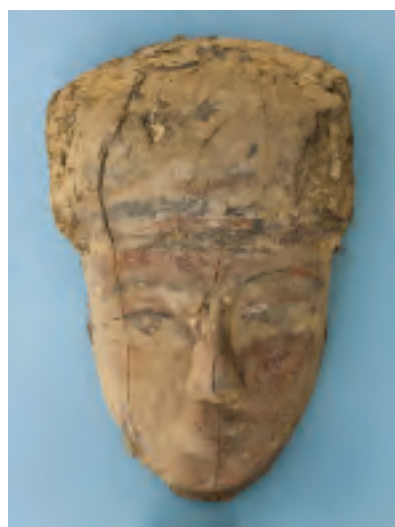


horizon

ISSUE 4 SEPTEMBER 2008

The Amarna Project and Amarna Trust newsletter



Painted wooden face from the coffin of the 'Lady of the House, Maiai', found in the South Tombs Cemetery, March-April 2008. Photo by Gwil Owen.

Something to celebrate

In June a milestone was passed. A lengthy period of work at Amarna ended, that had begun in November, had seen a variety of projects successfully pursued by people from several parts of the world, and was funded through the Amarna Trust. We had stood on our own feet for the first time.

We have no single major grant or individual source. Our funds come from a spread of supporters, from fees and lectures, from tours and contributions from some of the participating researchers. It shows we can manage. At our annual trustees meeting held in June we determined that the funds were already sufficient to underwrite an equivalent field programme that again starts in November and is intended to run through to June (with a break in January). It will include a resumption of repairs to the brickwork of the North Palace.

The project to some extent acts as an umbrella for research conducted by individuals some of whom bring their own collaborators or assistants and their own funding. The Stone Village survey and excavation are one; the study of the shattered statuary of Amarna (with the involvement of the Metropolitan Museum of Art) is another; the anthropological study of the human remains from the South Tombs Cemetery is a third. The latter was extended this year to include a field school based on the human remains. It is part of a collaboration between the expedition and the University of Arkansas, Fayetteville campus, that is looking to extend itself into other areas of the expedition's work, principally geophysical investigation of the ancient city.

For any archaeological project publication of research is a major responsibility. As reported on page 7, in May we set up in Cairo a publications office to assist with this task.

It remains to say, once again, thank you to our supporters for seeing us through the year.

Barry Kemp
Chairman of the Trustees

contents

Amarna's citizen cemetery	2
People of Amarna	4
The quality of life	5
From the archives	6

An Amarna overview	6
Scanning the horizon	7
A publications office in Cairo	7
Amarna living	8

Samir Anis Salib	10
The Amarna Trust	11
Acknowledgements	12

Amarna's citizen cemetery



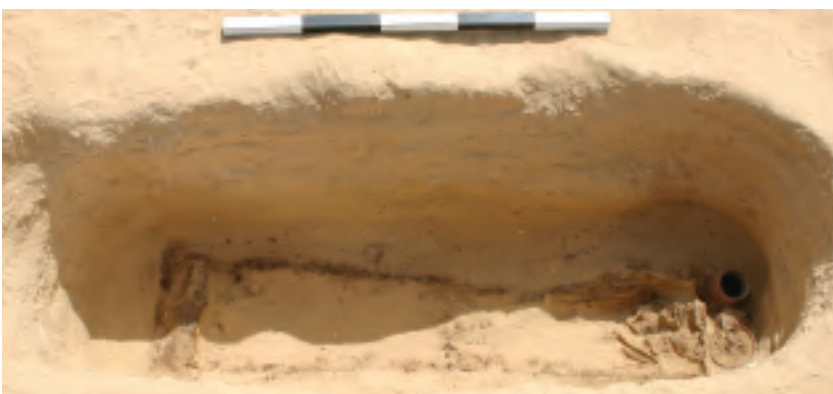
Excavated burial pits near the end of the dig (and since filled in again). View to the south. Photo by Wendy Dolling.

The 2008 excavation continued in the same area as in the past two seasons, and greatly clarified the nature of the site. Dug into a bank of sand, some graves were quite shallow and these, and the confusion brought by robbery in ancient times, gave us our first results in 2006 and 2007. Now, working across a lower-lying bed of firmer, gravelly sand, we encountered many proper grave pits that had been dug a little more deeply than others but which had lost their outlines in the disturbed looser sand closer to the surface. We now have a plan of the cemetery that shows a much greater density of defined graves.

The effects of robbery even at this deeper level remain intense. Deeper pits had only aggravated the robbers' greed. Careful sifting of what is left and close collaboration with the anthropologists working on the bones is, however, continuing to build up a picture that increasingly shows variety in burial practice.

We have a more reliable estimate of the minimum number of people interred. Over the three seasons at least 76 individuals have been identified (although 91 skulls have been recovered; to count as an 'individual' at least 50% of the person must be present). The number of burial locations, however, is only around 50. Part of the discrepancy is to be explained by cases where more than one person has been put into a pit. Grave pit 12063, for example, contained the remains of three people who are likely to have been buried at

the same time: two women (aged 35–45 and 40–45) and an infant around 9 months old. Moreover, parts of some individuals, separately numbered because found in different locations, probably remain to be matched as coming from the same person. Archaeologist Wendy Dolling, reviewing the evidence as a whole, estimates conservatively a minimum of 61 people buried. If this density is typical for the cemetery as a whole, then she calculates that it holds more than 3000 persons.



Grave pit 12093 that contained the powdery remains of a rectangular wooden coffin and, at one end, a group of pottery vessels, including a bowl containing seeds and/or grain and what is possibly fruit. Photo by Wendy Dolling.



The woodworker's adze (object 38538) from grave pit 12068, shown as photograph (by Gwil Owen) and as scanned image (by Christopher Goodmaster).

The finds were few, but some were noteworthy. There were the remains of a painted coffin, belonging to the lady Maiai, reported on page 4. Lying next to the face of an undisturbed burial (pit 12068), and within the burial shroud, was a small bronze woodworker's adze or chisel (object 38538). Such an implement was appropriate for the Opening of the Mouth ceremony which helped to return life to the body of the deceased. A scene of this ritual is known from a model coffin found in the city in the 1930s. In the sandy fill of Maiai's grave were the broken pieces from a small window-grille made from gypsum (object 38816).

This last find is one of a growing number (uninscribed stelae, an offering-table) that point to the original existence of some form of superstructure over the graves. Until now we have assumed that the scatter of stones over the cemetery, sometimes of a dark grey colour, comes from loosely piled cairns. They could, however, at least in part, be the remains of small tower-like constructions known from other cemeteries (Aniba and Buhen in Nubia are the best examples), but which, as at the Stone Village, substituted stones set in desert-clay mortar for the more normal bricks.

A fourth season, with a larger archaeological team, is planned for the coming February and March. Full accounts of each year's excavation (the most recent by Wendy Dolling) will be found in the *Journal of Egyptian Archaeology* and on the project's web site, www.amarnaproject.com. They address the problems of assessing how many people and how many burials have been found.

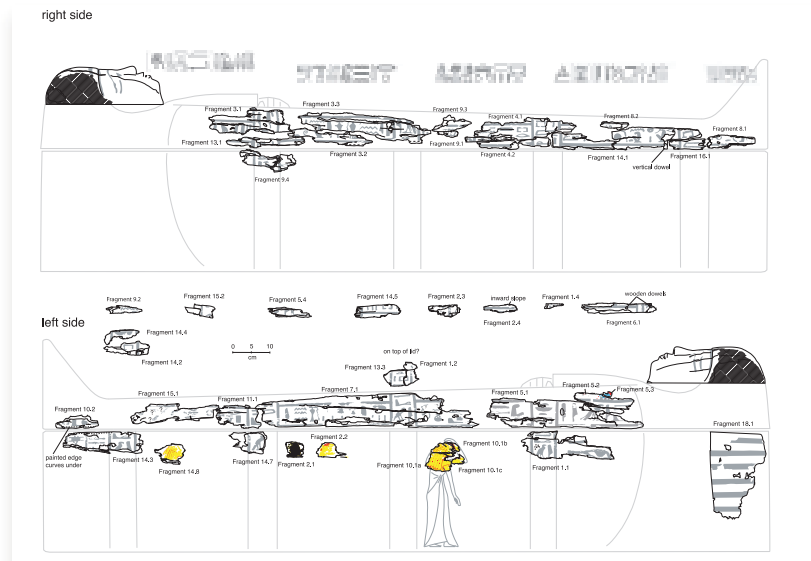
Part of a window made from gypsum (object 38816) found in the upper sand of Maiai's grave, and perhaps originally from a small superstructure. Photo by Gwil Owen.



People of Amarna 'The Lady of the House, Maiai'

Grave pit 12132 has at last given us a name, as well as the bones of the owner: 'The Lady of the House, Maiai', her title the one normally taken by a married woman. It was written over and over again on what was, when it was new, a well made though not ostentatious coffin. Termites and grave robbers have reduced it to fragments often little thicker than the skin of paint (apart from the miraculously preserved wooden face).

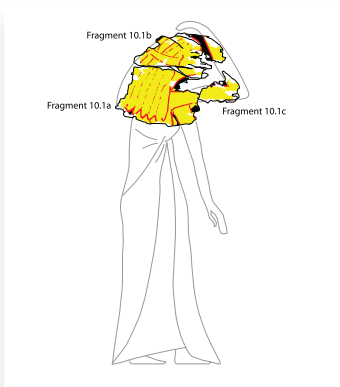
Thanks to the patience and skill of conservator Julie Dawson the fragments have been secured and mounted for study. When put together as digital images they become parts of the two sides of the coffin, the first one of the Amarna Period to have been found at Amarna itself. The decoration was simple and 'godless'. In bands of hieroglyphs Maiai prays for offerings of food and drink, and for being able to breathe the cool north wind, and also for seeing the light of Ra. On the sides came pictures of people mourning her corpse, and one of the Eye of Horus that symbolized wholeness.



The coffin's face was carved from a separate block of wood. Although the coffin was for a woman, the face is painted red, the normal colour for a man's coffin at this period.



A group of the fragments with Maiai's name from the left side, near the shoulder. The signs were originally white. Their brown colour is not only a result of age; it has also been brought on by the original application of a thick coat of resin varnish.



Fragment 10.1 is one of a small group that showed mourning women. They had been painted yellow on the black background, with details picked out with fine red lines.

Rainer Gerisch has shown how the coffin was made from different woods selected for their purpose: for the face, persea (*Mimusops* sp.); for the main thick boards, sycomore fig (*Ficus sycomorus*); for the dowels that held them together, tamarisk (*Tamarix* sp.); and for an unlocatable part, cedar (*Cedrus libani*).

The bones that, in all likelihood, go with the coffin were of a woman aged between 40 and 45 years (Individual 69a in the catalogue). Also scattered throughout the pit at different levels were the bones of a child (no. 69b), aged around five. Maiai had reached a relatively advanced age for the times, and her bones show that the years had taken their toll. She had multiple rib fractures and a broken arm (ulna; fractures that had healed), spinal arthritis and widespread osteoarthritis.

Her grave was one of a crowded cluster. One wonders if those in adjacent pits were other members of her local community.

Maiai and her coffin are important in another respect. They help to correct the initial impression that the cemetery was only for poor people; and they also help to answer suggestions that the cemetery was not for the ordinary people of the city but for a special group of outsiders, perhaps even a colony of foreign slaves brought in to build the city.

The quality of life

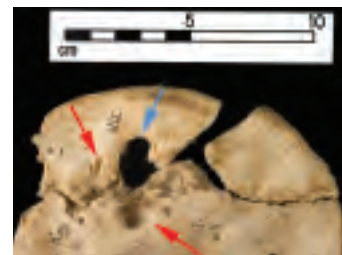
From the jumble left by robbers in ancient times the human bones from the cemetery are painstakingly reassembled into individuals. Their number has now reached 76 (though the number of skulls is 91 and grave pits is around 50). This year, anthropologist Jerry Rose, assisted by Melissa Zabecki, extended the research by holding a field school over a period of three weeks for six anthropology students who each followed a project of their own.

The physical condition of our population, and the underlying factors at work, provoke much comment, and even disagreement. The profile of their age at death is one such topic. This year's results have increased the number of older individuals. The age profile is now closer to what is expected, but at the same time the higher-than-expected number of deaths in the 10 to 20 year age group remains. Studies of other populations at other times and places bring out that epidemic disease can have just this effect. Diseases leave little or no trace on the skeleton, and they also change their characteristics over the centuries. Written sources from the Hittite kingdom provide one historical point of reference. They pin the blame for an epidemic that affected them, probably in the time of Tutankhamun, on captured Egyptian soldiers, but they give no details, no symptoms.

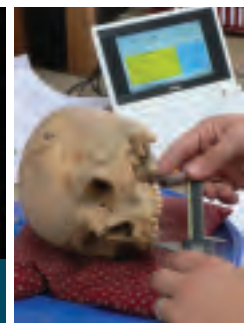
One condition that does leave its mark is anaemia experienced in childhood. Although sufferers are unaware of it, a distinctive pitting (cribra orbitalia) develops in the bone of the eye sockets. As in previous years, cribra scores are high. On the 25 skulls examined, 9 (one third) displayed the condition, one an infant of 9 months. The cause of the anaemia is currently understood to be a combination of a diet too dominated by cereals (bread and beer) to the near exclusion of meat, and the increased demand for iron by the body to cope with infection and internal parasites.

A sign that our people were borne into trying circumstances is that so many of them failed to grow as tall as they should. Estimating stature can be done by measuring the length of the femur. When this is done in a comparative exercise with other populations from ancient Egypt and Nubia, our Amarna people emerge as the shortest of all (see adjacent chart).

It is satisfying to find out about particular individuals, though the nature of the evidence nearly always turns them into victims. Two of the graduate field school members, Gretchen Dabbs and William Schaffer, have already published an account of a 35–39-year-old man (Individual 59) whose bones displayed injuries 'unsurpassed in quantity and locality'. They included at least 19 healed and unhealed rib fractures, a healed 'parry' fracture on the left forearm, an unhealed fracture of the breast bone, and at least two injuries to the pelvis where a weapon point had gone into or through the bone. One had healed but the other had not and was severely inflamed at the time of death. Was he a veteran soldier who returned home to die?



Lateral view of the left area of the hip bone of Individual 59, showing two wounds that had healed (red arrows) and one that had not but had produced a bony reaction to infection (blue arrow). Photo by Gwil Owen.



Gretchen Dabbs records one of a carefully prescribed set of measurements for each skull.

One question that is surprisingly hard to answer is how our people compare with other groups, especially from the New Kingdom. The dearth of trustworthy comparative material is striking, given the amount of cemetery excavation done in the past.

It is a pleasure to be able to record the recent award of a grant from the Society for the Study of Egyptian Antiquities (USA) to Melissa Zabecki, for a study of musculoskeletal stress markers at Amarna; and also to thank the King Fahd Center for Middle East and Islamic Studies (University of Arkansas) for continuing support.

G.R. Dabbs and W.C. Schaffer, 'Akhenaten's warrior? An assessment of traumatic injury at the South Tombs Cemetery.' *Paleopathology Newsletter* 142 (June 2008), 209.

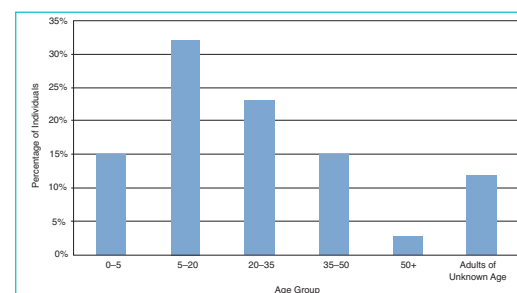


Chart showing ages at death, updated to include the 2008 results.

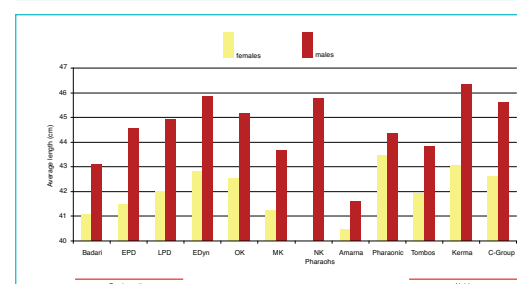


Chart showing stature based on the length of the femur, from a series of ancient Egyptian populations. 'Amarna' is the group from the South Tombs Cemetery.

From the archives

An English water-colour artist at Amarna



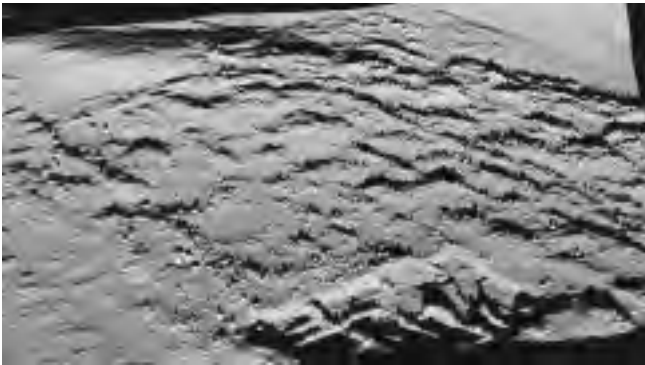
The writer of the following is Howard Carter, Petrie's assistant at Amarna in the spring of 1892. 'In the autumn of 1892, I returned with Percy E. Newberry to Beni Hassan, to complete a collection of coloured facsimiles that were considered necessary to finish the survey of that site. The party this time consisted of Mr. John E. Newberry, for the architectural features; Mr. Percy Buckman, who made a series of water-colour drawings of the locality... We were, however, soon to quit Beni Hassan, and to move south to the tombs of the grandees at El-Amarna, excavated in the foot-hills east of the ancient town. But in this particular project of the survey there was an unfortunate hitch. For unknown reasons we were unable to obtain the necessary permit from the Department of Antiquities. Hence we remained there for a few days only, and struck camp for the cliff-tombs at Sheikh Saïd, a site slightly north of El-Amarna, where permission to work was given' (quoted in N. Reeves and J.H. Taylor, *Howard Carter before Tutankhamun*, London, British Museum 1992, p. 43).

Three of Percy Buckman's water-colours remained with Percy Newberry, until donated, along with many of his books, to the Egyptology Library of the University of Cambridge, where they remain. One is of Beni Hassan, and one is of Sheikh Saïd. The third is a view of the desert plain at Amarna looking out from the North Tombs, the place where the party probably briefly camped. Buckman has captured a moment, common in the spring, when the sun's rays break through a gap in the clouds to create an 'Aten effect'. A short way from the right edge of the picture along the hazy boundary between fields and desert he has picked out a low white building. This will be Petrie's brick shelter built earlier in the year to protect the painted pavements in the Great Palace (the ones that are the basis for the reconstructed pavement in the ground-floor hall of the Egyptian Museum, Cairo).

An Amarna overview

Starting with issue 8 no. 4, *Ancient Egypt Magazine* has been running a series of six articles on Amarna, the city, its people, its religion, as seen from the perspective of the Amarna Project. The fifth will appear in the next issue. It is part of the Magazine's programme of 'Supporting Egyptological Causes.'

Scanning the horizon



An image of the Stone Village captured by laser reflection, as if seen from the south-east. At the bottom of the image are the walls of the building exposed in the main excavation trench.

Part of the expedition's regular programme is to build up an archive of images of how the site looks in our time. As an experiment, in March, Malcolm Williamson of the Center for Advanced Spatial Technologies (CAST, University of Arkansas, Fayetteville) brought to an Amarna a 3D long-range laser scanner. Assisted by Christopher Goodmaster it was set up at positions beside the Workmen's Village and the Stone Village, and a final day was allocated to the rock façade around the tomb of Panehsy. The Stone Village results are shown here.

The scanning was done at a point density of approximately 2 cm. For the Stone Village, 58 individual scans were recorded from six different locations, resulting in data from virtually all directions depicting the exposed stones of the underlying walls of the site's structures.

With appropriate software the images can be rotated and given different lighting effects.

The images provide a valuable supplement to the expedition's records of these sites, and show a way forward for a fuller recording of the landscape at Amarna.

A publications office in Cairo

Writing up archaeological reports needs lots of space, including table space for laying out plans and other drawings. As a way of helping the process along, a lease has been taken on a flat at no. 1, Midan el-Tahrir. An early 1930s building, its flats are of generous proportions. Fans set in its high ceilings make it tolerable in high summer without the need of air conditioning. The current priority is the completion of the full report on the house excavations at Amarna undertaken in 2002–5 (Ranefer and Grid 12).

The building stands on the corner of Tahrir Square and Mohammed Mahmoud Street (opposite the American University). The office occupies flat 17 on the 5th floor (above Arcadia Tours).

Its telephone number is 27955666.



No. 1 Tahrir Square is a solid example of subdued European modernism (shown here, left, in a 1950s' picture) constructed towards the end of downtown Cairo's heyday as centre of fashionable living and prosperity.

Amarna living

Decorate the house, Amarna style

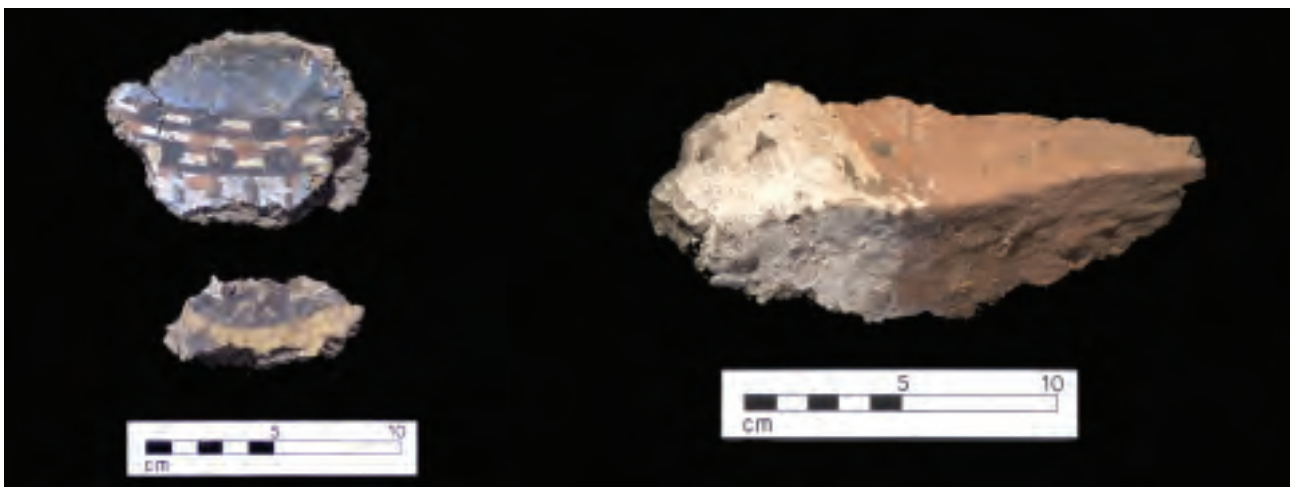
The excavated remains of Amarna houses are never more than shoulder high, usually a lot less. The walls show very little trace of decoration, even whitewash when the original plaster surfaces remain. Nor is there much colour attached to the rubble that fills the rooms. From the great clearances of houses carried out in the first decades of the last century certain observations demonstrate that, in houses large and small, unpainted mud plaster was the preferred finish for most wall surfaces. Bright colour was present, but sparingly so.

Although the evidence remains sparse, colour seems to have been mainly used to brighten the ceiling area. Much of the plaster recovered from recent excavations at the house of Ranefer belongs to ceilings painted white but divided into separate areas by the plaster casings that covered the wooden ceiling beams, and which were painted a distinctive pink-brown colour.

The accompanying picture (opposite, right) combines this decorative scheme with two others (both reconstructed from fragments), taken from the work of the Egypt Exploration Society in the 1920s. One (from house V37.6) is a window grille made from moulded gypsum, which was painted red though set in a white-painted area of the wall. The other (from house V37.1) is an elaborate false grille window made from mud and fixed to a wall, and then given a full unsubtle polychrome treatment. The most distinctive element comes near the top: a row of pendant lotus petals in different shades of blue.

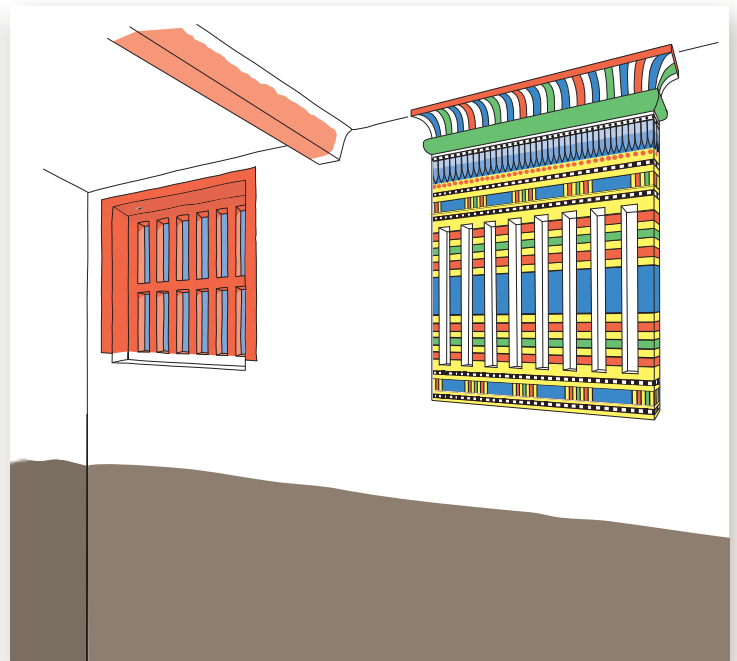
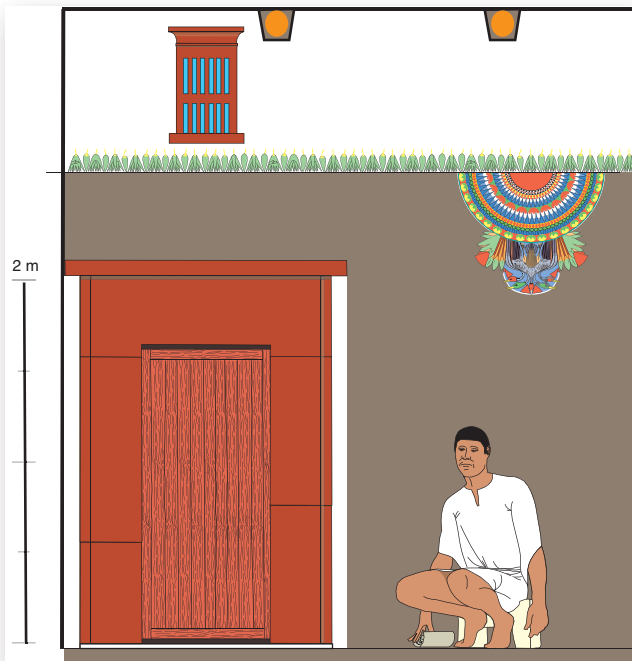
A small number of Ranefer fragments come from brightly painted (though roughly executed) designs that were on the walls. Again, a fuller (though still far from complete) understanding comes from the work of the 1920s. Where the white strip at the top of a wall met the plain mud plaster was the place for adding painted designs that could be quite elaborate, and could include garlands, semicircles made up of concentric lines drawn from a repertoire of mostly plant designs, and symmetrical swooping ducks.

The overall effect of whiteness and bright colour patches at and around the level of the ceiling is likely to have created a subdued lighting effect.



Two painted fragments from the re-excavation of Ranefer's house. An area of flat wall decoration, from a semicircular garland (left) ; and the end of a painted mud casing that covered a wooden ceiling beam (right). Photos by Gwil Owen.

Much of the source material for painted house decoration is scattered through the pages of the EES publications, *City of Akhenaten I* and *II* or is to be found in the chapter by S.R.K. Glanville, 'The decoration of the houses', in H. Frankfort, ed., *The mural painting of El-'Amarneh*.



In the reconstructions, the red-painted door is based on one found in house M50.13, and the red-painted window on one from P46.11 (object 22/583). The lotus frieze and the garland with swooping ducks are from R44.2 and V37.1, respectively. Note that the original garland and duck fragments preserve the boundary between painted design and the plain un-whitewashed mud colour of the wall.

The illustrations used here are some of those being prepared for a book commissioned by Thames and Hudson, *The ancient city of Amarna*.

In the next issue:
how to brighten up the false door.



Samir Anis Salib

Barry Kemp writes: It is sad to report the death, months before his retirement from the SCA, of Samir Anis, who for many years played a leading role in administering the Middle Egypt sector for the SCA.

I first met Samir around 1980, when I had not long started work at Amarna. Almost every year after that we met at the dig house, or in his office in Mallawi and then Minia, and even for a time in different places in Minia when he was taking leave from the Antiquities Service.

The man I came to know was forever polite, kind and helpful. He had a quick and incisive mind and so saw potential problems very rapidly. He would then point them out to me and suggest solutions. In doing this he put himself as if he were on my side in respect of the Antiquities Service. He took it for granted that my own interests were honourable, but that, as an outsider and a foreigner, I needed discrete guidance. I was always aware of that, and was very grateful for that attitude.

Samir's advice and his open and honest comments on the state of affairs were always expressed with dry humour and wit, stated sometimes with a serious expression. This gave to Samir a somewhat mischievous air. Sometimes it was hard to tell when he was being serious and when he was making a joke. He saw the funny and sometimes ridiculous side of the life he led, but also saw himself philosophically as having a serious and responsible part to play in it.

He was an upright, incorruptible man who knew how the law operated, and worked very hard especially to safeguard the lands that his organization owned and which are a perennial source of problems for local inspectorates. If Egypt is to have, in the future, a properly managed set of historical sites it will be through men of integrity and hard work like Samir.

My most recent contact with Samir sums up the man he was. One of our research projects involves the examination of carved stone blocks from Amarna taken in the 1980s to the magazines at El-Ashmunein. I had gained permission for two of the Amarna team to go to study them. The people at the magazines could not find the blocks. I telephoned Samir, who was in the offices at Abbasiya on that day. He well remembered the case and promised to look into the records at the central archives at Abbasiya. Samir was, by this time, exceptionally busy and burdened with extra responsibilities. He could so easily have left my question unanswered. Instead, he did exactly what he promised and within a few days I had photocopies of the original documents and, what was more, through his direct telephone intervention, the blocks were found and my people were able to work successfully. Samir was someone who, on becoming a senior figure, remained in touch with the real needs of people and of the subject of archaeology that his organization is there to promote.

I would like to salute the memory of Samir, a genuine friend, a kindly man, and a person of outstanding integrity who selflessly served his government and his colleagues.



Samir Anis, 'at home' in the magazines at El-Ashmunein, to the administration of which he gave much time.

Photo by Catherine Rutherford.



The South Tombs Cemetery extends for around 600 metres along the sides of a shallow wadi. Our excavations so far have been towards the further end (top right). A second area of excavation is planned for next year (bottom left). Photo by Gwil Owen.

The Amarna Trust

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

The McDonald Institute for Archaeological Research

University of Cambridge
Downing Street
Cambridge CB2 3ER
United Kingdom

The contact for The Amarna Trust is

Prof. Barry Kemp

The McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge CB2 3ER
United Kingdom

t: +44 (0)1223 339293

f: +44 (0)1223 339285

e: bjk2@cam.ac.uk

For donations and other financial matters the contact is the Honorary Treasurer

Dr Alison L. Gascoigne

Lecturer in Medieval Archaeology
University of Southampton
Avenue Campus
Highfield
Southampton SO17 1BF
United Kingdom

t: +44 (0)2380 599636

e: A.L.Gascoigne@soton.ac.uk

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.



As an experiment in the recording of objects, Christopher Goodmaster, of the Center for Applied Spatial Technologies of the University of Arkansas (Fayetteville), uses a 3D laser scanner to capture an object in three dimensions. It is part of a scheme to create a virtual Amarna museum. Its web-site is registered as <http://amarnamuseum.cast.uark.edu>. It is part of the agenda funded by the Templeton Foundation.

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.



Ancient World Tours run regular tours that include Amarna and we are proud to be sponsors of the excavations carried out by the Amarna Trust. Contact AWT on 020 7917 9494 or at www.ancient.co.uk or at amarna@ancient.co.uk

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, and in particular to its General Secretary, Dr Zahi Hawass.

Thanks to those who have supported the Amarna Project in the last year

Egypt Exploration Society
Amarna Research Foundation
McDonald Institute for Archaeological Research
King Fahd Center for Middle East and Islamic Studies
(University of Arkansas)

Ancient Egypt Magazine
Ancient World Tours
British Academy
Darlow Smithson
Egyptology Scotland
Quadro Srl
Sussex Egyptology Society
Templeton Foundation

Gilmer and Annedore Apaka	Helen Lowell
Leonard and Janice Bailey	John D. Muir
Alf Baxendale	Mina Mulvey
Lucilla Butler	Geoffrey Phillipson
Elaine Charlson	Derek Presley
Suresh Dhargalkar	Shirley Priest
Patricia Dihel	Dilip Singh
Betty and Jim Dunn	Kristin Thompson
Jo Fletcher	Ingeborg Waanders
Phyllis Grierson	Toby Wilkinson
Bob Hanawalt	