Care as well as research

Since the last issue of Horizon the Amarna Project has hosted two excavations, one in November and December at the Stone Village, and the other in February and March at the South Tombs Cemetery. A report on the first appears on pages 2 and 3; a report on the second will be in the next issue. The latter is, however, only a portion of an extended season that extends to the middle of June, the last month largely set aside for a human bone field school run by the University of Arkansas, an institution to which the Project has close ties. It is satisfying to see the facilities of the expedition house used to such good effect.

Although the expedition house gives us temporary occupants a feel of quiet isolation, local life around us is steadily joining the mainstream of progress. In the recent past Middle Egypt has given the impression of having a low priority in the Egyptian government’s plans for development. This is changing, most obviously in the building of new roads, that include a more direct link between the western desert highway and El-Minia, a lesser road that takes one from near Beni Hasan to the eastern desert road and hence down again directly to Amarna, and the steady advancement of the Nile bridge — carrying a four-lane highway — near El-Bersheh that will lead to a new city planned for the desert behind. This will all assist tourist access, but is already leading to a general increase in road traffic in the area that is bound to have an impact at Amarna, assisting the villages in their own largely self-generated modernisation that has an impressive momentum of its own.

Modernisation has familiar consequences. One of them is the increasing amount of durable rubbish that the villages have to dispose of, in which plastic bags and cement rubble are important components. As a small first step to reverse the tide, in December the Project cleared rubbish away from the line of the front wall of the Great Aten Temple (page 6). Measures of greater scope than this are needed, however. Although still only in outline, a scheme is under discussion in which the Supreme Council of Antiquities would fund the building of protective barriers for parts of the ancient site. The Amarna Trust is committed by its foundation articles to assist in measures to protect the site. It is something to which we should perhaps give higher priority. Next month we will resume repairs and cleaning at the North Palace, funded by the Amarna Research Foundation based in Denver, long a valuable supporter.

It is very gratifying to see that, at a time of economic worry, public support for Amarna and for the Trust’s role remains strong and encompasses an increasing number of people. Thanks again to all of you.

Barry Kemp
Chairman of the Trustees
Notes from the field

The Stone Village: an expanding landscape

The fourth field season at the Stone Village has extended excavation outside the perimeter of the visible ruins. Anna Stevens writes about the discoveries.

The Stone Village is the name given to a small site in the desert past the main stretch of riverside ruins at Amarna. Earlier expeditions to Amarna in the late 19th and early 20th centuries seem to have been unaware of the site, and because of this it has remained a poorly understood component of the ancient city of Akhetaten. But since 2005, the Stone Village has been the focus of a field project that seeks to both record the remains visible on its surface and also explore it by excavation, thereby introducing it in to the Amarna story.

The dominant surface feature is a large scatter of limestone boulders. These represent the collapse of closely packed structures with walls of mortared stone which, interspersed with small open spaces, clearly formed the hub of the site in antiquity. This is surrounded by Amarna-period ‘roadways’, scatters of potsherds and flaked stone, and tracts where the desert surface has been pitted, largely as a result of modern looting.

In November 2008, we returned to the site for a fourth season of fieldwork, turning our attention from the central scatter of boulders, termed the Main Site and the focus of previous seasons, to the features around its perimeter. Perhaps the most significant discovery was of two small tomb chambers cut into the edge of the low plateau into which the site is set. Each has a vertical shaft leading to a small rectangular chamber cut horizontally; one shaft preserved a set of steps cut carefully into the marl. The same style of tomb architecture is represented at the nearby Workmen’s Village, reinforcing the idea of a connection between the two sites. Unfortunately, robbers had broken through the brick walls that sealed the chambers and disturbed their contents, but to judge from the material that survived each probably contained a single person accompanied by simple grave goods or offerings – perhaps just a few pottery vessels and foodstuffs. The tombs must belong to a small cemetery attached to the Stone Village. We can ask why its occupants were buried here and not, for instance, at the South Tombs Cemetery, which is not too far away. Perhaps the villagers saw themselves (or were seen by others) as a distinct community.
A more puzzling discovery, around the northern side of the same terrace, was a rectangular pit cut into the side of the plateau, one edge formed by a brick wall. Almost certainly not a tomb, it may represent the conversion of a quarry for marl (used for bricks and mortar) into a functional space, but what its final purpose was is unclear.

Two structures on the plateau to the south of the Main Site were also targeted for excavation, in part because they represent a rare instance at Amarna where ancient roadways interact directly with buildings. One turned out to have a simple rectangular ground plan with no clear entranceways. It also yielded almost no objects, and so is very difficult to interpret, although one possibility is that it was a storage space. The other had been extensively damaged by robbers, but appears to have been an informally laid-out group of small rooms, around and inside which ash and dust had been trampled into thick surfaces, some of which collected discarded pottery and others small pieces of bronze, some worked into implements. Although we can rule out some functions – it is certainly not a chapel of the kind known from the ground adjacent to the Workmen’s Village, for example – pinpointing its function is again problematic. Might it have been some kind of workshop, or a place where the processing of supplies coming in to the village took place? Closer study of the finds may help us shed light on the activities carried out here.

Finally, we returned briefly to the Main Site, opening a small trench in its south-west corner. This revealed the best preserved group of walls yet encountered, some standing up to 1 metre high. They formed a series of small rooms, one of which contained an oven and another a probable emplacement for a quernstone with attached bin. The domestic character of these is in keeping with the identification of the Main Site as a desert-based village. The question of why this small settlement was situated in this relatively remote setting remains to be answered. This season’s work has, nonetheless, added considerable depth to our understanding of the site, highlighting the sense of community that underlay it and illustrated some of the ways in which the local landscape was adapted and resources utilized to meet community needs.

The 2008 field season was funded by a British Academy Small Research Grant, and a grant from the McDonald Fieldwork Fund, Cambridge University.
Work in progress
Recording Amarna’s leatherwork

The first phase of a project to record and interpret leather objects from Amarna, conceived by André J. Veldmeijer, has reached the stage of publication. André reports:

Leather objects from ancient Egypt can be found in most museum collections and recent excavations still recover leather artefacts. However, due to lack of research, our knowledge of leatherwork is surprisingly limited, especially when from the Pharaonic era. The Amarna Leatherwork Project (part of a comprehensive study of Egyptian leatherwork) tries to fill this gap. Amarna is important, because the many years of excavating have left a reasonable amount of material.

Most frequent is footwear, which was also made in other materials, such as palm leaf and wood. A good example of a leather sandal is object 22/119 from the 1922 EES excavations at the Workmen’s Village. Although a child’s sandal, it is well-made and consists of two sole layers, stitched together along the entire perimeter. Note that a narrow strip is inserted for decoration, but, as so often, it also served as reinforcement of the stitching itself. The shape of the sandal suggests for which foot it was meant. It is a type of sandal known from other sites. Details vary: for example, often there is a second, decorative strip, which does not extend along the entire perimeter but rather only to the front part, and some consist of three or even more sole layers. As far as colour is preserved, the sandals were bright red and green. Sandals consisting of a peculiarly curved sole are relatively numerous at Amarna, but examples from elsewhere show, albeit less distinctly, a comparable curvature. The fact that the curvature is always directed towards the inner side of the foot, suggests that it was made this way rather than being a feature of preservation.

Another important group of finds is ‘decorated leather’. Of course, this in itself is not a functional group, but it includes leatherwork with the same features, including elaborate decoration with applied, partly overlapping strips of leather in different colours, openwork and motifs in relief (made by scraping away the surrounding upper surface). The craftsmanship is very high with tiny sinew stitches of only millimetres in size. Although it seems to be related to chariots, which were prominent at Amarna, and to have included horse’s harnesses and the regalia of the owner, such as quivers, it is too soon for definite identifications. A more confident identification, as being from a garment, perhaps a loincloth, applies to several small fragments of thin, openwork leather amongst the material in Berlin.

The first of two monographs, ‘Amarna’s Leatherwork. Part I. Preliminary Analysis and Catalogue,’ is scheduled to be published in 2009. The work in Berlin was assisted by grants from the EES Centenary Fund and from the Amarna Trust.
One of the best-preserved fragments of decorated leatherwork, probably part of a chariot’s casing or horse harness, consisting of partially overlapping strips of differently coloured leather. It is shown as an annotated working photograph and as a finished drawing. ÄM AM 075. Drawing by E. Endenburg/A.J. Veldmeijer. Courtesy of the Ägyptisches Museum und Papyrussammlung, Berlin.
Amarna inherited

The slowly vanishing ‘House of the Aten’

Amarna’s most important building was the ‘House of the Aten’, the ancient term for the Great Aten Temple. Despite its grand name most visitors to Amarna pass it without noticing. Not only is it a largely flat and featureless piece of desert, it has been partly consumed by the modern cemetery of the village of El-Till.

Although old maps, back to the time of Napoleon, show this to be not a new development, the cemetery is now expanding at a faster rate than before. Recently there has also been an increase in the dumping of village rubbish over the front part of the temple enclosure that lies close to the asphalt road.

For ten days in December the project employed a gang of men from El-Till to dig out the rubbish and transport it in wheelbarrows to the side of the road. As soon as they had finished, the local council sent its large front-end loader to remove it.

What should be done with the temple itself? When excavated in 1932 large areas of the gypsum foundation layer came to light on which were preserved the outlines of the temple walls and of hundreds of offering tables. It has since gradually broken up though some areas towards the front remain in a reasonable condition. The best thing would be to bury it again in sand, but before that to clean it and make a fresh plan with modern surveying equipment. It would be a major undertaking. One even larger would be to mark the outlines with new stones above the protective sand layer. This was Amarna’s principal sacred site after all.
Amarna living
Flint tools, they were still in use

Carolyn Graves-Brown came to Amarna in January to look at flint tools from the Great Aten Temple house of Panehsy. This is her account:

While by the New Kingdom the Egyptian flint industry was in decline, flint technology was still embedded in Egyptian culture. For many purposes, such as the cutting of hard stone, flint had no real rival until the common use of iron in the Late Period. The quantity of sickle blades found at Amarna bear witness to the dependence on flint for cutting plant material, probably reeds, and the variety of other tool types show that flint was used in a wide variety of tasks.

In 1927 the archaeologist Henri Frankfort reported having found large quantities of cattle bones in the main house of Panehsy, ‘Keeper of the Cattle of the Aten’, and, in the ‘southern corridor’ a large number of flints were recovered. The 2006 re-excaavation of Frankfort’s spoil heaps provides an opportunity to explore the little understood flint technologies of New Kingdom Egypt.

In January 2009 a preliminary study established that around 150 pieces of mid-brown banded opaque flint had been recovered. These were largely retouched, expeditiously knapped flakes, manufactured from tabular blocks, presumably procured from the Amarna cliffs, and some perhaps as a by-product of tomb cutting. The prominent bulbs of percussion suggest the use of a hard hammer. Such pieces are typical of Bronze Age lithic technologies generally. There was, however, one more finely-made, regular blade with prepared platform which would have demanded a greater degree of skill (39271) and several formal types have been found elsewhere at Amarna showing a similar competence.

The Panehsy flakes could not be refitted, suggesting that knapping was carried out in other parts of the city (though it is unlikely that this assemblage represents all of the original deposition). Spurrell, Petrie’s flint specialist, reported that a quantity of sickle blades had been found by the ‘palace waste heaps’ while ‘rude flakes’ were found ‘in a large heap in the south end of the town’. The sickle concentration could imply an area dedicated to sickle blade or sickle manufacture. The description of the ‘rude flakes’ suggests a knapping or storage site. It would seem that although the majority of flint tools found at Panehsy’s House were expeditious, they were the result of an organised manufacturing process with separate zones for storage of raw products, for secondary knapping and for use, the Panehsy site being a use area. Flints were not simply gathered and knapped in an ad hoc manner as and when required. A similar situation seems to have occurred at Kom Rabi’a, Memphis.

The function of the flakes remains unclear. They would have been just as capable as formal flint tools and as metal tools in cutting flesh. Flint is sharper and harder than metal of the period, and a ready supply of freshly knapped pieces would negate flint’s disadvantage of requiring constant resharpening. One piece, however, was covered in ochre, suggesting that at least some pieces were used for other than butchery. It is hoped that further examination of the lithic industry at Amarna will shed more light on this little understood technology.

Ra nefer’s house (N49.18), restored plan. The back wall of the reception hall, outlined in red, was the main place of display.

A reconstruction of the right-hand niche of Ranefer’s house, based on the records of the 1921 EES excavations.

Two painted fragments from the 2002 reclearance of Ranefer’s house. The upper one gives part of Ranefer’s name in hieroglyphs. The other shows part of an elaborate broad collar from a figure dressed to impress.

**Amarna living**

**Impressing the visitors**

The larger Amarna houses were designed to impress visitors. The showpiece was the long hall at the front. It was evidently the place where visitors assembled and greeted their hosts before entering the main hall, the centre of family life.

The long inner side wall displayed the owner’s credentials on of a line of decorated doorways. Normally only the middle one was real, framed in stone and up to two metres wide. Painted hieroglyphs praised the king and the house owner in turn. The rest were imitations, niches in the brick wall that were painted red, sometimes with white or yellow vertical strips. They, too, bore painted hieroglyphic bands that praised the owner. They praised him in the language of a future ancestor, in the hope that, for a time at least, his aura would safeguard the house after his death.

Only the lower parts survive. The sifting of debris in the house of Ranefer has brought to light a few fragments probably from decoration higher up the false door. Two of them come from a scene that showed Ranefer himself.

The house of Ranefer forms part of a publication close to completion, of the excavations carried out between 2002 and 2005 in a housing area that included Ranefer’s house.
Fragments from the limestone door jambs that honoured Ranefr in almost identical terms. The vertical panels of hieroglyphs are in honour of the ‘spirit’ of the chariot officer Ranefr ‘true of voice’ (i.e. one vindicated by the tribunal of Osiris).

Amarna Visitor Centre

Building work has resumed on the Amarna Visitor Centre. Flexible strips are covering the roof; stone cladding panels are appearing on the outside walls. Less visible is the air-conditioning system, now installed inside. Photograph taken 23 March 2009.

The official sign outside the building site.

“Project: Building a Visitor Centre Museum, Tell el-Amarna, el-Minia.
Owner: The Supreme Council of Antiquities
Contractor: Centre for Projects for National Services, General National Company for Contracting and Provisioning
Supervisor: Maikal Nelsoun” (i.e. Mallinson).

Amarna in print

Through the courtesy of the Egypt Exploration Society, detailed reports of fieldwork at Amarna are published annually in the Journal of Egyptian Archaeology.
From the archives

The sick and injured

‘Each morning and evening too Mrs. Griffith and Miss Moss looked apprehensively to the verandah to see what accidents, frightful diseases, or trifling ills had sent victims to be treated gratis by European wizards. Unfortunately these wizards were sceptical of their own healing powers and not a few of the would-be patients had to be sent away as fit subjects only for the professional physician; but boric ointment and castor oil with good advice works wonders, not less by their moral than by their physical effects.’


The treating of sick or injured workers has been a task often undertaken by (or inflicted upon) the women of archaeological teams. A photograph of Mary Chubb (an EES secretary) at Amarna ‘giving first aid to one of the basket girls’ in the 1930s appears in Imogen Grundon’s recent biography of John Pendlebury, *The rash adventurer* (London, Libri 2007), Fig. 20.

Nowadays — and fortunately for all concerned — an archaeological team is unlikely to have as good a stock of modern medicines and first-aid products as the local village chemist shops. That said, villagers seem often very reluctant to consult doctor or dentist when the need would justify it. In February of this year the nearby village of El-Hagg Qandil was visited by a ‘General medical collective’ from El-Minia that, for a couple of days, set up a huge tent to house over twenty buses, each one a mobile unit offering free specialist consultation and treatment.
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.

Awaiting their turn. Trays of bones from individuals excavated at the South Tombs Cemetery in February and March 2009 wait for the arrival of the anthropology team in May, having had their preliminary examination immediately following excavation. The first count of individuals from 2009 is 52.
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.

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.

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Christopher Goodmaster and Stephanie Sullivan of the Center for Advanced Spatial Technologies (University of Arkansas) using ground-penetrating radar beside the old northern expedition house at Amarna. A report on this work will appear in the next issue of Horizon.

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