

horizon

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The Amarna Project and Amarna Trust newsletter

Challenging times

The period of activity covered by this issue spans the momentous political changes that began on January 25th and rapidly became Egypt's new Revolution. At the time, the expedition was hosting a field school, run by the University of California, Los Angeles (see pages 2–4). Within a few days of the demonstrations beginning, the Minia police instructed us to close down and leave; at the same time, UCLA invoked a repatriation plan for the non-Egyptian students.

The violent phase of the Revolution, played out in the centre of Cairo, subsided fairly soon. But it left a widespread feeling of uncertainty, despite the return of the appearance of normality. The police in Middle Egypt remained reluctant to allow foreign archaeological missions to work as usual, and so it became necessary to postpone the planned Amarna fieldwork until after the summer. Towards the middle of May, however, the police allowed the University of Arkansas anthropology team to stay at the expedition house for a month and to work on the human skeletal remains stored in the magazines (see page 5).

Unscrupulous people took advantage of the disorder to steal antiquities. Amarna escaped. No one sought to attack the magazines at the expedition house, and I saw no signs of digging into the site even though I managed to visit most of it. There are constant attempts at encroachment by local farmers on land belonging to the Supreme Council of Antiquities, but this is a long-standing problem, motivated by land-hunger. The safety of Amarna owes much to the continuing conscientious interest of the local inspectorate of antiquities, based in Mallawi.

Archaeological missions, who often discover new antiquities in the course of their work, are a worry to the regional police. But the same officers assured me that they had no concerns about tourists visiting Amarna and neighbouring sites, and that is the opinion I have formed, too. If you are planning a visit, do come.

Barry Kemp, Chairman



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A field school in archaeological geophysics



The year began with a geophysics field school. The Amarna Trust secured the agreement of the Cotsen Institute for Archaeology of the University of California, Los Angeles to organise an accredited course through its Field Program, and of the Center for Advanced Spatial Technologies at the University of Arkansas to provide specialist teaching.

Hans Barnard represented the former, Jason Herrmann and Stephanie Sullivan the latter. It followed a 2009 pilot project of the University of Arkansas (*Horizon* 6, 7). The aims of the field school were to develop further a multi-sensor geophysical survey of Amarna's archaeological landscapes and to provide training for students in archaeology and Egyptology from around the world. Amongst the twelve students were three inspectors of antiquities from Egypt's Supreme Council of Antiquities. The daily schedule included courses on more general subjects as well as technical instruction and the processing of gathered data. Before it was halfway completed, the course had to be stopped on account of unrest within Egypt. We plan to run another field school late next year.

Geophysics is not a substitute for the kind of precise plan that comes from excavation. What it offers is a diagram of human intervention on an ancient land surface, that can be extended relatively economically over areas that are far larger than archaeologists can now consider excavating. Its results should be seen as another layer of information, to be collated with topographic and other kinds of archaeological maps. It is only when large areas are covered, a variety of instruments is used and their data combined that a 'bird's eye' perspective is gained and the full value is revealed.

Jason Herrmann summarises the results that were obtained.

High-tech methods for detecting buried archaeological deposits without digging, such as remote sensing from satellite and aerial platforms, detailed surface survey, and geophysical prospection have come to be standard parts of the archaeologist's toolkit. The 2011 investigations began in the vicinity of the house of Ranefer, in a relatively flat stretch of the site that includes both excavated and unexcavated portions of the main city. The results were much like those from the North City survey of 2009, where the geophysical signature of architectural plans is sometimes obscured by an overburden of the melted mud brick that comprises the bulk of the mounds on site and contributes to the hummocky topography of the central city of Amarna (Figures 1 and 2).

We have been able, however, to discern the architectural plan of some of the buried structures through the sediments above. Since different geophysical techniques are sensitive to different physical properties in the soil, we made a point of using several different sensors to create a detailed picture of subsurface deposits. Data from multi-sensor surveys can be combined in what is called a false-colour composite to create an image that displays the different attributes of an archaeological deposit as captured by multiple sensors (Figure 3).

We next moved to the South Tombs Cemetery, the current main excavation site. Two weeks of investigations yielded an immense amount of digital data which are still being processed. Gwilym Owen, longtime photographer for the Amarna expedition, shared his experience and aerial photography equipment with the field school students who conducted an aerial survey of the site. The aerial images, along with detailed surface maps drawn by the students during data collection, have been crucial in interpreting the processed geophysical data (Figure 4).

Figure 4 shows a portion of the aerial survey, covering the *wadi* bottom and the greater part of the drainage surfaces that were used as the cemetery, side-by-side with the geomagnetic map of the *wadi* bottom. What is obvious is how the geophysical survey captures the natural geological

variation in the landscape, but a closer look at the magnetic map of the wadi reveals a number of magnetically enhanced anomalies that are 1–2 m long on the *wadi* slope. A comparison of this image with the aerial photography reveals that in most cases these anomalies are not reflected in the surface topography and are therefore likely buried features. It is tempting to interpret each of these small blobs as the location of a grave shaft, although this claim will need to be verified in future excavation seasons.

The geophysical data are currently being processed using ArchaeoFusion, a new software developed by archaeologists and engineers at CAST especially to process and fuse data from multiple sensors for archaeological investigations. Field school students received training in concepts in data processing and interpretation as well as training in ArchaeoFusion and other software for data processing and visualization. Data from the 2011 geophysical survey at Amarna is being used by several students from the field school in undergraduate theses and projects at their home institutions, and will be the focus of study over the next year as we find new ways to visualise and interpret the data and in preparation for future field seasons at Amarna.

Figure 1: Map of the area around the house of Ranefer. The geophysical survey grid (of 20-m squares) is marked in red, the portion where the different types of data are combined is marked in yellow, and the excavation grid numbered 12 is marked in green. The glaze kiln in house M50.14 shows as a cluster of readings of high magnetic contrast in Figure 2.

Figure 2: House of Ranefer area magnetometry survey with aerial photo. The central southern part was largely excavated already, and the lines of walls in the architectural plans of buildings are moderately clear. The Grid-12 excavation is in the south-east corner, and is outlined by points of high magnetic contrast that are buried iron survey spikes around the edge of the excavation. The north section of the survey is in a portion of the site that was not previously excavated, but is pitted with looters' holes. There are some clear signs of buried architecture in the form of rectilinear alignments in this area, despite the irregular surface disturbances. Patterning, especially where building alignments follow local trends, will become clearer when the survey area is increased.

Figure 3: results from the geomagnetic (bottom right), conductivity (bottom left) and magnetic susceptibility (top right) instruments at the Ranefer site combined into a false-colour composite image (top left). For the area of missing (unprocessed) data, the geomagnetic plot has been inserted to aid interpretation.

Figure 4: South Tombs Cemetery aerial photography and geomagnetic survey results. Excavation trenches shown in red. Black anomalies in geomagnetic data (upper inset, rendered yellow in lower inset) could indicate the locations of burials.



Figure 1

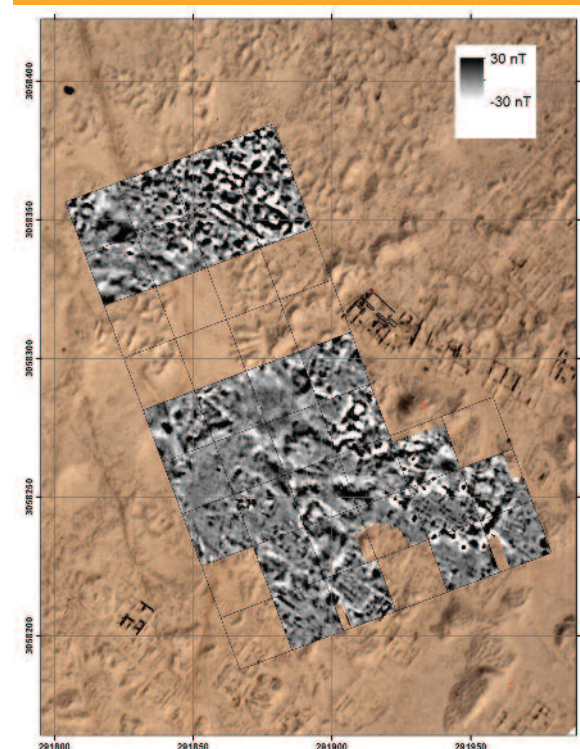


Figure 2

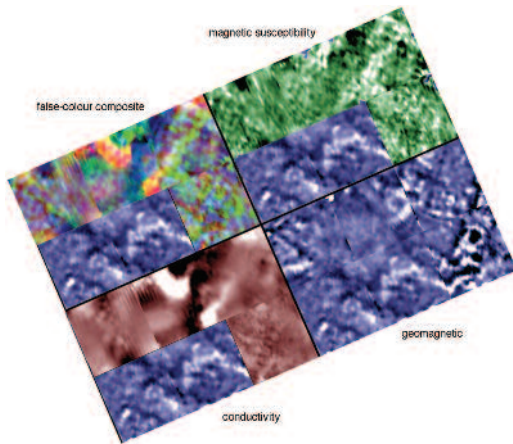


Figure 3

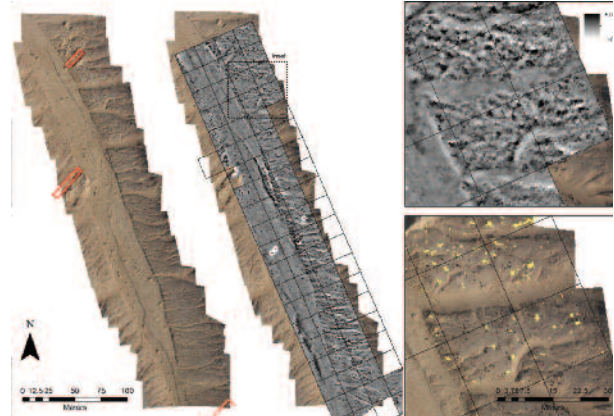


Figure 4



Ground-Penetrating Radar (GPR)

One of the more promising datasets is that of the GPR survey, which is extremely effective in sandy environments like that of the South Tombs Cemetery *wadi*. Ground-penetrating radar surveys of archaeological and geological deposits offer the added benefit of being able to estimate the depth of buried features and produce pseudo-three dimensional results. GPR works much in the same way as radar does in other contexts. The radar antenna emits a radio wave and the data recorded represent the intensity of the return when part of the radio signal bounces off a material with a different texture that is in its path. One drawback of GPR data is the large size of data files, which require specialised software packages and many weeks of data processing.



Magnetometry

Geomagnetic surveys are the most commonly used technology for archaeological prospection. The surveyor moves a very sensitive magnetometer at regular intervals over the earth's surface to create a map of magnetic intensity. Magnetic surveys reveal the locations of materials that can be magnetised when within the presence of an external magnetic field or that are permanently magnetised, normally through firing. At Amarna, we expect mud brick to be weakly magnetic, as well as organic deposits or organic-rich soils. Iron-rich stones like granite, as well as fired materials like ovens, kilns and hearths would appear more clearly since they generally are stronger magnets.



Magnetic Susceptibility

Magnetic Susceptibility is one of the two datasets that is collected simultaneously by the electromagnetic induction instrument used at Amarna. The types of features that are detected during a magnetic susceptibility survey are magnetised when in the presence of an external magnetic field. A magnetic susceptibility survey is useful for mapping more broad expanses of materials with contrasting attributes.

(continued below)

Conductivity

Electromagnetic induction also can be used to understand the ability for buried materials to conduct a magnetic field. Factors that would make archaeological and other buried deposits conductive are moisture content, degrees of soil compaction and salt content. Collected from the same instrument, conductivity data at Amarna are much like the magnetic susceptibility data in that they are most useful in mapping broad features such as activity areas, floors and buried soil deposits.

Bone update

In the middle of May, the storeroom (or magazine) attached to the expedition house was opened again, to allow the anthropology team from the University of Arkansas to continue their study of the human bones from the South Tombs Cemetery (see *Horizon* 8, 5–9). In the absence of fresh material, they examined again certain areas of the recording done in the past to ensure consistency, and, with the benefits of hindsight, to review aspects where recording leads to evaluations.

Aging

Methods of aging individuals have seen recent advances. One of these was applied to 149 Amarna adults. After further processing, this will lead to adjustments in the distribution of adult ages at death (though not to the overall picture). Another, based on tooth development and eruption, is limited to children. Applied to 58 Amarna children, it further demonstrated that, when the stage of tooth emergence is compared to long-bone length, Amarna children show a lag of between 18 and 26 months in the development of their bodies (Figure 1). For a period in childhood, people's growth slowed right down.

More on the injured scapulae

A surprising observation last year (*Horizon* 8, 8–9) was that several adult shoulder blades had been pierced while the owner was still alive, and that the damage had then begun to heal. The piercings resembled those that have been recorded on the shoulder blades of pigs, that have been interpreted as the result of non-fatal spearings (*Horizon* 7, 6–7). Much of the shoulder blade is thin and is therefore prone to post-mortem damage. The team has now examined the bones again, with this in mind. The signs of natural bone growth around the damage, as the wounds healed, are absolutely clear in four of the five cases identified, and a further positive example has been added. The wounds were, moreover, not accompanied by damage to the ribs. Five males seem, therefore, to have been stabbed through the shoulder, at an angle that pierced the muscle but avoided penetrating the body cavity and endangering life (Figure 2). A form of punishment comes to mind.



Figure 1. Mandible and femur from Individual 124. The age given by the rate of tooth eruption is 8.5 years. The longer femur (included for demonstration purposes) has the length that a child of 8.5 years should have under optimal growth conditions. Respective femur lengths are 297 and 306 mm.



Figure 2. One of the shoulder blades (scapula) bearing the partially healed remains of a puncture wound that has avoided damage to the ribs. It is held over a plastic teaching skeleton laid out in the position of a person spread-eagled face downwards on the ground, a position that would expose the shoulder blade to damage of this kind whilst reducing the risk of deeper penetration and damage to the ribs and beyond.

From the archives

Investigating the records of earlier expeditions is an important complement to current fieldwork. Marsha Hill, of the Metropolitan Museum of Art, New York, looks more closely at some documentation from the season of 1936/7.

'The Great Statue which the King Made' from building R43.2

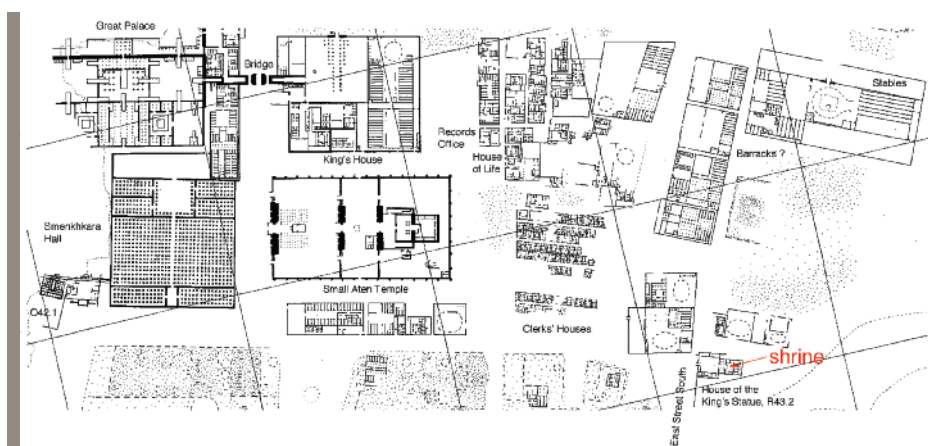


Figure 1. Plan of the southern part of the Central City, showing the location of the House of the King's Statue and the shrine.

Building R43.2 is located on East Street South in the area east of the Small Aten Temple where the Central City makes a transition to the main city suburbs (Figure 1). Nearest it are two buildings which seem to have more or less conventional house plans, but further to the west and north are buildings with official functions – scribal areas, the House of Life, 'barracks' and stables.

Constructed of sun-dried mud bricks, it had features similar to a temple in its open forecourt, larger and smaller columned halls and symmetrical arrangement (Figure 2). It is, moreover, adjacent to a sherd scatter which has similarities in its components to that of the Main Chapel in the Workmen's Village. Its contents, location, and unpretentiousness may indicate that it was a focus of private patronage.

The building was excavated in Pendlebury's last season of 1936–7. Elements of actual statuary were found in the building: a wooden sphinx, a faience *khepesh* crown retaining in its mortise the gesso used to attach it to a statue, a wooden arm, and wooden double plumes from a crown. Among other small finds of unusual interest were a papyrus depicting a battle that involves figures in Mycenaean boar-tusk helmets fighting alongside Egyptians, fragments of painted leather and fragments of a papyrus text (British Museum EA 74100–74102). But the building was termed the "House of the King's Statue" by the excavators because of the inscription on the painted panel of a wooden shrine that likely stood originally on a sort of podium in the central room.

In fact, three wooden elements were attributed by the



Figure 2. Building R43.2 in 2011, viewed towards the east. The large central room is evidently where the shrine (or one of the shrines) stood.

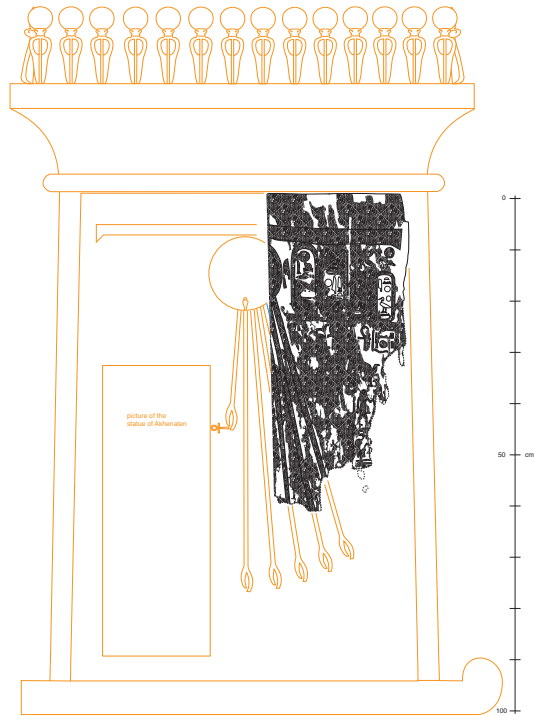


Figure 3. Reconstruction (by Kemp) of one of the panels, based on *The City of Akhenaten* III, Pl. LVI.4 and EES archive negative 36/A 78.

excavators to the shrine: a uraeus frieze and the inscribed panel found in the central room of R43.2, and another painted panel found in the columned hall outside. The panels were in such poor condition that they could not be successfully lifted from the ground, and only photographs taken on the spot give any record of the carved and painted scenes and inscriptions. These photos were recently re-examined by myself because of interest in the shrine and the wooden cult statue it implies, types of material rarely preserved in general and from the site in particular.

The panel from the central room preserves about half of an Aten disc and rays beneath the heaven sign. The hieroglyphs to the side of the Aten's disk are not oriented to read towards and to name the disk, as they usually are, but are arranged to keep that god's icon and names near-centre while providing the phrase 'Akhenaten-(epithets)-Beloved-of-Aten-(epithets).' Although conventional in other periods, it sounds somewhat odd to our ears since the Aten and Akhenaten are regularly linked in elaborate standardised titularies. The Aten's names are written in Fairman's so-called 'intermediary' version, essentially a variant orthography of the late name of the Aten. In a column below the king's names, an inscription written vertically and right-to-left reads 'great statue [with a standing king determinative] which the King caused to be made.' Just

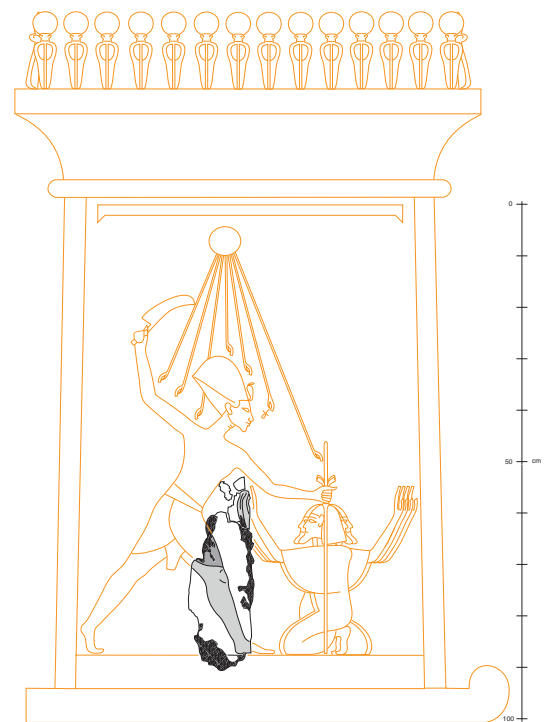


Figure 4. Reconstruction (by Kemp) of the second panel, framed by the same shrine outline as used in Figure 3. Based on EES archive negative 36/A 79, with some correction for perspective.

possibly the word *electrum* was mentioned toward the end, according to an initial observation by Pendlebury recorded in his correspondence (noted by Kristin Thompson). The orientation of the hieroglyphs that describe the great statue suggests it faces to the right, but no part of a statue is actually visible: it may have stood beneath the Aten rays or alternatively to the left of the rays, as reconstructed here (Figure 3). The further possibility exists that the hieroglyphs describe a statue inside the shrine rather than one pictured.

The panel from the columned hall was the lower part of a wooden panel with the painted depiction, in sunk relief, of a king striding energetically (Figure 4). Scrutiny revealed along the right edge the overlapping forms distinctive to groups of captives in smiting scenes, so that the king must have been shown smiting enemies. Such scenes involving Amenhotep IV/Akhenaten (or Nefertiti) occur on the 3rd pylon at Karnak and on *talatat*-blocks from Akhenaten's Karnak temples, along with many smaller versions from alongside windows of appearance or, also at Amarna, kiosks depicted on boats. In this instance, the overlapping forms appear to be four forearms and supplicating hands which have been reconstructed as representing half of a group of four captives.

According to Pendlebury, this panel preserved traces of royal

names on its reverse, including identifiable traces of the name of Nefertiti 'in the short form'. Her name reassuringly confirms the fragment's contemporaneity with the site, as otherwise, by reason of subject matter, traditional garments, and style, the fragment offers little that would compel an Amarna date. It should be mentioned that two finds from the House of the King's Statue have sometimes been adduced to suggest an association of the structure with a cult of Amenhotep III, but they seem not to justify such theories: first, a single example among a number of scarabs from the site bore a cartouche, and that happened to be one of Amenhotep III; secondly, a scribe's palette (Petrie Museum UC2260) bears the name Amenhotep in a cartouche, but the palette actually mentions 'his beloved son (Amenhotep)', a designation likely to refer to Akhenaten as a young prince. In all likelihood, then, the smiting king on the panel should be Akhenaten.

As mentioned, the excavators envisaged a single shrine. It is possible to construct a shrine of taller proportions that enable the first panel to stand above the second to create a scene in which Aten rays pour down over the smiting king and the inscriptions refer to the smiting figure as the statue in question. However, the panels do come from different rooms, so that, confined as we are to information available from the photographs, one can only say there is no necessity for this to have been the case: the smiting figure might have been a separate panel, presumably from a second shrine. Nefertiti's name in the short form has been noted by Vergnienx to appear only quite early at Amarna, which also tends to point to this panel as separate from the first that bears the intermediary form of the Aten name. In any event, the smiting figure on a shrine would suggest that the statue enclosed in that shrine was an image of the king as protector against Egypt's enemies.

For actual documented statuary presenting the king as dominating a captive we must wait for a stone example from the reign of Merneptah. There is, however, often a chronological disjunction between the appearance of types in wooden and metal statuary of clear ritual character and the appearance of the same types in stone statuary, so it cannot be entirely excluded that such a statue was enclosed. Of course, the statue could have conveyed the notion of protection against Egypt's enemies in another form, such as the king trampling the nine bows (examples of feet above the nine bows exist from Amarna), or seated on the bodies of captives (as with a statue depicted in the tomb of Rekhmire, vizier of Thutmose III).

Whether dedicated by the king or actually through the agency of a well-placed donor, and whether one or two statues should be understood, a protective image of the king expresses a royal aspect known to be popular with the military from Ramesside evidence but also an aspect that could be widely appreciated by Amarna's inhabitants. It seems well-placed at a chapel on a route into the bureaucratic and military district of the Central City.

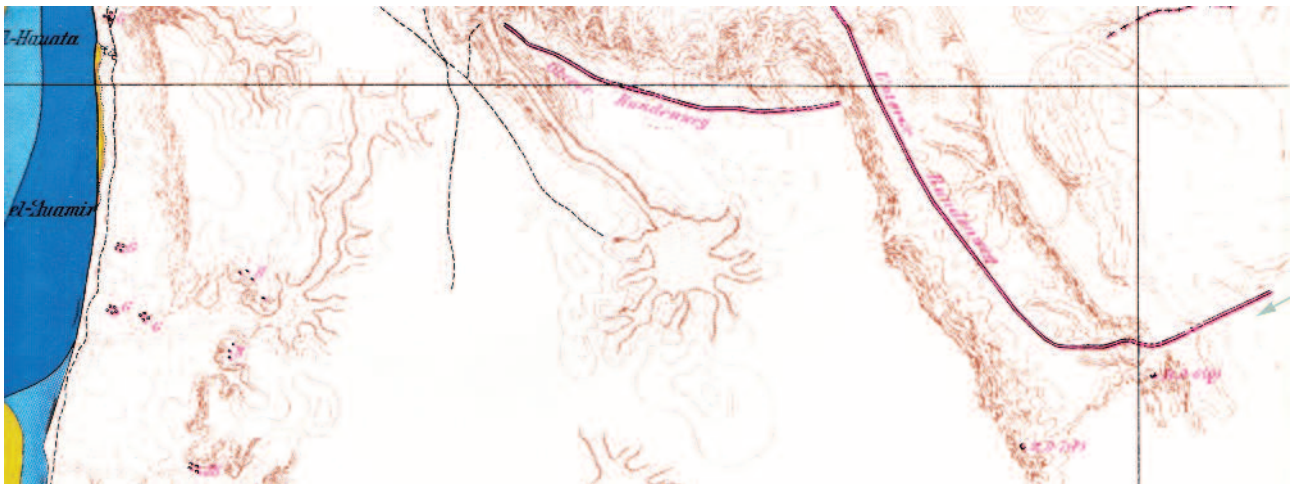
References

The original report is in J.D.S. Pendlebury, *The City of Akhenaten* III (London, Egypt Exploration Society 1951), 140–1. A photograph of the first panel is Pl. LVI.2. Some discussion is in B.J. Kemp, *Ancient Egypt; Anatomy of a Civilization* (London and New York, Routledge 2006), 283–5; B.J. Kemp and S. Garfi, *A Survey of the Ancient City of El-'Amarna* (London, Egypt Exploration Society 1993), 63; Anna Stevens, *Private Religion at Amarna; the Material Evidence* (Oxford, Archaeopress 2006), 249–50. For the fragments of papyrus and painted leather, see R. Parkinson and L. Schofield, 'Images of Mycenaeans; a recently acquired painted papyrus from El-Amarna.' In W.V. Davies and L. Schofield, eds, *Egypt, the Aegean and the Levant: Interconnections in the Second Millennium BC* (London, British Museum 1995), 125–6. H.W. Fairman on Aten names is in *City of Akhenaten* III, 183; for Nefertiti's name see R. Vergnienx, *Recherches sur les monuments Thébains d'Amenhotep IV à l'aide d'outils informatiques I* (Geneva, Société d'Égyptologie 1999), 184 and n. 57.

100 years ago

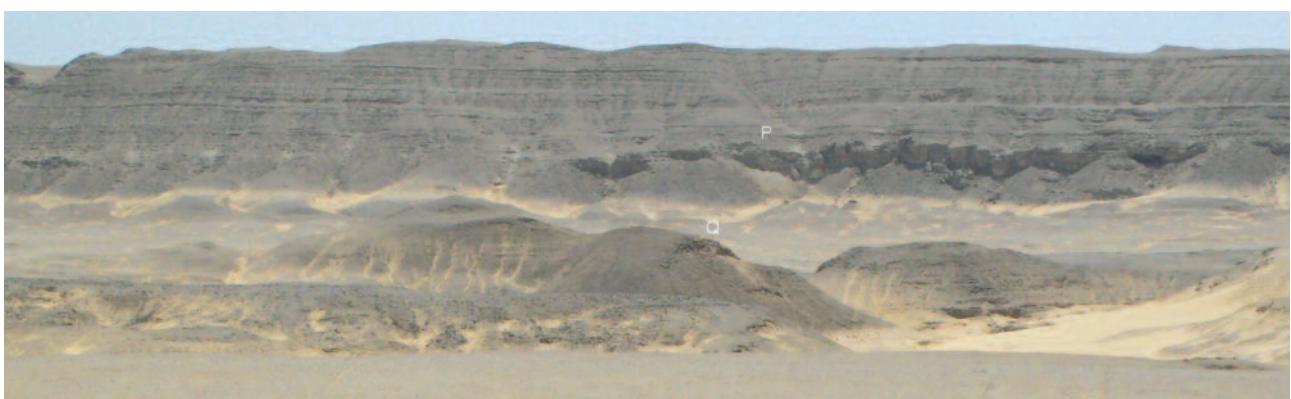
‘Towards the end of November 1913 Major Timme stayed with us again in order to put the finishing touches to his survey of the region. On the day of his departure to the field, in the midst of work for the mobilization of his battalion, he sent us – what an example of German conscientiousness and calm! – the survey along with the descriptive text ready for the printer. Sadly I must also report of this excellent colleague, linked to me through longstanding friendship, that he was seriously wounded on the 5th of November 1914 as he led an attack by his regiment on the east Prussian front.’

Ludwig Borchardt, *Mitteilungen der Deutschen Orient-Gesellschaft*, 55 (Dezember 1914), p. 37.

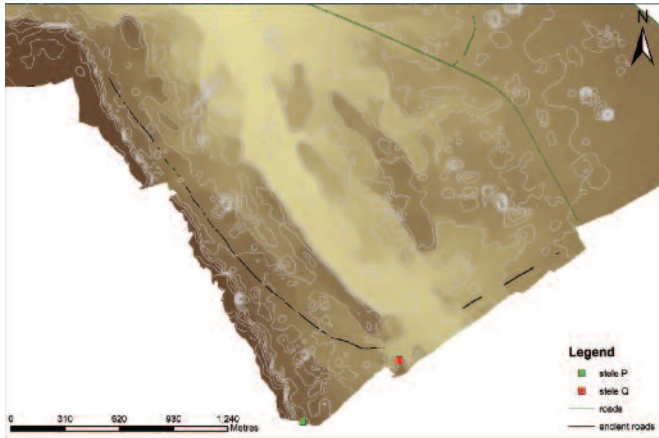


A small part of Timme's map, showing the location of Stelae P and Q and the line of one of the ancient trackways. The green arrow at the right edge marks the direction of the photograph (below).

Major (later Colonel) Paul Timme (of the 55th Infantry Regiment of the Imperial German Army) had joined the staff of Ludwig Borchardt at Amarna in the spring of 1911, having taken a year's leave from his regiment (that would see him also traveling to Australia, the South Seas and the Dutch East Indies). His aim was to make a detailed map of the Amarna plain at a scale of 1:25000, using a plane table and other survey instruments. Working alone, and with a donkey to bear his equipment, he completed a remarkably detailed and accurate map of the east bank during February and March of that year. He subsequently did the same on the west bank.



View southwards towards Stelae P and Q. In the right foreground a length of one of the ancient trackways is visible.



A preliminary draft of part of the new map of the Amarna plain in the vicinity of Stelae P and Q, by Helen Fenwick. Contours are at 10-metre intervals.

With the instruments at his disposal, he was unable to survey heights. In the place of contours he sketched form lines that give an effective impression of topography and provided the basis on which to record archaeological features, many of them now lost.

Timme's survey was handsomely published in 1917, as the 31st Scientific Publication of the Deutsche Orient-Gesellschaft. It remains a fundamental source of reference as well as a delight to consult, not only for the maps but also for his personal observations on what Amarna was like a century ago.

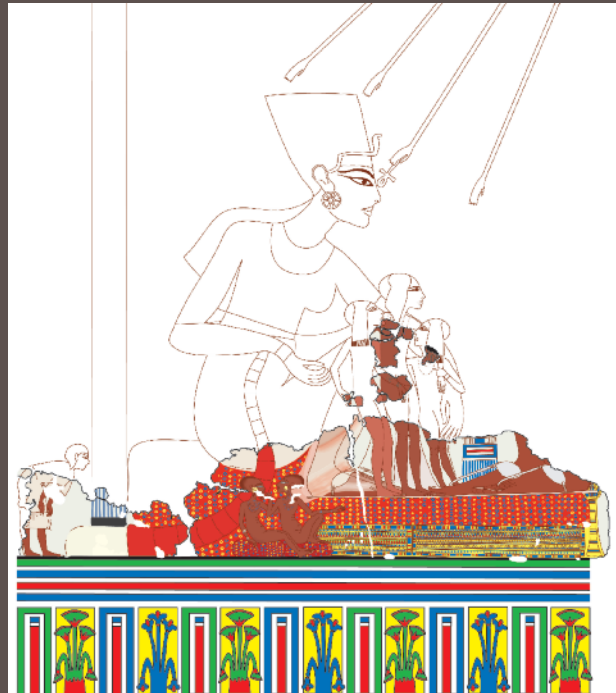
Major Timme survived his wounding. Rainer Gerisch, a long-time member of the present Amarna expedition, has looked into his background. He was born on 4 March 1866 in Breslau (now Wrocław in Poland), making him 45 in 1911. At some time after 1918 he settled in Garmisch-Partenkirchen (Bavaria). In 1928 he took a round trip of the Mediterranean by boat, and died of a heart attack on the way back to Hamburg. His funeral took place on 15 September 1928 in the crematorium at Ohlsdorf (Hamburg), his brother, Walter Timme, publishing an obituary in the *Hamburger Nachrichten* (Abendausgabe) for 14 September 1928.



P. Timme, *Tell El-Amarna vor der Deutschen Ausgrabung im Jahre 1911*. Ausgrabungen der Deutschen Orient-Gesellschaft in Tell el-Amarna II. 31.

Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft. Leipzig, Hinrichs 1917; reprinted Osnabrück, Zeller 1970. The part reproduced here is from the reprint.

Princesses scene



A partial reconstruction of the wall painting that includes the 'Princesses Panel' found by Petrie at the King's House in 1892 and now in the Ashmolean Museum, Oxford. The reconstruction is based on material in F. Weatherhead, *Amarna Palace Painting* (London, Egypt Exploration Society 2007). The face of Nefertiti is based on fragments found at the Bridge and published in the same place. The length of the painting is c. 1.63 m. An illustration from B. Kemp, *The City of Akhenaten and Nefertiti; Amarna and its People* (London, Thames and Hudson, scheduled for 2012).



Where the painting stood: on the wall in the foreground. Petrie removed the bricks from the back of the painting, so lowering the height of the wall. The rubble that now lies in front of the wall has been placed there to protect the remains of the painted dado that Petrie left in place. The length of c. 1.63 metres is approximately the same as the length of five of the mud bricks.



An alternative image of the sun, voyaging in its boat, incised on a flint pebble that has been further worked to make it spherical (the Egyptians having long accepted that the sun was a ball). Dark matter that looks like resin fills the incisions. This was not the image of the sun that Akhenaten wanted though. Object 5484 comes from the Main Chapel in the Workmen's Village, from a rubble layer above the floor of the Inner Hall, R20 (972). Its discovery in a chapel and the appearance of the object suggest that it was something to accompany the recitation of a spell. Diameter 2.5 cm.

The Amarna Trust

The Amarna Trust is registered with the Charity Commission as no. 1113058. Its registered address is

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The Amarna Trust submits an annual set of accounts to the UK Charities Commission. None of its income is used in the furtherance of raising funds. Its overheads are modest.

The objectives of the Trust are:

To advance public education and to promote the conservation, protection and improvement of the ancient city of Tell el-Amarna, Egypt and the surrounding area for the benefit of the public in particular but not exclusively by:

- i) creating a permanent facility for study (the research base – The Amarna Centre);
- ii) undertaking and supporting field research (and publishing the useful results of such research);
- iii) promoting training in archaeological field skills;
- iv) providing, and assisting in the provision of, lectures and publications in furtherance of the stated objects;
- v) developing displays and exhibitions at a site museum for the benefit of the public and an educational outreach programme for the benefit of pupils at schools; and
- vi) working in partnership with the Supreme Council of Antiquities of Egypt to maintain the ancient city for the benefit of the public.



The new helium balloon for Amarna, bought with a donation from the Amarna Research Foundation of Denver (Colorado). It improves on its predecessors by having a separate outer cover, so protecting the inner cover from abrasion.

The website of the Amarna Research Foundation is www.museum-tours.com/amarna

The Trust invites donations from individuals or from corporations. Donations can be earmarked for particular purposes or they can be allocated by the Trust in pursuit of the stated objects of the Trust. The Trust is able to benefit from the present UK tax legislation by reclaiming tax on donations from UK tax-payers under the Gift Aid scheme, which increases the value of the gift by nearly a third. For this it is necessary to accompany each donation with a Gift Aid declaration form or a similar letter. There are further tax advantages for donors who pay at higher rates.

For residents of the USA, donations can be made either to the Amarna Research Foundation or to the Cambridge in America Foundation (both 501(c)(3) tax-exempt organisations) with the request that the donation be made into a grant for The Amarna Trust.

Further information, including downloadable forms, are available at www.amarnatrust.com where you can also donate on-line. Donations can also be made via www.justgiving.com/amarnatrust



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All work done at Amarna relies upon the support and agreement of the Supreme Council of Antiquities of the Arab Republic of Egypt. We are indebted to its personnel, both local and in Cairo.

Thanks to those who have recently supported the Amarna Project

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Anonymous	Daniel Kolos
Ron Ames	Elsebeth Larsen
Kirstin Armstrong	Helen Lowell
Dorothea Arnold	Paul Lynn
Suzanne J. Arnold	Aayesha Mohammed
Frances Bailess	Janet Notman
Alf Baxendale	Clinton W. Owen
Louise Blanke	Mary Ownby
Marie Bryan	Lynette Petkov
Lucilla Butler	Shirley Priest
P.G. Craske	Colin Pyke
Suzuki Crome	Margaret Quinn
Surésh Dhargalkar	Jerry Rose and Dolores Burke
Jim and Betty Dunn	Kimberly Sanders
Jane Durant	G. Schmidt
Ellie Rose Elliott	Edythe Scott
Ian Flinn	Janet and Mike Shepherd
Richard Glendon	Dilip Singh
Eileen Goulding	Anna Stevens
Annie Haward	Tetsuya and Marin Takahashi
Alison Hawcroft	Marie Trier
Anna Hodgkinson	Ingeborg Waanders
Mel Horder	Stewart White
Martin Jones	Antonia Willis
Clarinda Karpov	Mike and Robyn Wright
Barry Kemp	Robert Wright
Jolante Klevenhagen	