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TELL EL-AMARNA

تل العمارنة

*Anna Stevens*

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## TELL EL-AMARNA

### تل العمارنة

Anna Stevens

Tell el-Amarna  
Tell el-Amarna

*Tell el-Amarna is situated in middle Egypt and is the location of the New Kingdom city of Akhetaten, founded by Akhenaten in c. 1347 BCE as the cult home for the Aten. Occupied only briefly, it is our most complete example of an ancient Egyptian city, at which a contemporaneous urban landscape of cult and ceremonial buildings, palaces, houses, cemeteries, and public spaces has been exposed. It is an invaluable source for the study of both Akhenaten's reign and of ancient Egyptian urbanism. The site has an extensive excavation history, and work continues there today.*

يقع تل العمارنة في منطقة مصر الوسطى حيث يمثل موضع مدينة آخت-آتون من عصر الدولة الحديثة ، انشئت المدينة بواسطة اخناتون في 1347 قبل الميلاد حيث كانت مقرا لعبادة آتون. سكنت لفترة وجيزة ، وهي تعتبر من اكثر الأمثلة الكاملة لمدينة مصرية قديمة ، حيث لدينا بيئة مدنية معاصرة من المنشآت الدينية والإحتفالية ، القصور والمنازل والجبانات والمساحات العامة والتي تم الكشف عنها ، وهي تعتبر من المصادر القيمة لدراسة كلا من فترة

**T**ell el-Amarna is the site of the late 18<sup>th</sup> Dynasty royal city of Akhetaten, the most extensively studied settlement from ancient Egypt. It is located on the Nile River around 300 km south of Cairo, almost exactly halfway between the ancient cities of Memphis and Thebes, within what was the 15<sup>th</sup> Upper Egyptian nome.

Founded by the “monotheistic” king Akhenaten in around 1347 BCE as the cult center for the solar god, the Aten, the city was home to the royal court and a population of some 20,000-50,000 people (Kemp 2012a: 271-272). It was a virgin foundation, built on land that had neither been occupied by a substantial settlement nor dedicated to another god before. And it was famously short-lived, being largely abandoned shortly after Akhenaten's

death, some 12 years after its foundation, during the reign of Tutankhaten; a small settlement probably remained in the south of the city (Kemp 1995: 446-448). Parts of the site were reoccupied during late antique times and are settled today, but archaeologists have nonetheless been able to obtain large exposures of the 18<sup>th</sup> Dynasty city. Excavation and survey has taken place at Amarna on and off for over a century, and annually since 1977.

#### Etymology

The ancient name Akhetaten (*ꜥḫt jtn*: Horizon of the Sun's Disc) seems to have referred both to the city itself and its broader territory, which was roughly delineated by a series of Boundary Stelae cut in the cliffs around the settlement (Murnane and van Siclen 1993).

The archaeological site has been known as Tell el-Amarna since at least the early nineteenth century CE (Capart 1935). The name is probably connected to that of the Beni Amran tribe who settled in this part of Egypt around the beginning of the eighteenth century CE and founded the village of el-Till Beni Amran (now usually shortened to el-Till) on the ruins of Akhetaten. The name Tell el-Amarna is often abbreviated to Amarna or el-Amarna, to avoid giving the impression that it is a *tell* site in the sense of a mound of ancient remains. The archaeological landscape of

Amarna is a fairly flat one, reflecting the largely single-phase occupation of the site.

### *Location and Layout of Site*

The principal remains lie on the east bank of the Nile, in a large bay that is bordered to the east by the limestone cliffs of the high desert (fig. 1). The ancient city probably included agricultural land and settlement on the west bank, but none of this is now visible beneath modern fields and buildings.

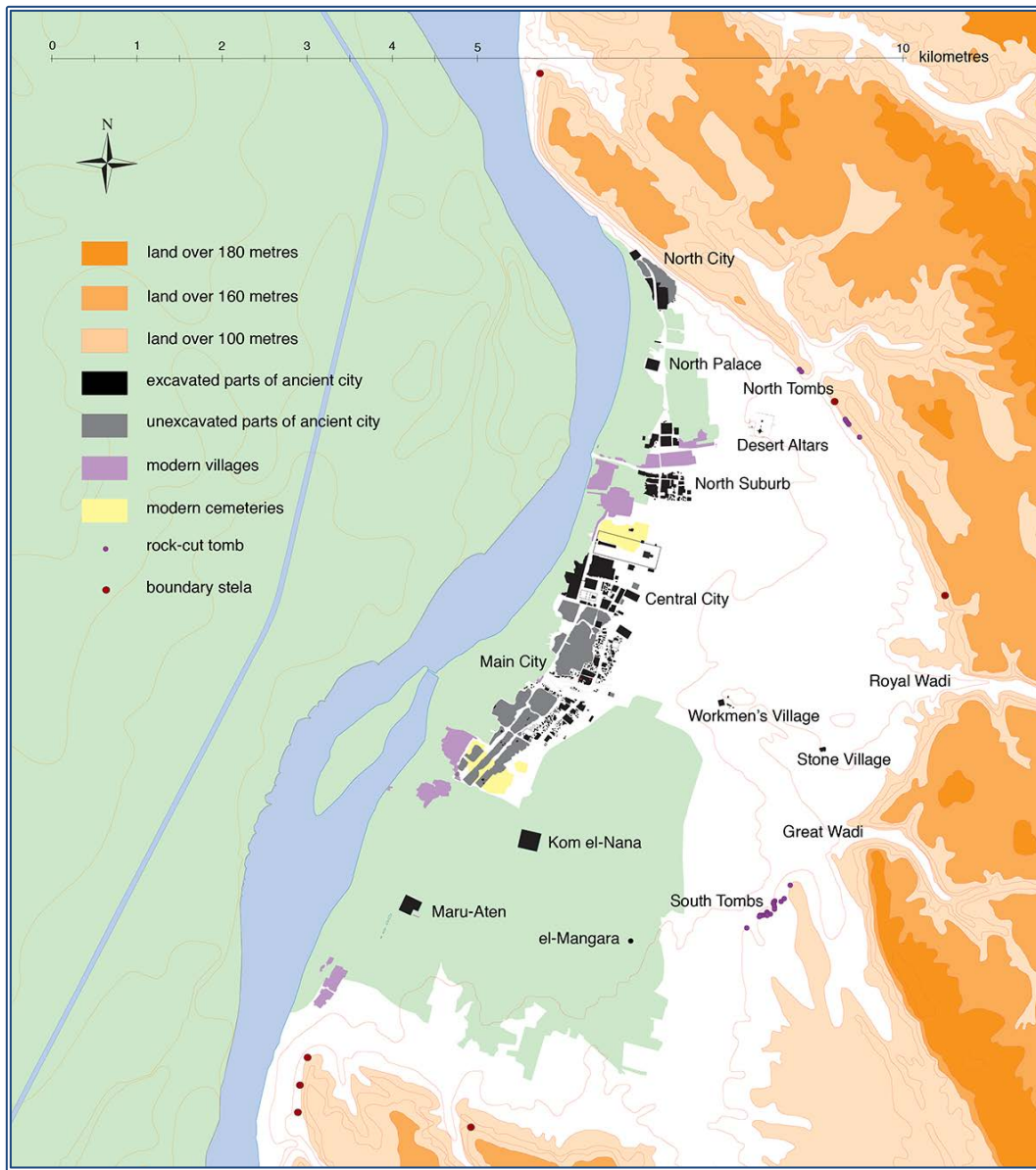


Figure 1. Map of Amarna.

The bay offers a low flat desert setting, the eastern cliffs forming a high and imposing boundary at their northern end, but lessening in height southwards. The cliff face is broken by several wadis, one of which, the Great Wadi, has a distinctive broad, rectangular profile that resembles the hieroglyph *akhet* (“horizon”; as first noted by Aldred [1976], although he misidentified it as the Royal Wadi, burial place of the royal family). The shape of the wadi perhaps prompted Akhenaten to choose this particular stretch of land for his new city; at sunrise, the eastern cliffs in effect become a visual rendering of the name Akhetaten. It is curious that the Great Wadi has not revealed any 18<sup>th</sup> Dynasty remains, but the poor quality of the limestone here probably rendered it unsuitable for tomb cutting.

Thirteen Boundary Stelae have been identified to date on the east bank of the river and three on the west bank, the only trace of the ancient city yet found here (fig. 2). The Stelae did not delineate a rigid boundary as

such, and elements of the city, such as the tombs in the Royal Wadi, lay beyond the limits they defined. Inscriptions on the Boundary Stelae outline Akhenaten’s vision for the city, listing the buildings and monuments he intended to construct. Many of these can be identified within the broader archaeological record, being either directly identifiable on the ground; named in administrative inscriptions, such as jar labels and stamps on jar sealings; or represented in scenes within the rock-cut tombs of the city’s elite (Davies 1903-1908; Fairman 1951: 189-223). The latter depictions, although often stylized, are an important aid for reconstructing the vertical appearance of the stone-built temples, shrines, and palace structures of Akhetaten, which were dismantled by Akhenaten’s successors and now survive only to foundation level. There are, however, institutions listed on the Boundary Stelae and in private tombs that have not yet been identified (e.g., Williamson 2013), among them the tomb of the Mnevis bull. Some of these were perhaps never constructed.

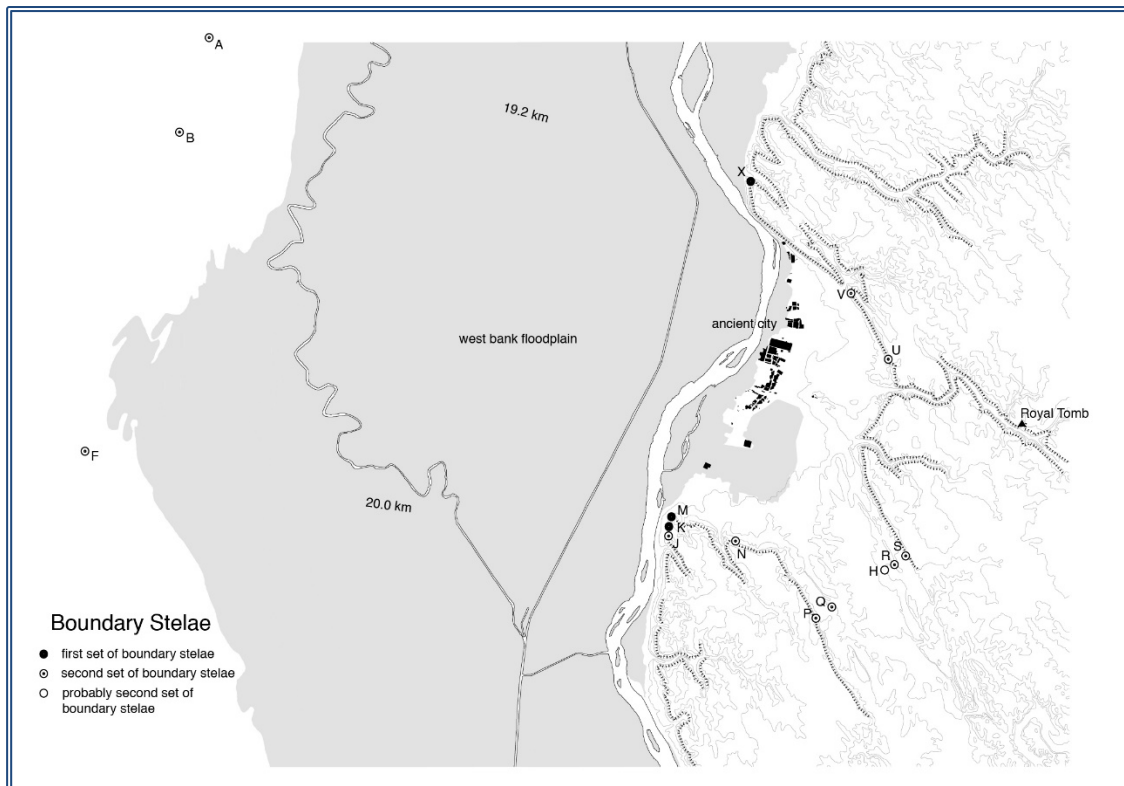


Figure 2. Location of the Boundary Stelae.

Akhetaten was a long, narrow city that extended some 6 km north-south along the river, and around 1 km eastwards into the low desert (fig. 1). The city's riverfront is probably long destroyed under the broad band of cultivation that occupies the riverbank, although there has been little attempt to check if anything survives here. The principal ruins of the city are now contained to the desert east of the cultivation. Akhetaten was largely a mud-brick city, although the most important ceremonial buildings were constructed of stone. The basic building stone was locally quarried limestone that was cut into smaller blocks (*talatat*) than the previous standard, probably to allow the rapid construction of the city. During the dismantling of the city after Akhenaten's reign, most of the *talatat* were removed to other sites for reuse as construction materials, including Assiut and Abydos, with many relocated over the river to the site of el-Ashmunein (Roeder 1969).

Excavators divide Amarna into four main zones: the Central City, Main City, North Suburb, and North City (fig. 1). The Central City, located roughly opposite the Great and Royal Wadis, was the official hub of Akhetaten. It contained the two main temples (the Great Aten Temple and Small Aten Temple), two of the royal residences (the Great Palace and King's House), and further ceremonial, administrative, military, industrial, and food-production complexes. The Main City was the largest residential zone, extending southwards from the Central City, the North Suburb its smaller counterpart to the north. At the far north end of the bay, the North City and its environs contained housing areas and two additional royal residences (the North Palace and North Riverside Palace), and associated administrative/storage complexes. The North City palaces were connected to the Central City by a north-south roadway, now known as the Royal Road, which probably served, at least in part, as a ceremonial route for the royal family (Kemp 1976: 93-99).

The cliffs beyond, extending some 10 km northwards into present-day Deir Abu Hinnis, contained the city's main limestone quarries. Survey here has identified an extensive

network of Amarna Period roadways that probably once linked the quarries to harbors and perhaps also quarry-workers' settlements (Willems and Demarée 2009; Van der Perre 2014; De Laet et al. 2015).

Within the main bay, the low desert between the city and the eastern cliffs was largely free of settlement, apart from two workers' villages, the Workmen's Village and Stone Village. The desert to the south seems to have been a kind of cult zone, characterized by the presence of several isolated religious and ceremonial complexes: the so-called Maru Aten, and at the sites of Kom el-Nana, el-Mangara, and near el-Hawata. These are now largely lost under cultivation, but were probably dedicated especially to female members of the royal family (Kemp 1995). Another ritual complex, the Desert Altars, lay in the northeast of the city (Kemp 1995: 448-452).

The low desert had a network of "roadways" that probably facilitated the movement of people and goods, but also the policing of the city's eastern boundary, supported by guard-posts built at points around the cliffs (e.g., Kemp 1995: 445). The low desert and eastern cliffs were also the location of Akhetaten's cemeteries. Tombs for the royal family were cut in a long wadi now known as the Royal Wadi, and the main public burial grounds occurred in two clusters to the northeast and southeast of the city. Each combined decorated rock-cut tombs for the city's elite set into the cliff face (the North Tombs and South Tombs) with simpler pit graves in the desert floor or within adjacent wadis. The two workers' villages also had their own small cemeteries.

#### *Excavation/Research History*

Amarna is one of the most extensively investigated archaeological sites in Egypt. Early European expeditions, from the late eighteenth century, concentrated on surveying the city and copying its key monuments, especially the Boundary Stelae and rock-cut tombs. The Napoleonic survey of 1798/1799 made the first substantial record of the site, publishing a partial plan of the city ruins in the *Description de*



*l'Égypte* in 1817 (Planches IV, plate 63.6-9, cf. Aufrère 1993). In the 1820s, John Gardner Wilkinson resurveyed the city and copied some of its monuments, with James Burton copying the tomb of the official Meryra (no. 4). Several survey and epigraphic expeditions followed, including those of Robert Hay and G. Laver in around 1833, Nestor L'Hôte in 1839, and a party led by Karl Richard Lepsius in 1843 and 1845, who produced the most complete of the early plans of the city. In the 1880s, Urbain Bouriant and Alexandre Barsanti partly cleared the Royal Tomb, which had by this time already been robbed, and from 1901 to 1906 Norman de Garis Davies copied the Boundary Stelae and the rock-cut tombs, producing the first English translations of the *Hymns to the Aten* and a six-volume monograph set that remains the principal publication of the tombs (Davies 1903-1908). A further event of note occurred in around 1887, with the chance discovery by villagers of the Amarna Letters, a cache of nearly 400 clay tablets inscribed in cuneiform, most of which document diplomatic correspondence between Egypt and the Near East (Moran 1992; Rainey 2015).

Excavation proper began with the expedition of Flinders Petrie in 1891-1892, who excavated in and around the Central City, while also undertaking some broader survey (Petrie 1894). From 1911-1914, fieldwork stepped up in scale and shifted in focus when the Deutsche Orient-Gesellschaft (DOG) obtained the concession to the site and a team trained largely as architects, working under Ludwig Borchardt, excavated broad expanses of housing in the Main City (Borchardt and Ricke 1980). The DOG established a grid system that remains the basis for numbering buildings at Amarna today and conducted an extensive survey of the site and its environs (Timme 1917). The years 1921-1936 then saw large scale excavations of the Egypt Exploration Society (EES); namely, at the Workmen's Village, within housing areas across the North City, North Suburb, and Main City, at the outlying desert shrines, within the North Palace, and across the Central City (Peet and Woolley 1923; Frankfort and Pendlebury 1933; Pendlebury 1951).

Barry Kemp has directed an annual program of survey, excavation, and conservation at Amarna since 1977, under the auspices of the EES until 2006, and as the Amarna Project thereafter. This work has seen focused excavation across the site: primarily, at the Workmen's Village, housing areas and workshops in the Main City, the Small Aten Temple and its surrounds, the North Palace, Kom el-Nana, the Great Aten Temple, and at the city's non-elite cemeteries. The second half of the nineteenth century has also seen campaigns by the Egyptian Antiquities Organization (e.g., Hamza and Kemp 2000), in the Royal Wadi first by Geoffrey Martin and Ali el-Khouly (Martin 1974, 1989; el-Khouly and Martin 1987) and subsequently Marc Gabolde (Gabolde and Dunsmore 2004), Paul Nicholson's investigations of glass and faience workshops (Nicholson 2007), and a study of the Coptic remains at the North Tombs (Pyke 2007, 2008, 2009).

The excavations at Amarna thus fall into two main phases that coincide broadly with the periods before and after the development of "new archaeology." The early excavations of Petrie, the DOG, and the EES were generally characterized by rapid clearance that saw a focus on defining and recording structures, but with little attention given to the nature of the deposits encountered nor the systematic collection of artifacts and environmental materials (see Shaw 1995: 227-229; Stevens 2015: 5-6); around 1000 buildings were cleared during this work. In part, the agenda of ongoing excavations is to provide well-provenanced archaeological materials so that the datasets from the two phases of fieldwork can be used together.

### *Historical Context and Significance*

From a historical viewpoint, Akhetaten was never one of ancient Egypt's great cities or religious centers, rivaling Thebes or Memphis. The importance ascribed to Amarna originates largely from modern scholarship, for two main reasons. The first is that it formed the arena on which one of the most unusual, and in some respects transformative, episodes in ancient Egyptian history played out. The second is its

contribution to the study of urbanism in the ancient world.

Founded in Year 5 of Akhenaten's reign, as recorded on the Boundary Stelae, the city represents the king's final break from Theban tradition. It was, in large part, the discovery of Amarna, and the translation of the Boundary Stelae and *Hymns to the Aten* in the rock-cut tombs, that introduced scholars to Akhenaten. Reconstructing historical narratives for the Amarna Period remains an important goal of Egyptological research (Williamson 2015), and while the largely destroyed monuments of the city of Amarna itself have provided less epigraphic material of historical value than the Boundary Stelae and tombs, insight on the period and its key figures can still be found through the careful reconstruction of fragmentary scenes and inscriptions from state buildings (e.g., Reeves 1988), and to some extent through administrative inscriptions such as those on hieratic jar labels and stamps (Fairman 1951: 152-160). A recent discovery of note at the limestone quarries at Deir Abu Hinnis is a hieratic inscription that places Nefertiti at Amarna in Year 16 of Akhenaten's reign, later than previously thought (Van der Perre 2014).

The non-textual remains of the city have less to offer directly to the historical narrative of the Amarna Period, but do provide a glimpse of Akhenaten's vision and priorities. The city was a manifestation of the king's commitment to the Aten, its cult architecture dominated by open air shrines, altars, and courts, including Sunshades of Ra, dedicated often to members of the royal family, and was also the setting for the art that gave so much character to his reign (e.g., Arnold 1996).

Although the formal areas of the city, including its desert shrines, were rapidly and poorly excavated in the early twentieth century, there remains scope to piece together the stratigraphic, architectural, and sculptural records here. Renewed excavations at the Great Aten Temple are revealing evidence of multiple building phases, not well elucidated within the earlier archaeological reports (Kemp 2012: 9-26, 2013: 20-32, 2014: 1-14, *fc.*). A long-term study by Kristin Thompson and

Marsha Hill seeks to reconstruct the statuary program of the city's cult and ceremonial spaces (e.g., Thompson 2006, 2012), while Jacquelyn Williamson, in examining the relief-work from Kom el-Nana, has confirmed the presence of a Sunshade of Nefertiti here and raised a possible connection between this complex and elite mortuary cults (Williamson 2008, 2013). Kate Spence (2009) explores how the city's four palaces fit within their urban setting and the Amarna royal family interacted with the city that was created, in part, on their behalf. The site, and its archaeology, still has a large role to play in contextualizing Akhenaten's building and art program, and enhancing our understanding of the character of the Amarna Period.

In addition to its historical significance, Amarna is our most complete example of an ancient Egyptian city. Allowing for its unusually short period of occupation, and the particulars of Akhenaten's reign, it serves as a fundamental case site for the study of settlement planning, the shape of society, and the manner in which ancient Egyptian cities functioned and were experienced.

Overall, the city has a fairly organic layout, albeit with hints of planning: the line of the Royal Road seems to have formed an axis along which key buildings such as the North Palace, the temples and palaces of the Central City, and the Kom el-Nana complex were laid out (Kemp and Garfi 1993: 77, *fig. 10*), and it is probably not a coincidence that the axis of the Small Aten Temple lines up with the mouth of the Royal Wadi. Scholarly opinion differs, however, on the extent to which the city was formally designed, and particularly how far it was laid out according to a symbolic blueprint befitting its status as cult home for the Aten (Kemp 2000 reviews the debate).

Less contentious is the observation that the residential areas of Akhetaten developed in a fairly piecemeal manner, the smaller houses built abutting one another, often fitting into cramped spaces, and with thoroughfares developing in the areas between—although the city presumably never reached the kind of urban density of long-lived settlements such as Thebes and Memphis.



Houses at Amarna were built of mud-brick, with fittings in stone and wood. Although no two houses are identical, they show a preference for certain spaces and room arrangements, including a large focal room, often in the center of the building, from which other spaces opened (Tietze 1985; fig. 3). Most houses preserve a staircase, indicating at least the utilization of rooftops as activity areas, and

probably often a second story proper (Spence 2004). The elite expressed their status by building larger villas with external courtyards that included substantial mud-brick granaries, and sometimes incorporated ponds and shrines (Crocker 1985; fig. 3), the latter occasionally yielding fragments of sculpture depicting or naming the royal family (Ikram 1989).



Figure 3. Partially reconstructed plan of the estate of the official Ramose in the Main City.

The large expanses of housing exposed at Amarna have allowed for two fundamental observations on urban life and society here. The first is that smaller houses tend to cluster around the larger estates of the city's officials and master-craftsmen. This arrangement suggests that the occupants of the former supplied goods and services to the owners of the larger residences, who were themselves presumably answerable to the state, in return for supplies such as grain (Janssen 1983: 282; Kemp 2012a: 43-44). The second is that the variations in house size, likely to reflect in part differences in status, allow an opportunity to

model the socio-economic profile of the city. When the ground-floor areas of Amarna houses are plotted on a graph according to their frequency, the resultant curve suggests a population that was fairly evenly graded in socio-economic terms, without sharp class distinctions (Kemp 1989a: 298-300). It is a model that has found support among housing and funerary data at other sites, including Thebes and possibly Tell el-Dabaa (Smith 1992: 218; Meskell 1999: 148; Bietak 2010: 19, fig. 19).

Like most settlement sites, industry leaves a

particularly strong signature in the archaeological record of Amarna in the form of manufacturing installations, tools, and by-products. The site has contributed significantly to the study of the technological and social aspects of such industries as glassmaking, faience production, metalwork, pottery production, textile manufacture, basketry, and bread-making, and has been one of the hubs of experimental archaeology in Egypt (e.g., Nicholson 1989, 1995; Rose 1989; Samuel 1989; Wendrich 1989; Powell 1995; Kemp and Vogelsang-Eastwood 2001; Eccleston 2008; fig. 4). Kemp's suggestion (1989b), made during the excavation of a workshop in the Main City, of a three-tiered framework for industry at the site—small-scale domestic production, courtyard establishments, and formal institutional workshops—has offered to researchers a model to be tested and refined.



Figure 4. Delwen Samuel and Paul Nicholson monitor temperatures within a replica oven during a bread-baking experiment in 1987.

In many ways, modern fieldwork at Amarna has followed a processual approach to archaeology (cf. Smith 2010: 173), although researchers are increasingly asking how the city was experienced by those who lived there in terms, for example, of how domestic space was structured socially (Spence 2010) and Akhenaten's religious beliefs received (Stevens 2006). The recent excavation of the city's cemeteries (Kemp et al. 2013) offers an important opportunity to study experience as it relates to health and personal biographies, and funerary belief and practice for the non-elite.

### *Features*

The principal features of Amarna are presented below as they appear roughly from north to south.

#### *North City, including the North Riverside Palace*

The North City is an area of settlement at the far north end of the Amarna bay, originally separated from the rest of Akhetaten to the south by a stretch of open desert (fig. 5). This northern zone of Amarna is one of the least well-published parts of the site. The EES worked here in 1923-1924 and 1924-1925 and again in 1930-1931 and 1931-1932, but only produced preliminary reports on the work (Newton 1924; Whittemore 1926; Pendlebury 1931, 1932). Some reclearance and replanning was also undertaken in 1981 (Jones 1983).



Figure 5. View of the North City taken in 1930/1931. To the far right, adjacent to the cultivation, is the boundary wall of the North Riverside Palace. The standing building to its left is the EES dig house.

The North City would originally have been dominated by the North Riverside Palace, most of which is now lost under cultivation. The full extent of the palace has never been mapped and all that is visible today is a part of the thick, buttressed eastern enclosure wall (fig. 6), although excavations in 1931-1932 exposed a small stretch of what may have been the palace wall proper. To the north of the palace, and perhaps once part of it, is a large terraced complex containing open courts and magazines known as the North Administrative Building. The land to the east of the palace is

occupied by houses that include several very large, regularly laid out estates, and also areas of smaller housing units beyond, running up to the base of the cliffs.



Figure 6. Part of the broad mud-brick enclosure wall of the North Riverside Palace, all that is visible of this complex today.

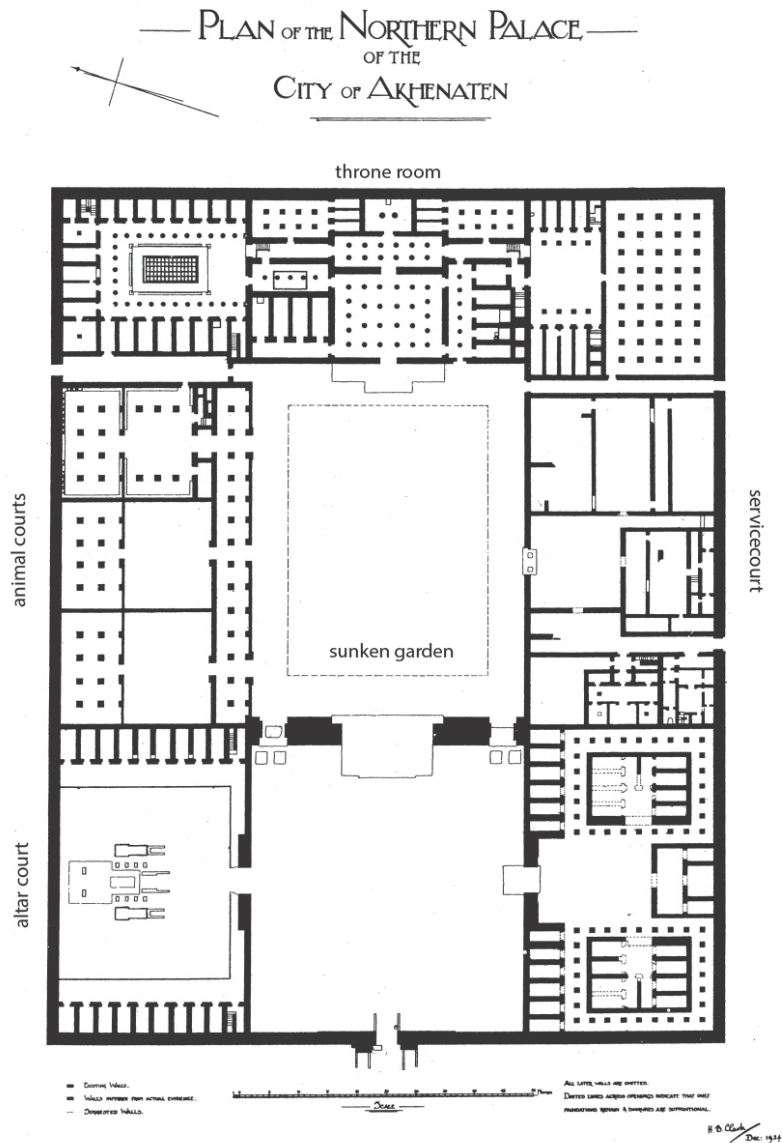


Figure 7. Plan of the North Palace after its initial clearance in the 1920s.



*North Palace*

Situated around 1 km south of the North City was a second royal residence, the North Palace. This is the best recorded of the Amarna palaces, having been excavated first in the early 1920s (Newton 1924; Whittemore 1926) and reexcavated and restudied in the 1990s (Spence 1999, also 2009: 182-184). A final report on the site is in preparation. The palace was built around two open courts separated by a pylon or possible Window of Appearance, the second court containing a large basin that probably housed a sunken garden (figs. 7, 8). Opening off each courtyard was a series of smaller secondary courts containing altars, magazines, an animal courtyard, probable service areas, and a throne room. A feature of the site was the good preservation of its wall paintings when exposed in the 1920s (Davies 1929; Weatherhead 2007: 143-214).



Figure 8. View of the second court at the North Palace, showing the rectangular depression that probably once contained a sunken garden, taken in 1984; the complex has since been partially restored.

The North Palace and North Riverside Palace are generally thought to have been the main residences for the royal family, the palaces in the Central City playing more ceremonial and administrative roles. The North Palace has often been assigned to female members of the royal family, whose names appear prominently here (Kemp 1976: 93-99; Reeves 1988), although Spence (2009) considers it more likely that royal women had chambers within the North and North Riverside Palaces rather than an entirely separate residence.

*North Tombs and Northern Cemeteries*

The North Tombs are a set of elite tombs cut into the cliffs of the high desert towards the northern end of the Amarna bay. There are six principal tombs, numbered 1-6, which belonged to high officials in Akhenaten's court. Although none was fully completed, these preserve decoration that is notable for representing the city's monuments, the prominence given to the king and royal family, and the presence of copies of the *Hymns to the Aten*. There are also several other undecorated (and unnumbered) tombs. The tombs were reoccupied by a Coptic community in around the sixth to seventh centuries CE and the tomb of Panehesy (no. 6) converted into a church at this time (Jones 1991; Pyke 2007, 2008, 2009). The main publication of the tombs is that of Davies (1903-1908); for their construction and broader social context see Owen and Kemp (1994) and Arp (2012), respectively.

Adjacent to the North Tombs are a number of non-elite burial grounds. The largest, which probably includes several thousand interments, occupies a broad wadi between North Tombs 2 and 3 (fig. 9). The graves here take the form of simple pits cut into the sand, containing one or more individuals wrapped usually in textile and mats (Stevens et al. *fc.*). There is also a smaller cemetery at the base of the cliffs adjacent to the tomb of Panehesy (no. 6) and another in the low desert some 700 m to the west of this, both as yet unexcavated.



Figure 9. The non-elite cemetery located in a broad wadi adjacent to North Tombs 2 and 3 taken in 2015. The pits visible on the desert surface are the result of robbery.

*Desert Altars*

The Desert Altars lie on the desert floor not far from the North Tombs. They were excavated by the EES in 1931-1932 (Frankfort and Pendlebury 1933: 101-102) and reexcavated briefly in 2001 (Kemp 2001: 20). The complex had two main enclosures (fig. 10). The first, in its final form, contained three separate foundations arranged in a line within a court formed simply by clearing the desert of stones. The southernmost supported a colonnaded building, the central construction formed a large altar flanked by two smaller altars, and the northernmost foundation comprised a mud-

brick altar approached by ramps on four sides. The second enclosure was originally defined by a mud-brick wall and contained at least one stone-built chapel. The site has suffered badly from erosion, and other original elements are likely to be now lost. It has been suggested that the complex was associated with private funerary cults (Petrie 1894: 5; Frankfort and Pendlebury 1933: 102); Kemp (1995: 452) has also noted similarities between the arrangements of the shrines here and buildings shown in the “reception of foreign tribute” scenes in the nearby tombs of Huya and Meryra II.

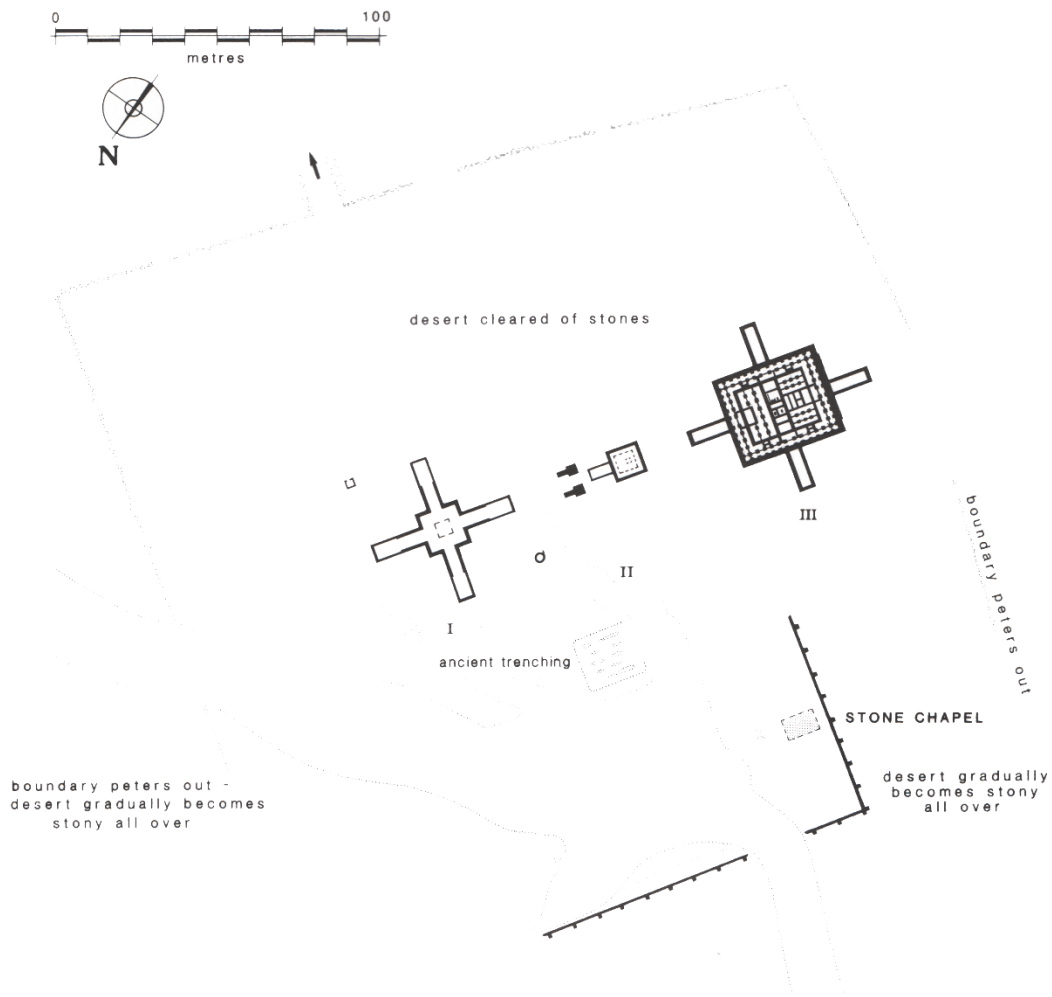


Figure 10. The Desert Altars.



*North Suburb*

The residential area that spreads northwards from the Central City is known as the North Suburb. It was extensively cleared by the EES from 1926-1931 (Frankfort and Pendlebury 1933) and is now partly lost under modern settlement and fields belonging to the village of el-Till.

The houses of the North Suburb were arranged in three main strips, divided by two north-south thoroughfares (East Road North and West Road North), a broad wadi further dividing the houses into a northern and southern group. The western strip of residences included a group of particularly small, closely packed houses, although to the east and north the houses were more widely spaced and include larger walled villas; these areas seem to exhibit less build-up of archaeological detritus, which might suggest that they developed later in the city's history (Kemp and Garfi 1993: 47-48).

Part of the North Suburb was built over in late Roman times, this activity represented by the remains of a large building with tower and

by a cemetery (Frankfort and Pendlebury 1933: 66-67, 80; Kemp 2005: 41, fig. 1.18).

*Central City*

The Central City (figs. 11, 12) was excavated extensively, and rapidly, by the EES in the 1930s (Pendlebury 1951), following smaller-scale work by Petrie. The scenes in the elite tombs are particularly important for reconstructing the appearance of the buildings here, which are often preserved to little more than foundation level. The Royal Road provided an axis along which the most important buildings were arranged. The Great Palace, some 580 m long, dominated the western side of the road, although little remains of the complex today (figs. 13, 14). It must once have extended to the waterfront, but the western side of the building has been lost under cultivation since at least the mid nineteenth century. The palace was built in a combination of stone and mud-brick. Parts of it were lavishly decorated with faience and hard stone inlays, and painted decoration, including its famous painted floors (Weatherhead 2007: 1-62).

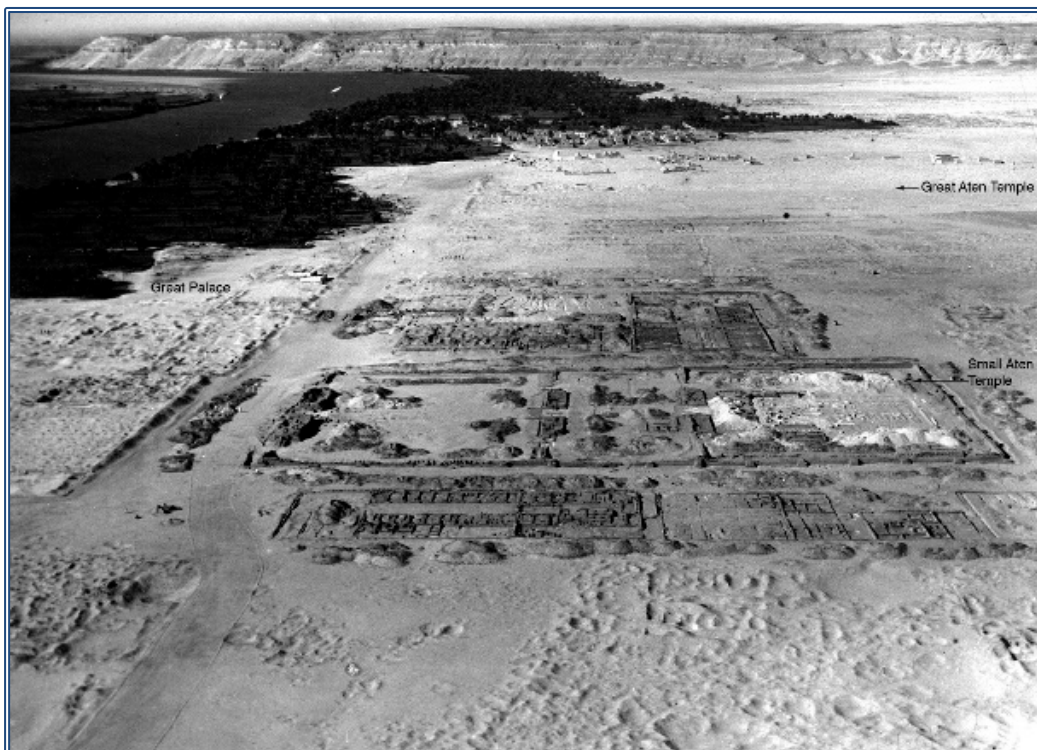


Figure 11. Aerial photograph of the Central City taken in 1932 by the Royal Egyptian Airforce.

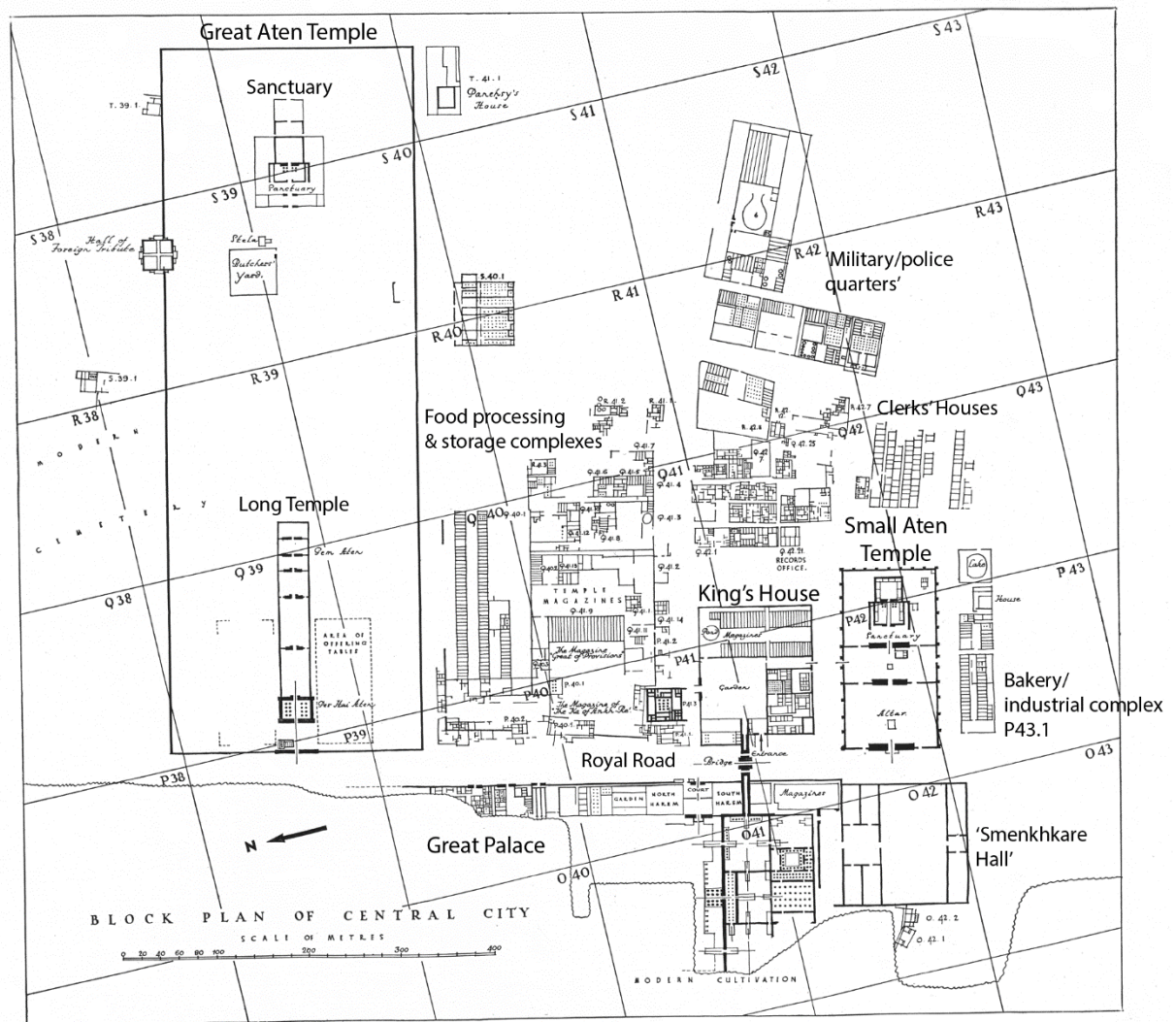


Figure 12. Plan of the Central City made during the EES excavations in the 1930s.

Based on excavated remains, and tomb scenes, it is possible to reconstruct the general ground plan of the complex. The western part of the palace was dominated by stone-built state apartments, with a large courtyard containing statues of the royal family leading to a series of courts and halls, and a possible Window of Appearance. The eastern part was built instead largely of mud-brick, comprising a strip of buildings that included magazines; an area identified by the EES excavators as the “harem quarter,” featuring a sunken garden and painted pavements; and a set of houses and

storerooms that probably served as staffing quarters. Late in the Amarna Period, a large pillared or columned hall was added to the southern end of the palace, with stamped bricks bearing the cartouche of Ankhkheperura lending it the name *Smenkhkare Hall* (or Coronation Hall). This area is badly destroyed.

On the eastern side of the Royal Road lay the Great Aten Temple and Small Aten Temple. The former occupied an area of 800 x 300 m, much of it apparently left empty, contained by a mud-brick enclosure wall (figs.



11, 12, 15). A reexamination of the building began in 2012, confirming that it had two main construction phases (Kemp 2012: 9-26, 2013: 20-32, 2014: 1-14, *fc.*). In its final phase, the enclosure contained at least two main buildings: a structure now termed the Long Temple (originally perhaps the *Gem-pa-Aten*) towards the front, and the Sanctuary to the rear. The former contained at least six open-air courtyards occupied by several hundred offering tables. Tomb scenes suggest that three of the courts contained cultic focal points: a

raised altar in one case, and offering tables in the other two. Along the front of the temple was a series of pedestals surrounded by white-plastered basins. Offering tables and pedestals surrounded by basins were also a feature of an earlier iteration of the temple here, largely buried beneath the later structure. Massive fields of mud-brick offering tables that flank the Long Temple to its north and south have also now been shown to belong to the first phase of the temple (Kemp 2014: 11-13).

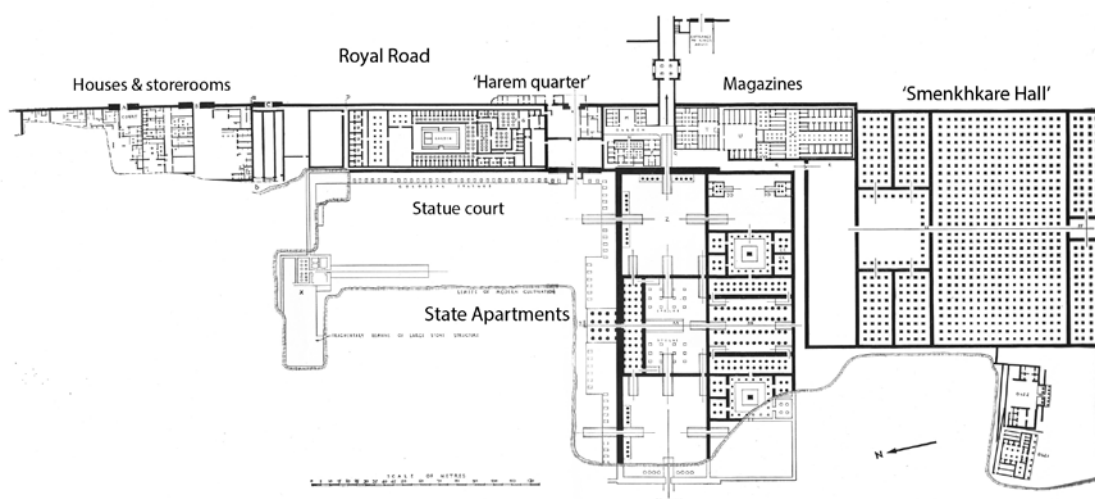


Figure 13. Plan of the Great Palace, partly restored, after its clearance in the 1930s.



Figure 14. The condition of the State Apartments at the Great Palace in 1977/1978.



Figure 15. Aerial view of the Great Aten Temple taken in 1993, and showing the modern cemetery encroaching on the north (right) side of the complex

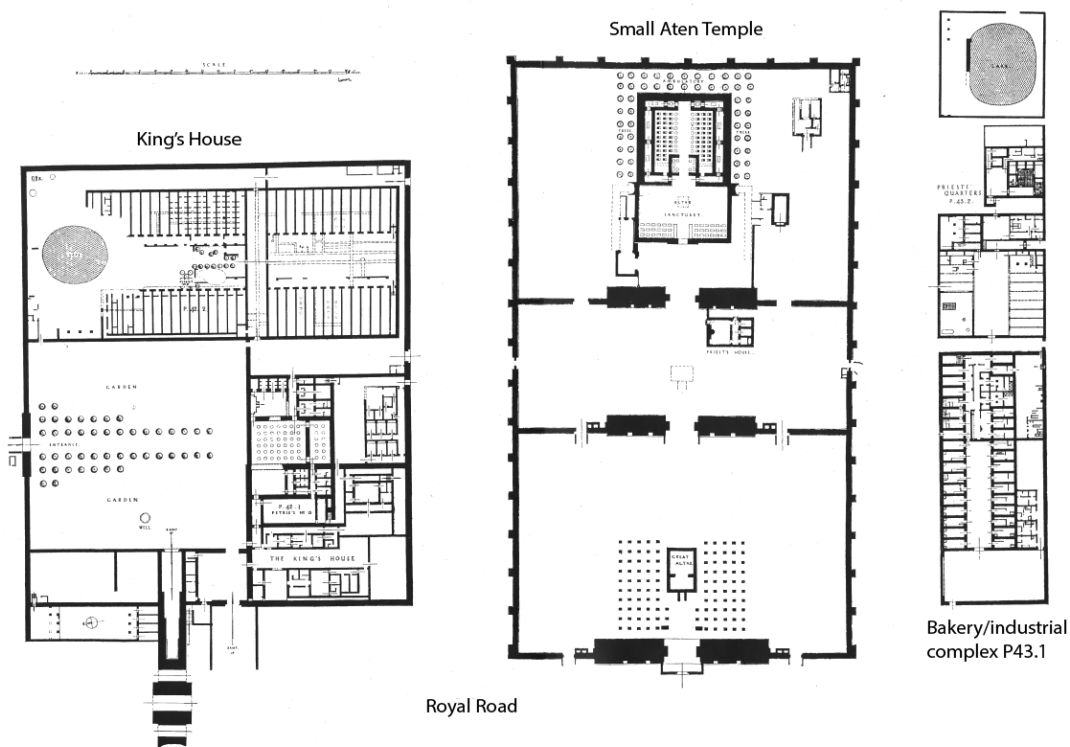


Figure 16. Plan of the King's House, Small Aten Temple, and complex P43.1 made during the EES excavations in the 1930s.

The Sanctuary comprised a rectangular stone building divided in two parts, each open to the sky and filled with offering tables, although recent fieldwork has shown that this area initially featured a grove of trees and a mud-brick altar or pedestal (Kemp 2012: 19-25). Three further features occupied the ground in front of the Sanctuary. A building comprising four suites of rooms with lustration slabs was built across the northern enclosure wall, perhaps as a purification space for people entering the temple (although identified as the “hall of foreign tribute” by the EES excavators). To the south there was originally an altar or similar construction that supported a stela, pieces of which have been recovered during excavation, and probably a statue of the king, as shown in tomb scenes. To the west of the stela lay a butchery yard, which presumably facilitated the supply of meat offerings to the Aten.

Immediately south of the Great Aten Temple is a series of buildings that probably also served the temple cult, especially the preparation of food offerings (fig. 12). These comprise: the house of the high priest Panehesy; a building containing several columned halls with stone-lined floors and lower walls, troughs, and ovens, perhaps connected with meat processing; a bakery formed of chambers often containing ovens, near which lie large dumps of bread mold fragments; and a set of storerooms and associated buildings.

To the south again is a walled complex now termed the King’s House that was connected to the Great Palace by a 9 m wide mud-brick bridge running over the Royal Road (fig. 16). At the King’s House, the bridge descended into a tree-filled court that led to a columned hall with peripheral apartments, one of which contained a probable throne platform. The famous painted scene of the royal family relaxing on patterned cushions (Ashmolean AN1893.1-41[267]) originates from this building; other painted scenes include that of foreign captives, perhaps connected with a Window of Appearance (Weatherhead 2007: 75-142). The complex also contained, in its final form, a large set of storerooms.

The Small Aten Temple, or *Hut Aten*, lay immediately south of the King’s House, occupying a walled enclosure of 191 x 111 m that was divided into three courts (figs. 11, 16, 17). The first court contained a field of offering tables flanking a large mud-brick platform of uncertain purpose. The second court contained a house-like building with small dais that was perhaps a throne base; there is space for other structures here that might have been entirely destroyed. The final court contained the stone Sanctuary, very similar in layout to that at the Great Aten Temple and likewise containing many offering tables. The Sanctuary was flanked by trees, and there were several small brick buildings in the ground around it.

South of the Small Aten Temple was another set of chambered structures (building P43.1) recalling those beside the Great Aten Temple and which may likewise have served as bakeries, although there is also evidence that faience and glass items were produced here (fig. 16).

Extending beyond the King’s House to the east (fig. 12) was a series of administrative buildings, roughly arranged into a block, among them the “Bureau of Correspondence of Pharaoh,” where most of the Amarna Letters were probably found, and the “House of Life.” To their south is a set of uniformly laid out houses generally thought to have been occupied by administrators employed in the Central City (Shaw 1995: 233-237). In the desert to the east lies a complex identified by the EES excavators as military/police quarters. Nearby were several further enclosures, among them a small shrine, the House of the King’s Statue, which has been suggested as a state-built public chapel, perhaps built for those who worked in the Central City (Kemp 1989a: 285; Shaw 1995: 235).

#### *Main City and South Suburb*

The large residential zone that spreads southwards from the Central City is termed the Main City (fig. 18). The area is interrupted by a large wadi and is sometimes divided into two: Main City North and South, with a few buildings at the very south end of the site sometimes given the name South Suburb. The



Main City and South Suburb combined cover about 2.5 km of ground, north to south. The area saw intensive excavations from 1911-1914 under the DOG (Borchardt and Ricke 1980) and from 1921-1922 and 1923-1925 by the EES (Peet and Woolley 1923: 1-36 for the early

seasons; the work of the later seasons is largely unpublished). The current expedition to the site has also undertaken excavations in workshops and houses here (*Amarna Reports* IV: 1-168; *Amarna Reports* VI: 1-101; Kemp and Stevens 2010a, 2010b).



Figure 17.

View across to the Sanctuary of the Small Aten Temple (with re-constructed columns) from the magazines at the King's House.



Figure 18. A view across houses on the eastern outskirts of the Main City with the cliffs of the high desert in the background taken in 2013.



Figure 19. A block of small houses exposed at excavation grid 12 in the Main City in 2004-2005 (see Kemp and Stevens 2010a, b).

The Main City was organized around at least three main north-south thoroughfares: East Road South, West Road South, and Main Road. Fieldwork has focused mostly upon the area east of the Main Road, which is occupied by fairly dense housing areas, generally arranged with smaller houses forming clusters around larger estates (fig. 19). Some of the buildings can be identified as workshops from the detritus left behind by their occupants, and there is a notable concentration of sculptors' workshops through the northern end of the Main City, on the outskirts of the Central City. Apart from wells, there are few obvious public spaces or amenities among the Main City buildings. The buildings to the west of the Main Road remain mostly unexcavated and are now largely lost under cultivation, and it is not known to what extent they had the same residential character.

#### *Boundary Stelae*

The Boundary Stelae take the form of tablets carved directly into the limestone bedrock and

reaching up to 8 m in height (figs. 20, 21). Flinders Petrie (1894: 5-6, pls. XXXIV-V) was the first to methodologically survey these monuments, numbering them alphabetically, but leaving gaps in the sequence to allow for new discoveries, of which there were none until 2006 when surveyor Helen Fenwick noted a new stela (H) in the eastern cliffs (Fenwick 2006). The stelae have been published in two monographs, with accompanying black-and-white photographs and partial copies of their inscriptions (Davies 1903-1908, part 5; Murnane and van Sichen 1993).

Sixteen stelae are known, three on the west bank of the river and the remainder on the east bank (fig. 2). Their purpose was partly to define the limits of the ancient city, and partly to allow Akhenaten to outline his vision for Akhetaten. They are topped with scenes of the royal family worshipping the Aten, and most had statues of the royal family cut out of the rock at their base. The bulk of each tablet, however, is occupied with inscriptions in the form of



“proclamations,” including lists of institutions the king intended to found. An “earlier proclamation,” inscribed in Year 5, is known from three of the stelae, and the “later proclamation” of Year 6 occurs on 11 examples. The earlier proclamation, now less well preserved, was the more detailed of the two, concerned especially with the proper maintenance of the cult of the Aten, outlining festivals to be undertaken for the god, and endowments for the cult. Among the most notable and often-cited statements within the proclamations are the king’s claims that Akhetaten was previously unoccupied, and his vow to repair the stelae in the event they are damaged.

Most of the stelae are now in a poor state of preservation, having suffered from weathering, the carving-out of portions of relief for sale on the antiquities market, and damage in the search for hidden treasure.

Much of the man-made damage dates to the nineteenth and early twentieth centuries, although in 2006 Stelae S was dynamited, shattering the relief into fragments that are now in the Amarna magazine.



Figure 20. Boundary Stela U photographed in 1983 before the construction of a staircase to allow visitor access.



Figure 21. Close up view of Boundary Stela U and the statues at its base.

*The Royal Tomb*

The Royal Tomb, one of the foundations listed on the Boundary Stelae, was cut into the limestone bedrock deep in the Royal Wadi in the eastern cliffs, recalling the Valley of the Kings in Luxor (fig. 22). Although unfinished, the tomb was used for the burials of Akhenaten, princess Meketaten, probably Queen Tiy, and another individual, perhaps Nefertiti. At the end of the Amarna Period the contents of the tomb were partly relocated to Thebes (Davis et al. 1910). The tomb was badly looted shortly after its discovery in the late nineteenth century and has suffered subsequently from vandalism and flooding. The walls nonetheless retain important scenes, including those alluding to the death of princess Meketaten, perhaps in childbirth. The Royal Wadi also contains three additional unfinished tombs and another chamber that is either a store for embalming materials or a further tomb.



Figure 22. The entrance to the Royal Tomb photographed in 1977/1978; the entrance was later covered by a metal roof to drain off floodwaters.

The principal missions in the Royal Wadi in modern times have been those of Geoffrey Martin and Ali el-Khouly (Martin 1974, 1989; el-Khouly and Martin 1987) and Marc Gabolde (Gabolde and Dunsmore 2004).

*South Tombs and South Tombs Cemetery*

A second group of rock-cut tombs belonging to the city's elite is situated at the cliff-face southeast of the Main City. There are 19 numbered tombs (nos. 7-25) and several other unnumbered chambers. The tombs are in a less finished state and are smaller than the North Tombs. Large quantities of pottery dating to Dynasties 25 and 30 litter the ground nearby, suggesting the tombs were reused in the Late Period (French 1986). For more information on the South Tombs, see Davies (1903-1908), Owen and Kemp (1994), and Arp (2012).

The rock-cut tombs are again only the elite component of a much larger cemetery that occupies a 400 m long wadi between Tombs 24 and 25. Fieldwork here from 2005 to 2013 (Kemp et al. 2013) revealed a densely packed cemetery containing the graves of several thousand people, those of adults, children, and infants intermingled (fig. 23). The deceased were usually wrapped in textile and a mat of palm midrib or tamarisk and placed singly in a pit in the sand. Less often, they were buried in coffins made of wood, pottery, or mud. The decorated coffins include examples with traditional funerary deities, and in a new style in which human offering bearers replace the latter. Most graves seem to have been marked by a simple stone cairn, and in some cases a small pyramidion or pointed stela showing a figure of the deceased (fig. 24). Fragments of pottery vessels that presumably often contained or symbolized offerings of food and drink were common. Other grave goods were rare, but included such items as mirrors, kohl tubes, stone and faience vessels, tweezers, and jewelry such as scarabs and amuletic beads.

The study of the human remains showed an inverse mortality curve, ages at death highest between 7 and 35 years, with the peak between 15 and 24 years. Those buried here suffered high rates of degenerative joint disease,





Figure 23. View across the excavations at the South Tombs Cemetery in 2007.



fractured limbs, and conditions such as *cribra orbitalia*. The population was also relatively short, females on average 153.5 cm tall and males 163.9 cm. Collectively, this data suggests that working lives for the non-elite at Amarna were physically strenuous and their diet was often lacking adequate nutrition (Rose and Zabecki 2009; Dabbs et al. 2015).

Annual reports on the cemetery excavations appear in the *Journal of Egyptian Archaeology* for years 2005 to 2013, and the final publication is in preparation.

#### *Workmen's Village*

The Workmen's Village (fig. 25) is the larger of the two settlements on the eastern desert plain, lying in a broad bay on the south side of a low plateau that extends down from the high desert. It is one of the most extensively studied areas of Amarna, having been excavated in

Figure 24. A stela from the South Tombs Cemetery showing a man and woman represented in a style similar to contemporaneous representations of the royal family



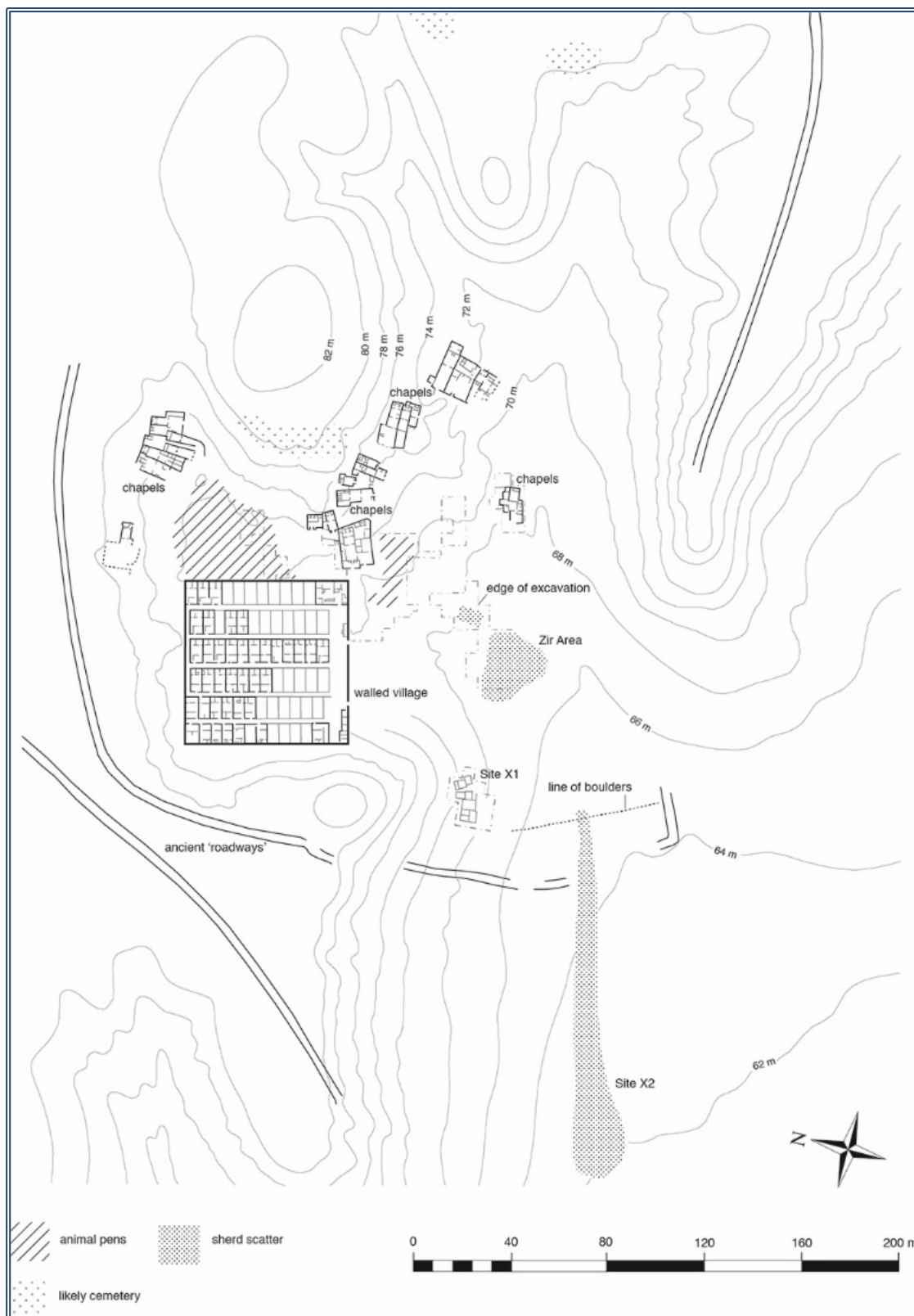


Figure 25. The Workmen's Village.



Figure 26. The Workmen's Village during the EES campaign in 1922.



Figure 27. The interior of house Gate Street 8 excavated in 1985, showing the "staircase room" in the foreground, the central room with mastabas and hearth in the center, and the narrow front room in the background.

1921 and 1922 (Peet and Woolley 1923: 51-108), when some of its walls still stood almost to roof-level (fig. 26), and again from 1979-1986 (*Amarna Reports* I-IV; Kemp 1987). Because of its isolated setting, the village formed a self-contained sub-community of Akhetaten with its own houses, garden plots, animal pens, rubbish dumps, and cemetery.

The village is one of few housing areas at Amarna to have been formally planned: it is laid out with rows of 73 equally sized house plots, and one larger house, all surrounded by a perimeter wall around 80 cm thick with two entranceways. Apart from the larger house, thought to belong to an overseer, the village houses exhibit at ground-floor level a tripartite plan not generally found in the riverside suburbs, with a staircase leading to a roof or further story/s above (fig. 27). Perhaps quite soon after the village was founded, its occupants modified and added to their houses and settled the land outside the village walls, constructing chapels, tombs, animal pens, and garden plots (Kemp 1987; figs. 28, 29). The latter reflect the efforts of the villagers themselves to sustain their community (Stevens and Clapham 2014), but the isolated location of the site, and lack of a well, also made it dependent on supplies from outside. An area of jar stands known as the Zir Area on the route into the village seems to represent the standing stock of water for the village, supplied by deliveries from the riverside city, the route of which is still marked by a spread of broken pottery vessels (Site X2). Near the end of the sherd trail there is a small building (Site X1), which may be a checkpoint connected with the importation of commodities. Given its location and similarity to the tomb workers' village at Deir el-Medina, the Workmen's Village is thought to have housed workers, and their families, who cut and decorated the rock-cut tombs, including those in the Royal Wadi. This identification is supported by the discovery at the site of a statue base mentioning a "Servant in the Place," recalling the name "Place of Truth" used by the tomb-cutters at Deir el-Medina (Kemp 1987: 45).



Figure 28. An animal pen (probably for pigs) at the Workmen's Village.



Figure 29. The Main Chapel at the Workmen's Village after reclearance in 1984. Note the use of whitewash on the walls, and benches in the outer court, perhaps to accommodate guests during ritual meals.

The internal history of the village, however, is not easy to reconstruct. At some stage an extension was added to the walled settlement, possibly to accommodate a growing workforce to help complete the royal tombs. It has also been suggested that, perhaps late in its occupation, the site housed a policing unit (Kemp 1987: 46-49). Excavations have produced a relatively high proportion of jar labels and faience jewelry from the last years of the reign of Akhenaten and those of his successors (Shaw 1984; Leahy 1985: 66; Shannon 1987), suggesting a burgeoning of activity at this time, but without ruling out earlier occupation. The discovery of a 19<sup>th</sup> Dynasty coffin beside the Main Chapel (Taylor and Boyce 1986) indicates that the village site was still known of later in the New Kingdom.



*Stone Village*

The Stone Village lies on the north face of the same plateau that shelters the Workmen's Village (figs. 30, 31). It is a smaller site and has been less extensively studied. Only identified as an archaeological site in 1977 (Kemp 1978: 26), it was the subject of a fieldwork campaign from 2005-2009 (Stevens 2012a, 2012b).



Figure 30. The Main Site at the Stone Village, looking towards the river, taken in 2008.

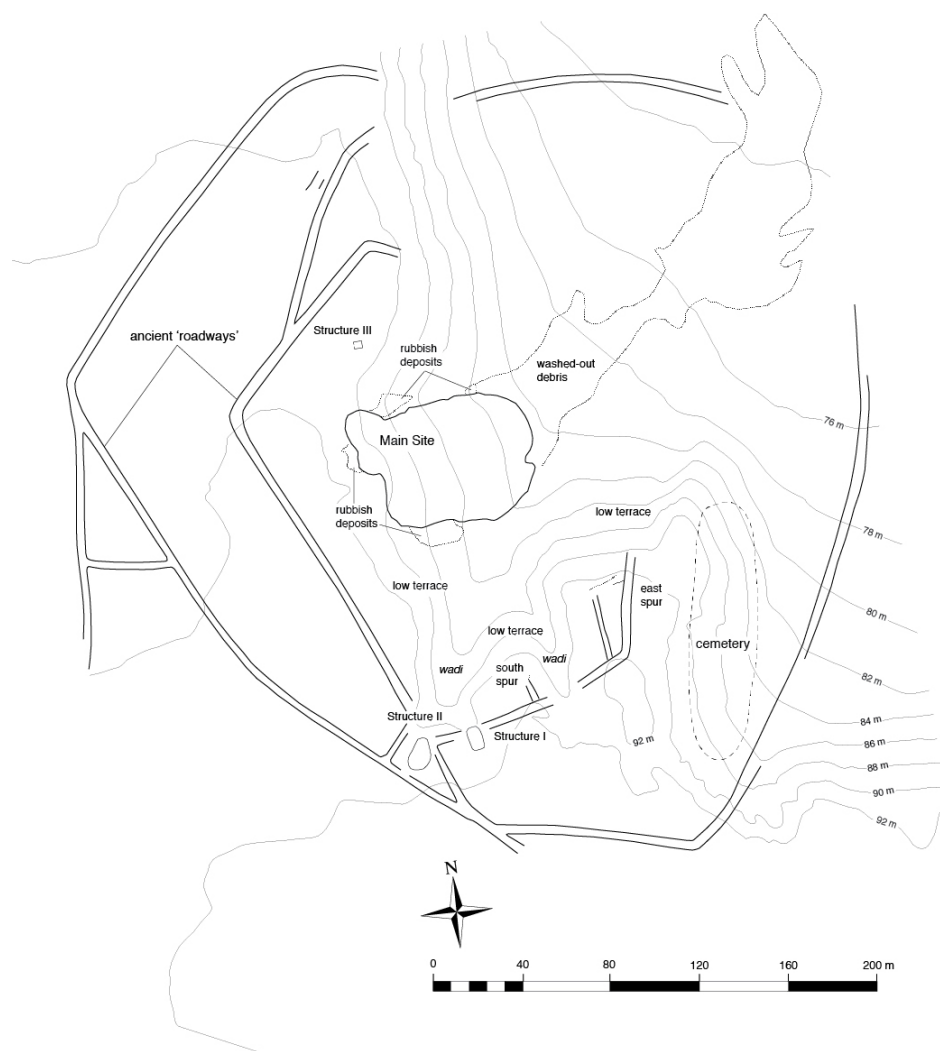


Figure 31. The Stone Village.

Like the Workmen's Village, the site had a central occupation area (the Main Site), encompassing around half of the area of the walled settlement at the Workmen's Village. Excavations here revealed remains of both roofed structures and external spaces that were in part likely residential, but were not laid out in the same neat arrangement of houses as the Workmen's Village. The excavated buildings were made almost entirely from desert clay and limestone boulders, with little sign of the alluvial bricks that were used to lay out the Workmen's Village houses and perimeter wall. While the Main Site was surrounded at least in part by an enclosure wall, this was around half the thickness of that at the Workmen's Village and seems not to have been part of the original layout. And the extramural area of the site is also far less developed than that of the Workmen's Village, with no obvious sign of chapels, garden plots, or animal pens, although there are marl quarries and a small cemetery. Two simple stone constructions on top of the plateau (Structures I and II) were perhaps connected with the supplying and/or policing of the site, while a smaller stone emplacement to the north (Structure III) was possibly a guard post.

The purpose of the Stone Village is difficult to pinpoint, but it seems likely to also have housed workers involved in tomb construction. Large numbers of chips of basalt have been found at the site (and likewise at the Workmen's Village), perhaps for making large pounders of the type used for stone extraction in the Royal Wadi. Given the limited sign of state input in laying out the site, and its simplicity in comparison to the Workmen's Village, it may be that the workers here were less skilled or of lesser social standing than those at the latter. The possibility that the site had secondary functions—such as supplying desert-based workforces—also remains.

*Kom el-Nana*

The ruins at Kom el-Nana are the best preserved and studied of the peripheral cult complexes, excavated by the Egyptian Antiquities Organization in the 1960s and the current expedition to the site from 1988 to 2000. Kemp offers an overview of the site in *Amarna Reports VI* (Kemp 1995: 433-438).

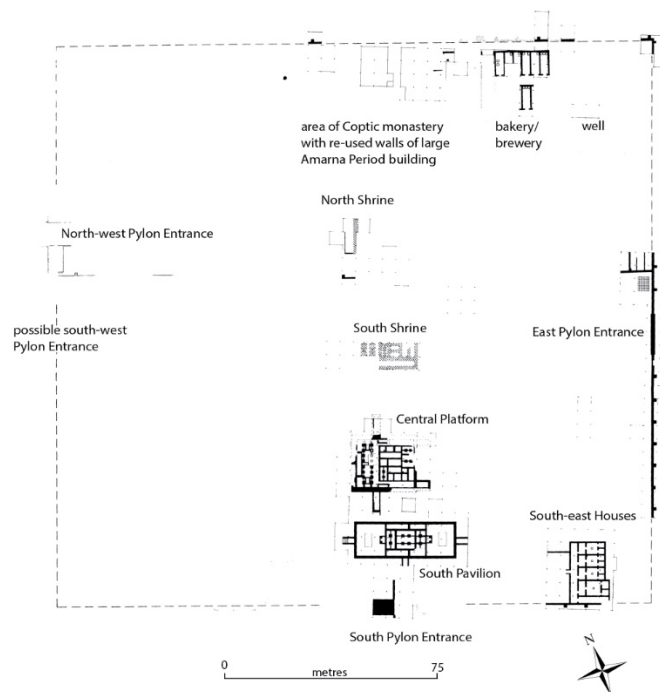


Figure 32. Exposed remains of the ritual complex at Kom el-Nana.



Located southeast of the Main City, the site comprises a large enclosure some 228 x 213 m, divided into a northern and southern court (fig. 32). The latter was dominated by a podium (the “central platform”) accessed by ramps on at least its north and south sides, and supporting rooms including a columned hall with stepped dais, possibly the location of one or more Windows of Appearance. South of the central platform was a long narrow processional building (the “southern pavilion”) containing columned spaces and two open courts with sunken gardens, and to its north the so-called South Shrine, which seems to have included a set of chambers on the east and a columned portico to the west. Badly demolished at the end of the Amarna Period, thousands of pieces of smashed up limestone and sandstone blocks were found here. Inscriptions on some of these identify the site as the location of a Sunshade of Ra, probably dedicated to Nefertiti, whose image also appears prominently in reliefs; other inscriptions give the name *rwd ḥnhw jtn*, an institution mentioned in the tomb of the official Aye in connection with the provision of mortuary offerings (Williamson 2008, 2013). The southern court also contained a series of tripartite houses and garden plots.

The northern court housed a second stone shrine, the North Shrine, of which only a small part has been uncovered, along with a bakery and brewery complex. Part of the northern enclosure was overbuilt by a monastery in around the fifth and sixth centuries CE that included a small church decorated with wall paintings (Pyke 2003). The excavations of the monastery are published only as preliminary reports, but studies of its ceramics and glassware (Faiers 2005, 2013) and archaeobotany (Smith 2003) have appeared.

#### *Maru Aten*

The Maru Aten was a ritual complex, incorporating a Sunshade of Ra dedicated to Meritaten, at the far south end of the Amarna plain. The site is known for having been elaborately decorated, including with painted pavements, but is now lost under cultivation. It was excavated in 1921 by the EES (Peet and Woolley 1923: 109-124), but the principal

discussion of the site is that of Kemp (1995: 416-432), who stresses the speed with which the excavation was undertaken and the paucity of archive records.

The site comprised two enclosures, a northern one, built first, and southern one (fig. 33). The northern court was dominated by a large shallow pond surrounded by trees and garden plots, with a viewing platform and causeway built at one end. At the other end was a stone shrine adjacent to an artificial island on which was a probable solar altar flanked perhaps by two courts. The northern enclosure also contained T-shaped basins, probable houses, and other buildings of uncertain purpose. The southern enclosure likewise had a probable central pool (not excavated) and a building at either end, one a mud-brick ceremonial structure, perhaps for use by the royal family, and the other a stone building of uncertain function.

#### *The “Lepsius Building” and El-Mangara*

A few hundred meters southwest of the Maru Aten there likely stood another stone-built cult or ceremonial complex, noted briefly by Lepsius in 1843, while at the site of el-Mangara, about 1700 m southeast of Kom el-Nana, evidence was also collected in the 1960s for a stone-built complex, in the form of largely intact decorated blocks, mud-brick, and Amarna Period sherds. Both sites are now lost under cultivation (Kemp 1995: 412, 438-443).

#### *Royal Road*

The city incorporated several thoroughfares, generally running north-south, the most important of which is now known as the Royal Road. It linked the palaces at the north of the Amarna bay to the Central City and then continued southwards, with a slight change of angle, through the Main City (Kemp and Garfi 1993). It is just possible that part of its northern span was raised on an embankment, a mud-brick structure north of the North Palace, cleared briefly in 1925 (Whittemore 1926: 9-10), perhaps serving as an access ramp (Kemp and Garfi 1993: 44-46). The line of the road from the North Palace through the Central City, if projected southwards, also passes

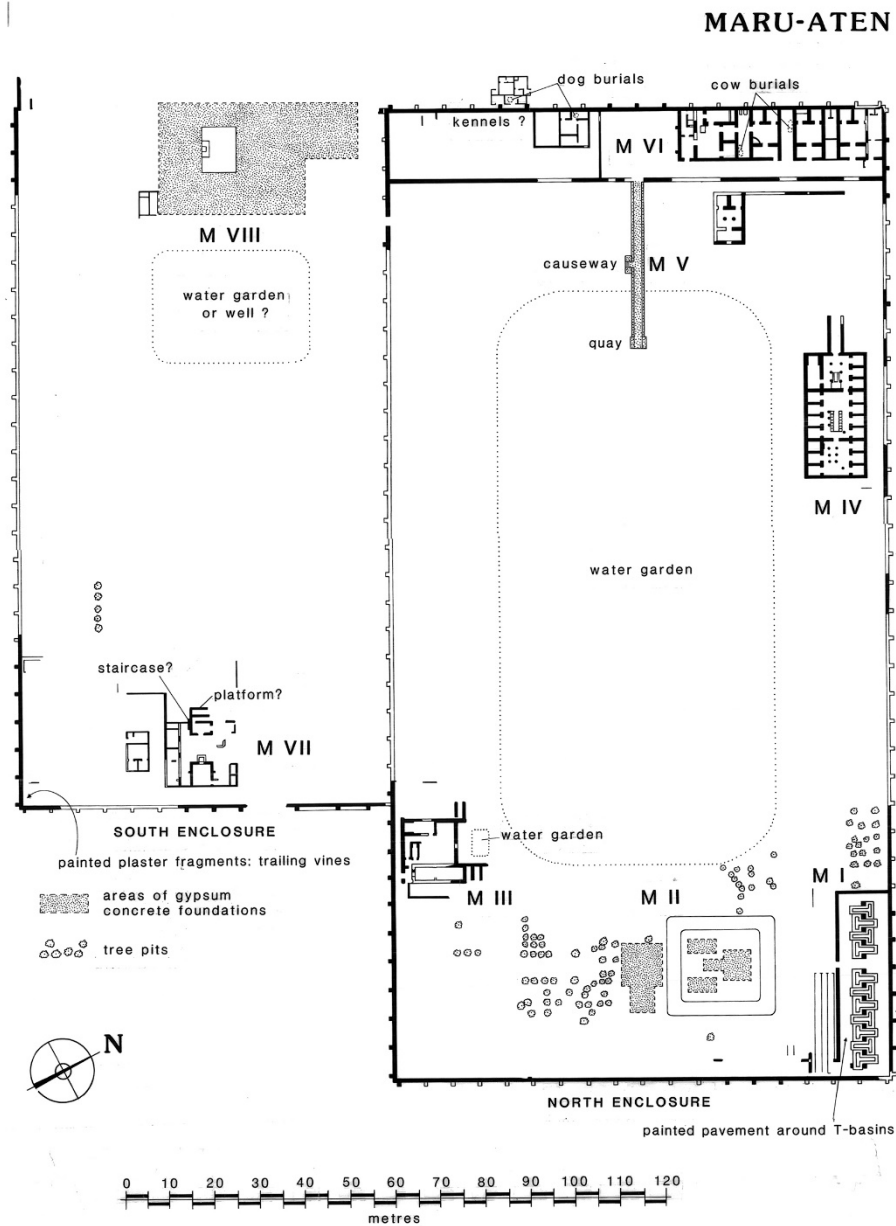


Figure 33. Plan of the Maru-Aten based on archive records.

directly by the Kom el-Nana complex near the southern end of the site, suggesting that it was used in laying out the city (Kemp and Garfi 1993: 48). Thereafter, the Royal Road probably remained an important stage for the public display of the royal family as they moved between the city's palaces and temples (O'Connor 1989: 86).

#### *Desert Roadways*

The low desert to the east of the city was crisscrossed by a network of roadways: linear stretches of ground, c. 1.5-11 m in width, from which large stones have been cleared and left in ridges along the road edges (fig. 34). The most complete survey of the road network is that of Helen Fenwick (2004); its full

publication is pending. The roads probably served variously as transport alleys, patrol routes, and in some cases as boundaries, and suggest fairly tight regulation of the eastern boundary of the city (Kemp 2008). Particularly well-preserved circuits survive around the Workmen's Village and Stone Village (Kemp 1987: 23; Stevens 2012a: 69-80). The roadways are among the most vulnerable elements of Amarna's archaeological landscape, although protected in part by their isolated locations.



Figure 34. An Amarna Period roadway on the desert floor to the north of the Workmen's Village taken in 1977/1978.

### *Availability of Data*

This article can be considered a companion piece to the website of the Amarna Project (<http://www.amarnaproject.com/>), which provides more information on the city and its excavations, and is gradually being expanded to serve as an online archive for Amarna. It includes downloadable copies of the *Amarna Reports* series ([http://www.amarnaproject.com/downloadable\\_resources.shtml](http://www.amarnaproject.com/downloadable_resources.shtml)) and the Amarna Small Finds Database, a list of objects excavated by the EES in the 1920s and 1930s ([http://www.amarnaproject.com/pages/recent\\_projects/material\\_culture/small\\_finds/database.shtml](http://www.amarnaproject.com/pages/recent_projects/material_culture/small_finds/database.shtml)). The Egypt Exploration Society has also made available on their Flickr feed scans of the object registration cards from which the latter is derived: (<https://www.flickr.com/photos/egyptexplorationsociety/collections/72157653989072968/>).

### *Bibliographic Notes*

The most complete and up-to-date study of Amarna is Barry Kemp's 2012 book, *The City of Akhenaten and Nefertiti: Amarna and its People*. The excavations of the current expedition up to the mid 1990s are reported on in the *Amarna Reports* series, and since then in excavation monographs. A list of all publications produced by the expedition is available on the [Amarna Project website](#). For details of the layout of Akhetaten the reader should consult Kemp and Garfi's (1993) survey and the Amarna Project website; the index in the former (Kemp and Garfi 1993: 83-110) lists when individual buildings were excavated and their principal publications. Overviews of the site and its artifact record are also provided by the exhibition catalogs *Pharaohs of the Sun: Akhenaten, Nefertiti, Tutankhamun* (Freed et al. 1999) and *In the Light of Amarna: 100 Years of the Discovery of Nefertiti* (Seyfried 2012), while *Amarna: Lebensräume – Lebensbilder – Weltbilder* (Tietze 2010) focuses on its domestic architecture. More information on the early expeditions to the site can be found in Kemp and Garfi (1993: 10-19) and Montserrat (2000: 55-66), who explores the cultural and political milieu of this work.



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## *External Links*

Aegaron

*Ancient Egyptian Architecture Online*: A repository for standardized architectural information & drawings. (Internet resource: <http://dai.aegaron.ucla.edu/>. Accession date: February 2016.)

Amarna Object Cards

*Amarna Object Cards (T.A.O.C.)*. A collection of object cards recording items discovered during the Egypt Exploration Society excavations at Tell el-Amarna from 1921-1937. (Internet resource: <https://www.flickr.com/photos/egyptexplorationsociety/collections/72157653989072968/>. Accession date: February 2016.)

Amarna Project

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Amarna Reports

*Amarna Reports*. A series of six volumes published by the Egypt Exploration Society between 1984 and 1995. (Internet resource: [http://www.amarnaproject.com/downloadable\\_resources.shtml](http://www.amarnaproject.com/downloadable_resources.shtml). Accession date: February 2016.)

Amarna Small Finds Database

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- Figure 1. Map of Amarna. Image by Barry Kemp, partly based on survey data provided by Helen Fenwick.
- Figure 2. Location of the Boundary Stelae. Image by Barry Kemp.
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