

## CHAPTER 2

### THE CONTEXT: THE SOUTHERN TEMPLE GROUP

#### 2.1 Introduction

"...it would appear that across the entire amphitheatre of flat land which lies within the boundaries marked out by 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 focussed 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" (Peet and Woolley 1923: 109).

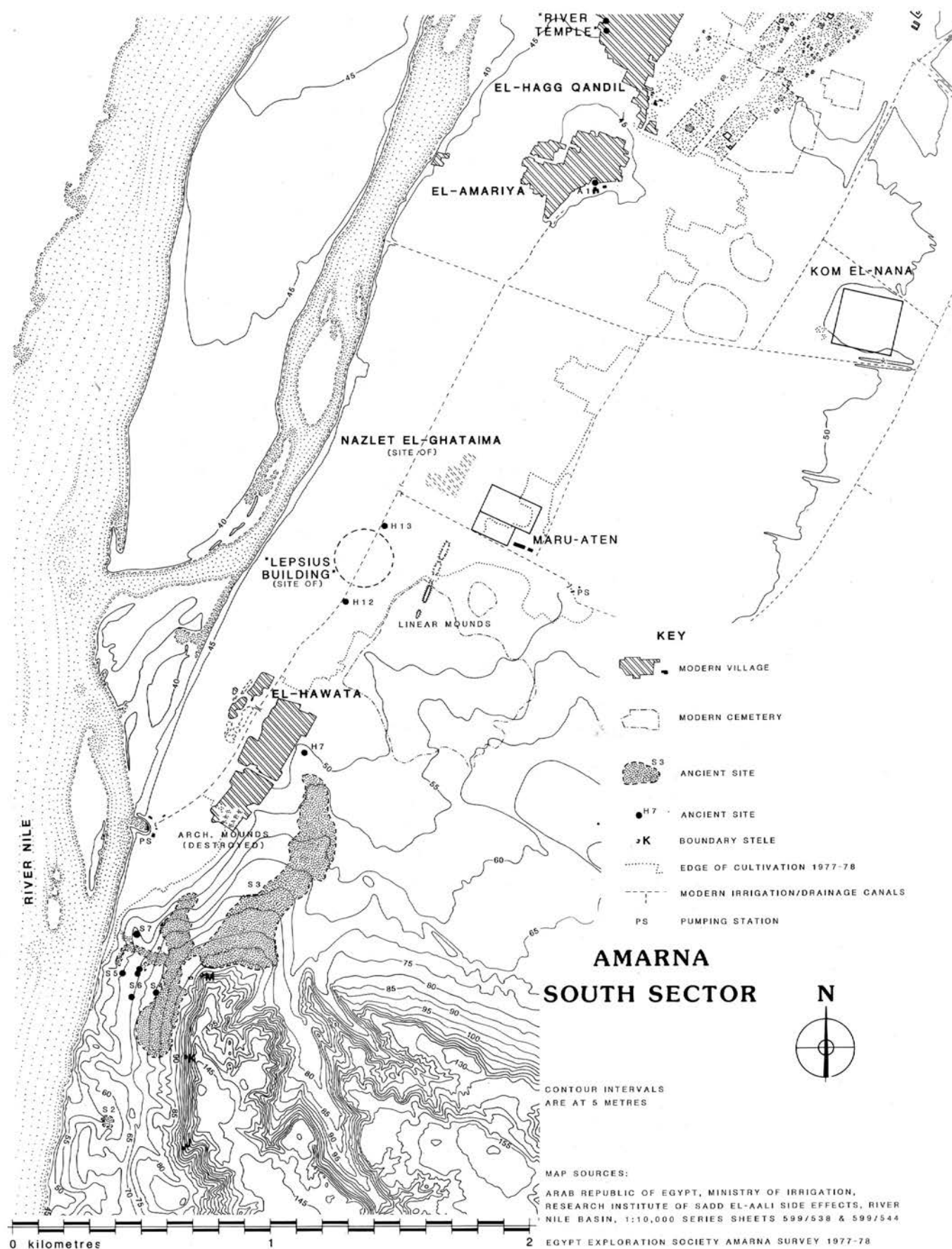
These words, written as an introduction to the excavation report on the southerly site of Maru-Aten, were prophetic for both the north and south extremities of Amarna. The importance of the former, now known as the North City, was revealed by subsequent excavations of the Egypt Exploration Society (still 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.

A fuller report, citing more archaeological detail for a range of sites covered in a survey of the whole of the southern sector, will appear in *Amarna Reports* VI (cf. Figure 2.1). What is presented here is a summary of the evidence for a group of temples which gave to the southern zone a special character. They numbered four, but only one of them — Maru-Aten — has had hitherto a firmly established place in scholarly accounts of Amarna. The excavation of Kom el-Nana adds a second to this category, but the remaining two are likely to remain shadowy entities, their existence inferred from sources which are not capable of further investigation.

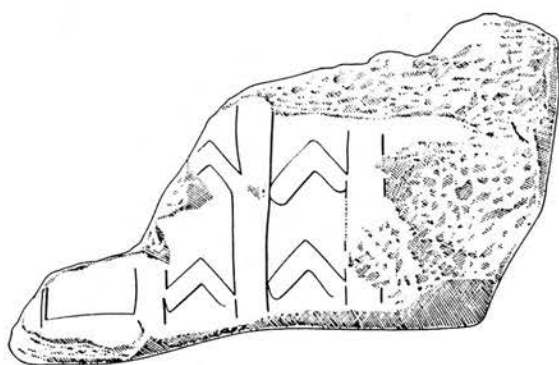
#### 2.2 Temple no. 1: The "Lepsius Building"

The great German Egyptologist C.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 (*LD Text* II: 123–128). 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 Hauāta wird ein neuer Kanal nach Amarie und Hagi Kandil gezogen. Hierbei hat man nahe bei Hauāta ein flaches Ruinenfeld durchschnitten, wo Säulenstücke und Hieroglyphen in weissem Kalkstein zum Vorschein gekommen sind, darunter der Nachname Amenophis' IV (Āach-en-āten)" (*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, the course of the canal has remained the same, as marked on 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 E.E.S. archives), show that this site was never cut by a canal running north–south.

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. Without modern verification, however, these observations do not provide a conclusive



case.



**Figure 2.2.** Decorated face of limestone block from the canal side north of el-Hawata (drawn by A. Boyce).

The stretch of the canal for a distance of about 700 metres north of el-Hawata was examined for evidence on 4 February 1989. The canal was filled with water at the time and was irrigating the fields on both sides. Between 250 and 500 metres 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 present, but rarely. Over the same stretch larger pieces of limestone, with edges rounded by water, can be seen both at the edges of fields and along the side of the canal. At about 200 metres south of the bridge a rectangular block of stone, roughly worked, lay partly sunk in the fields. Its visible surfaces measured 52 by 20 cms. These observations on their own supply little real support for the existence of a separate Amarna stone building. Much more positive is a fragment of a limestone block picked from shallow water at the side of the canal at point about 450 metres south of the bridge and illustrated in Figure 2.2. It measures 14 by 9 cms across the face, is 14.5 cms 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 separate existence of this site does seem to be assured. We are, however, extremely unlikely ever to know anything more about it. Lepsius marked on his plan (we must remember that the original was probably a rapid sketch) a circular area about 150 metres 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 must reconcile ourselves to the fact that, in the Lepsius Building, we have lost a major royal building at Amarna.

### 2.3 Temple no. 2: Maru-Aten – introduction

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 shows 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. Pendlebury remarked in his diary (E.E.S. 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, 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 lately



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 whole site was destroyed by the huge irrigation project laid out in the 1960s. The only signs now of its existence are some low spoil heaps on vegetation-covered waste-land north of the pumping station and which originally lay near the back of the northern enclosure.

Maru-Aten remains an enigma, although points of resemblance which it has with Kom el-Nana may bring some clarification as the excavation of Kom el-Nana progresses. 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 Amarna 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*: 147–156) 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 northern enclosure was built subsequent to the southern, 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. 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.

# MARU-ATEN

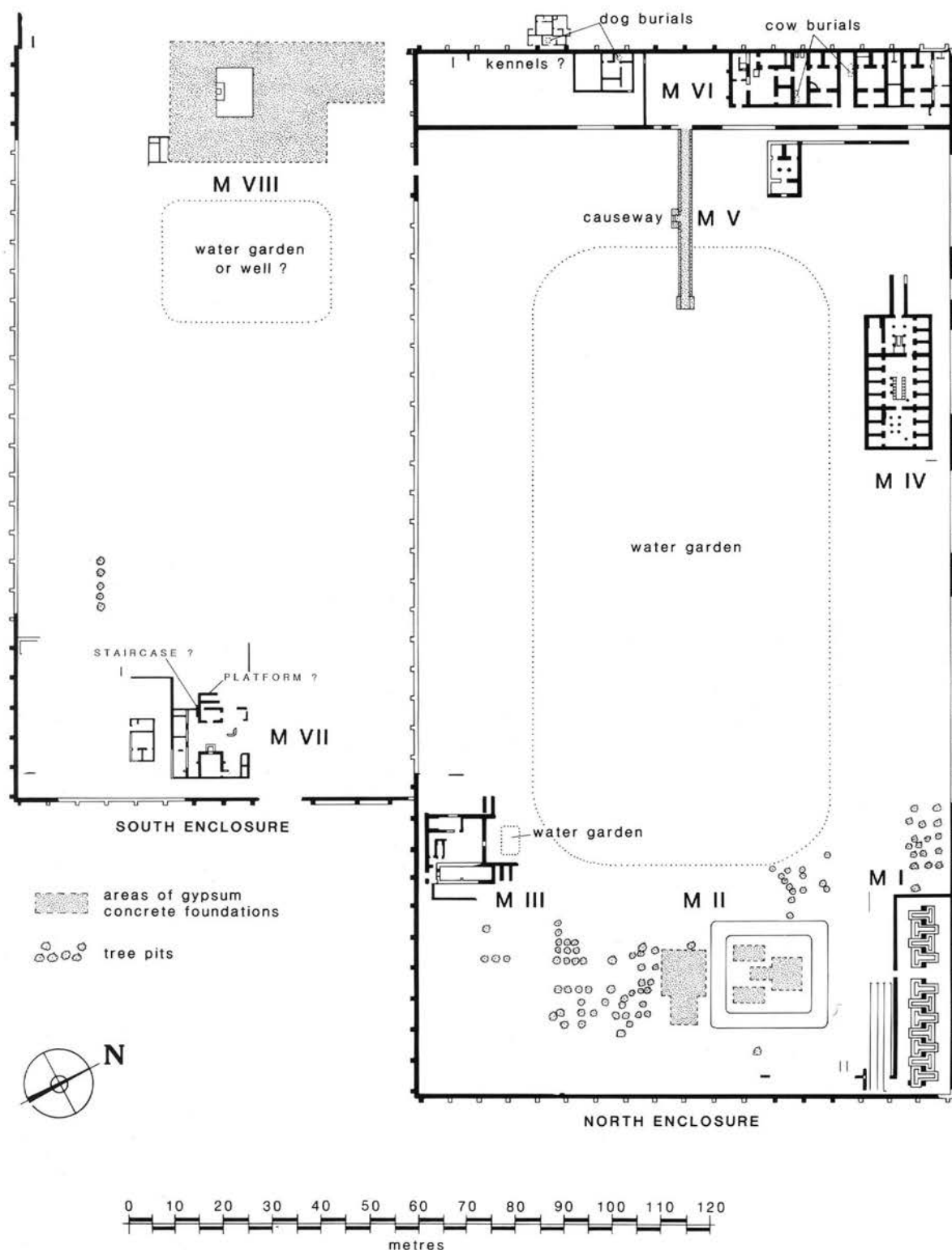


Figure 2.3. General plan of Maru-Aten, after COA I: Pl. XXIX.

## 2.4 Maru-Aten – Building MII

One of Maru-Aten's unique features was the complex in the north-east corner of the northern enclosure, which consisted of the building group MII and the T-shaped basins with painted plaster. 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 to refer to the individual parts of MII (Figure 2.4). Before excavation the site of MII was apparently 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 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 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 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.*: 120–121) 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 2.6, 2.7), 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 (E.E.S. 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,<sup>1</sup> 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, 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):

<sup>1</sup> 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.

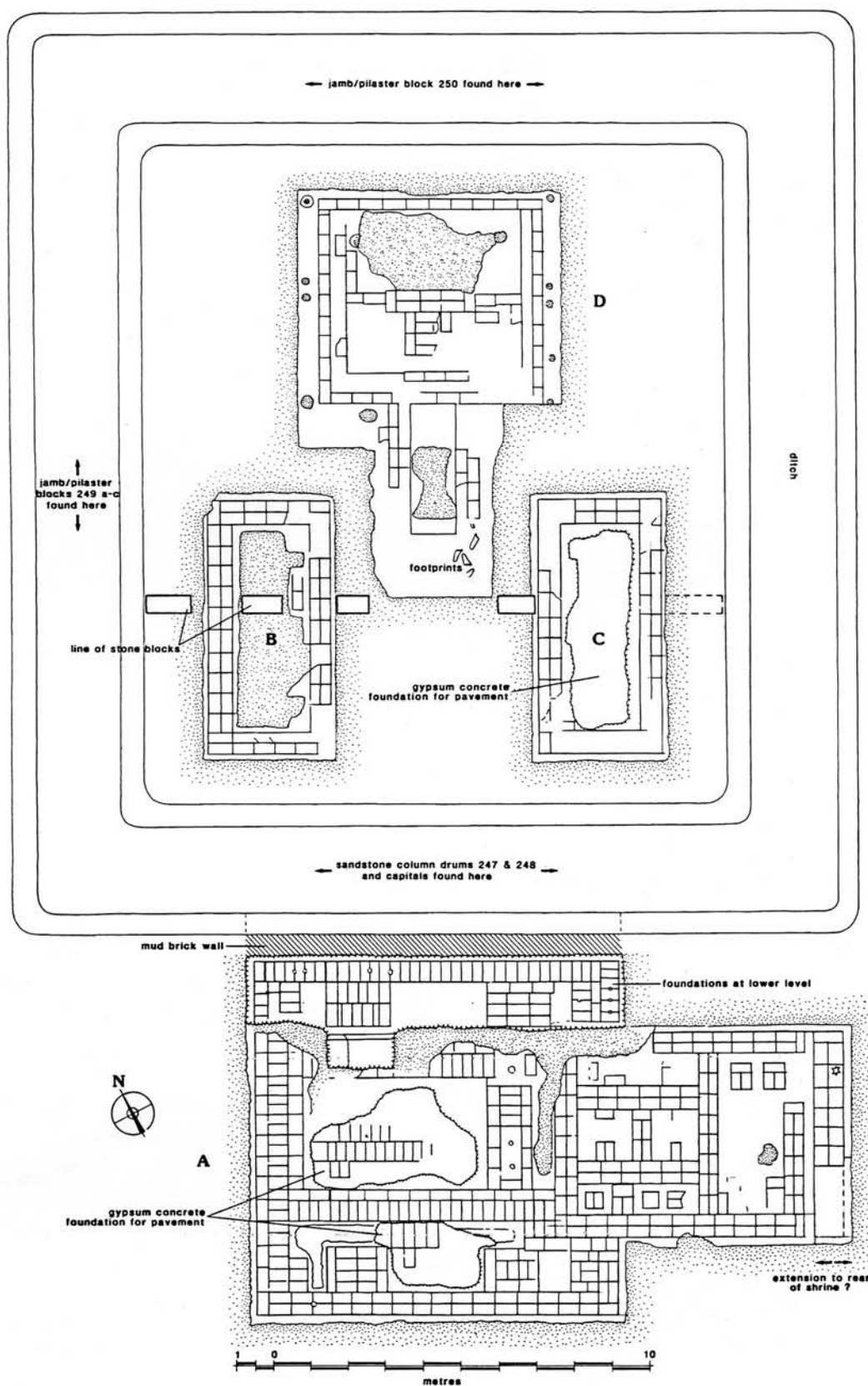


Figure 2.4. The group of buildings MII at Maru-Aten, after COA I: Pl. XXX.

MII D

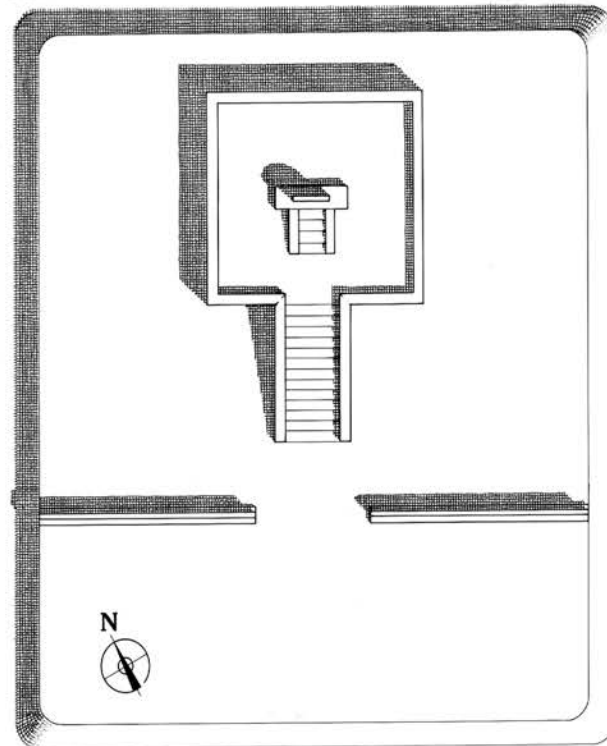


Figure 2.5. Site MII at Maru-Aten at a possible initial stage of use.

22/248 A & B (Cairo JdE 47200)

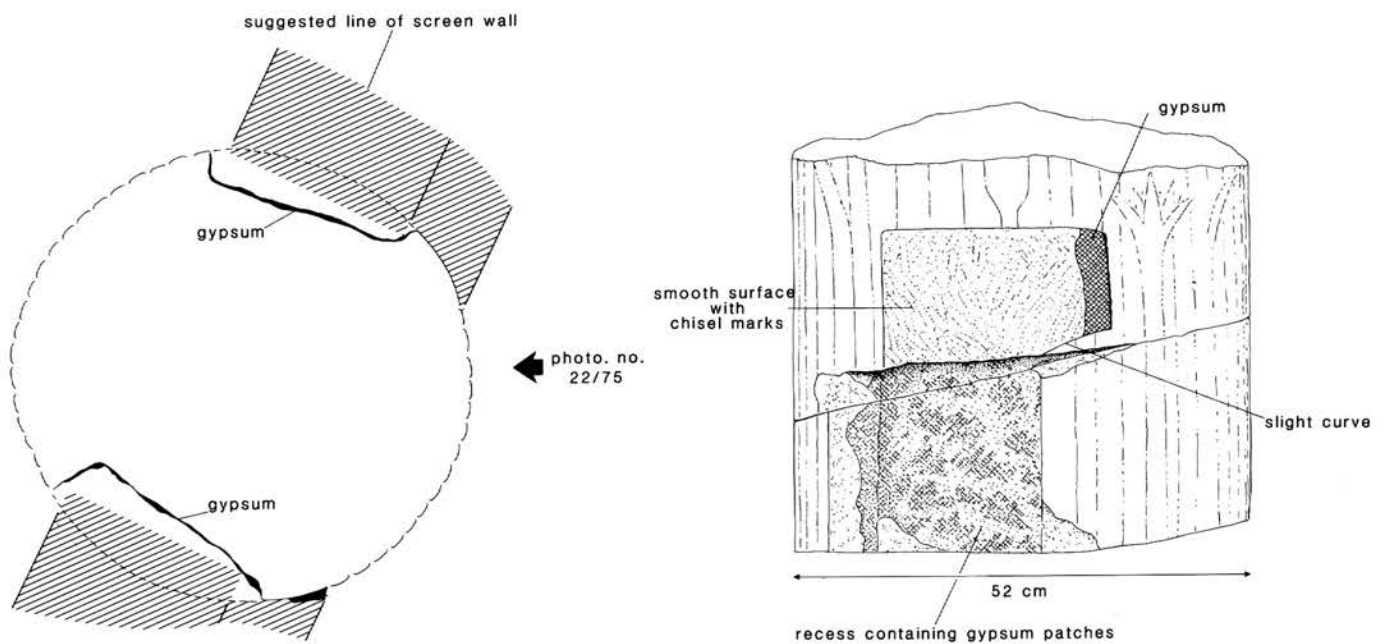
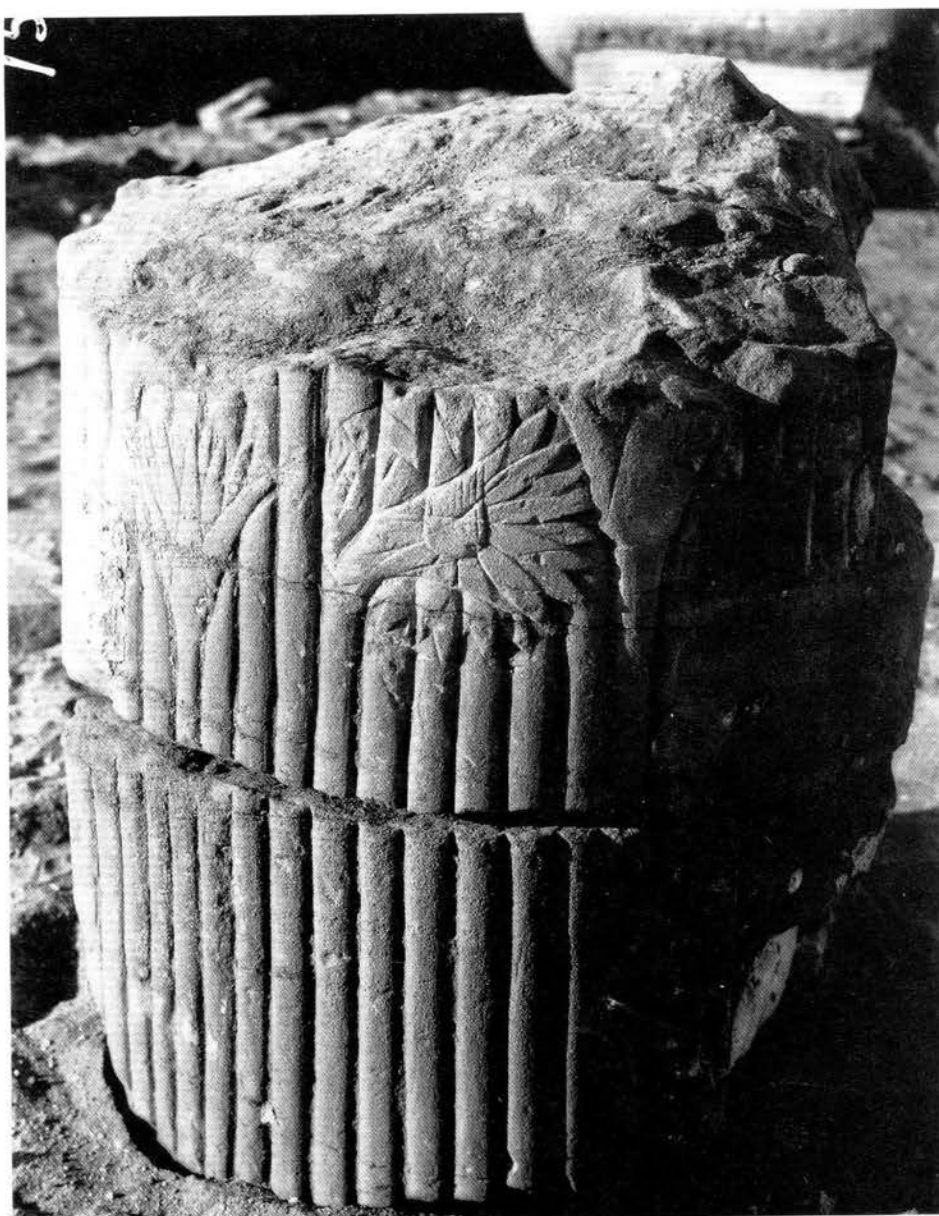


Figure 2.6. Sketch of column drum 22/248A & B = Cairo JdE 47200, made by Kemp in the Cairo Museum.





**Figure 2.7.** Photograph of column drum 22/248A & B taken in 1922. E.E.S. 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.

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 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 2.6. 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 2.7) 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 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 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 1922: Pl. XII; *COA* I: Pl. XXXI.5; reproduced here as Figure 2.7) 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 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 one 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. This said, we can also consider it likely that the fragments of alabaster mentioned by Woolley in connection with the sandstone duck columns simply came from an architectural element made entirely of alabaster. 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 uncertain. 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 MIIB-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 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.

Amarna 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.<sup>2</sup> It is here that Newton's reconstruction fails.<sup>3</sup> There are no signs of column foundations for any of the three buildings on the island (MIIB-D), and, as the discussion above indicates, 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

<sup>2</sup> E.g. COA III: Pls. III, IV, XIII, XIV, XL5.

<sup>3</sup> 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.



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 Amarna 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. 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 seem 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 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.

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"). Woolley and Newton restored it 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.<sup>4</sup> The internal divisions have a parallel in the plan of the Great Altar at the Small Aten Temple, and 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 possibility, 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, 11 cm thick, and worked on both sides (22/208 = COA I: 121, Pls. XXXIII.2; LVII.53–60; sent to Toledo); (b) fragments from a pink granite stela 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, decorated on both faces, and only 6 cm thick (22/273 = *ibid.*: 121, Pls. XXXIV.1, 2; LVI, sent to the Ashmolean Museum 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.

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

<sup>4</sup> 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 Hatiay (COA II: 64, Pls. XV, XXIII.3).



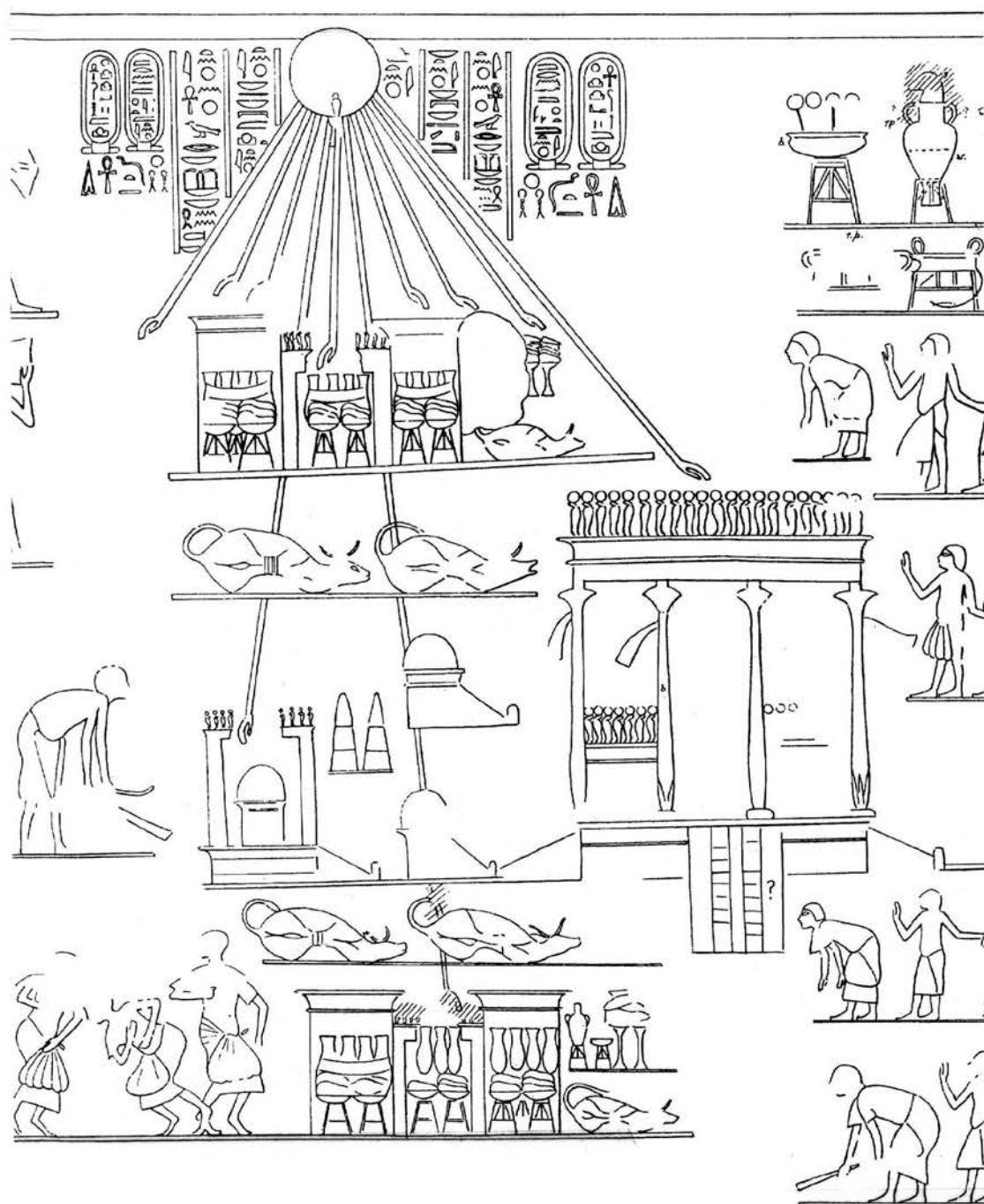


Figure 2.8. Part of the scene of the Reception of Foreign Tribute at Amama, in the tomb of Huya, showing the architecture of the ceremonial area. After *RT III*: Pl. XIV.

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. Neither are there special indications for pilasters nor 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 Figure 2.8). 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 completely 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 Chapter 3, section 3.12, and Figure 3.21).

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). Without being able to examine these pieces any interpretation 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.

The two main conclusions to arise from this discussion are, firstly, that the central structure on the island is likely to have been an open platform of a well-known type used for solar worship; and, secondly, that it may well belong to an initial layout to which the other buildings were added later.

### 2.5 Maru-Aten – Building MVIII

The MII group together did not form the largest stone building at Maru-Aten. This honour belongs to MVIII, which stood at the western end of the southern enclosure and had been, by far, the most impressive building at Maru-Aten. We are, however, 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.<sup>5</sup> The plan 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 especially to the distribution of columns, 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? 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 of stonework within its centre, perhaps for a garden.

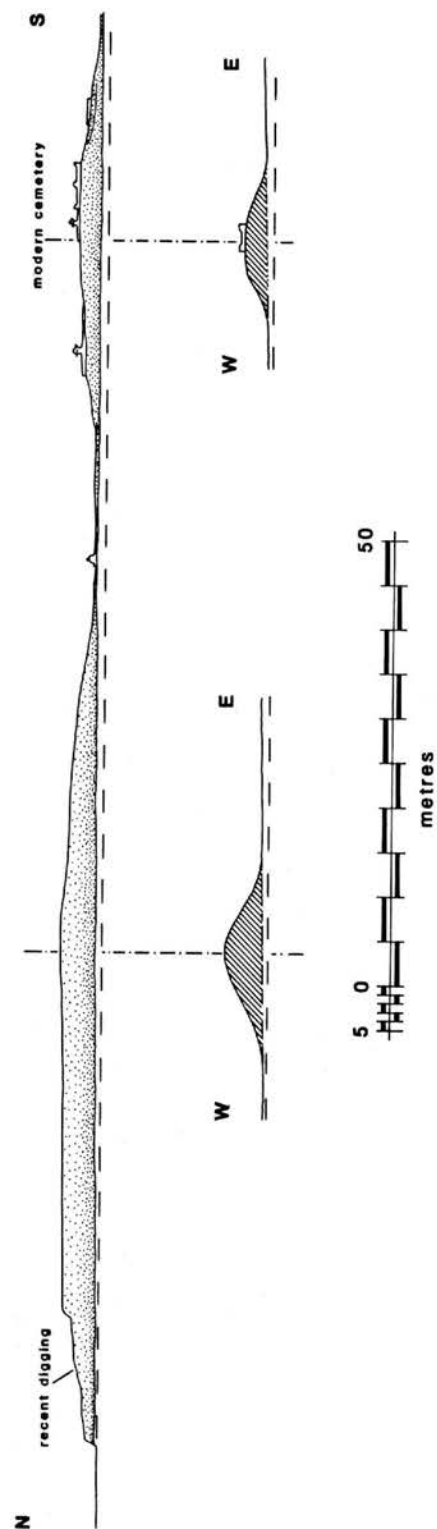
It is much to be regretted that Maru-Aten no longer exists as an archaeological site, for the brief period of time that Woolley spent clearing it and the dearth of recorded information, both published and unpublished, would otherwise have exposed it to re-examination in the expectation of finding significant new evidence as to the internal layout and relative chronology. Yet even then it is unlikely that the challenge of finding meaning would have been met. The intellectual structures which are projected on to the ground in layouts of this kind are particularly resistant to recovery from the kind of evidence that archaeology provides.

### 2.6 Maru-Aten – the linear mounds

An account of Maru-Aten should not end with the two enclosures made familiar by Woolley’s excavations. Beginning some 70 metres south of Maru-Aten and 50 metres in front of the line of its west wall 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). Woolley 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 (E.E.S. 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 2.9, 2.10) the

<sup>5</sup> 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”.



**Figure 2.9.** Elevation of the two surviving linear mounds south of Maru-Aten and north of el-Hawata, drawn 1.2.77.





**Figure 2.10.** Photograph taken looking towards the north in 1922 of the linear mounds (E.E.S. archive photograph 22/82). The stone-covered mounds in the foreground are modern Muslim graves.

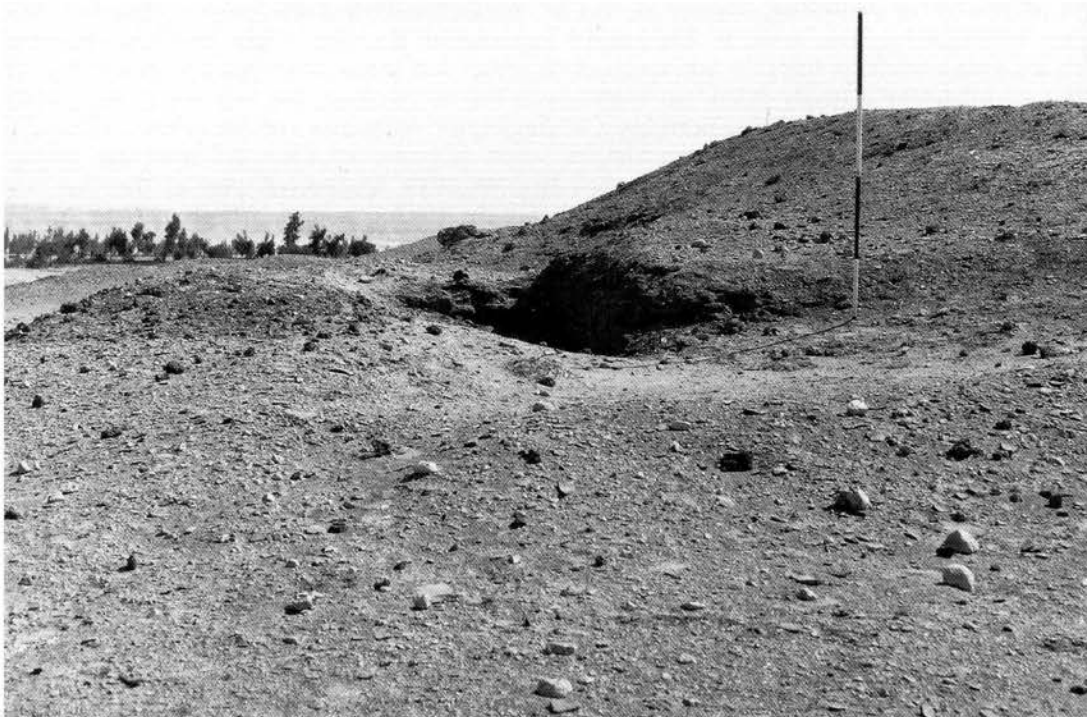
northern one has a length of about 95 m (and has lost perhaps another 10), a width of 20 m and a height of 4m; the diminutive southern one measures about 45 x 15 x 2.5 m. Woolley's explanation is certainly a tempting one, although it fails to explain what effect was intended by dumping the earth in this 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, in which not a few Eighteenth Dynasty potsherds occur. However, in places where ditches now cut the ground over the site of Maru-Aten the local soil appears to be a buff-coloured sandy silt, a basic wadi deposit, containing fewer stones. It is perhaps 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. The mounds may not, therefore, 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). The 1923 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.

### **2.7 Temple no. 3: Kom el-Nana – general description**

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 2.11) which attracted the attention of Lepsius, who identified them as ruined pyramids (*LD Text II*: 125, 126). Another suggestion, offered hesitatingly by Timme (1917: 24, cf. Blatt 6), was that it 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 (E.E.S. 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 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 dateable evidence.



**Figure 2.11.** One of the mounds (mound "B") of the late Roman/early Christian 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 running 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 recognise as the southern 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 Amarna art style.<sup>6</sup> 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 Amarna 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 Amarna-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 it has turned out to be bakeries rather than houses). The depth of the late Roman remains was, however, somewhat underestimated, something corrected on subsequent visits. On one of these (January 1981) Peter French made notes on the surface pottery of this period, which he was inclined to date to the 4th/5th century AD. His conclusions were:

- (1) the 4th/5th century AD sherds are very much more numerous than the NK. The most impressive patch of the latter is in the “N.K. sherds and mud brick walls” area on the south-east side, outside the enclosure (probably the part that attracted Pendlebury’s attention);
- (2) there was no discernible difference in 4th/5th century AD sherds from different parts of the site, i.e. we should assume a “one period” occupation, length not determinable. It could also be 6th century rather than 4th/5th;
- (3) “Egyptian A” fine wares, the standard fine ware of Christian Egypt found in great quantity in Aswan and perhaps made there, but occurring in quantity at least as far north as the Memphis area, were present but not abundant. This is probably indicative of a fairly poor community;
- (4) a desert-edge Christian community might well be monastic, but there is no obvious spot for a church. The site needs to be excavated before more can be said, but puzzling is the apparently scattered nature of the buildings. If one of the mounds (C ?) covers a church it was very small.

The two seasons of excavation so far conducted at Kom el-Nana have begun to lay bare the outlines of the New Kingdom constructions on the east and south sides. Little has yet been done on the late Roman level (but note the section of wall exposed in square W38, see Chapter 4), but it is now possible to define its appearance and extent rather better than was done in 1977 (Figure 2.12). The settlement covered an area some 100 m square, in the middle of the northern part of the Amarna-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. It had its own enclosure wall which is very obvious on the east side. Within this space were three major buildings, roughly square in plan, which have decayed to form three steep mounds (A–C), the largest being mound B (Figure 2.11). Much of the remaining ground was occupied by lesser buildings, two of which, lying west of mound C, were partly exposed by the 1963 EAO excavations. The site as a whole seems to have been laid out on a rectilinear plan, and the walls were well constructed of mud bricks. It gives the impression of a having been an official creation, with probably a fairly short life. Rubbish, including large quantities of broken pottery, was dumped on the south side and probably to the west, to judge from the present spread of sherds in this direction. So far no trace of stonework from this period has been found. Military post and Christian monastery are two suggestions that have been put forward, but only major excavation, which is planned for the future, is likely to take the discussion significantly forward.

The late Roman level obscures about one sixth of the Amarna-Period remains. Since it seems to lie on the surface which developed from centuries of exposure following the ancient abandonment and destruction of the site (illustrated by the stratigraphy in square W38, see Chapter 4) excavation beneath the late Roman foundations should, in the end, enable the plan of the earlier period to be completed. As it is, we can already account in a very general way for

<sup>6</sup> I am grateful to Dr Ali el-Khouli for showing me Mr Osiris Gabriel’s report which is now in the EAO archives at Abbasiya. The fragments of stone were for many years stored in Tomb 14 at Amarna but have now been transferred to the EAO magazine at el-Ashmunein.

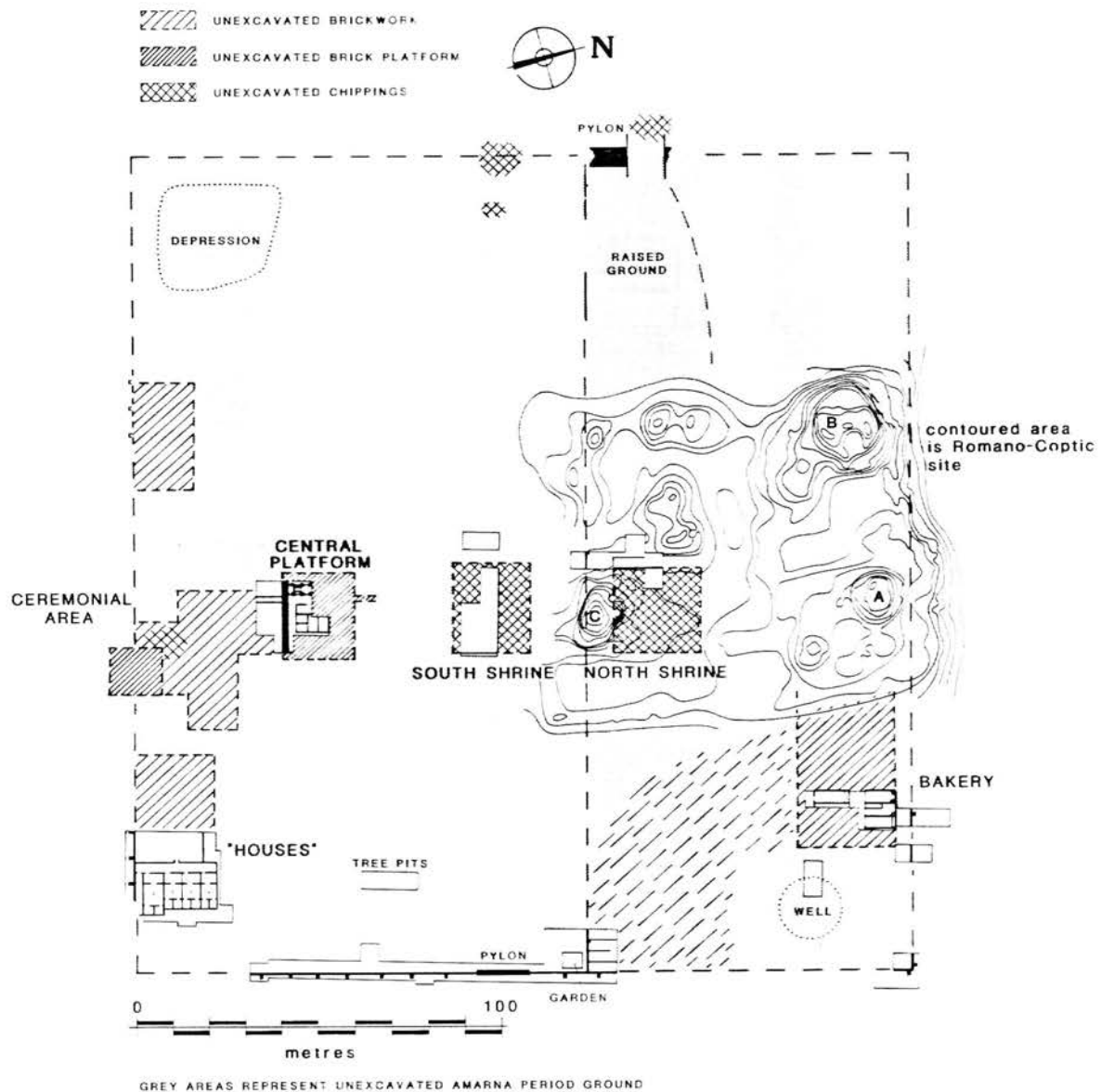


Figure 2.12. Contour plan of Kom el-Nana.



## Kom el-Nana excavations

much of the character of the site in the Amarna Period.



**Figure 2.13.** Outline interpretation of Amarna-Period features at Kom el-Nana.

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 (Figures 2.12, 2.13). Much of the eastern side has been excavated, together with short stretches towards the eastern ends of the north and south walls. 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 layer of gravel spread anciently over the ground to the south which had buried the lower part of the wall, perhaps in an attempt to prevent water damage from the adjacent wadi. The wall was provided with regularly spaced large buttresses, 1.20 m square, spaced at approximately 7.5 m intervals. One of the corners (the north-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 sondages carried out in 1963 by the EAO also revealed what was probably a pylon entrance in the west wall, facing the river. As far as one can tell now these pylons were much broader, having a width of about 6 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 late Roman material further to the west and running to join the western enclosure wall a short distance to the south of the western pylons just described. 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 late Roman layer and its basic character is thus evident from the combination of excavated results and surface topography and characteristics. Much of the space seems to have been free of buildings altogether, and was probably floored with a thick mud surface. This has been located in association with the building in the south-east corner, around the central platform, and to the west of the South and North Shrines. A large part of the eastern section, however, was treated differently. The ground level was artificially raised with a layer of desert sand, gravel and stones (and builders' rubble at the south end), and trees were planted in regularly spaced circular pits filled with mud. 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. This discovery has prompted a detailed study of other such gardens found previously at Amarna and elsewhere. Written by Pamela Rose, it is scheduled for publication in the near future.

A large mud-brick platform (the "Central Platform") occupied the focal point of this great open space, straddling the east–west axis of the enclosure but lying slightly back from the north–south axis. A detailed account of the excavation of part of this platform is the subject of Chapter 3. It had measured perhaps 20 m square, and had been 1.5 m high, reached by a ramp on the south and perhaps also by a corresponding one on the north. The platform had not been open but had been covered with a series of rooms and colonnades forming a pavilion. To the south of the platform the present ground-surface undulates in a manner suggestive of further brick buildings, though of less substantial character, with the exception of a conspicuous mound which seems to straddle the southern enclosure wall and could be the remains of a second platform. Ascertaining the nature and purpose of this part of the site is an immediate priority for fieldwork.

The mounds also continue along the inside of the southern enclosure wall towards the south-east corner of the enclosure. One of these mounds, the one closest to the south-east corner, has now been completely excavated. It covered a carefully laid-out group of four similar sets 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. 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-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. A similar set of "houses" existed at Maru-Aten.

The remaining feature of the southern enclosure was the South Shrine, dealt with in Chapter 4. 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 its 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. 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 accomplishment.

The general character of the northern enclosure is more difficult to appreciate because a large part of the centre is occupied by the late Roman settlement. The recent excavations have revealed that it, too, possessed a stone shrine on an east-west alignment, lying towards the southern side of the enclosure roughly opposite South Shrine. Part of the front edge was exposed in 1989, but insufficient 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 wall of the temple.

The north-eastern part of the enclosure was the object of excavation in 1988 and 1989, revealing a markedly different character to the rest of Kom el-Nana in that much was occupied by non-religious structures. A bakery 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 they functioned in part as bakeries.<sup>7</sup> 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 which includes, for example, many meat jars. 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 lay 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 are known: beside the Great Aten Temple, and beside the Small Aten Temple (the *Hwt-itrn*).

A well had lain just to the south-east of the bakery block, which had later filled up to leave just a shallow circular depression on the desert surface. A cutting made across its western side in 1988 revealed that the natural substrata are soft sands and clays, but also that an ancient well shaft had almost certainly been cut into it. Following the collapse (after the abandonment of the site) of the revetment which must have been built to hold back the soft substrata, the hole was filled first with wind-blown sand and erosion debris, and then by dark earth containing a mixture of Eighteenth Dynasty and Roman pottery. The nature of the slope of the natural substrata suggests that the aperture of the well was smaller than was the case with most of the two-stage Amarna wells, but in view of the soft nature of the sediments and of the relatively high water-table it will probably not be possible to find out much more about it.<sup>8</sup>

Much of the remaining eastern part of the northern enclosure may also have been built up. 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 during the Amarna Period, whilst dark dusty surface traces over much of the remainder imply the presence of other buildings. A key question that cannot be answered until the late Roman level has been

<sup>7</sup> Original identification in Kemp 1979: 7-12; further reporting by Rose and Nicholson in AR IV: Chapter 9.

<sup>8</sup> Since the 1988 excavation the local water table has risen considerably, making further investigation unlikely.



investigated is whether other and perhaps different secular buildings also stood in the north enclosure.

## 2.8 Kom el-Nana – discussion of its significance

It is already clear that Kom el-Nana 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 2.14). All of these buildings have a common orientation, and relate to a single axis.

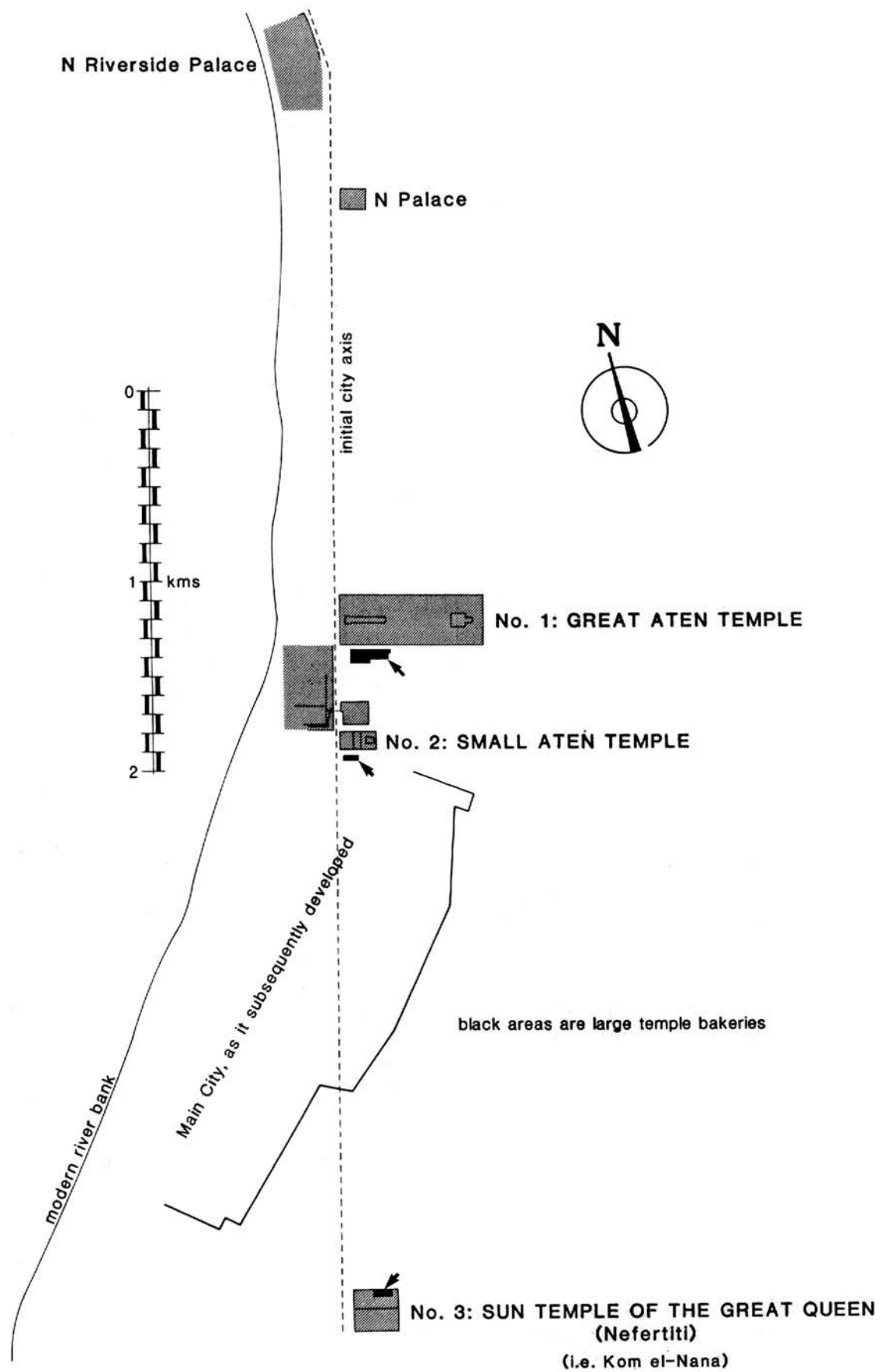
From an early moment in the city's history two competing directional preferences were at work, and in their interaction brought about the irregularities in street plan and house alignment which are so marked a feature of the city's layout. The premier axis was presumably that of the "Royal Road", laid out at the king's wish. 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 river as it flowed past the Amarna desert bay. The part of the city to be inhabited first by commoners was almost certainly that part of the South Suburb between the Central City and the broad (modern) wadi which cuts across the site, with a probably rapid extension southwards to the latitude of the house of the vizier Nakht. 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: 88–89). Housing starts were probably made at numerous widely spaced localities over this area, often, it would seem, with little or no planning directive and with only general, and sometimes mistaken, expectations of how the city would develop. However, 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 idealised plan.

What, then, was Kom el-Nana? Three elements that we have isolated — building type, presence of large temple bakery, inclusion within the very first architectural scheme — point to one identification for Kom el-Nana: nothing less than the third temple of 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;<sup>9</sup> Fairman 1935: 136–137; *COA* III: 190–191; Mumane 1984).<sup>10</sup> It begins with statements of intent to build three temples: the "House of the

<sup>9</sup> A copy of the relevant part was kindly supplied by Dr. Jaromir Malek. It has the form of a copy of Davies' copies which were annotated against the originals during the early part of the 1921–22 (Woolley) season.

<sup>10</sup> Kemp has also checked this particular part of the inscription.





**Figure 2.14.** Diagram showing the relationship of Kom el-Nana to the Small and Great Aten Temples within the Central City, and to the "Royal Road".

Aten", the "Mansion of the Aten",<sup>11</sup> and the "Sunshade of Re (i.e. solar shrine) of the [great] royal wife [Nefertiti]", and continues with statements about a "House of Rejoicing for the Aten" and royal apartments. The second building seems to be securely identified with the Small Aten Temple in the Central City (a building of such importance and likely chronological priority that its inclusion within the list of the boundary stelae must be taken for granted), and insofar as one can be sure that the "House of the Aten" and "House of Rejoicing" really were terms for individual buildings they, too, were situated in the Central City. Neither by text nor by archaeology, however, has a solar temple of sufficient magnitude been located within the Central City. It is worthy of serious consideration that Kom el-Nana is this building. However, for this identification to convince it must satisfy what few criteria we can draw up for solar shrines of the "Sunshade of Re" type. This will be examined in the last section.

## 2.9 Temple no. 4: el-Mangara

Strictly this lies outside the southern zone, being 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 an Egyptian Antiquities Organization inspector, Osiris Gabriel, in 1963, at the time that the irrigation project was being laid out. It is reported that a number of cut stone blocks was found buried in sand at a depth of 1.5 to 2 m, together with at least one fragment of a carved block now in the EAO magazine at el-Ashmunein. These blocks were tumbled, and no trace was found of an actual wall or its foundations in stone, or of a mud brick wall.

The site 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. 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 2.15). By the time of the later visit the area was still uncultivated desert, but had been recently trenched by closely set ditches preparatory to cultivation (Figure 2.16). 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. Recognisable 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 2.17);
- (2) a column base (Figure 2.18), 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;
- (3) a fragment from a limestone architectural moulding or perhaps even from a statue (Figure 2.19);
- (4) a cut stone block bearing part of an architectural scene (Figure 2.20). 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 meaning (Figure 2.21), 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 threshold. Four small fragments of gypsum concrete were also noted (more

<sup>11</sup> Fairman 1935: 136 comments "battered but certain" in respect of the reading of the hieroglyphic group *t3 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:





**Figure 2.15.** 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.

were visible in 1977, Figure 2.22), and in 1977 a few eroded mud-brick fragments were also present (no modern building yet stood in the vicinity at this time). A small quantity of sherds was seen and catalogued, all of them consistent with an Amarna Period date. The appearance of the site, and the high water table, suggest that excavation would be pointless and, in any case, the site is due for imminent cultivation.

The depth at which the first blocks were found in 1963 does not accord with the conditions of a normal site at Amarna, where the ancient ground level is usually close to the present desert surface. 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



**Figure 2.16.** 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 2.20.

houses about 250 m to the south-west adjacent to which, on the west, the site of el-Mangara lies. 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 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, in addition to the line of brick platforms, had also originally possessed a small stone shrine inside a brick enclosure wall (see Chapter 3, section 3.12) buttressed in the same way as the Maru-Aten and Kom el-Nana enclosures.

#### **2.10 What purposes did the southern monuments serve ?**

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. At





**Figure 2.17.** El-Mangara: in the foreground are two limestone cavetto cornice blocks, the nearer one from a corner.

first sight, the fact that we know the name of one of them — Maru-Aten — should be of great assistance in understanding what this purpose was, but whilst broad limits of meaning can be given to the term *m3rw* the ways in which such places were used remain elusive.<sup>12</sup>

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

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<sup>12</sup> The original discussion by Gunn in *COA* I: 156–158 summarises well what is known of the term, to which needs to be added discussions arising from the passage in the Kom el-Hetan stele of Amenophis III which describes the building of a *m3rw* for Amun. See Badawy 1956, Manniche 1982, Bell 1985: 275. Meltzer 1988: 92–93 provides an up-to-date summary of recent discussions of the etymology of the word.

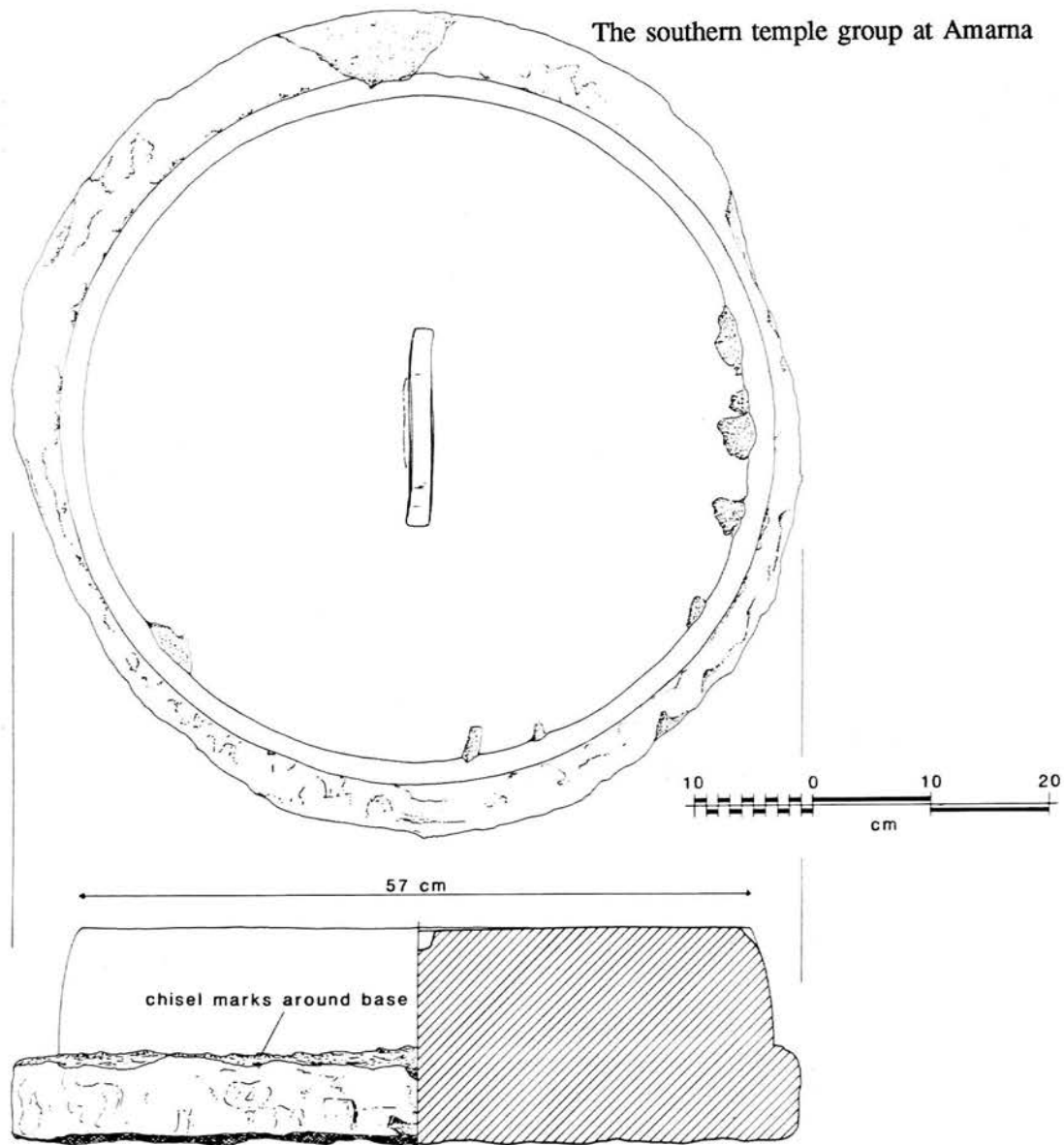


Figure 2.18. Column base of nummulitic limestone from el-Mangara. The diameter of the top surface is 57 cm.

whether *m3rw* in the New Kingdom was really a proper architectural term at all, rather than a broad term of domain 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), *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).<sup>13</sup> 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: 92–93), 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 occurs on a limestone block found 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: 214–218). If one follows a

<sup>13</sup> An example of *pr ltn* 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.

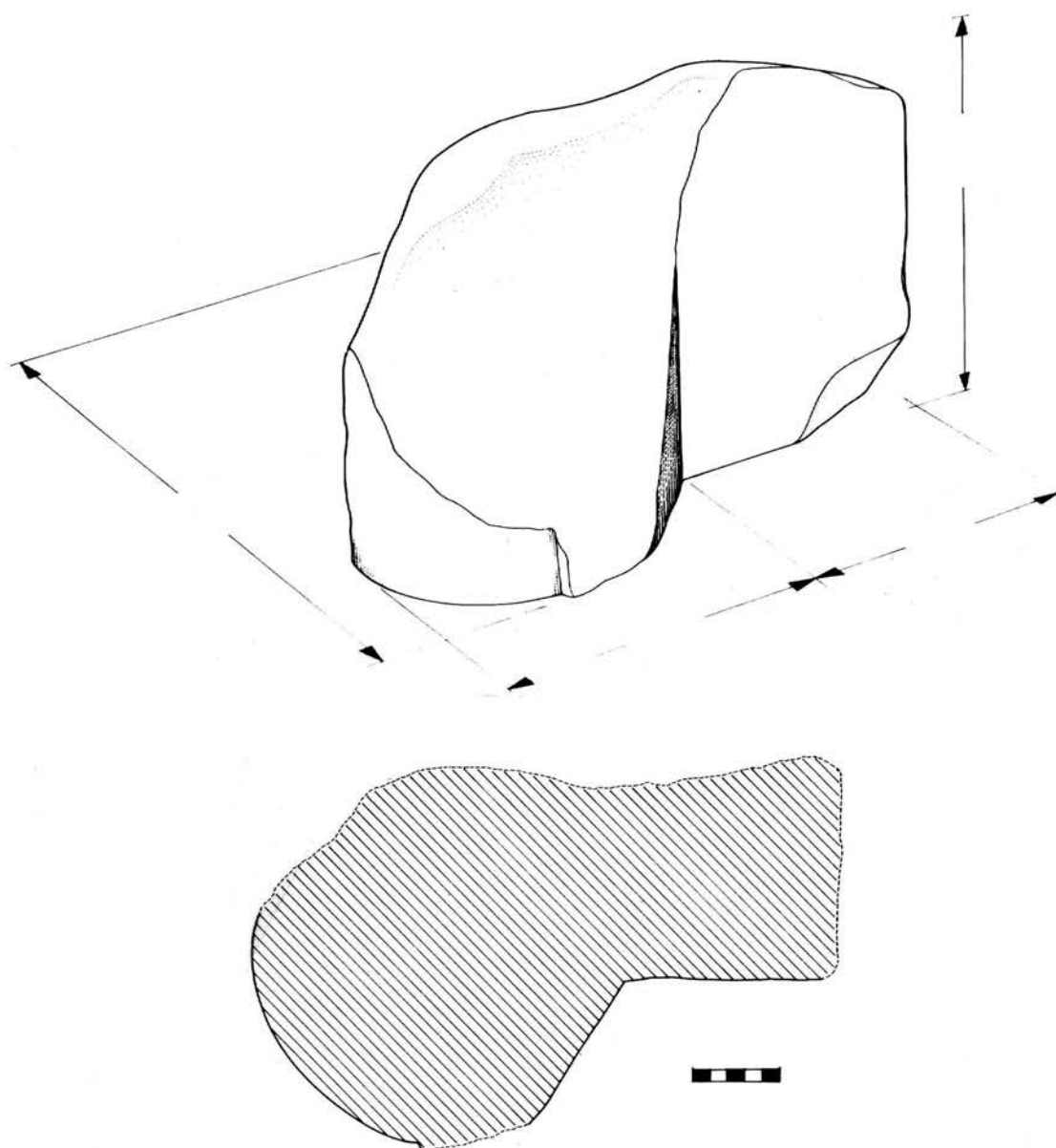
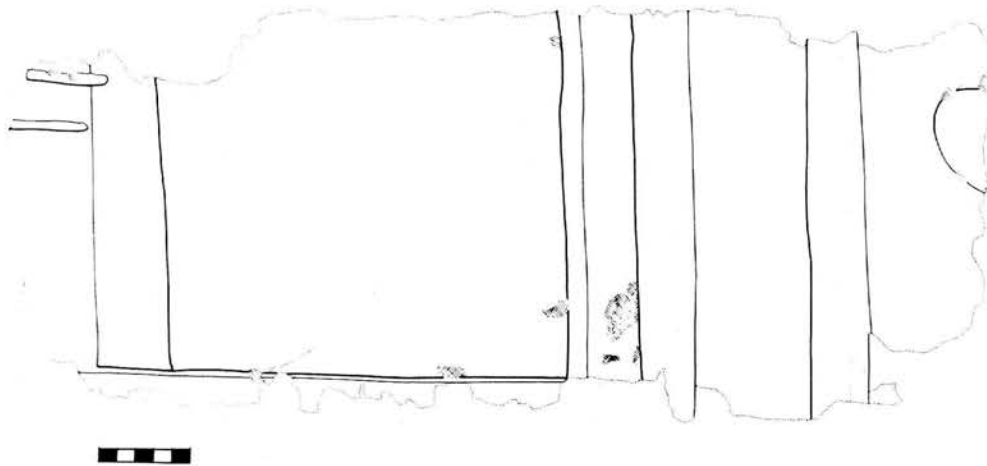


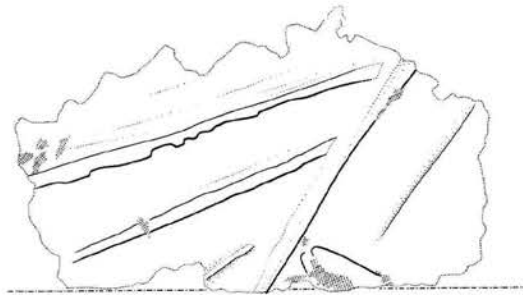
Figure 2.19. Limestone moulding from el-Mangara (drawing by A. Boyce).

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).

For Maru-Aten the effect of a figurative interpretation is to alter the emphasis that we give to the other term associated with the building that convenience will still oblige us to call Maru-Aten, the *šwt-R*, "Sunshade of Re". This term has been much discussed (primarily by Fairman in *COA* III: 200–208; Stadelmann 1969; Spencer 1984: 119–125; Bell 1985: 35). It seems now to be well established that "Sunshades of Re" were temples or shrines to the sun which characteristically featured 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 Deir el-Bahari being a fine extant example. Several constructions of this kind have been excavated at Amarna, frequently and rather unexpectedly



**Figure 2.20.** Relief scene, at quarter-size, from a limestone block from el-Managara, visible in the foreground in Figure 2.16. The full block size is 53.9 x 22.5 x 22.4 cm. No colour preserved. Drawing by A. Boyce.

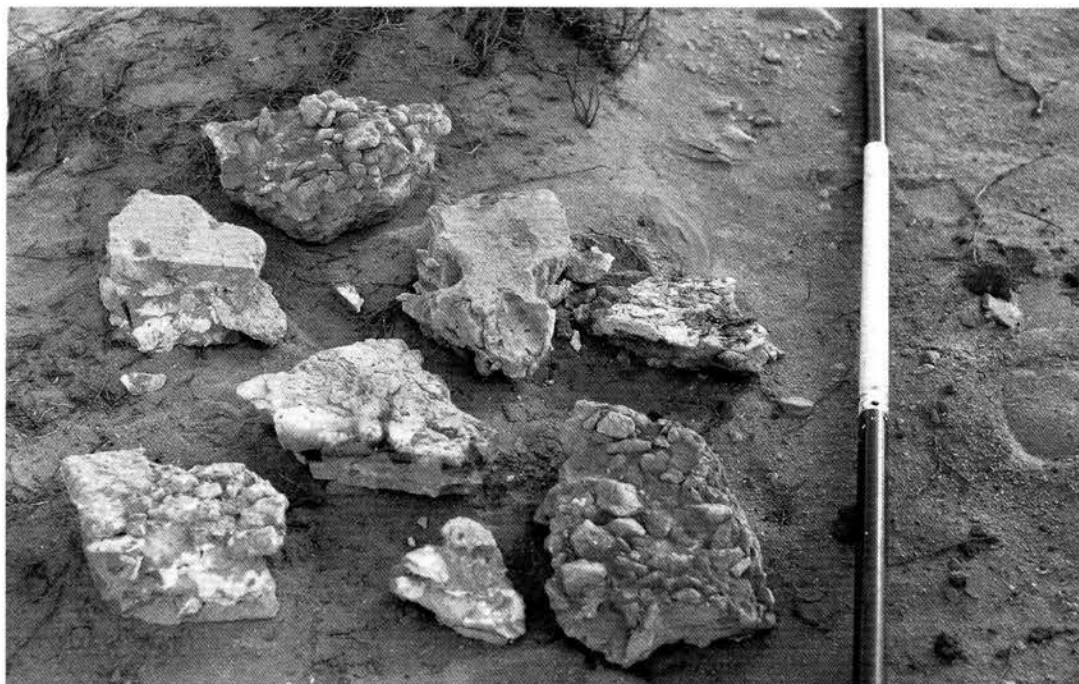


**Figure 2.21.** Fragment of a relief scene from a limestone block from el-Mangara, at half-size. The broken line represents an edge to the block. No colour preserved. Drawing by A. Boyce.

orientated towards the north. They were also closely connected to the cult of the king (and, at least in the Amarna Period, to royal ladies) 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).

A key text found at Maru-Aten (*COA* I: 147, Pls. XXXIV.1, 2; LVI, no 22/273 and now in the Ashmolean Museum, Oxford) 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 from the MII group and which Woolley placed on the building on the island (MIID) although this may have been only a guess (ibid.: 121–122, and see above). The reconstruction of the island buildings suggested above turns them into an example of the ideal





**Figure 2.22.** Pieces of gypsum concrete from a foundation platform at el-Mangara, photographed in 1977.

type of solar platform which modern study of the term “Sunshade of Re” has created. Some Amarna “Sunshades of Re” were elements of major importance in Akhenaten’s scheme; witness the fact that a “Sunshade of Re” for Nefertiti occupies the third place in the building manifesto of the “Earlier Proclamation” in Boundary Stelae K and X (see above), and the prominence given to another such building for Queen Tiy in a well-known scene in the tomb of Huya at Amarna (*RT* III: 7–9, 19–25, Pls. VIII–XII). Later New Kingdom texts document “Sunshades of Re” as religious institutions with priesthoods and land (the evidence conveniently summarised in Spencer 1984: 124–125). We can match the prominence and institutional character of these buildings better if we regard Maru-Aten as a whole 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 the solar shrine proper, and the remainder of the site the precinct containing the ancillary structures (probably built over a period of time) which Egyptian temples generally, including Aten

temples, possessed. In other words, in Maru-Aten we are looking at a complete example of an important "Sunshade of Re" temple.

A brief description of what can be discerned of the character in the Amarna Period of Kom el-Nana has already been given. Points of resemblance with and difference from Maru-Aten were noted, but the overall impression is that both buildings are somewhat different versions of a single type, the most important difference probably being the bakery block on the northern side of Kom el-Nana. The significance of this should not be underestimated. Only two other examples of this type of building — conspicuous archaeologically on account of their deposits of distinctive pottery bread-moulds — are known at Amarna, and both stood beside the principal Aten temples in the Central City. As yet the boundaries of this portion of Kom el-Nana have not been reached, but enough is apparent for making the judgement that it must have been smaller than the one beside the Great Aten Temple, but could easily have been as large as the one beside the Smaller Aten Temple. This feature thus elevates Kom el-Nana to the same plane of religious-institutional provision as the main temples at Amarna, and forms one of the reasons for considering that Kom el-Nana was the third of the city's initial religious foundations, the "Sunshade of Re" of the great queen, presumably Nefertiti.

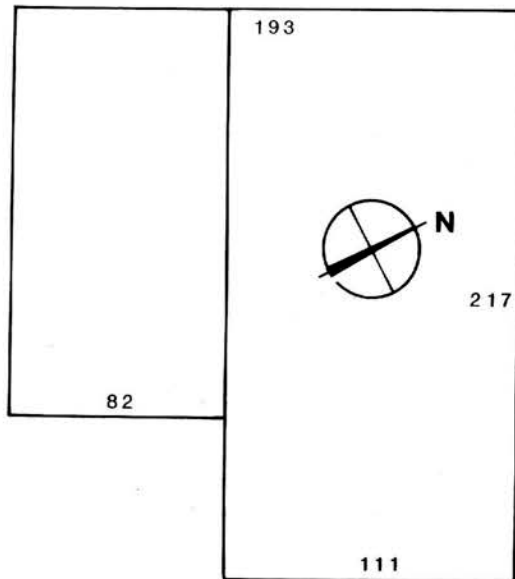
To be really convincing, however, one element that we should expect to find is a solar platform. We can already characterise the southern part of Kom el-Nana as a huge open rectangular space in which the central feature was the large brick platform reached by a ramp from the south (the direction preferred with Maru-Aten IID, and with the example in the Altar Court of the North Palace), but in a crucial respect this platform differs from what a solar platform should be like. The top was not open but supported a roofed building, and so in a later section (Chapter 3) a different explanation has been put forward for it, namely, that it was a reviewing platform. Failure so far to identify a proper solar platform at Kom el-Nana amounts, however, to very little, for although the general outline of the enclosure and its interior are apparent there is yet ample room for an individual feature to lie undetected. This means that the identification of Kom el-Nana as the solar shrine for Nefertiti must remain, for the time being, an attractive but only working hypothesis.

One of the many problems of Akhenaten's reign lies in knowing, in the dearth of suitable texts, how far he departed from the normal New Kingdom pattern of institutional organization for his temples. The existence of large bakeries (at Kom el-Nana, at least, probably producing other commodities as well as bread) at three major temples can be interpreted as a sign that these temples were, indeed, centres of administration of resources and of at least partial dependency of a sizeable number of people who either belonged to the temple staff or who, in return for service rendered to the royal family, were entitled to a share of the temple's distribution of commodities. The archaeological evidence at Amarna also suggests one further step in the discussion of dependency. Just as the presence of a bakery is a distinguishing mark for Kom el-Nana, so is the absence of one for Maru-Aten. Was the "Sunshade of Re" of Meretaten (i.e. Maru-Aten) also dependent institutionally on Kom el-Nana?

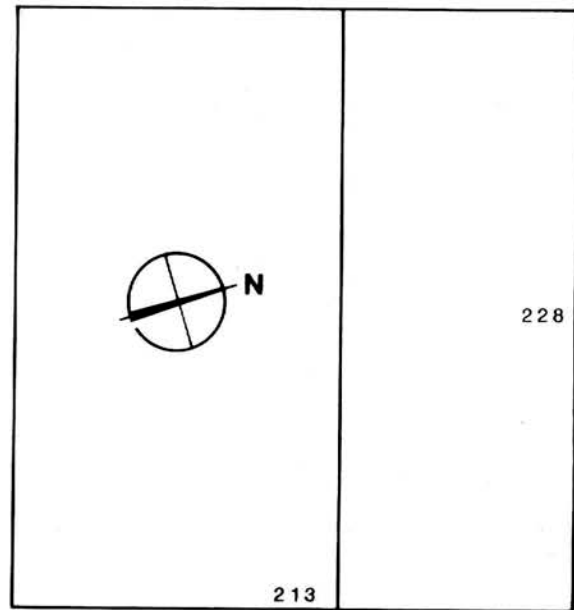
The evidence at our disposal shows that, like any major Egyptian town or city, Amarna possessed a range of cult centres. Two of them were major temples dedicated to the Aten, there was at least one small temple for a statue of the king (*COA* III: 140–141), and there were others still, the "Sunshade of Re" temples which seem to have been elements in the households of senior royal women. It would fit our general picture of New Kingdom society if we regard these temples as not only providing places of worship to the sun performed in the name of the female owner, and places, perhaps, of private ceremonial and perhaps of retreat, but also creating an institutional framework supporting the household of the owner in a prestigious way safeguarded by its religious status. This framework would consist essentially of ownership and management of lands, and payments from income to personnel.

Is this, then, the real significance of the southern zone at Amarna: the place where several of the "Sunshade of Re" temples of royal ladies were situated, widely spaced on the desert, with suburbs for staff and dependents? By this view Kom el-Nana would have been the senior institution, serving one or more of the remainder.

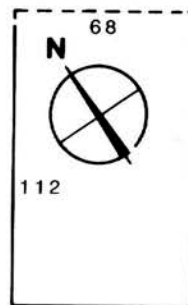
# MARU-ATEN



# KOM EL-NANA



dimensions are in metres



# DESERT ALTARS CHAPEL