallow pit in the desert which had been covered by a foundation layer of gypsum concrete, as was usual with Amarna stone buildings. The one part which did not conform to this pattern was a rectangular area in the centre of the main part which seems to have a very dark colour, as if made of alluvial soil. It was left open on Newton's plan, and Woolley described it as "a small central room with no columns, at the back of which there seems to have been a throne or altar" (*ibid.*: 113). Was it perhaps a garden, or could it have been an area of mud-brick paving? For the rest, we simply cannot take on trust the positions of walls and columns in the reconstruction, and since no photographs were taken and no original notes or sketches survive, we must reduce our picture of MVIII to the merest outline of a large stone building which employed columns somewhere, either in colonnade form or within halls, and had a significant interruption to

⁴ A diary entry for January 5th, 1922 suggests that Woolley himself may have made the plan of this part, which he calls the "entrance-hall".

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the stonework within its centre. The asymmetric placing of this building, and the failure by Woolley to find any brickwork at all from the western boundary wall, raise, as so often, the question of contemporaneity of features. Was MVIII an addition, made at a time when the rear part of the Southern Enclosure was no longer of importance, which involved the demolition of the west wall and its replacement by another brick wall even further to the west (and which was not found by the excavators)?

It is much to be regretted that Maru-Aten no longer exists as an archaeological site, for the brief period of time that Woolley spent clearing it and the dearth of recorded information, both published and unpublished, would otherwise have exposed it to re-examination in the expectation of finding significant new evidence as to the internal layout and relative chronology. The intellectual structures which are projected on to the ground in layouts of this kind are particularly resistant to recovery at the best of times from the kind of evidence that archaeology provides, and when there is considerable uncertainty as to whether one is looking at a single coherent scheme, or to a scheme which was modified over a period of time, the task of proper understanding is made almost impossible.

We do, of course, know the name of part or all of this complex, Maru-Aten, and this ought to be of great assistance in understanding what its purpose was. A consideration of this is given below (section 15.10).

15.4 Maru-Aten – the linear mounds

Beginning some 70 m south of Maru-Aten and 50 m in front of the line of its west wall, there originally stood a conspicuous line of four narrow artificial mounds which ran across the remainder of the flat ground and on to the beginning of the low spur which bears the modern cemetery. They were remarked on by Timme (1917: 24) and by Woolley (*COA* I: 110, 114). The latter related them to the artificial shallow lakes of Maru-Aten: "It is from this lake, and from the smaller one in the south enclosure, that all the material came which forms the line of great spoil-heaps standing up south-west of the site", a view endorsed by Pendlebury in a diary entry for November 19th, 1931 (EES archive A1.1): "The big mounds to the S.W. [of Maru-Aten] seem to be mainly from the excavation of the lake as Woolley said." They show up vividly on the 1923 aerial photographs. In modern times the two northern ones have been entirely removed; the tiny southernmost is protected by having modern tombs dug into it, whilst the second from the south is currently in the process of being dug out by villagers.

To judge from the 1923 aerial photographs and from what can be observed today the mounds ran for a total distance of about 300 m. Of the two remaining mounds (Figures 15.11, 15.12) the northern one has a length of about 95 m (and has lost perhaps another 10), a width of 20 m and a height of 4 m; the diminutive southern one measures about 45 x 15 x 2.5 m. Woolley's explanation is certainly a tempting one, although it fails to explain what effect was intended by dumping the earth in this fashion and at such a distance from its point of origin (the southernmost mound is 450 m from the nearer of the two pools). A superficial examination of the materials of which the larger of the two remaining mounds is composed, on the other hand, suggests a different origin altogether. The materials are lumps of greenish-grey marl and many rounded stones, mixed with not a few Eighteenth Dynasty potsherds. However, if one walks over to the site of Maru-Aten itself one can see that in places where modern ditches cut the ground the local soil appears to be a buff-coloured sandy silt, a basic wadi deposit, containing fewer stones. The material is not the same as that in the mound. It is, therefore, more likely that the spoil heaps contain material dug from the base of the marl spur, thus from an area directly to the west now under cultivation. Thus the mounds may not have any connection with Maru-Aten.

There is an obvious similarity with the mounds of the Birket Habu beside Malkata at Western Thebes, though there the scale is much grander (Kemp and O'Connor 1974; Babled 1993-4: Pls. XXVII-XXIX, with reversed aerial photographs). The 1923 Amarna aerial photographs show no signs of a regular edge to the desert, so that if a basin or broad canal had existed to the west of them it must have lain at least 100 m away. If it did, then the Lepsius building (whatever that was) would have lain in close proximity to it.

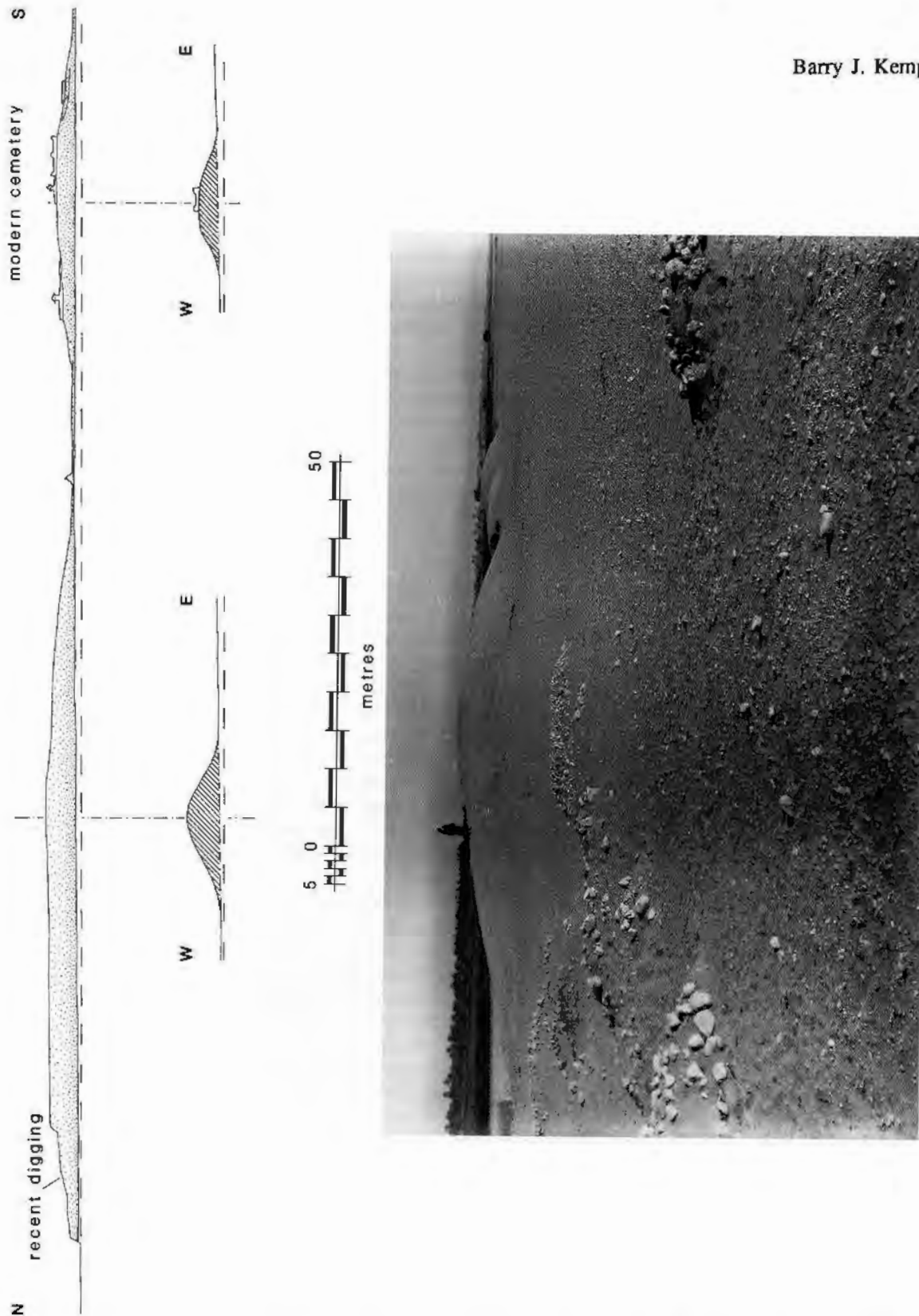


Figure 15.11 (above). Elevation of the two surviving linear mounds south of Maru-Aten and north of el-Hawata, drawn 1.2.77. **Figure 15.12** (below). Photograph taken looking towards the north in 1922 of the linear mounds (EES archive photograph 22/82). The stone-covered mounds in the foreground are modern Muslim graves.

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15.5 Kom el-Nana: discovery and general character

On the map of Amarna made by Petrie (1894: Pl. XXXV, cf. p. 2) and on that published in *COA II*: Pl. I, is a site identified as a "Roman camp" lying to the south-east of the modern village of el-Amariya. By the 1970s it had picked up the name Kom el-Nana which is now its official designation. It is conspicuous primarily on account of a group of steep mounds of roughly square plan (cf. Figure 15.13) which attracted the attention of Lepsius, who identified them as ruined pyramids (*Denk. Text II*: 125, 126). Another suggestion, offered hesitatingly by Timme (1917: 24, cf. Blatt 6), was that the site was of Old Kingdom date since it lay across the line of the Hatnub road. Pendlebury paid it a brief visit on November 19th, 1931 and wrote in his diary (EES archive A1.1): "Went on to 'Roman camp' a magnificent Roman site with an Egyptian (XVIIIth) to the South." With these few words Pendlebury made himself the first person (as far as available records tell) to detect the two-period character of Kom el-Nana. We should probably identify the Eighteenth Dynasty material which he saw on the south side as the little outlier outside the southern enclosure wall towards the east end, modern digging having brought many sherds to the surface. By contrast, the southern part of the Kom el-Nana enclosure itself, although of Eighteenth Dynasty date, was, prior to our own excavations, singularly devoid of datable evidence.



Figure 15.13. The north-western mound of the Byzantine level at Kom el-Nana, viewed to the east.

In the early 1960s a grand scheme was initiated for extending cultivation over a tract of flat desert between the villages of el-Amariya and el-Hawata. Arising from this the Egyptian Antiquities Organization, represented by the Inspector of Antiquities Mr Osiris Gabriel, carried out a test excavation on Kom el-Nana (cf. Leclant 1965: 184, §15) which took the form of a series of pits and narrow trenches across a strip of ground about 30 m wide which ran between a point on the line of the western enclosure wall and another on the south side of the dense remains in the middle of the site (marked on the sketch map in Kemp 1978: 30, Fig. 5, and cf. p. 27). At the latter point, the site of what we can now recognize as the South Shrine, the excavation was considerably broadened and a large part of the stone chippings was removed and dumped immediately to the south, so revealing a portion of the gypsum foundation layer of the

temple and producing a quantity of stone fragments decorated in the Amama art style.⁵ As a result of this excavation, Kom el-Nana itself and a broad tract of desert to the east and to the west were protected by drainage canals on the four sides.

The Amama Survey of 1977 included Kom el-Nana within its scope and produced a brief set of notes, a sketch plan, and some profiles (Kemp 1978: 26–33). These established that Kom el-Nana was a major Amama-Period royal building and discerned its dual character: a southern part given over to religious use and possessing stone buildings, and a northern part of domestic character (although excavation has now modified this view). The depth of the late Roman remains was, however, somewhat underestimated, something corrected on subsequent visits.

The current excavations were undertaken in 1988 as a response to a threat to the site's very existence posed by local farmers intent upon enlarging to the utmost the area of land under cultivation. Kom el-Nana had been protected from the irrigation scheme of 1963 by canals dug around the four sides which left a large margin of empty desert to the east and west of the visible line of the ancient enclosure wall. In the Spring of 1987 the eastern portion was ploughed to the very edge of the enclosure wall, and has since merged in with the adjacent farmland. Although a trial plough furrow had been cut across the north-east part of the site (over the bakery/brewery area) by the beginning of the 1988 season, the commencement of excavation appears to have been successful in preventing any actual loss of the archaeological site proper. However, this cannot be claimed to have saved it. The gradual saturation of the ground with moisture spreading from the fields, which is bringing vegetation in its wake, and the constant passage of agricultural traffic are producing a steady deterioration and mean that much of the site is probably doomed in the longer term. The site has also been open to digging for antiquities and for *sebakh*, especially around the site of the North and South Shrines, where fragments of decorated stone can readily be discovered. Following our own excavation here in 1989 this central part of the site was surrounded with a barbed-wire fence, extended during the 1993 season to enclose the late Roman site as well.

The reputation that the site has had as a "Roman camp" is explained by an area of later occupation on which excavation was begun in 1993. It covered an area some 100 m square, in the middle of the northern part of the Amama-Period enclosure, running between the northern enclosure wall (which it straddles) to a line which is more or less the centre-line of the whole site. The excavations so far carried out have revealed a heterogeneous collection of mud-brick buildings belonging to a settlement (Kemp 1993, 1995). They had been constructed over the remains of a large brick building of the Amama Period, sometimes re-using the walls. Rubbish, including large quantities of broken pottery, was dumped on the south side of the settlement and probably to the west, to judge from the present spread of sherds in this direction. Two seasons of excavation (1993, 1994) have now been devoted largely to this part. A few Coptic texts point to the community having been a small Coptic monastery, to be dated, according to the pottery and coins, to between around 500–625 AD.

The overall character of the Amama-Period enclosure has now become reasonably clear. The line of the enclosure wall can be traced on the ground for much of its length in the form of an intermittent low narrow mound (Figure 15.14). Much of the eastern side has been excavated by the expedition, together with short stretches towards the eastern ends of the north and south walls. Modern use of a track which cuts across the south-west corner has also exposed the tops of three of the buttresses along the southern stretch. The wall, built throughout of sun-dried mud bricks, was 70–72 cm thick. Along a stretch of the southern wall the conditions were such as to preserve some of the original rendering of the exterior, showing that it had been covered with a thick layer of mud plaster but with no signs of white surfacing. The preservation was due to a thick bed of gravel spread in ancient times over the ground to the south which had buried the lower part of the wall, possibly in an attempt to prevent water damage from the adjacent wadi, but perhaps more likely in order to counterbalance the thick deposits of sand and gravel laid down against the inside as part of a deliberate raising of the interior floor level. The wall was provided with large buttresses, 1.20 m square, spaced at approximately 7.5 m intervals. One of the corners (the north-

⁵ I am grateful to Dr Ali el-Khouly for showing me Mr Osiris Gabriel's report which is now in the EAO archives at Abbasiya. The fragments of stone were for about twenty years stored in Tomb 14 at Amama but are now in the "Small Magazine" at el-Ashmunein.

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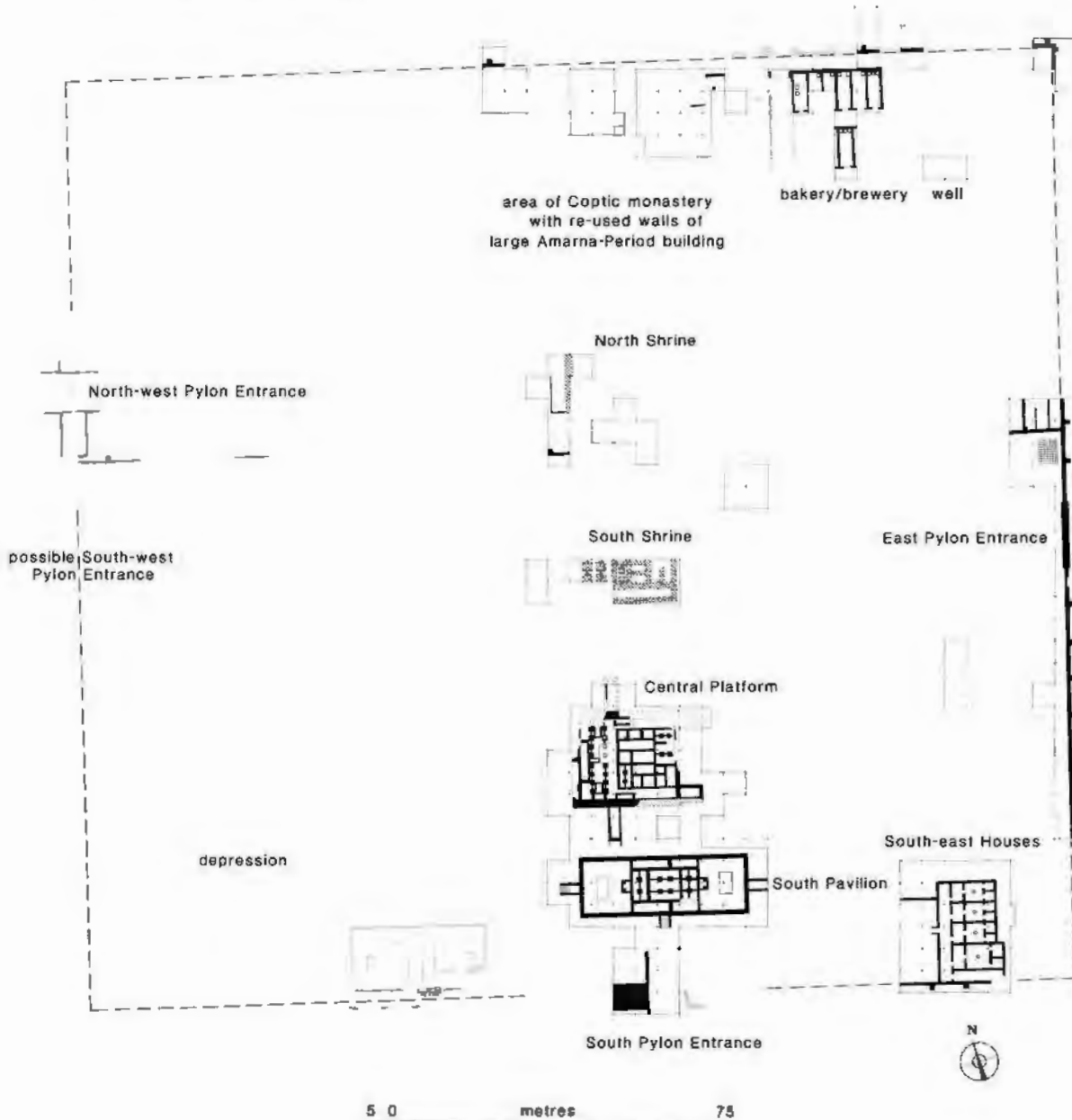


Figure 15.14. Summary plan of Amarna-Period features so far revealed at Kom el-Nana.

east) has been exposed, showing that the last buttresses stopped slightly short of the corner itself, which was not protected by a corner tower. Its outside aspect was thus exactly like that of Maru-Aten.

On the eastern side the wall had been interrupted by a long narrow brick pylon, set on the central axis of the whole enclosure. Having been denuded to its foundation level — below the level of the threshold of the central door — it is a single continuous length of brickwork, 14.85 m in extent and 1.60 m wide. We should doubtless resolve this into the base for a pair of pylon towers with central gateway, each pylon being about 6–6.5 m long. The gateway contained no sign of gypsum concrete and so had therefore lacked the kind of heavy stonework which some Amarna pylons possessed. A much more substantial pair of pylons, six metres thick and flanking

a broad stone-paved entrance, interrupted the south enclosure wall. Part of the western tower was discovered in the 1990 season, and recent digging for earth by local farmers into the side of a mound immediately to the east has revealed that its core is composed of brickwork from the eastern tower. A third major entrance with stonework can be deduced from surface traces in the west wall opposite the narrow brick pylon in the east wall. The sondages carried out in 1963 by the EAO also revealed what was probably a pylon entrance in the west wall, but in the northern part of the enclosure. As far as one can tell now these pylons were also broad, with a width of about six metres.

The enclosure was subdivided into two parts by a stout internal wall running east-west. Its eastern end, where it joined the main eastern enclosure wall, was exposed by excavation in 1988 (square AU36). This showed that it had been butted against, and thus added to, the eastern enclosure wall, which, as far as our knowledge extends, was built in a single length. This internal wall was also provided with buttresses, on its north face, of the same dimensions as those on the outer wall. A short length of the continuation of this wall was found crossing the trench dug in 1989 to explore the foundations of the North Shrine, in square X38, whilst a more substantial length exposed in 1963 can be seen emerging from beneath the cover of Byzantine material further to the west and running to join the western enclosure wall. Kom el-Nana thus contained two enclosures, the northern measuring about 88 x 220 m, and the southern 122 x 220 m.

The southern enclosure is free of the Byzantine layer and its basic character is thus evident from the combination of excavated results and surface topography and characteristics. In places, the ground level had been artificially raised with a layer of desert sand, gravel, and stones (and builders' rubble at the south end). Much of the space seems to have been devoid of buildings altogether, and was probably floored with a thick mud surface. This has been located beside the building in the south-east corner, around the Central Platform and South Pavilion, and to the west of the South and North Shrines. Around these buildings no trace has been found of trees or of other ancient vegetation, and one is therefore led to think that the buildings here were surrounded by a floored open space. This was not wholly so, however, for at least parts of the open space which lay to the east of, i.e. behind, the Central Platform. The denuded remains of tree pits, spaced at around 3 m intervals, were found in a test excavation of an area measuring 5 x 15 m running north-south (squares AP24-26). Other tree pits were located in the ground immediately inside the line of the enclosure wall itself. Related to this grove or orchard was a garden of small square plots of soil crossed by a narrow path running north-south and situated in the shelter of the corner formed by the eastern enclosure wall and the internal dividing wall.

A large mud-brick platform (which we have called the "Central Platform") occupied the focal point of this great open space though lying slightly back from the north-south axis. It had measured 24.50 x 21.75 m, and had been 1.5 m high, reached by long ramps on the south and north, and probably by a pair of shorter ones on the east. The platform had supported a walled building which had contained a set of rooms and a narrow columned hall. Within the hall, and arranged along three walls, were the bases of three probable daises reached by stairways (Kemp 1991). The whole bears a strong resemblance to artistic portrayals of New Kingdom buildings which contained a Window of Appearance. I have tentatively suggested above, in the discussion of Maru-Aten, that a parallel can be found in the building MVII in the southern enclosure there. Close by to the south lay the South Pavilion, a long and narrow processional building with three well-preserved entrances reached by external staircases, the foundations of columned rooms, and two open courts centred on sunken gardens. Its principal entrance lay exactly opposite the South Pylon, and it provided exits to the great court on the west, and to a group of houses, not yet fully excavated, on the east.

Further buildings lay along the inside of the southern enclosure wall towards the south-east corner of the enclosure. One of them, that closest to the south-east corner, has been completely excavated. It consisted of a carefully laid-out group of four similar suites of rooms with thick, well constructed walls, brick floors, limestone column bases, and broad limestone thresholds. They have the appearance of a row of similarly designed "houses" (with narrow front hall, columned main room, and two adjacent chambers at the rear) opening from a common corridor, which itself opens westwards to an open, mud-floored area. They resemble the group MVI at Maru-Aten (see above). It is unlikely, however, that they served as permanent or long-term residences, for they conspicuously lack domestic fittings and seem to have stood in clean, well-

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swept surroundings. Within the most southerly, of somewhat larger size, evidence was uncovered suggesting that it had been used as a workshop for making painted and gilded wooden objects, but whether this was its original purpose or one allocated for a special reason at the end of the building's history we cannot judge. This whole block of buildings was an addition to the original construction, built on a low platform covering the mud floor which extended across much of the southern enclosure. Adjacent to these houses on the west lies a still unexcavated mound. Surface indications suggest that it covers the remains of a single large Amarna-style house.

The principal building of the southern enclosure was the South Shrine. It lay on the same latitude as the Central Platform, in the space between it and the wall dividing Kom el-Nana into two parts. Although demolished subsequent to the Amarna Period and as yet only partially excavated we can form some idea of the building's appearance from the outlines of stone blocks left on the gypsum-concrete foundation layer and from the thousands of broken fragments left behind in the debris. It must have measured around 27 m east-west, and it probably faced towards the west. Indeed, its principal axis probably coincides with the eastern and western pylon entrances of the south enclosure. The front half consisted of a deep colonnade or columned hall, employing two (or more) rows of massive limestone columns of the open papyrus-bundle type. The rear part was subdivided by walls into a series of small chambers, but whether they were open or roofed cannot as yet be ascertained. The predominant building material was limestone, although sandstone, perhaps for a portal and architraves, was used at the front. The whole was carved and brightly painted, displaying the work of craftsmen of varied standards of skill.

Other features of this part of Kom el-Nana are an enclosure built along the inside of the southern enclosure wall and visible from surface traces, and a depression situated in the south-west corner of the main enclosure. The nature of this has not yet been properly determined, although a resistivity survey over it has suggested that there is no deep underlying disturbance such as would be caused by the presence of a well.

The general character of the northern enclosure is more difficult to appreciate because a large part of the centre is occupied by the Byzantine settlement. Its site had been chosen to take advantage of the elevated ground formed from the decay of a substantial brick building of the Amarna Period. In 1993 the tops of several of its walls were uncovered. This evidence is not sufficient to identify the nature of the building but, from its size, it was evidently one of the principal structures at Kom el-Nana. A second stone shrine (the North Shrine), on an east-west alignment, lay towards the southern side of the enclosure roughly opposite the South Shrine. It is tempting to conclude that the other pylon entrance in the western enclosure wall was on its axis. Part of the front edge to this shrine was exposed in 1989, but not enough to suggest the original dimensions. A feature so far unique to Amarna temples is a long narrow garden edged with brick which ran along the front.

The north-eastern part of the enclosure was the object of excavation in 1988, 1989, and 1994, revealing a markedly different character to the rest of Kom el-Nana in that much was occupied by non-religious structures. A combined bakery/brewery block ran along the north side, parallel to but separated from the northern enclosure wall. It consisted of at least two rows of long rectangular chambers (8 x 3 m) with brick floors and stone-lined doorways, regularly provided with ovens and kilns at the rear, and with fire-pits in the floor. Both here and in the similar buildings known from the Central City at Amarna pottery bread-moulds feature prominently, implying that these buildings functioned in part as bakeries (original identification in Kemp 1979: 7-12; further reporting by Rose and Nicholson in *AR IV*: Chapter 9). But in contrast to the Central City bakeries (as determined by the expedition's pottery survey) bread-moulds form only part of a more varied repertoire. Baking bread may have been, therefore, only one of their functions; they may have been used by teams of people engaged in producing a range of commodities. Debris from these activities occurred plentifully within the chambers, and a rubbish heap from the same source lay outside the enclosure wall to the north. The bakery block is a feature of singular significance. Only two others — conspicuous archaeologically on account of their deposits of distinctive pottery bread-moulds — are known: beside the Great Aten Temple, and beside the Small Aten Temple (the *Hwt-Itn*), the principal Aten temples in the Central City. The significance of this should not be underestimated; for it elevates Kom el-Nana to the same plane of religious-institutional provision as the main temples at Amarna.

A well had lain just to the south-east of the bakery/brewery block and this had later filled up to leave just a shallow circular depression on the desert surface. Much of the remaining eastern part of the northern enclosure may, however, have been built up, for, between the well and the angle formed by the subdividing wall and the eastern enclosure wall, the foundations of the corner of a building were found which had been destroyed probably during the Amarna Period.

15.6 El-Mangara

This site lies well out in the desert in the south-eastern part of the Amarna plain. It was brought to light by a flash flood from a torrential rainstorm in the desert hinterland which uncovered some stone blocks. An excavation was undertaken by Egyptian Antiquities Organization inspector Osiris Gabriel in 1963, at the time that the irrigation project was being laid out. The catalogue of recovered stonework (kindly shown to me by Mr Samir Amis, Director of the southern sector of the Minia Inspectorate) runs to 81 entries, some of them covering groups of fragments.⁶ What distinguishes the material as a whole is that something like half of the pieces are complete or nearly complete blocks, whereas the stonework generally recovered from Amarna sites consists largely of very broken pieces. (The collection formed by Mr Osiris Gabriel from his excavations in the same year at Kom el-Nana are like this, for example.) Fragments of Amarna stonework often have a fresh and unweathered appearance when found, sometimes with paint still adhering, from having been buried in thick deposits of broken gypsum concrete which have protected them (the stonework recovered by the expedition at the Small Aten Temple and Kom el-Nana is in this condition). The el-Mangara blocks, by contrast, generally bear a tawny weathering patina on all faces, little colour is preserved, and some still have patches of orange sand and gravel adhering to them. This is consistent with the account that the blocks were found tumbled in the desert, and agrees with the absence of traces of broken gypsum-concrete foundations at the site of the excavations themselves. On the other hand, two pieces (nos. 57/8 and 59) have had a piece of the face removed with a saw, a feature of a few pieces found both by Mr Osiris Gabriel and ourselves at Kom el-Nana, indicating that at least a few blocks had been previously visible at the surface.

With the exception of three fragments of inscribed purple quartzite (nos. 56, 66, 71), all of the pieces are of limestone. The majority are wall blocks (some with cylindrical corner mouldings) bearing carved scenes which included a very deeply cut and roughly life-sized image of the royal family. Some pieces derive from a frieze of cobras with sun-discs, and a single fragment (no. 31) is part of a deeply fluted papyrus-bundle column. The few examples of Aten cartouches show the earlier form of the name; one block (no. 29) mentions *ʿt3 šwt...*, probably "the Sunshade (of Ra)", the significance of which will be discussed in the final section of this chapter.

The site of the discovery was visited by Kemp during the 1977 survey season, when a basic record was made of what was there (cf. Kemp 1978: 34); and again in March 1989 and March 1991. In 1977 it could still be seen that the natural ground was a wadi floor of sand and gravel bearing the marks of old watercourses and supporting tufts of coarse grass of the kind that grows on wadi floors (Figure 15.15). By the time of the 1989 visit the area was still uncultivated desert, but had been recently trenched by closely set ditches preparatory to cultivation (Figure 15.16). Ground water could be reached within less than 50 cm of the base of these shallow ditches. Over a distance of c. 50-70 m a few pieces from large stone blocks lay scattered on the surface, all of limestone except for one eroded sandstone piece. Recognizable were the following:

- (1) two blocks with cavetto cornice from the top of a doorway, one of them evidently from a corner since the moulding runs around two adjacent sides (Figure 15.17);
- (2) a column base (Figure 15.18), carved from nummulitic limestone. In the upper surface is a shallow groove. The finished column base stands on a roughly chiselled circular podium which is part of the same block of stone. This feature and the small size of the base (the top surface has a diameter of 57 cm) suggest strongly that it was originally embedded in a mud brick floor, presumably supporting a wooden column. Traces of mud plaster actually adhere to the roughened edge. Column bases with this kind of rough lower part still stand in the north-east court of the

⁶ I am also grateful to Dr Ali el-Khouly for showing me Mr Osiris Gabriel's report. The stonework was for about twenty years stored in Tomb 14 but is now in the "Small Magazine" at el-Ashmunein.

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Figure 15.15. The site of el-Mangara, viewed to the north-west in 1977. The tufts of grass in the middle distance are growing on a wadi floor.



Figure 15.16. The site of el-Mangara, viewed to the west in 1989. The rectangular block of limestone in the foreground was decorated with the scene illustrated in Figure 15.20.



Figure 15.17. El-Mangara: in the foreground are two limestone cavetto cornice blocks, the nearer one from a corner.

North Palace and were set into shallow circular depressions in a brick floor;

(3) a fragment from a limestone architectural moulding or perhaps even from a statue (Figure 15.19);

(4) a cut stone block bearing part of an architectural scene (Figure 15.20). In the top left corner is evidently the end of a cornice, whilst the two vertical elements on the right defined by widely set parallel lines could be column shafts;

(5) a fragment of a block with remains of a scene of uncertain character (Figure 15.21), the cutting of the two apparent grooves being much sharper on one side than the other and thus making it unlikely that they represent Aten rays;

(6) a fragment of black granite (noted in 1977);

(7) part of a possible limestone threshold.

Four small fragments of gypsum concrete were also noted (more were visible in 1977, Figure 15.22), and in 1977 a few eroded mud-brick fragments were also present (no modern building yet stood in the vicinity at this time).

A few surface sherds were collected at the site. Although most were badly weathered and their surfaces eroded, there can be no doubt that all were of late Eighteenth Dynasty date, and

Outlying temples at Amarna

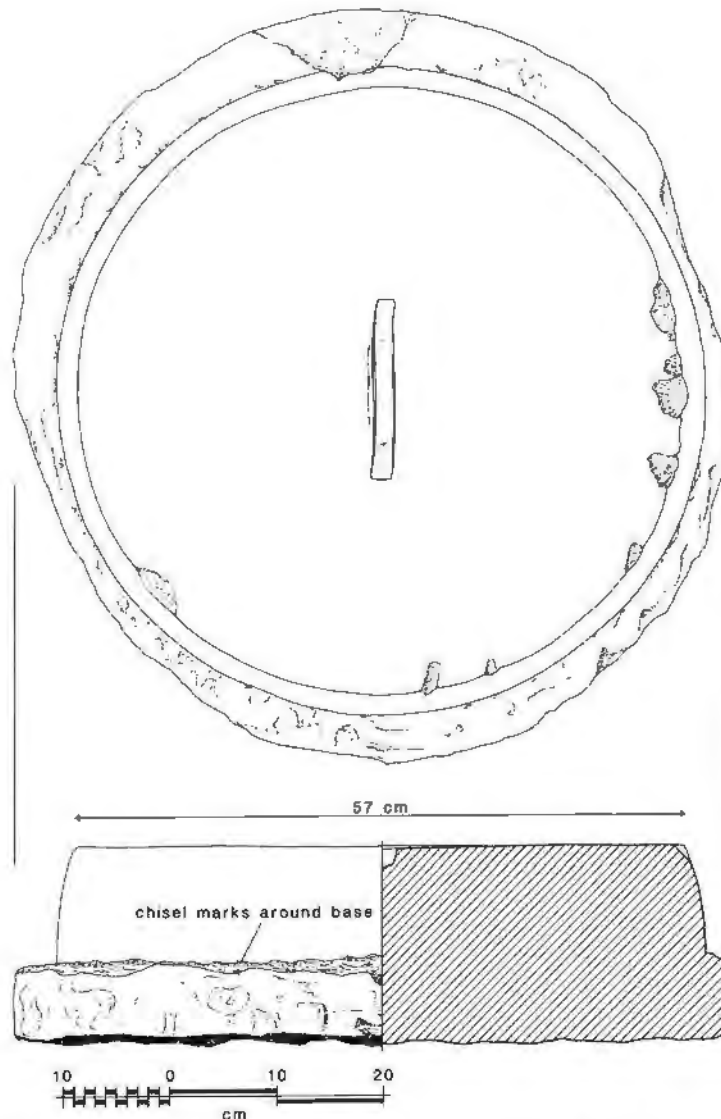


Figure 15.18. Column base of nummulitic limestone from el-Mangara. The diameter of the top surface is 57 cm.

comparable with types found elsewhere at Amarna. The following notes have been supplied by Pamela Rose, with references to vessel groups as defined in *AR I*: 133–40, and to fabrics as defined in *AR II*: 133–40.

Almost all the sherds were of unslipped siltware (fabrics I.1 and I.4), and most were from closed forms; the diagnostic pieces and some of the larger body sherds suggest that many came from unslipped “beer-jars” (Figure 15.23.D–F; Group 18). Three of the closed-form sherds were red slipped, one also having a line of string impressions around it, but there is no indication as to the form of the vessel(s) from which they came. There was one tiny fragment of blue-painted pottery from a closed form. Sherds from open forms were uncommon, consisting of rim sherds of a large “hearth” howl (Figure 15.23.B; Group 11) and a bowl with out-turned rim (Figure 15.23.C; Group 6); a third undiagnostic sherd was slightly discoloured on the interior and may have held burning material. All the open-form sherds were unslipped.

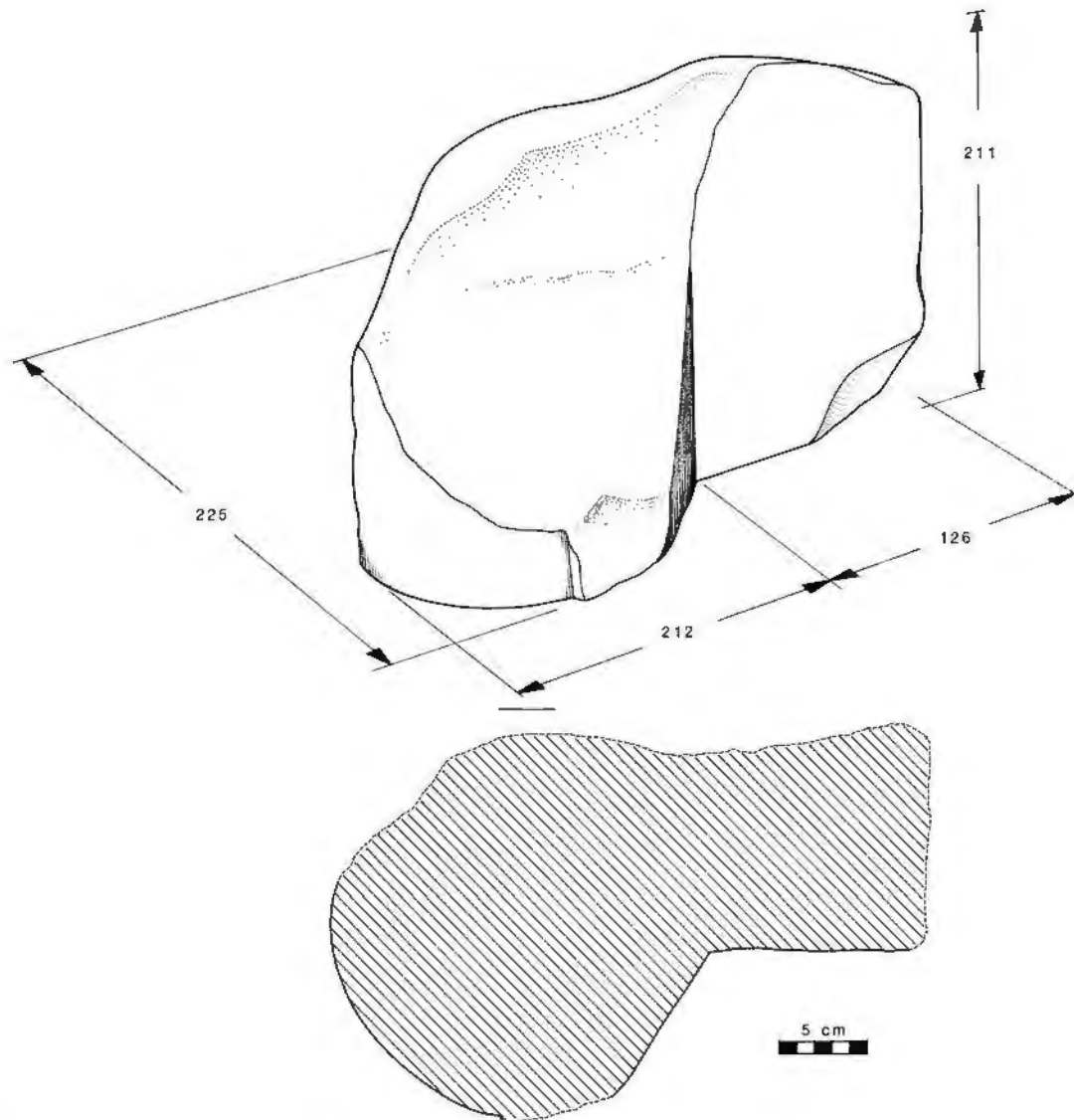


Figure 15.19. Limestone moulding from el-Mangara. Drawing by A. Boyce.

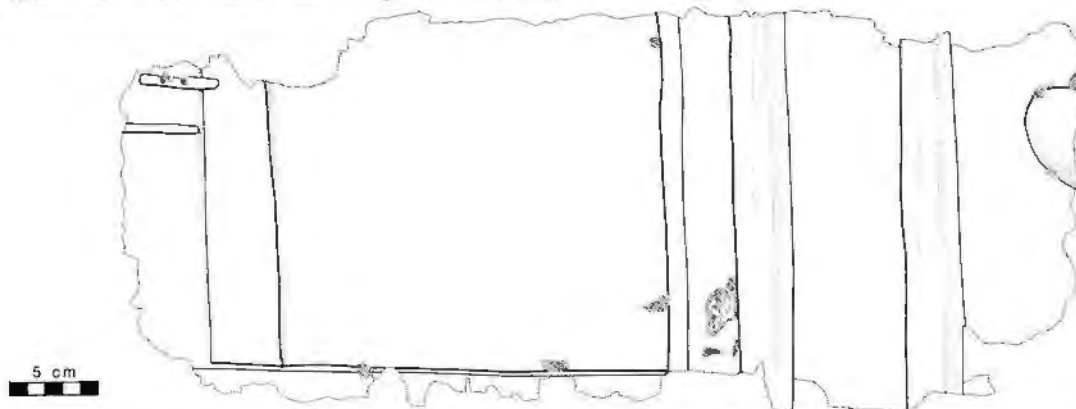


Figure 15.20. Relief scene, at quarter-size, from a limestone block from el-Mangara, visible in the foreground in Figure 15.16. The full block size is 53.9 x 22.5 x 22.4 cm. No colour preserved. Drawing by A. Boyce.

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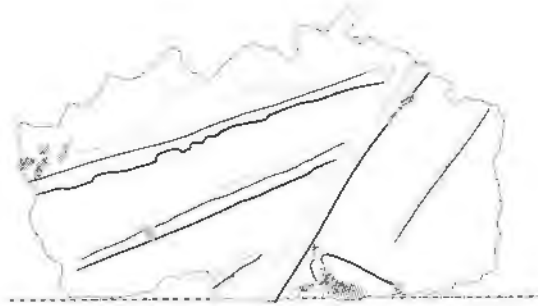


Figure 15.21. Fragment of a relief scene from a limestone block from el-Mangara, at half-size. The broken line represents an edge to the block. No colour preserved. Drawing by A. Boyce.

Of the three non-siltware sherds, one was a large marl clay “meat-jar” rim (Figure 15.23.A; Group 13; fabric III.6, with a cream-slipped exterior), and the others both fragments of Canaanite jars (Group 20; fabric III.11), one part of a handle and the other a body sherd.

By March 1991 the site was under cultivation. This, and the high water table, would seem to exclude the possibility of useful future fieldwork.

The fact that the blocks found in 1963 had hitherto been mostly invisible and lay beneath the general level of the surrounding ground does not accord with the normal condition of a site of a stone building at Amarna, where the ancient ground level is usually close to the present desert surface and there are abundant tell-tale traces in the form of heaps of broken gypsum concrete and stone fragments. One possibility which has to be considered is that the blocks are a secondary deposit, perhaps collected at this remote spot for reworking (the modern Arabic name means “factory, quarry”), though this does not really explain the depth. A strong argument against this and in favour of debris from an *in situ* site is the variety of material, which includes gypsum concrete and mud brick fragments, and pottery. This is more consistent with the original existence at el-Mangara of an Amarna-Period site.

An important question to ask is whether the site can be identified in any of the earlier records. The position of el-Mangara can be most easily fixed by reference to a low escarpment which rises from the almost flat desert about 1300 m to the south-west of the South Tombs, and which is here called the “Old Kingdom hill” on account of the scatter of stone hut circles with pottery of this date over the surface which slopes gently back from the escarpment itself. From the edge of the escarpment the position of el-Mangara is given by a small and isolated group of modern houses about 250 m to the south-west. The site of el-Mangara lies just beside them, on the west. This puts el-Mangara about 1700 m to the south-east of the south-east corner of Kom el-Nana. If this position is transferred to the old sets of aerial photographs it can be seen that it lay on the edge of a broad wadi, which doubtless explains how it came to be discovered following a flash flood. On Timme’s map this is the location of a “Brunnen?”, presumably marked in the usual Amarna way by the existence of a depression. Herein lies a possible explanation for the site, namely that, in addition to a mud-brick element provided with columns, it was a small temple with a well attached (or vice versa). Over time, as the sides of the well collapsed, some of the stonework also fell in, explaining the depth at which some of the blocks were found in the 1960s. A small part may have remained at the original ground level, the last traces of which were ploughed in the late 1980s. In its isolation it would have resembled the “Desert Altars” site in the north of Amarna which also perhaps offers a guide to what the building could have been like, not in respect of the line of brick platforms for which the Desert Altars site is best known, but the adjacent part which consisted of a small stone shrine inside a brick enclosure wall buttressed in the same way as the Maru-Aten and Kom el-Nana enclosures (Figure 15.25).

This brings to an end the notes on important buildings of the Amarna Period in the southern part of Amarna. In order to complete the picture, however, two other sites also need some discussion.

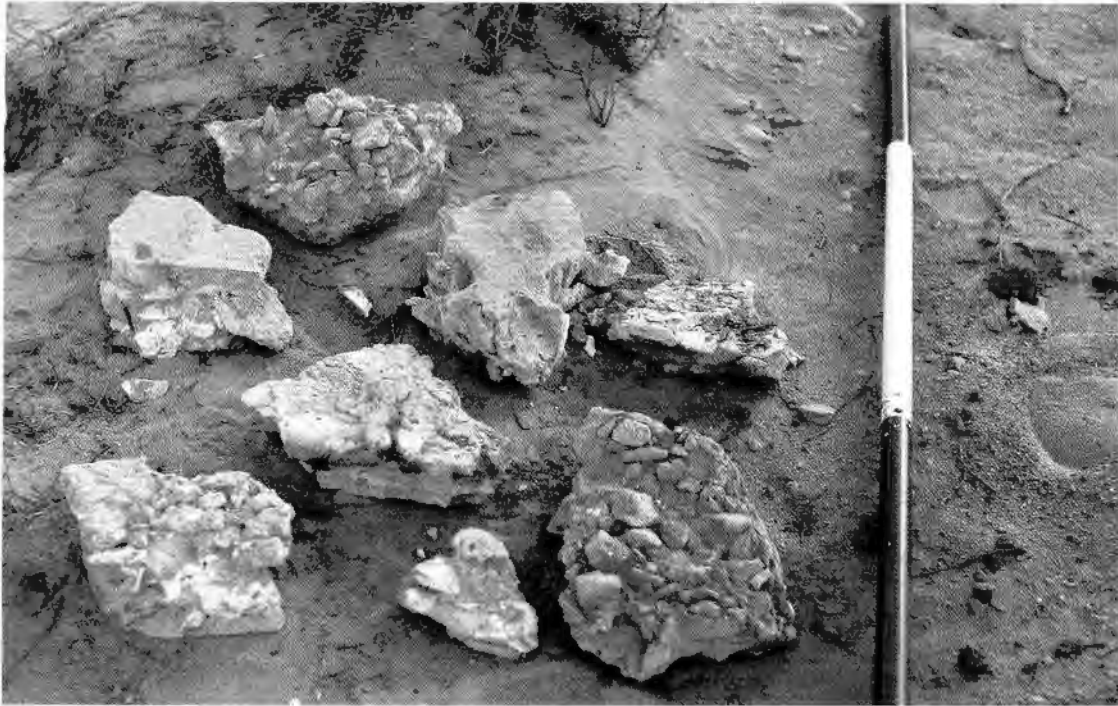


Figure 15.22. Gypsum concrete from a foundation platform at el-Mangara, photographed in 1977.

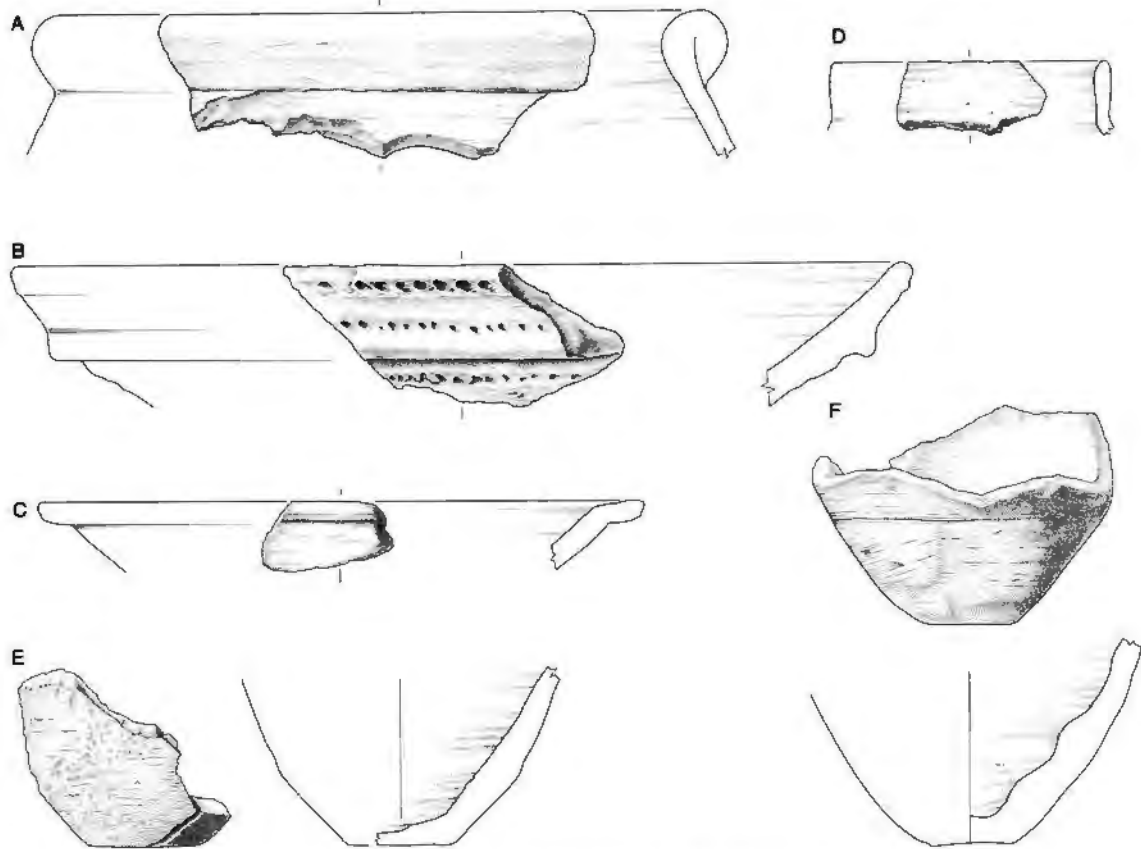


Figure 15.23. Sherds from el-Mangara, at one-third scale. Drawings by A. Boyce.

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15.7 El-Hawata

The early days of archaeology at Amarna produced persistent references to significant Amarna-Period remains around the modern village of el-Hawata. Thus Woolley (*COA I*: 1): "there are slight traces near el-Hawata of the southern outpost which beyond all doubt existed there." Pendlebury walked this far on November 19th, 1931 and remarked in his diary (EES archive document A1.1): "Went on beyond Hawata to extreme south end. Where the cliffs come down to the river is evidently what Woolley called the fortified outpost. It is a big site well worth digging." He makes a further reference to it in his popular book on Amarna: "at the extreme North end is a big terraced building which may have been a Customs House, at which goods arriving up-stream would have to be unloaded. Traces of what may be a similar building are visible in a corresponding position at the South end of the plain" (Pendlebury 1935: 45). On the general map which prefaces the illustrations to *COA II* (Pl. I) an area of unexcavated ruins is marked at the foot of the cliff below Boundary Stele K and labelled "Southern entrance". This ground is, in fact, covered with debris from an extensive and much-plundered late Roman cemetery. This mistake is, however, not Pendlebury's, for, during his visit, photographs were taken (EES archive 31-32/A54) A55) of a site which is labelled in the negative catalogue as "Southernmost outpost of site beyond Hawata". This is not the one marked on the *COA II* map but is identifiable now as a small Eighteenth Dynasty brick building on the edge of the desert shelf overlooking the Nile. It is numbered "S5" in the survey records of the current expedition and is one of a scattered group of small buildings which presumably acted as guard posts around the southern zone of the city. They will be treated in a survey report reserved for a future *Amarna Reports* volume. All that need be noted for the present is that there never was a large Amarna-Period building to the south of Hawata.

It is evident that all of these references should be separated from observations made by Timme on the existence of Amarna-Period remains at this end of the site. His map shows the whole village of el-Hawata as being in the midst of a substantial area of ancient remains, coloured red to signify "Altägyptisch: Ruinenfeld". In the text he provides the following note: "In the south by the village of El-Hawata, all around as well as under it, lies the third part of the ancient city. To the south of the village the dark lines of walls stand out sharply in the smooth white sandy ground, clearly recognizable in the illustration between the village and the individual trees. Ovens and workshops for faience manufacture appear to have lain here" (Timme 1917: 22-3, with reference to illustration Abb. 3, p. 7). These remains appear in one of the 1923 aerial photographs, occupying exactly the location indicated by Timme. A group of perhaps six or seven medium-sized buildings appears to be visible. In a later set of aerial photographs taken in April 1947 the ground was still clear of modern buildings. However, when I first visited el-Hawata, in 1977, I found that the village had expanded over by far the greater part of this patch of desert. I noted at the time that the southern part of the village is built on a slight mound, but modern diggings show that this is primarily natural, an outlier of the taller sand mounds behind the village. I examined the ground in many of the streets and open spaces for traces of antiquity but in that part of the village to the east of the canal found little other than small quantities of "Roman" sherds. Two particular exposures (H3 and H4) lay in the region of the ancient houses seen by Timme. The first was a recent shallow digging exposing a section showing a thin gravel capping over sand but no ancient remains at all. The second was a recently dug well. Here the natural deposits were covered with a surface layer of compacted debris which was not obviously ancient. Some weathered sherds lay over the nearby ground, all of them "Roman". Nothing was seen which could be related to the New Kingdom. The same was true of the ground to the west of the canal, where an open space contained the remnants of an archaeological mound, but all the signs here also were of a "Roman" date (confirmed by Jane Faicrs, expert in the pottery of this period, during a later visit). Such details of this material as were recorded at the time will be published in a future survey report devoted to late Roman remains.

The only spot at which I could find New Kingdom material, H7, lies just outside the village on the east, towards its north end, on the low "bank" of a wadi. Part of a small ancient building lay exposed in 1977, as if it had been excavated, an impression furthered by the presence of a spoil heap to the north containing loose mud bricks. Figure 15.2b includes a sketch plan. Mostly only one or two courses of bricks remained, but in one place the brickwork was preserved to a height of 1 m. The wall pattern can be resolved into an Amarna "house", the solid area of

brickwork perhaps deriving from a staircase. Potsherds lay in and around this building, and on the wadi flank to the east for a distance of about 75 m. They appeared to be all of late Eighteenth Dynasty date except for one probably "Roman" sherd. In March 1992 the EAO carried out a test excavation on the sloping ground east of H7 in response to a village request to have the land released for building on. A series of closely spaced pits were dug down into the desert. Some of them cut through brick walls quite deeply buried in sand, and Eighteenth Dynasty pottery was thrown up. The walls appeared to belong to a lightly constructed building. Despite this demonstration that an ancient building lay beneath the ground, by the following year a modern building had been put up on the site. It is possible, too, that more of the site runs westwards beneath the modern village.

How should we evaluate this evidence? It is necessary to realise that Timme, who was not an archaeologist, was not in a position to use pottery as a means of dating. This is very apparent from his notes on Kom el-Nana (Timme 1917: 24) where the substantial "Roman" pottery which must have been on the surface found no place in his evaluation of the possible date of the remains. Apart from site H7, which stands on its own, I have found nothing in and around the village to suggest the presence of a significant archaeological site other than one of Byzantine date, which probably once covered an extensive area of ground. The only reservation I have is Timme's remark that ovens and workshops for faience manufacture seem to have lain here. The safest present conclusion is that el-Hawata was the site of a few modest buildings of the Amarna Period, but that there is not enough evidence to indicate the existence of a "suburb". Indeed, site H7 could be one of a widely spaced series of small buildings which ran between a point near the Workmen's Village to the high ground south of el-Hawata, traces of which have been noted by the expedition.

15.8 The "River Temple"

This part of Amarna does not, properly speaking, belong to the southern zone as defined here but is really at the southern limit of the Main City. However, in view of the fact that temples (or enclosures containing temples) seem to have formed an important element of the southern zone — even to have characterised it — a discussion of the building to which Woolley gave the name "River Temple" seems in order.

The origin of the name lies within the circumstances of the day, and supplies a good example of how potent names can be when once applied to something and how difficult it is to discard them. The end of the 1922 season was approaching but, despite considerable success in excavating at the Workmen's Village and in clearing Maru-Aten, leading to the discovery of painted plaster floors and much decorated stonework, Woolley was drawn to attempt yet greater discoveries which the correspondence of the time reveals were regarded as vital to secure future funding. The story of how Woolley was led to the site by tales emanating from el-Hagg Qandil, and found it to be an area briefly investigated by Borhardt, is reported in Woolley 1922a: 65–66, and *COA* I: 125. The archive material shows that, from the outset of his interest and before he began the excavation, Woolley thought of the site as a temple. Thus diary entry 16.11.21: "Brief 'sondages' on riverine temple (?) site." Report to the EES 23.11.21: "If time and funds allow, I propose, as soon as the Palace is finished, to turn my attention to a large temple near the river at the south end of the ancient town; it is certainly much ruined, but it should yield inscriptions of interest; the building is largely in stone, and the material seems not to have been carried off with the thoroughness shown in some other parts of the site." Diary entry 26.11.21: "Drew up contract & signed same for dig on River Temple site." Report to the EES 8.12.21: "On the day after tomorrow I propose to start work on the site of the river temple; I have already had the railway moved down there in preparation." Letter from Woolley to Sir John Maxwell 15.12.21: "I am now at work on a big temple which promises well in monuments; we have not got anything in the first week, naturally, for there is heavy clearing work to do under masses of drift sand, but good things have been found here in the past by the villagers, and three weeks more work should reward the Society thoroughly; — a gamble, of course, but all the signs are in our favour, and a temple at Tell el Amarna can hardly fail to be pretty good."

In the event, Woolley's expectations were disappointed but the idea that the site had been one of a temple of Akhenaten's time remained, Woolley's final report was constructed around it, and

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it has passed generally into the literature on Amarna.

Despite its proximity to the river the underlying natural ground seems not to have been alluvial soil but sand (*COA I*: 134). In ancient times, therefore, it must have been part of an extension to the desert reaching westwards towards the river bank. What makes Woolley's results so important is that they revealed continuing occupation later than the Amarna Period in a form which suggests a proper settled community rather than "squatters". Before the encroachment southwards of the modern village of el-Hagg Qandil this part of Amarna must have been a low archaeological mound covered with drift sand, its highest point, to judge from Woolley's own comments (*ibid.*: 127, 132), beneath the village even in his day.

The idea that a temple had stood here arose from the presence of stonework. By the end of the excavation, however, the only stonework which could be regarded as *in situ* represented architectural elements within buildings of mud brick, whereas no trace was found of the characteristic gypsum foundations for a stone temple of the Amarna Period. The various sculptured blocks of this time (*ibid.*: Pl. XLIII) could well derive from the period when Amarna stonework was being shipped out for use elsewhere. The only part of the site which supported Woolley's original identification was a room (no. 38) in a well-constructed mud-brick building, possessing the remains of two columns and a stone platform reached by a little flight of steps which Woolley called an "altar". Since, however, one of the stones making up the platform bore a cartouche of Rameses III recut over a text of the Amarna Period, and was itself re-used (*ibid.*: 128, 160, Pl. LVIII), Woolley concluded that it had been "a shrine in the latest period of the building; but as its walls were of the time of Akhenaten (the stonework was not), it may possibly have been from its origin a side-chapel of a larger temple" (*ibid.*: 127). A remarkably close parallel was subsequently supplied by a group of houses of the Third Intermediate Period at Medinet Habu (Hölscher 1954: 7–8, Fig. 6, reproduced here as Figure 15.24). Here is the same arrangement of paired columns and dais (derived from the New Kingdom tradition), one of the latter constructed of stone, relatively high, and reached by steps. Medinet Habu also supplies, in the house of the scribe Butchamun of the Twenty-first Dynasty, an example of a private house with stone columns (*ibid.*: 4–5, Fig. 5).

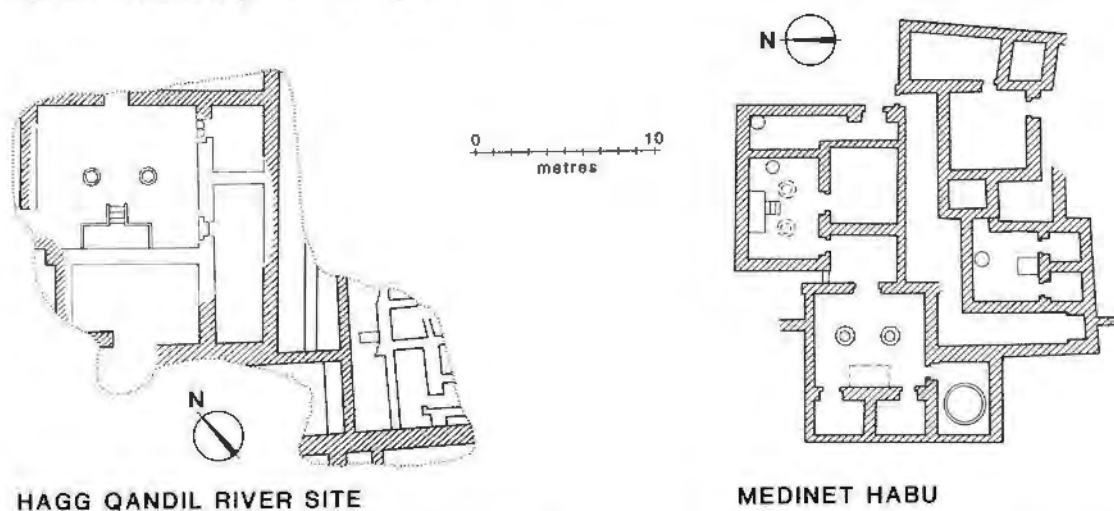


Figure 15.24. Left: northern building at the "River Temple" site (after *COA I*: Pl. XLI); right: houses from Medinet Habu ascribed to the Twenty-second to Twenty-fifth Dynasties (after Hölscher 1954: 7, Fig. 6). Both are drawn to the same scale.

Woolley was convinced that the original brickwork was of the Amarna Period, though with considerable re-use and restructuring, often at a higher level: "That the brick walls were of the Akhenaten period was shown in the north section by the XVIIIth Dynasty pottery found on the lowest floor-level associated with them, and in the south by the inscriptional evidence" (*COA I*: 128), the latter remark referring to chips and fragments of inscribed limestone of the Amarna

Period found lying on the lowest floor level (*ibid.*: 127, 130). Even so, the architecture as a whole, and especially in the southern zone, differs markedly from the Amarna-Period architecture of the rest of the city. In view of the apparent predominance of later pottery as well, it seems safest to regard the site as essentially a re-settlement of the late New Kingdom, continuing on for several centuries and evidently housing people of some substance. It probably was built over the remains of Amarna-Period buildings, but to ascribe any one wall to the Amarna Period has to be only a guess. There is certainly no real evidence that, either in the Amarna Period or at a later time, a temple or shrine ever stood here.

The main house was, as we have seen, a building of some substance, and evidently formed part of a small town. It is, therefore, worth looking for a possible place name for it in the surviving geographic list closest in time, the Onomasticon of Amenemope. The one that fits best is entry no. 376, *Pr-šs*, "House of alabaster", known also from the Ramesside P. Amicns (Gardiner 1947: II: 77*-79*), and located by Gardiner "very possibly on the right bank near El-'Amāmah". Kessler (1981: 106-107) prefers to place it a little further north, near Sheikh Said, primarily on the grounds that, by this time, the alabaster quarries of Hatnub were no longer in use. This is a premature judgement, since alabaster outcrops and abandoned workings occur over a wide area of the desert behind Amarna, and it cannot be claimed that our knowledge of them is in any sense complete, especially if one allows for the simple fact that quarry inscriptions are the exception rather than the rule. Even so, the DOG expedition located an alabaster quarry with a very late rock carving even further east than the Old Kingdom Hatnub quarry (Borchardt 1914: 9-11; Timme 1917: 46-7). Furthermore, whilst no settlement remains of the period are known in the Sheikh Said area, the "River Temple" site at Amarna does provide evidence for the existence of a little town of just the right periods for the known history of *Pr šs* and so makes it the best choice.

15.9 The Desert Altars

This group of buildings deserves to be included within the discussion despite the fact that it lies in the northern desert sector of Amarna, between the North Suburb and the North Tombs. It was the subject of a brief excavation by Pendlebury in the 1931-32 season (*COA II*: Chapter V). The following discussion is based not only on Pendlebury's published report but also on survey observations.

The site really contains four sets of remains which are, to some extent, independent of one another, perhaps reflecting periodic changes. The simplest element is an irregular polygonal area of desert that has been cleared of stones and is delineated on the north, east, and south by a slight ridge of stones which sometimes dwindles to an intermittent row. To the west both the north and south boundaries peter out and the swept area merges into a desert surface with its natural pebble cover. Although erosion has badly affected this side, it cannot account for the entire disappearance of a western boundary, which seems never to have been made. On the east (or, more correctly, south-east) side, one of the desert roads leading to the North Tombs runs into the enclosure, more or less on the line of one of the ramps of Altar I. It prompts the idea that the whole site was, in some way, related to the North Tombs, perhaps "erected for funeral ceremonies connected with those Northern Tombs" (*COA II*: 102). This has to remain a hypothesis which, if true, rather modifies the image of royal monopoly of significant religious buildings which is conveyed by the art of the period. The possibility has to be borne in mind, however, that the swept enclosure was simply laid out a little later than the road, and thus that the connection between them is coincidence.

Not quite in the centre of the cleared area a brick platform had been erected, its foundations suggesting that it had supported a heavy element in the centre, perhaps an offering-table. This whole structure was later demolished to make way for a larger version of the same shape (Altar II), which stood towards the middle of an axis on which two other buildings were erected (Altars I and III). The southernmost (Altar III) was, as Pendlebury pointed out, not properly speaking an altar at all. Its foundations suggested a platform supporting a colonnaded building. A comparison between its plan and that of the Central Platform at Kom el-Nana reveals an important difference in the way that the square brick column foundations are arranged with respect to the thick outer wall. At Kom el-Nana, where there was direct evidence for the outside wall having run up to the

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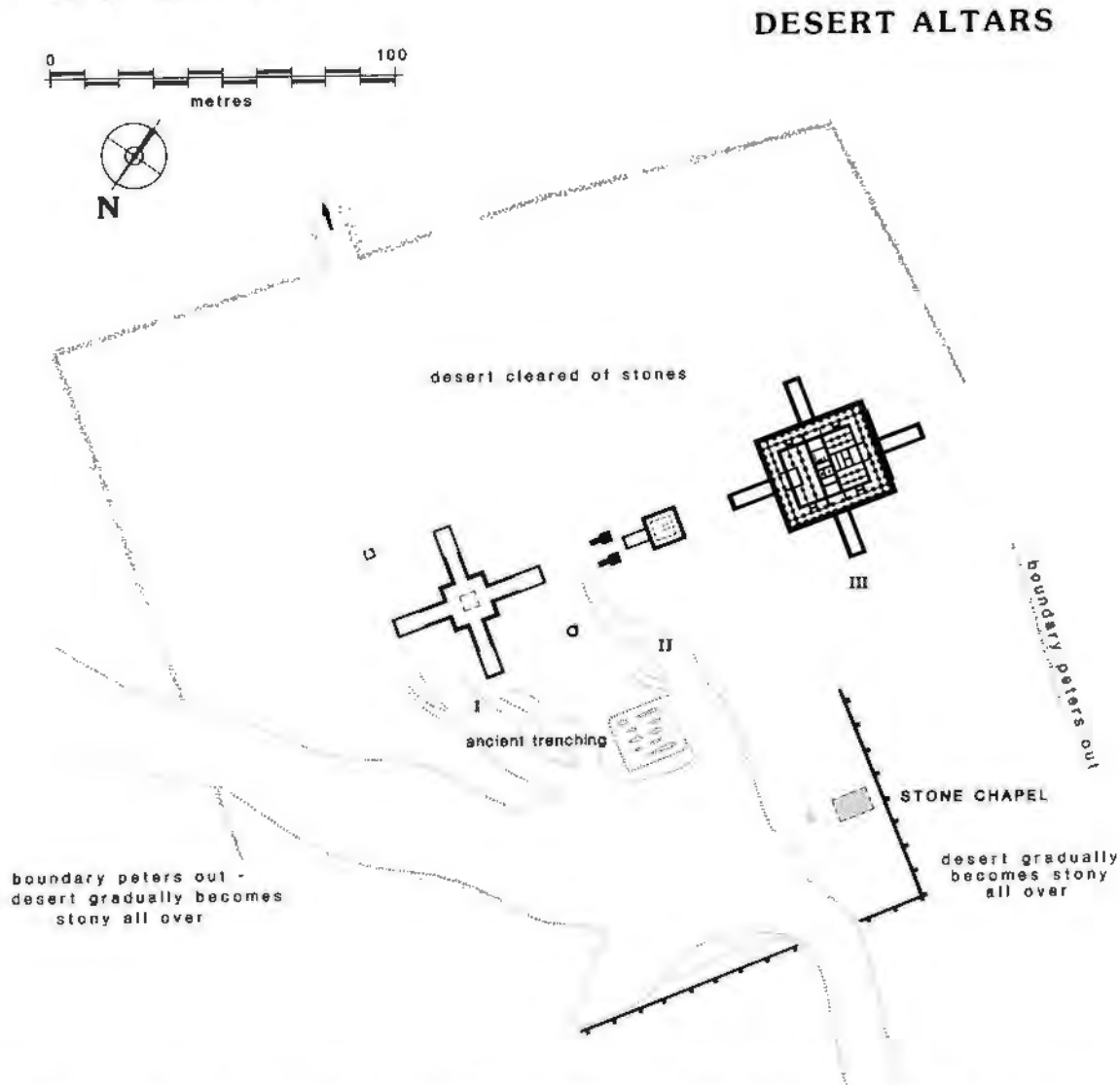


Figure 15.25. Outline plan of the Desert Altars site, after COA II: Pl. XXVI, with additions.

full height of the building, the column foundations were set well in from the wall, as is to be expected. At Desert Altars III, however, the foundation pattern suggests that one row of columns was placed astride the inner line of the main wall. It would then make better sense to see the platform, unlike that at Kom el-Nana, as having been open at the sides.

About 45 m to the west of a point on the axis between Altars I and II lies a series of markings on the desert surface which look significant only when seen from the air. Indeed, I first noticed them only in 1993 whilst studying aerial photographs newly taken. On a subsequent visit I checked the area on the ground. It is defined by a shallow trench which probably ran originally around a square with sides c 23 m long (the southern side has been destroyed by a watercourse). Inside it run possibly four other parallel equally spaced trenches, aligned north-south. From the air the ridges and dips form a pattern that is so regular, and that lies so close to the axis of the adjacent brick altars, as to preclude the possibility that it is a natural feature. Yet, on the ground, the markings appear as shallow undulations within the natural desert surface, without trace of mud-brick dust, gypsum or stone fragments, or any other form of archaeological material. It does not seem that there is a buried building here.



Figure 15.26. Aerial photograph, at a slightly oblique angle, of the Desert Altars, April 1993.

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What, then, could this be? The only explanation that I can think of at present is that the undulations are foundation trenches for the walls of a building. A building of stone is unlikely, in view of the standard Amarna-Period practice of erecting stone buildings on shallowly sunk platforms of concrete. It could have been of mud brick. At the Small Aten Temple, walls of the earliest phase had been subsequently demolished, leaving only the bed of mortar and sometimes part of the bottom course at the foot of a very shallow foundation trench. These trenches had re-emerged through differential weathering to appear on the modern surface. A preliminary scraping of a small area on the bottom of one of the trenches at the Desert Altars revealed only a continuation of coarse desert sand beneath but, of course, it is possible that, even though foundation trenches had been dug for walls, the project was abandoned before any building took place. There presumably has to be the further possibility that the trenches were for the lower wooden beams of a timber-framed tent, although they do look rather large for this. This is an intriguing possibility in view of the statement in the Later Proclamation on the boundary stelae that Akhenaten, during his second visit to Amarna, was based "in the pavilion of matting that His Majesty had made in Akhetaten" (Murnane and Van Siclen 1993: 100, 105, 173-4). This has to remain, however, a passing thought rather than a serious suggestion.

The fourth element at the Desert Altars lay on the western edge of the site and is presented in COA II in a tiny inset in the plan of the Altars, Pl. XXVI. It consists of two sides (southern and western) of a mud brick enclosure wall strengthened by external buttresses, and an area of gypsum concrete foundation close to the middle of the south side. Pendlebury called this latter element the "Stone Chapel". In the tiny inset plan its alignment differs noticeably from that of the altars, by about $4^{\circ}50'$. This is something now very difficult to check because erosion has reduced the wall to a blurred gravelly ridge. For the plan in Figure 15.25 the position of the wall in relation to other features was fixed by a single survey point to act as a check on distance, and its alignment was derived from a 1947 aerial photograph on which it shows up fairly clearly. This alignment is much closer to that of the altars, differing by only about 1° . This could be attributable to faulty original laying-out of walls by the builders of either the altars or the enclosure.

The gypsum-concrete foundation platform was judged by Pendlebury to have been about 10 m square, although it is marked as a rectangle on the inset map, and he adds that "there are traces of what may be another just to the north". Parts of this platform remain, as do traces further north, and would be worth cleaning again and planning in detail since this was something which was not done. Pendlebury was of the opinion that it was dismantled in Akhenaten's time in view of the absence of much evidence for destruction. It had been quite a small stone building and the thoroughness of the ancient removal of stone should not be underestimated, but the fact that he himself found 82 fragments of "reliefs, fragments of statues, and inscriptions" (COA II: 108) on the site explicitly contradicts this interpretation. The stonework and the survival of the lowest courses of the western brick enclosure wall as a low ridge imply that, when Amarna was abandoned, the enclosure and its stone shrine were standing, as were the brick altars. It is reasonable to conclude that both the line of "altars" and the enclosure were built after the laying out of the swept area, but which one of these two had priority is not really apparent from the layout itself. The inscriptions contained both the earlier and later forms of the didactic name of the Aten, as well as a fragment (31.32/A.33) which Fairman considered could have borne part of the cartouche Ankh-kheperura of Smenkhkara. Fairman's hand-copy of this piece (A.33), preserved in the EES archive (Doc. 9.1), is thus:



The enclosure and stone shrine could, therefore, have been the last element on the site, a pious gesture, perhaps, to mark as permanently sacred a site which had been used previously for occasional open-air royal ceremonies.

One further comment on the enclosure is due. The centre has acted as an attractor for run-off when rainwater has flowed over the desert surface. This could be the product of entirely natural surface irregularities, but it is worth considering the possibility that a well was here. This would be an appropriate feature in an enclosure of this type, making it more like an example of the

ideal type of garden shrine (see below). It is a site which certainly deserves to be investigated again, and offers a model for what the lost building of el-Mangara could have been like.

Whilst this enclosure with its stone shrine can be fitted into a well attested architectural scheme, the line of "altars" is unusual in the openness, even bleakness of its setting, leaving it exposed to the full force of the sand- and dust-laden winds from the north/north-west and south. There is a strong temptation to recognize this group of buildings in the scenes of the Reception of Foreign Tribute in the tombs of Huya and Meryra II which lie in the cliffs not very far away (*RT* III: Pl. XIV, reproduced here as Figure 15.10; *RT* II: Pl. XXXVII).⁷ In the former (Figure 15.10) the left-hand building in the middle register provides an obvious counterpart to the central three-element altar group, Altar II. To the right stands a platform with ramps and a canopy supported on columns, the building depicted in Meryra II's tomb in more detail and in use as the royal reviewing dais. This could serve as a representation of Altar III which, as noted above, was probably open at the sides. Beyond this the comparison breaks down. Huya's representation contains nothing that adequately portrays Altar I; on the other hand, a pair of enclosures containing offering-tables flanks the three-element altar group. It has already been noted that the design of this group offers a useful parallel to the buildings on top of the island MII at Maru-Aten, whereas the Desert Altars site contains nothing like this. As with depictions of Aten temples in Amarna tombs it does seem to be impossible to find complete congruence between the artists' views and the plans of actual buildings. One cannot therefore be sure that the Reception of Foreign Tribute scenes portray the Desert Altars site. The value of the comparison lies partly in the way that the scenes depict the use of a canopied dais in a reviewing ceremony which placed the royal family at the centre of attention and required the existence of a large surrounding open space, and partly in the presence, as an architectural adjunct, of solar platforms or platform altars. Both of these elements the Desert Altars site possesses.

15.10 Discussion

The southern zone at Amarna contained at least three major royal buildings in which stonework occurred in significant quantities, whilst the evidence from el-Mangara points to the existence of a further but minor one. We know something of the layout of two of them, Maru-Aten and Kom el-Nana, and both have elements in common, sufficient to suggest some similarity of purpose although there are obvious differences in the way that this purpose was achieved. In the case of the Desert Altars Chapel in the northern zone we may be looking at something similar but reduced to its essentials. Architecture of this kind is a resolution of specific functional requirements — of cult and of ceremony — in terms which satisfy aesthetics of building form and overall layout. The manifestly different solutions to the laying out of a large formal enclosure displayed by Maru-Aten and Kom el-Nana, and also by the two Aten temples in the Central City and by the Desert Altars site, point to the fact that this was a creative task in which certain elements in an architectural vocabulary were used each time to a somewhat different effect.

If we view the broad sweep of evidence, both representational and archaeological, not only from the Amarna Period but from the New Kingdom as a whole, we can discern more than one vision of the ideal religious building although the difference is sometimes as much one of perspective as of real form. In one of these visions a shrine or a ceremonial edifice is set within an idealized landscape: an enclosed rectangular space planted with trees and plants which surround a central rectangular body of water. The shrine is not the dominant feature but stands discreetly towards the rear. Other small shrines may also be found placed around the garden. The principal examples are described and illustrated in Badawy 1968: 22–23, 491–496; Geßler-Löhr 1983: 166; Davies and Gardiner 1936: Pl. XXV; and van Siclen 1982: 10–18. In contrast to the awe provoked by the architectural dominance of major temples, the principal sensation released by these garden shrines is the tranquility which comes from contemplating carefully landscaped nature. It is evident from texts which refer to one or more gardens of Amun situated at Thebes (van Siclen 1982: 10–18) that this setting reflects primarily a straightforward liking for such

⁷ Suggested originally by Davies, *RT* II: 6; III: 12. Frankfort, *COA* III: 22–25, preferred to identify the site of the Reception, as recorded in these two tombs, with a building straddling the north wall of the Great Aten Temple, but the resemblance to the tomb scenes is even less.

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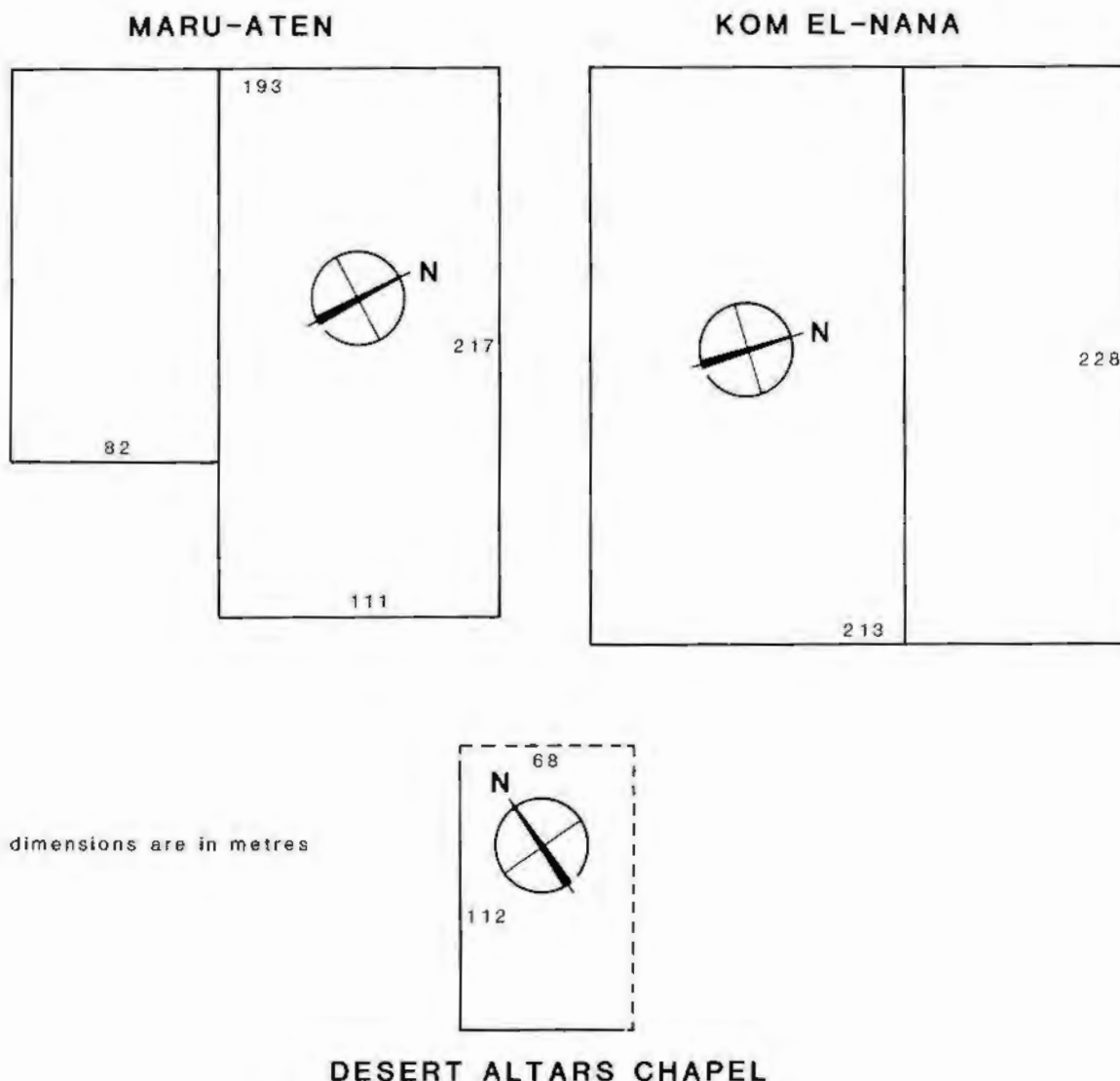


Figure 15.27. Outlines of the three properly documented enclosures at Amarna, drawn to the same scale for comparison of size.

things and was intended to induce a simple and immediate sensual pleasure both to man and to god, although they could also provide the basis for a kind of poetic theology, as when Amenhetep III compares the lake in the *Maru*, which he has built at Thebes, with Nun, the divine personification of the ground waters (*Urk.* IV: 1651.8–10; Helck 1961: 196; Davies 1992: 3). A very few of the most prominent residents at Amarna gave their own private chapels this walled-garden setting, though the water source would have looked more like a well than a pool. The example which conforms closest to the ideal is Q46.1 (Borchardt and Ricke 1980: 26, Plan 2; Geßler-Löhr 1983: 205–207). A large example, but one where, unfortunately, the front part was badly eroded and not fully excavated, is U25.11 in the North City (Pendlebury 1932: 145, Pl. XV). In a few cases the water source lay behind the chapel (e.g. Q44.1, Newton 1924: 290, Pl. XXV, and the unpublished Main City house of the High Priest Panehsy, cf. Griffith 1924: 302). One must be careful about assuming, in cases where the open ground has not been fully excavated, that the open areas in which domestic shrines stood at Amarna were given over wholly to gardens. Three “furnaces built of mud bricks” (pottery kilns ?) stood in the corner of the Q44.1

enclosure, for example, and one should note the context of the pottery kiln in P47.22 (*AR V*: 77–81).

The garden shrine was not an ideal accorded much recognition in the art of Amarna tombs, which focuses on the architectural mass of temples and the articulation of detail and inner layout. Whether the Great Aten Temple — one of the inspirations for the tomb scenes — was devoid of vegetation over its huge open space can only be settled by excavation in the future, although tree pits have been found around the Sanctuaries of both Aten temples. But, in looking at some of the Amarna buildings, we can place them better in context by reference to the ideal type or image of a temple as a shrine set towards the back of a relatively large sacred enclosure laid out as a garden with its own water supply than we can by comparing them to the images of Aten temples preserved in the tombs.

For function and meaning a valuable contribution is made by the texts from Maru-Aten. This twin enclosure derives its name from several occurrences on stonework recovered during the 1922 excavation. The first element in the name, *m3rw*, has received detailed consideration in the past.⁸ The majority of references to *m3rw* are found in texts of the Graeco-Roman Period. If we had sufficient evidence for understanding independently what the word meant in the New Kingdom it would be interesting to see whether a shift or perhaps a refinement of usage had occurred by Ptolemaic times, but, since we do not, we should avoid the temptation of using these later references as a primary source for the New Kingdom. One question which we must ask is whether *m3rw* in the New Kingdom was really a proper architectural term at all, as is usually assumed. It could instead have been a broad term of domain, here applicable to the Aten, and a member, therefore, of the set of figurative terms in use at the time, of which others were *iw* “island” (as in the phrase “island of ‘Aten distinguished in jubilees’ in Akhetaten” in the Boundary Stelae, *COA III*: 190, 196; Mumane and Van Siclen 1993: 40, 172, 216), *3ht* “horizon” (as in Akhetaten), *š* “pool”, and *pr* “estate, domain”, although this latter term was equally a member of the set of terms more specifically applicable to buildings (Spencer 1984: 14–20).⁹ The phrase “House of Rejoicing” is probably another term of broad application (see below). If we make *m3rw* part of the set, its particular nuance of openness, derived from its etymology as “Viewing place” (Bell 1985: 275; Meltzer 1988: 92–3), would make it amenable to translation by the English word “park”, “parkland” and, to judge from its apparent rarity, it was a somewhat picturesque term. A colourful example, in which three of these domain terms occur in sequence, has been found on a limestone block at Karnak bearing a text which refers to the Aten as being “in the northern *m3rw* of the Aten in the *š* of the Aten in Akhetaten” (Tawfik 1977; Redford 1973: 81, 93, who translates the second term as “island”; Gebler-Löhr 1983: 214–18). If one follows a figurative interpretation of these words, such that the reference is simply to Amarna as a whole, one escapes from having to force on to the archaeology and layout of Amarna and its component elements interpretations which do not really fit (e.g. making the North Palace the location of the place referred to in this phrase). This need not exclude the possibility that, on occasions, as with the other terms, it could refer to a place that had a specific boundary, perhaps created by a wall. The *m3rw* “made” by Amenhetep III at Thebes, which contained a temple inside it, would be a case in point (*Urk. IV*: 1651.8–10; Helck 1961: 196; Davies 1992: 3).

The reason for making this point is that, at Maru-Aten, it alters the emphasis that we give to the other term recorded at the building that convenience will still oblige us to call Maru-Aten, the *šwt-r'*, “Sunshade of Re” (the translation “Re-chapel”, Spencer 1984: 125, makes better sense in English, but I have preferred here to keep to the more pedantically correct translation). This term has been much discussed (primarily by Fairman in *COA III*: 200–8; Stadelmann 1969; Spencer 1984: 119–25; Bell 1985: 35). It seems now to be well established that “Sunshades of Re” were temples or shrines to the sun. An important characteristic was an open-air platform reached by a flight of stairs, the one on the north side of the upper terrace of Hatshepsut’s mortuary temple at

⁸ The original discussion by Gunn in *COA I*: 156–8 summarises well what is known of the term, to which should be added discussions arising from the passage in the Kom el-Hetan stele of Amenhetep III which describes the building of a *m3rw* for Amun. See Badawy 1956; Manniche 1982; Bell 1985: 275; Babled 1993–4: 135–6. Meltzer 1988: 92–3 provides an up-to-date summary of recent discussions of the etymology of the word.

⁹ An example of *pr İtn* as the “estate of the Aten” is cited in *COA III*: 200, section 4. Cf. Redford’s remarks on this term in the Karnak *talatat*-blocks, Redford 1973: 80, note 8.

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Deir el-Bahari being a fine extant example. Several constructions of this kind have been excavated at Amarna, frequently and rather unexpectedly orientated towards the north or south. They were also closely connected to the cult of the king (and, at least in the Amarna Period, to royal women) to the extent that Bell has defined a "Sunshade of Re" as: "a chapel in which was celebrated the divinity of the king, or a member of the royal family, as a living incarnation of the sun god Re" (ibid). One should note, however, that one very small-scale set of three solar platforms of this kind is known from the grounds of a private house in the North Suburb (house of Hatiay, *COA* II: 64, Pls. XV, XXIII.3). However, although such platforms seem to have provided a desired means of engaging in solar worship, we cannot be sure that they were an essential criterion. A key text found at Maru-Aten (*COA* I: 147, Pls. XXXIV.1, 2; LVI; Shaw 1994: 122, Pl. X.1, excavation no 22/273 and now in the Ashmolean Museum, Oxford, 1922.141) gives as an epithet to the Aten that he is "in the Sunshade of Re of the king's daughter Meritaten in the Maru of the Aten in Akhetaten". The text was part of a granite stela (or parapet) from the MII group. Woolley placed it on the building on the island (MIID), although this may have been only a guess (ibid.: 121–2, and see above). The reconstruction of the island buildings suggested above turns them into an example of the ideal type of solar platform which modern study has shown could be an important element of a "Sunshade of Re".

"Sunshades of Re" comprise a whole category of religious foundations in the New Kingdom, possessing land and priesthoods (Helck 1960–4: [190–2]; Spencer 1984: 124–5). The Amarna Period saw the creation of several: a fragment of an offering-list from early in Akhenaten's reign and found at Karnak mentions as recipients of offerings "altars of the sun", which were distributed throughout the country, and a specific "Sunshade of Re" which was located at Memphis (Helck 1973: 97–8; Spalinger 1991: 29, note 37). At least four were established at Amarna, in each case for a female member of the royal family. One ascribed to Nefertiti occupies the third place in the building manifesto of the "Earlier Proclamation" in Boundary Stelae K and X (see further below); another for Queen Tiy features prominently in a well-known scene in the tomb of Huya at Amarna (*RT* III: 7–9, 19–25, Pls. VIII–XII). The other two belonged to two of Akhenaten's daughters, Meritaten and Ankhscnpa-aten (*COA* III: 201–2; Helck 1960–4: [191–2]; Mumane and Van Siclen 1993: 172, citing the claim that they had originally belonged to Kiya). We can match the prominence and institutional character of these buildings better if we regard Maru-Aten as a whole (or perhaps just the Northern Enclosure) as a "Sunshade of Re", the term *m3rw* following as a less specific domain term and either referring to a broader zone in the southern part of the Amarna plain or acting as a picturesque term in apposition. The island platform MIID would have been an important part; but so also would have been the solar shrine MIIA which lay on the enclosure's main axis. Thus at Maru-Aten (or, at least, in its Northern Enclosure) we are looking at a complete example of an important "Sunshade of Re" temple, with a southern annexe in which the focal building was for royal ceremonial rather than for Aten worship.

What of Kom el-Nana? It is already clear that it was a major royal establishment combining shrines, a ceremonial architectural assemblage, and a major centre of food production. The combination of these elements provides strong links with the two principal Aten temples in the Central City. We can, moreover, take the argument one stage further, finding reason for making it part of Akhenaten's original grand scheme for the new city. This is to be found in its location and orientation, which are curious when taken in isolation but highly significant when set within the overall framework of the city. For it can scarcely be coincidence that a single straight line runs past the fronts of the North Palace, the buildings along the "Royal Road" in the Central City, and Kom el-Nana itself, with the fronts of the two central Aten temples projecting slightly across it (Figure 15.28). All of these buildings have a common orientation, and relate to a single axis (see also the discussion in *AS*: 77–9).

From an early moment in the city's history two or more competing directional preferences were at work, and in their interaction brought about the irregularities in street plan and house alignment which are so marked a feature of the city's layout. The premier alignment (seemingly derived from the initial setting-out scheme of Akhetaten, see Chapter 5 and Figure 5.26) was presumably that of Royal Road. It fixed the locations of the royal buildings in the Central City, the North Palace, Kom el-Nana, and, with a change of direction dictated by the approach of the cliffs to the river, the North Riverside Palace. This line ignored, however, the gentle curve of the

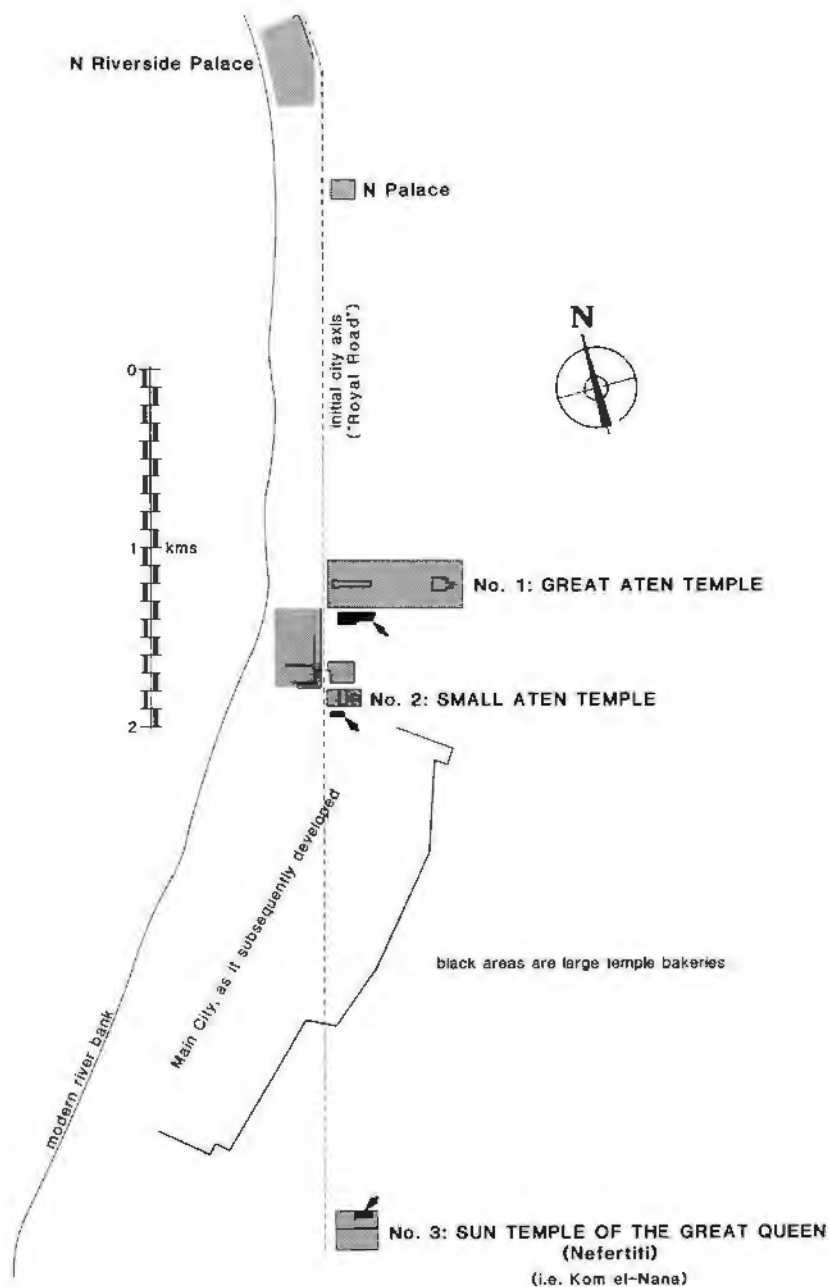


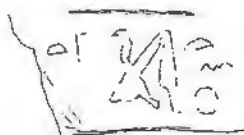
Figure 15.28. Diagram to show the relationship of Kom el-Nana to the Small and Great Aten Temples within the Central City, and to the "Royal Road".

river as it flowed past the Amama desert bay. The part of the city to be inhabited first by commoners was almost certainly the western portion of the Main City. This much can be argued from the density of rubbish accumulation, which is far greater in these areas, and from the direction of layout of some of the houses spread across this area (cf. Kemp 1981: 88–9). Housing starts were probably made at numerous widely spaced localities over this area, often, it would seem, with little or no planning directive and perhaps responsive to a series of informal desert tracks which carried traffic around the city on the east and adjusted themselves as the city

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expanded (AS: 47–8, 71, Fig. 10). Several important buildings (including some of those in the eastern part of the Central City, and the private residence of the High Priest Panehsy) follow this second direction of layout and so imply that it acquired official sanction early on. We can make sense of the placing of Kom el-Nana only if we assume that it was one of the very first sites chosen by Akhenaten, before even the beginning of serious house-building in the South Suburb, when the desert of Amarna presented a surface free of architectural obstructions and grand conceptions could be considered. Within a short time a more realistic alignment for the southern part of the city was accepted, one parallel to the general trend of the river bank, but already the laying-out of Kom el-Nana had reached too advanced a stage for it to reflect this major modification to the initial idealized plan.

One question to be asked of any important construction at Amarna is whether it can be identified in Akhenaten's building manifesto. This text forms part of the "Earlier Proclamation" on the first set of Boundary Stelae dated to the king's fifth regnal year (RT V: 28–31; an unpublished collation by Battiscombe Gunn now in the Griffith Institute, Gunn MSS IVA.2;¹⁰ Fairman 1935: 136–7; COA III: 190–1, the result of an independent collation; Mumane and Van Siclen 1993: 40, 171–2). The manifesto begins with statements of intent to build a series of temples and palaces, each one an element in the same formulaic sentence "It is in this place that I will make X for the Aten my father in Akhetaten", where X stands for a specific project. The first three offer straightforward translations, in which X is, in turn, the House of the Aten, the Mansion of the Aten, and the "Sunshade of Re (i.e. solar shrine) of the [great] royal wife [Nefertiti]". For the second one it should be noted that the hieroglyphs are damaged. Fairman (1935: 136) commented "battered but certain" in respect of the reading of the hieroglyphic group *ḫwt hwt*, which neither Davies nor Gunn noted. On examining the inscription myself I would consider it to be "battered and feasible". That the word here had the feminine definite article is a point in favour of this reading. My own copy of this part is thus:



Mumane and Van Siclen (1993: 24) accept the reading without query.

The continuation of the text is ambiguous. In the conventional translation Akhenaten goes on to state twice that he will build a "House of Rejoicing", and then promises to do all the "works" (*b3kw*, a translation followed by Helck 1961: 341–2) that are required. In trying to find a conceptual rhythm in the text I have previously suggested (AS: 78) that these sentences are not more items in a continuous catalogue but an interjected summation of what has preceded and what will follow. This involves the assumption that "House of Rejoicing" is a figurative domain term, one in a sequence, and not a reference to a specific building. In their new edition of the stelae, Mumane and Van Siclen (1993: 40, 172–3) keep the "House of Rejoicing" as a building, but have it followed by a promise of "revenues" (a legitimate alternative translation of *b3kw*) and "oblations" (reading signs where Davies, Gunn, and Fairman could see nothing). I suspect that none of us has really got it right, although I am still attracted to the idea that Egyptians had a fondness for poetic terms of spatial reference which were not specific to particular buildings, as here, with the "House of Rejoicing". The uncertainty of translation means that it is unwise to continue, beyond the first three named buildings, to seek equations with individual parts of the site that have been excavated.

In the first three buildings of the list, the House of the Aten (here presumably a specific building and not a domain), the Mansion of the Aten, and the solar shrine of the great queen, we might have three major religious foundations centred on temples. The first two are probably the two major Aten temples in the Central City, both of which were supported by a provisioning compound built to one side which specialised in food production presumably for large public festivals. In the case of the Small Aten Temple and its adjacent bakery, numerous bricks used in

¹⁰ A photocopy of the relevant part was kindly supplied by Dr Jaromír Málek. It has the form of a hand copy of Davies' version which was annotated against the originals during the early part of the 1921–2 (Woolley) season.

the construction were actually stamped "Mansion of the Aten". Although the present evidence is wholly circumstantial, a building which fits the third place, that of the "Sunshade of Ra" of Nefertiti, is Kom el-Nana, on account both of its location on the original city axis and in also possessing a major food-production centre built along one side.

It is, of course, possible that the intentions of the building manifesto were not put into effect in precisely the way that they were formulated (no one has ever found a convincing trace of a tomb for the Mnevis bull, for example). In the case of the "Sunshade of Re", however, we know, from evidence already referred to, that several were actually constructed at Amarna, so that the one specifically for the Great Queen was to be, as it turned out, only the most prominent of a group. Because "Sunshade of Re" shrines seem to have been important constructions it makes better sense to see Maru-Aten as one of them rather than limiting the term to a single small element within it. At the level of overall conception Maru-Aten can be placed in the same set as Kom el-Nana and the Desert Altars enclosure (probably el-Mangara also, see below) and, if we extend the term "Sunshade of Re" to all of them, an advantage of economy is gained by identifying a set of important buildings with a set of entities named in the texts. How, otherwise, can we locate these buildings within the corpus of Amarna inscriptions?

For this line of argument to be valid one has to abandon the idea that certain of the toponyms used at Amarna were specific to individual buildings, and were instead used in a broader and more figurative way to refer either to Amarna as a whole or at least to a wide zone within it. One of these broader domain terms is "House of Rejoicing", which had probably been used in a general way by Amenhetep III at Malkata, to judge from the wide distribution of stamped bricks containing this name (Hayes 1951: 177-8). If we do transfer "House of Rejoicing" to the group of domain terms, we can make better sense of other inscriptions. One is on a statue base (its place of finding unfortunately unknown), which refers to: "The Sunshade of Re of princess Meritaten...in the House of Rejoicing of the Aten in the estate of the Aten in Akhetaten" (COA III: 193; Helck 1960-4: [191]; Spencer 1984: 123). The others occur on blocks from Amarna found at Hermopolis and refer in a similar way to a "Sunshade of Ra" of princess Ankhsenpa-aten "in the House of Rejoicing of the Aten in the estate of the Aten in Akhetaten" (Helck 1960-4: [192]; Spencer 1984: 123-4; and esp. Roeder 1969: Taf. 56, block 450-VIIA). I would see these expressions as saying rather picturesquely that these buildings were just at Amarna. In the first case I would see the reference as simply to Maru-Aten itself, a building which featured the name of Meritaten prominently and contained a solar shrine specifically described as such.

An additional piece of evidence which might provide another explicit link between "Sunshades of Re" and the buildings under consideration comes from el-Mangara. As was noted above (section 15.6), one of the blocks (no. 29) does actually bear the term "Sunshade" (*ṯ3 šwt*). The block is not complete, only the right half survives. Across the bottom lower right part Aten rays descend from right to left. In the triangular space above them a text had been carved in vertical lines of hieroglyphs. The ends of only two columns are preserved: one has the group *ṯ3 šwt*, the other reads *ḥm*. One close parallel to this arrangement is to be found in the tomb of Huya at Amarna (RT III: Pl. XI), in the scene which depicts Queen Tiy's solar temple. In a series of short vertical columns arranged above the rays of the Aten the name of the Aten is written out followed by a reference to the "Sunshade of Re" of Queen Tiy. More or less the same arrangement is found on the fragment of granite parapet from Maru-Aten, where the name of the "Sunshade of Re" of Meritaten is placed above the descending Aten rays (COA I: 147, Pls. XXXIV.1, 2; LVI; Shaw 1994: 122, Pl. X.1). Two more cases can be cited from amongst the Hermopolis blocks where the name of the "Sunshade of Re" of princess Ankhsenpa-aten is likewise written in vertical columns above Aten rays (Roeder 1969: Taf. 56, block 450-VIIA; Taf. 19, block 207-VIIIA; cf. Hanke 1978: Abb. 48). These are suggestive parallels for reconstructing the remainder of the el-Mangara text as the name of a particular "Sunshade of Re", although sadly the name of the royal owner is not preserved. As yet, no text of this kind has been recovered from Kom el-Nana.

In linking the set of outlying temples at Amarna to the category of buildings known from texts as "Sunshades of Re" we are modifying, or rather extending, our view of what a solar shrine of this kind looked like. As yet there is no sign at Kom el-Nana of the characteristic solar platform, although little of the North Shrine (which mostly lies beneath a Byzantine building) has so far

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been uncovered. Although part of the ground at the northern end is also much obscured by the Byzantine settlement, the traces so far uncovered of what lies beneath this part suggest that, in the Amarna Period, a large brick building had stood here. What we can understand of the functions of the site points to its use for royal ceremonies which drew in large numbers of people. The whole southern enclosure seems to have focused on the building with a probable Window of Appearance which we have called the Central Platform (perhaps equivalent to building MVII at Maru-Aten) and which looked out over an open expanse like a parade ground. Why else should a large bakery and brewery be present in an isolated place except to provide sustenance to crowds of people who came or were summoned to the king's presence ?

The king's presence is conjured up from all the known ancient representations of the Window of Appearance in use, yet all of the known Amarna "Sunshades of Re" belonged to royal women. Much depends, of course, on what we mean by "belong to". Just as was the case with temples generally, "Sunshades of Re" were supported by landed foundations which produced an income of commodities. This is shown not only by the appearance of later examples of temples of this kind in the lists of the Wilbour Papyrus, but more particularly by a small number of sherds from amphorae at Amarna which had contained commodities originating from "Sunshades" (*COA* III: 201–203). Their aspect of ownership may therefore have been primarily one which proclaimed the name of the person to whose household the establishment belonged although, as the portrayal of the Sunshade of Queen Tiy on the walls of the tomb of Huya shows (*RT* III: Pl. X, p. 21), the royal female concerned could have been represented by statues, although alongside statues of a king. If we put Kom el-Nana in the same category as Maru-Aten, and see both as examples of "Sunshades of Re", we are bound to conclude that, despite being in the possession of a royal female, it could have been used primarily for ceremonies which featured the king as well as the queen.

The picture of the Sunshade of Queen Tiy in Huya's tomb introduces another perspective. The building is here made to look like other Amarna temple representations where an identification with the Great or Small Aten temple is indicated (cf. the discussion in *RT* III: 19–25; *COA* III: 203–8; Stadelmann 1969: 162–4). It does not look at all like a solar platform, although it contains one within its outer court (as do the standard representations of Aten temples at Amarna). If one interprets the scene in a fairly literal way, one has to envisage a two-part stone building which possessed a colonnade as a main feature and a court of many altars behind. This is the very shape that I have suggested above for the axial temple MIIA at Maru-Aten. Stadelmann (*ibid.*: 164) has concluded from Huya's scene that Queen Tiy's temple, as depicted, would have been about 40 m square. This is roughly the size of the sanctuaries of the Great and Small Aten Temples, and would now be represented by a fairly conspicuous ruin. Fairman (*COA* III: 204; cf. Stadelmann 1969: 164) drew attention to an associated part of the scene in the tomb of Huya, a register devoted to river-side scenes, and offered the idea that it gave a clue as to the location of the building, that it lay close to the river. The problem for him, as for Stadelmann, was that none of the known buildings by the river bore much resemblance to the building depicted in the scene. This remains true in respect of buildings with known plans. There is, or was, however, the Lepsius Building (see section 15.2). It had the right location and had been a stone building of the suggested magnitude, and one provided with columns, but it obviously remains quite speculative to link it with the building shown in Huya's tomb and so to make it the "Sunshade" of Queen Tiy. It is worth mentioning here a further reference to a building in the earlier proclamation, in a section of the text closer to the end (Murnane and Van Sijlen 1993: 46, 179; the traces were not resolved by Davies). It is very damaged, but the term used is, as they note, reminiscent of a "sunshade". An accompanying statement referred to its location, to the effect that it was (if the text is read correctly) on the route to the southern stelae. The Lepsius Building is potentially a candidate for this.

Stadelmann (1969: 164–5) has also pointed out that all temples at Amarna, in being sun temples, did not differ in essence from "Sunshade of Re" shrines. In this observation perhaps lies a solution to the difficulty of reconciling the various strands of evidence. As far as we can tell, the main religious buildings at Amarna were either in the Central City or lay well outside the city proper altogether, all of them (except the Desert Altars enclosures) to the south or south-east. The term "Sunshade of Re" was simply applied to the latter buildings as a group and was not limited to a single design. This would, of course, imply that all of these outlying buildings belonged to

royal women, leaving the main temples in the Central City outside this group as places where the connection with the king was dominant and where the distinctive temple name was preferred to the generic "Sunshade of Re". The closeness of meaning of the word "Sunshade of Re" and the general term "temple" (*hwt*) is, moreover, brought out by their interchangability in a phrase in a short version of the hymn to the Aten which occurs in several of the Amarna tombs (COA III: 202; Stadelmann 1969: 164–5, 165 n. 1). Furthermore, in the case of Maru-Aten, I have argued above that, in its fully developed design, its principal building was actually an Aten temple (building MIIA) to which the solar platforms on the island were peripheral. Its central feature might actually have been comparable to the South Shrine at Kom el-Nana, as well as to the sanctuaries in the two large Aten temples in the Central City.

The following table (Table 15.1) summarises the implications of the line of argument that has been followed in the preceding paragraphs, the principal effects of which are to give a personal ownership to most of the shrines and temples at Amarna, and to enhance the standing of the term "Chapel of Re/Sunshade of Re", so that, in each of the named cases, it refers to a major monument (I have, for this exercise, ignored the existence of Kiya).

temple designation	patron/patroness	site
<i>hwt-tn</i>	Akhenaten	Small Aten Temple
<i>šwt-r^r</i>	Nefertiti	Kom el-Nana
<i>šwt-r^r</i>	Tiy	Lepsius Building
<i>šwt-r^r</i>	Meritaten	Maru-Aten
<i>šwt-r^r</i>	Ankhsenpa-aten/another princess	el-Mangara
<i>šwt-r^r</i>	Ankhsenpa-aten/another princess	Desert Altars shrine

In Chapter 5 the argument was developed that Thebes may well have provided the general model from which the layout of Akhetaten was developed, and that this could have extended to the inclusion of a sacred landscape equivalent to the west bank at Thebes. The outlying garden temples — "Sunshades of Ra" — were an integral part of this. It has to be remembered that each of the west-bank mortuary temples at Thebes combined within one building several cults: of a form of Amun-Ra, of the visible sun via an open-air solar shrine, of the king who built it, and sometimes of an ancestor, and it provided a site for royal ceremonial, through the provision of a Window of Appearance. If we suppose that the outlying Amarna temples (together with the Small Aten Temple) were substitutes for them, we can see that one element in the Theban temples, the open-air solar shrine, has become the essence of the building, and has been developed and modified according to the nature of the Aten cult, but with the retention of provision for royal ceremonial. A Window of Appearance, it should be noted, was part of the design of one of the Aten temples in the Central City, to judge from tomb representations (Kemp 1976: 91, Fig. 2).

A theory that this group of Amarna temples was a substitute for the west-bank temples at Thebes raises a possible further implication. It might follow that at least a notional connection would have existed between each of these temples and one of the tombs in the royal valley. Thus, is this group of temples a guide as to who was buried there? If one includes the two annexes to Akhenaten's tomb, by the time work was suspended starts had been made on seven tombs (cf. Mumane and Van Siclen 1993: 174–5; or even eight, El-Khouly and Martin 1987: Pl. 14B). One of them might have been for Tutankhamun (El-Khouly and Martin 1987: 16), although the slow rate of progress on tomb cutting ought to mean that it would have been the tomb least advanced (perhaps no. 30, no more than an exploratory cutting of a few days' work, which was situated on the opposite side of the Royal Valley itself, El-Khouly and Martin 1987: 14, Pls. 8, 14A; Pl. 14B illustrates workings at an even more preliminary stage in the Royal Valley). The most likely intended occupants otherwise are the female members of Akhenaten's family. The king's initial scheme, as outlined in the first set of boundary stelae (Mumane and Van Siclen 1993: 41), envisaged tombs for himself, for Nefertiti, and for Meritaten. This might be a clue as to the identity of the owners of those tombs on which most work had been done (nos. 27 and 28, as well as the king's own tomb). Martin (1974: 105; 1989: 50) has suggested that the unfinished annexe in Akhenaten's tomb could have been for Nefertiti, but equally the intention could have been to provide for the burial of Queen Tiy. Akhenaten would then have brought to Amarna the one woman missing from the female set to which he gave such prominence. Queen Tiy was, of

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course, represented at Amarna by one of the solar temples. Another tomb ought then to have been for Ankhscnpa-aten, and it has been suggested, on the somewhat uncertain basis of a stamped jar handle, that princess Nefemefrure could have been buried in one of the tombs also (El-Khouly and Martin 1987: 8, 16).

Aside from this line of speculation, the evidence at our disposal shows that, like any major Egyptian town or city, Amarna possessed a range of cult centres. Two of them were major temples dedicated to the Aten, there was at least one small temple for a statue of the king (COA III: 140-1), and there were others still, the "Sunshade of Re" temples which were elements in the households of important royal women. It fits our general picture of New Kingdom society if we regard the latter group of temples as providing not only places of worship to the sun performed in the name of the female owner but also, in each case, the focus for an institutional framework supporting the household of the owner, its religious status safeguarding its existence. This framework would have consisted essentially of ownership and management of lands, entitlement to income from other institutions, and payments to personnel. Their buildings also performed a more general function, which takes us back to the beginning of this chapter. By their existence Akhenaten and the women of his family gave themselves important territorial markers scattered over the Amarna plain, well beyond the limits of the residential city. Wherever the royal family or ordinary city-dwellers went, there, shimmering in the distance, was a royal enclave claiming attention.

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