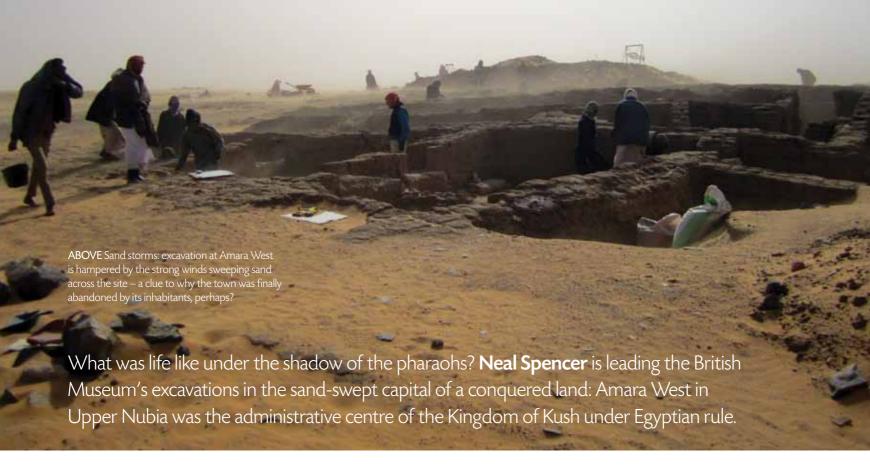
Amara West

LIFE IN EGYPT'S NUBIAN EMPIRE





uring the great imperial age of the Ramesside pharaohs (c.1307-1070 BC), Egypt's empire stretched from what is now Syria to northern Sudan, and with considerable influence beyond. Temples were decorated to emphasise complete Egyptian control over the known world: scenes of orderly Egyptian troops, led by pharaoh in his chariot, are shown overwhelming unfortunate enemies, be they Libyan, Near Eastern, or Nubian. Accompanying texts describe battles and campaigns always victorious - and highlight the lowly character of Egypt's neighbours and

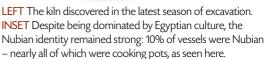
foes. Nubia had been re-conquered by Egypt around 1500 BC, and would remain part of the Egyptian empire until c.1070 BC, described ignominiously as 'not people one respects, they are wretches, with vanquished hearts'.

Amara West, in modern northern Sudan, was first excavated in 1938-1939 and again in 1947-1950 by the Egypt Exploration Society, who uncovered well-preserved houses, storage facilities, a decorated sandstone temple and parts of the cemeteries. Perhaps the most important discovery was a large building near the West Gate, in which parts of decorated sandstone doorways were

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found. The inscriptions named several holders of the title 'Deputy of Kush' - the senior administrator for the occupied territory of Upper Nubia - suggesting Amara West was the administrative centre of Kush from the reign of Seti I (1290-1279 BC) onwards.

In 2008, a major British Museum research project returned to the site; and we were especially delighted to be investigating this settlement site because it is attached to a contemporary cemetery - something that is becoming increasingly rare.

While the previous excavators had focused on the decorated temple and the house architecture, we wanted to find out more about the actual community who lived, worked, and died in Egypt's Nubian empire. How did the rhetoric and ideology of the pharaonic texts and depictions

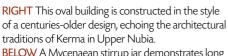
compare with the archaeological evidence of everyday life? How did individual households organise their living spaces? What did they eat? Were they healthy? Where did they come from and what rituals did they

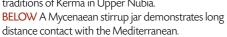
Egyptians or Nubians?

The rhetoric and iconography of the ancient Egyptian engagement with Kush was one of complete domination - 'vile Kush' is a common phrase in the inscriptions. Increasingly, colonial encounters are seen more as 'entanglements': intermarriage, cultural permeability and shifting identities are typical products of such environments.

In the town at Amara West, the architecture of the town (and indeed the bombastic scenes of victory on the gateways) were unmistakeably Egyptian, as were the majority of the objects made and used by the inhabitants. But the town was far from homogenous: up to 10% of the ceramics are handmade Nubian vessels, nearly all cooking pots.

This could reflect important approaches to food preparation and consumption, though the faunal and botanical evidence is, at this preliminary stage of analysis, broadly consistent with that in contemporary Egypt, including cultivation of barley and emmer. Petrographic and chemical analyses of pottery fabrics are providing important insights into which pots were made locally, and which were brought from Egypt. Between the west gate of the town and a villa in the southern neighbourhood (see p?? following), we uncovered an oval building that was >









www.world-archaeology.com CURRENT WORLD ARCHAEOLOGY 27 constructed that echoes the centuries-old architectural traditions of Upper Nubia, specifically Kerma. As yet, we have not determined its purpose - possibly a house or a chapel, or even simply for foodprocessing – but whoever built it clearly remembered their ancestral roots.

The cemetery, too, echoes the cultural admixture present at Amara West (see

ABOVE RIGHT Magnetometry survey of the town revealed a hitherto unknown suburb of large houses extending west of the town.

BELOW Part of the 'suburb' of large villas that lay to the west of the town, beyond the the defensive walls. BELOW INSET An 'ostraca', found beneath the floor of one house, bears text from the Teaching of Amenemhat, giving royal advice to future kings.





direction). But Amara West was part of a much wider world, as proved by the discovery of both Mycenaean stirrup jars and of Egyptian imitations of them.

But what did it mean to be 'Egyptian' or 'Nubian'? Beyond the administrative apparatus, and even the supply of certain commodities from Egypt, how much did this matter? Upper Nubia had been under pharaonic control from 1500 BC, and it would seem the majority of the town's inhabitants were probably part of those families who had settled here generations earlier during that time.

Living it up

Magnetometry survey during the initial season revealed a previously unknown 'suburb' of large villas that extended west of the town: clearly, the inhabitants did not feel the need to shelter within the ostensibly defensive walls, suggesting Upper Nubia was largely peaceful under Ramesside rule.

The excavation of one villa showed how the inhabitants were keen to express wealth in the much the same way as their contemporaries back in Egypt. This large mudbrick house (397m²)





featured an imposing stone door, an open-air courtyard, a set of rooms for food preparation, alongside more secluded reception rooms and a master bedroom towards the back of the house. In keeping with practise in Egypt itself, the number of grinding stones, bread ovens, and storage bins suggest more was being stored and prepared than needed by the inhabitants. Under the floor of one room we found an ostraca – a piece of broken pottery used as a writing surface – was found bearing a passage from the Teaching of Amenemhat, a literary text in which the

deceased king advises future rulers. This discovery shows that some at Amara West were enjoying reading and copying what was by then a 500-year old classic! The stratigraphy beneath the villa showed that this extramural area developed late in the town's history, perhaps prompted by a desire for some inhabitants to escape the increasingly cramped confines of the walled town.

A house divided

The main excavation area in the last four years has been inside the town,

LEFT Ovens in one of the houses: evidence suggests that more bread was being made than was required for individual use.

immediately north of the official residence of the Deputy. A fascinating picture of a neighbourhood developing across two centuries is emerging: at several phases, buildings were levelled, and new ones constructed on a different layout, suggesting a centralised programme of change. The area changed from one of large storerooms - possibly associated with the Deputy - to a dense conglomeration of contiguous houses. Internal arrangements within these houses were repeatedly reworked to meet changing needs. The excellent preservation of the architecture - often nearly 2m in height - allows a good understanding of space, and from the installations and artefact assemblages can we can work out the functions of different rooms.

Towards the northern end of the housing block, house E13.3 was a mid-sized dwelling (120m²) opening onto a narrow north-south alley, itself built over the levelled remains of an earlier ▶

Beyond the

CEMETERIES AT AMARA WEST

Michaela Binder discovers what the dead can tell us about living.

he cemeteries at Amara West provide an interesting insight into cultural developments in Egyptian-controlled Nubia during the New Kingdom period and its aftermath, and, to date, we have uncovered 64 tomb structures.

The people were buried in two distinctive areas: to the northwest and to the north-east of the town. The administrative elite serving at Amara West during the colonial period chose to be buried entirely according to Egyptian rituals in rock-cut chamber tombs with small pyramid superstructures entirely of mudbrick. The bodies were placed in painted wooden coffins and may have been mummified – though because of soil conditions, such remains have not been preserved.

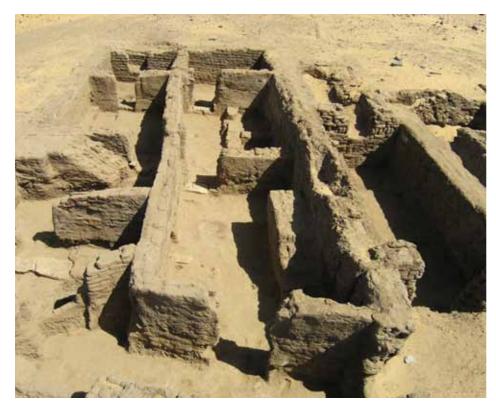
The dead were adorned with scarabs jewellery, and small amulets of Egyptian gods, though, sadly, tomb robbers had

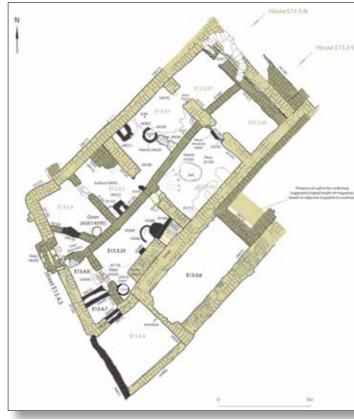


ABOVE Michaela Binder excavates the comingled human remains of grave 305 at Amara West.

disturbed most burials. This preference for Egyptian customs is also seen in more humble, non-elite graves.

In contrast, other graves attest that parts of the population continued to follow indigenous Nubian burial traditions: small burial mounds and bodies in a crouched position. We look forward to further study involving theses customs which will inform further research on the human remains. \$





ABOVE Photo and plan of one of the houses, a mid-sized dwelling, in the north section of the town.

house. Probably provided with a stone doorway, the house was divided into three areas, with the central room set around a hearth. Our knowledge of this period in the house's use is somewhat limited, as almost immediately the building was split into two: a long wall was built down the middle, and small adjustments were made

to ensure each side had a front doors and stairs to the roof or upper storey.

Sadly, we will never know why this house at Amara West was divided, though papyrological evidence from Egypt does give us glimpses of complex household histories; we know, for example, of one house that oscillated from three to nine

and then to six inhabitants, following deaths, births, marriages, and divorce.

Whatever the reason, the histories of each house now diverged. The southern house (E13.3-S) featured only three rooms. Visitors would have climbed down a steep staircase from the street - where rubbish accumulation was an ever-present



ABOVE An Egyptian style pyramid tomb with the remnants of its mud-brick superstructure – stylistic distinct from contemporary Nubian burials, see p.38. RIGHT Decorated coffin with face mask with illustration of the design.

Clues to health

The human remains from Amara West, now totalling about 170 individuals, are being stored at the British Museum in London where they are available for more investigation. The main focus of research is the living conditions of the ancient inhabitants at Amara West, backed up by ongoing archaeological and palaeoenvironmental research within the town.

We know that certain types of chronic diseases - such as respiratory infections, tuberculosis, leprosy or syphilis, severe malnutrition, dental disease or joint diseases - can leave





distinctive imprints on the bones. A bone fracture, even if healed, may stay visible because the bone formed during healing usually has a different appearance compared with normal bone.

Another important marker for living conditions is body height: though determined genetically, nutrition and disease during growth can significantly influence whether an individual is able to fulfill their genetic potential. Studying all these markers together gives us a clearer picture of the general living conditions

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evidence of organic material used in roof construction.

ABOVE RIGHT A scarab bearing a seal (Neal can you say a little more about this?)

LEFT This sandstone male bust was found still standing on the pedestal where he had been place by the inhabitants of the house, inside the door of a room that had then been blocked up.

problem - into the first room. Cereal grinding and bread baking took place here, on a much smaller scale than in the villa. A staircase might have let in light there were no windows in these houses - perhaps allowing craft activities to take place here. In any case, whatever was

happening in this space required the clay floor to be replaced seven times!

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The middle room was probably the heart of the private house: set around a hearth, it would have been the focus of food preparation and perhaps also sleeping. The dense housing and lack of windows meant these houses stayed cool in the summer heat, but retained warmth during the cold desert nights.

Hundreds of fragments of mud with impressions of beams, poles, matting, and tied bundles of grass provide us with important evidence for how the buildings were roofed. It is even possible, in some examples, to distinguish between rooms covered with a light roof and those with thick floors and heavy supporting beams perhaps where a true upper storey existed. >

enjoyed by people in the past. Therefore, while analysis of evidence from Amara West is still at an early stage, already we are finding intriguing clues to what life was like in this Nubian town under Egyptian rule.

The demographic profile shows that about half of all adults died at the relatively young age of 21-35 years, while others apparently lived into their 40s and 50s - not a bad age for ancient, pre-antibiotic populations, and would argue for reasonably good living conditions.

Sub-adult mortality is slightly lower than expected. However, this may simply be a reflection of funerary traditions: we know from other Egyptian cemeteries that neonates and young infants were treated differently, often buried either within the settlement

or in separate areas of the cemetery.

Evidence that life was not easy is revealed by another physical trait: height. The

people of Amara West were on the small side. On average men reached about 5ft 5ins/167.1cm, and women about 5ft ½in/154.4cm. Such low values in both sexes suggest an unfavourable living environment, possibly due to disease

ABOVE Amulets, beads and hair-rings found associated with burials.

LEFT A scarab found within one of the graves at Amara West.

and dietary deficiencies which inhibited growth during Another interesting finding is the high frequency of healed fractures. Nearly half the adult population showed signs of at least one fractured bone, most commonly occurring in the rib cage. More unusual is the relatively frequent occurrence of spinal and pelvic fractures. Such injuries are mainly associated with falls or crashes, and may attest to the hardships of agricultural life. Less common was signs of infectious diseases even though there are several individuals

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displaying evidence of some form of >



ABOVE Jewellery (direction), flint knives (direction), and fishing floats (direction) recovered from Amara West provide insight into the daily lives of the inhabitants of this colonial town.

The wide range of artefacts – flint knives, hammerstones, fishing-net floats, and jewellery – provides an insight into the daily chores that took place in the house. Amulets and scarabs attest to some of the inhabitants' religious beliefs, but the back room held a more striking remnant of household ritual: a male bust, in painted sandstone, that still sat upon a pedestal inside the door of the room. This is likely to have represented one or several

family ancestors. Texts from Thebes show how the dead were able, and actively asked, to intercede in the problems of the living. Intriguingly, the room was blocked up, and the door plastered over, long before the house was abandoned. In other houses, simply carved stone stelae depict the worship of particular gods.

Picturing the past

Moving to the southern end of the neighbourhood, a rather different house is under excavation. Here, the house is arranged around a series of two square rooms, each with a hearth at its centre,

and one fitted with a mastaba (low bench) against one wall. This would have been the main reception room, and was clearly designed to impress the visitor. The drab brown colour of the mud plaster was painted with a white dado framed with a black line, perhaps to imitate stone, while the wall behind the mastaba was painted a bright yellow. Amidst the rubble, we found evidence for another colourful feature: fragments of architectural moulding, painted (and repainted) in red, yellow, white, blue and black. The architectural forms echo that of formal cult temples (cavetto cornice, torus moulding), though



respiratory disease. However, a third of the population analysed so far showed pathological changes on the inner side of the skull, expressed through deposition of new bone formation. This maybe the result of an infectious disease, but it can also occur through dietary deficiencies such as scurvy (and associated lack of vitamin C).

Clues to eating

Human remains represent an important source of information about past diet. One method used is the study of carbon- and nitrogen-stable isotopes present in bone collagen. The ratio of specific isotopes of carbon gives an indication of different plant types consumed as well as the ratio of terrestrial and marine food resources eaten. Stable nitrogen isotopes, on the other hand, provide information about the proportion of meat in the diet.



LEFT Both styles of burial were in evidence at Amara West: the Egyptian style burial, in this case of a non-elite member of society (FAR LEFT) and the Nubian style crouch burial (LEFT).

We, therefore, were keen to use such methods at Amara West. However, bone collagen is an organic component which only survives if soil conditions are favourable and, sadly, at Amara West this was not the case: the bone collagen had completely deteriorated.

Other skeletal sources of information about dietary habits in past human population include teeth and jaws. Interestingly, people

at Amara West seemed to have lost most teeth very early in life. Abscesses in the jaw were equally common. Those teeth that were present, were usually highly worn, often down until the tooth root. Reasons for this high degree of wear may be found in a diet containing a lot of abrasive material, including sand and grit from the granite grinding stones abundantly found on.

Cemeteries allow us to study living conditions of past human

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ABOVE Painted fragments of architectural mouldings (inset) in this house at the southern end of town suggest the presence of a household shrine.

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on a more humble scale, suggesting the fragments found come from a household shrine that was set into the wall above the mastaba.

To create this house, the builders had demolished the back of large storage magazines, indicating how parts of the town could be radically re-organised. Outside one wall, we excavated a deposit that might represent the rubbish left behind by the painters, or at least the preparation of pigment for some purpose at Amara West (coffins in the cemetery

were also painted). Sherds used as palettes for mixing pigments, smoothers, sandstone sharpeners, and large grindstones still covered with pigment were found in large quantities. Colours included the blue, green, white, black, and red that we saw in the painted house. As most scientific analyses in the past have been limited to small samples of museum objects, invariably from tombs, this gives us a rare opportunity to investigate how colour was processed in ancient Egyptian towns.

Abandonment: political vs climatic change

Amara West, unlike many of the best known ancient settlements in northeast Africa, was abandoned within several centuries of its foundation. The explanation for this has again been rather influenced by pharaonic ideology - and the neat categorisation of 'Egyptian' and 'Nubian'. With the collapse of Egyptian control of Upper Nubia, in the early 11th century BC, it is assumed the Egyptians returned home, leaving Amara West to \$\rightarrow\$

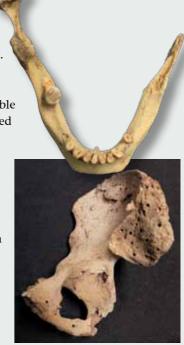


ABOVE Burial mounds reflect a preference by some of the population for indigenous Nubian burial traditions.

groups from a different angle, through people's most direct remains, their skeletons. Bones work as a unique database storing all kinds of information about who we were, what we ate, what we worked, where we came from and what diseases plagued us during lifetime. Recent technological advances have extended the range of tools available to bioarchaeologists, the scientists studying human remains from archaeological sites, by methods such as DNA, stable isotope analysis, or high resolution imaging techniques. These all provide us increasingly refined insight into past human life.

Bioarchaeological research at Amara West is still in its early stages as both analysis and excavation are still ongoing. Together with the archaeological and environmental evidence from the town and surrounding habitats it will be possible to shed light on how well humans adapted to this increasingly challenging natural environment which ultimately led to the abandonment of the site.

Cemeteries allow us to study living conditions of past human groups from a different angle: bones work as a unique database storing all kinds of information about the people were, what they ate, what work they did, where they came from, and what diseases plagued them during their lifetime. Recent technological advances have extended the range of tools available to bioarchaeologists - including methods for studying DNA, stable isotope analysis, and high resolution imaging techniques - all of which provide an increasingly refined insight into past human life.



ABOVE A fractured pelvis – note where arrows pointing – indicative of a harsh, possibly agricultural, lifestyle.
BELOW Lower jaw with heavily worn front teeth and molars lost during lifetime

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be engulfed by the sands. Only a few 'squatters' (a loaded term in itself) were left behind. The current project has established that occupation persisted for two to three centuries after the pharaonic state no longer controlled Nubia, through ceramics found in the town as well as burials in the cemetery. Rather than a change in political context, it may well have been another factor that precipitated the town's desertion.

In collaboration with the universities of Manchester and Abersytwyth, the history of the defunct Nile channel north of the town is being investigated. When flowing, this channel would have created an island; the orientation of the town and temple at Amara West suggests this was the case during the Ramesside era. A sondage in the palaeochannel revealed interleaved deposits of windblown sand and Nile-borne silts: the last eight floods in the channel were distinct. Opticallystimulated luminescence dating (OSL) was then applied to samples from the sondage, to provide a chronological framework. Strikingly, it seems the last floods – long after the channel flowed perennially - occurred in the middle of the first millennium BC. The failure of the channel would have had a considerable impact on the viability - or at least desirability - of occupation at the site.



ABOVE Excavation revealed that climate – in particular a lack of water – forced the abandonment of the site, rather than any political imperative.

Once dry, the vegetation barrier on either bank could no longer survive. With water and vegetation gone, the island would be exposed to the strong northern winds carrying sand - all too familiar to us who excavate the site! In the latest phases of the town, door blockings become ubiquitous as inhabitants attempted to contain the sand. Eventually, agriculture became too difficult, and, to this day, occupation is only on the opposite bank of the Nile, with the river providing a barrier from the wind and sand of the Sahara.

FURTHER INFORMATION

For further information and bibliography: www.britishmuseum.org/AmaraWest Follow the project blog: http://blog. britishmuseum.org/category/archaeology/amara-west/

Acknowledgements: The fieldwork is undertaken in collaboration with the National Corporation of Antiquities & Museums (Sudan), with funding from the British Museum, Leverhulme Trust, British Academy and Fondation Michela Schiff Giorgini.

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