



# NEKHEN NEWS

Published for  
The Friends of Nekhen

Volume 26

Fall 2014



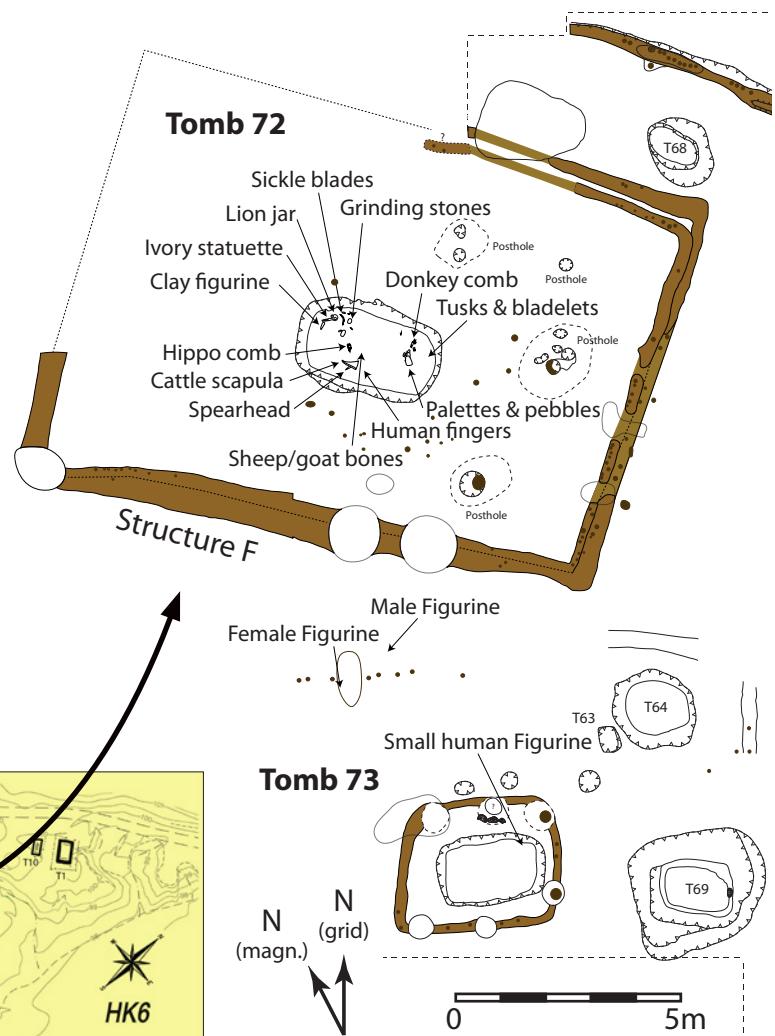
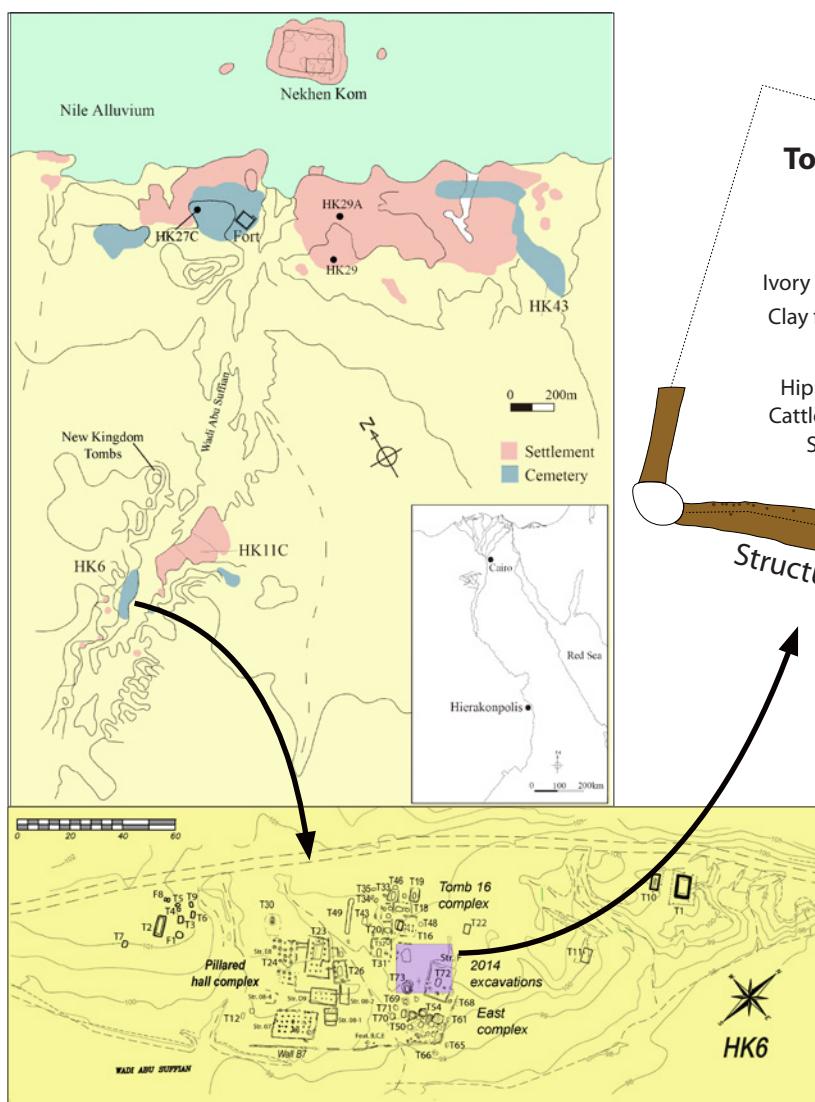
Simply Amazing!

## In This Issue

Hierakonpolis in 2014 .....	2	Meat and Potatoes: A Food Factory at HK11C.....	20
A Year to Remember! .....	3	For Take Away and Delivery: Food Preparation	
A Tomb Fit for a King? The Discovery of Tomb 72 at HK6 ..	4	at HK11C .....	22
The Ivory Statuette from HK6 Tomb 72 .....	7	HK27C C-Group Cemetery Revisited .....	23
Special Finds: the Combs from HK6 Tomb 72 .....	10	Messages in Mud: Analysing Mud-bricks from HK27C .....	26
Confessions of a Conservator: Treating the		Nubian Pots at HK27C: A Case Study .....	27
Ivories from Tomb 72 .....	11	A Tattooed Trio at HK27C .....	28
Symbolism and Place: Investigating the Origins of		Sealings from the Palace at Hierakonpolis .....	30
Hierakonpolis Grinding Stones .....	13	Walking in Annie's Footsteps .....	32
Getting to the Bottom of the Big Hole: Tomb 73 at HK6 ..	15	The Hierakonpolis Home Page .....	34
Piercing Insights: Experiments in Predynastic Craftsmanship..	16	The Friends of Nekhen .....	35



# Hierakonpolis in 2014



## Thanks, as always!

We are deeply grateful to our loyal Friends of Nekhen for their continued support of our work in good years and bad. This, of course, was a very good year, and it is thanks to all of our Friends that such amazing discoveries could be made. In particular, we wish to express our gratitude for the generous support of Tom & Linda Heagy, Darrell Baker & Christine Auth, Bonnie Sampson, Grier Merwin, Art Muir, Patricia Perry, Mel & JoAnn Hunt, Dagmar Bird, John Wall, Lyn Stagg, David Aid, Richard Fazzini & Mary McKercher, Crennan Ray, Leanna Gaskins, Tracy Gill, Helen Nash, Geoff Phillipson, Mark Lehner, Robert Metzger, Roger & Maissa Saunders and Wanda Summers. The Japanese Academy for the Promotion of Science funded the excavations at HK11C. A grant from the White-Levy Program for Archaeological Publication allowed us to research our finds from the Nubian cemeteries, revealing many new insights. The Inter-University Attraction Poles Programme – Belgian Science Policy makes possible the important contribution of Wim Van Neer and Bea De Cupere toward the greater understanding of our (many) faunal remains. The invaluable assistance of our inspectors and colleagues in the SCA at Edfu and Cairo is gratefully acknowledged. Finally, many thanks to Ulrika for her boundless hospitality. Thank you one and all!

*NEKHEN NEWS* is published for The Friends of Nekhen

**Renée Friedman**  
Director, Hierakonpolis Expedition  
Editor of the *NEKHEN NEWS*

**Xavier Droux**  
Editorial Assistant

James Rossiter  
Photographer and photographic editor

**Friends of Nekhen / Hierakonpolis Expedition**  
c/o Renée Friedman  
Dept. of Ancient Egypt & Sudan  
British Museum  
London, WC1B 3DG, UK  
email: [friendsofnekhen@yahoo.com](mailto:friendsofnekhen@yahoo.com)



**Tori Muir**  
Spot-on Creative  
Design/Layout  
[www.spot-on-creative.com](http://www.spot-on-creative.com)  
All photographs copyright  
Hierakonpolis Expedition or author  
unless otherwise indicated.

[www.hierakonpolis-online.org](http://www.hierakonpolis-online.org)

# A Year to Remember!

—Renée Friedman, Director, Hierakonpolis Expedition

The spectacular finds from HK6 Tomb 72, made during the last days of the season, may be taking centre-stage (pages 4–14, 18–19), but 2014 can be characterised as ‘stimulating’ from start to finish. Unexpected discoveries in the Nubian C-Group cemetery (pages 23–25) kicked off the season, while further insights were revealed in the lab (pages 26–29). During the detailed study of the collected materials from this Middle Kingdom cemetery, it seems that everything had a story to tell: bones, beads, pots, skin, and even the mud-bricks, gave up their secrets. Back in the wadi, continued exploration at HK11C confirmed



Face of the ivory statuette from HK6 Tomb 72.

they certainly ended with a bang. With three digging days left to go, the discovery of a nearly intact main tomb in the East Complex is an event we will long remember. Despite the severe disturbance of the tomb owner’s body, the amazing ivory statuette along with 69 other objects (pages 18–19) were found mostly in their original place. Together they form a unique assemblage of excavated materials for the Predynastic period and allow us to glimpse the variety of materials once present in the elite tombs and also consider the rituals that surrounded their inclusion.

Add to this some rainy day adventures (page 34), excursions to the Elkab magazine to examine the sealings (page 30), a felucca ride on the Nile, sentimental journeys (page 32) and weekly showers (there was no

water pressure at the house this year) at the Funduk el Shams, a charming (and highly recommended) hotel just down the road from the site, it was quite a year.

Even after the season ended, there was still no rest. In early April, *Egypt at its Origins 5: The Fifth International Colloquium on Pre- and Early Dynastic Egypt* took place in Cairo, with many of the team members presenting papers and posters. Then, once back home, the final touches needed to be applied to the refreshed Raymond and Beverly Sackler Gallery of Early Egypt at the British Museum, which opened to the public on July 9. With new themes and displays illustrating Egypt’s beginnings from the Late Palaeolithic to the end of the Second Dynasty, the gallery also features several of our finds from Hierakonpolis, including a cast of our famous mask. It may look rather spooky, but the resemblance to the face on ivory statuette from Tomb 72 is easy to see. Photos in the gallery also show highlights from our excavations as well as the local riverscape, with pictures taken by team members during the above-mentioned felucca trip, which was a much needed moment of calm during this hectic but incredibly rewarding season. I hope you will all have a chance to visit this new permanent display soon.

For many reasons, 2014 was a memorable year and on behalf of the entire Hierakonpolis team, I would like to thank all of our Friends for the support that made it a reality. I hope you are as thrilled and intrigued by all of our recent discoveries—from a statuette of ivory to the grain size of sand—as we are. Thanks again! 



Cast of the Hierakonpolis mask on display in the Gallery of Early Egypt, British Museum.



On the river at Hierakonpolis—a moment of calm in a hectic season.  
Photo now gracing the Gallery of Early Egypt, British Museum.

# A Tomb Fit for a King? The Discovery of Tomb 72 at HK6

—Xavier Droux, Lincoln College, Oxford, with contributions by Renée Friedman

At the end of last season we uncovered two lines of wooden posts, the remains of a wall (Wall F) running north-south for 9m (not 7.5m as previously reported). When it turned a corner at each end we knew we had a new structure, but what was it? In February 2014 we returned to find out.

First we needed to determine its size. Assuming we already had the long side of the structure, we expected to encounter another corner soon. Clearing along the south, the wall trench appeared just below the surface as a broad yellow ribbon, but as we moved westward, opening section after section, the wall just kept on going. It was 13m before the corner was finally reached! We now knew we were dealing with an impressive building. By tracing part of the north wall, where the two phases of construction were clearly defined as two wall trenches at different levels, we also confirmed it was a building with a complex history. What was inside of it, however, remained resolutely opaque. The interior was relatively flat and very confusing. There were some disturbed sand-filled areas, some burnt areas, and also an array of postholes, some with the remains of charred wood at the bottom. Yet we could see no patterns and the only objects of interest were numerous fragments of First Dynasty ceramic jars stands decorated with



Overview of Tomb 72.



Flint bladelets and ivory tusks were just the start of the adventure.



Bladelets found with the tusks refitted together and were probably knapped at grave side.

incised and cut out triangles, which were concentrated in the west.

Exploration continued with care, but as the end of the season approached we were still unsure whether it was a pillared hall or the superstructure of a tomb. There was only one solution—pick a spot and dive for the ‘chocolates’. These dark brown silts mark the only natural layer in the cemetery (other than bedrock) that we can easily discern and trace. From experience we knew that if a tomb was here, it would cut through this symbolically resonant fertile layer and just maybe we could find it.

We were not let down. Below a sandy area in the structure’s centre we finally reached the chocolates and in it what we were hoping for: the neatly defined cutting of a rectangular tomb, 3.2 x 2m, with postholes, and even some actual posts, flanking it. So relieved to have an answer, we weren’t all that concerned that the tomb fill contained so little, just a few potsherds and some bones. Little did we suspect the adventure ahead of us...

The first hint appeared on the east side as we neared the tomb floor: three hippopotamus tusks, and fragments of a fourth. These hollow ivory objects with small holes drilled around the rims, often found as pairs, are known from many Predynastic cemeteries, but these are the



Anticipation as the ivory statue and intact jar emerge.



The base of the clay figurine: front and side.



The jar with incised lion, compared to the lions in the Painted Tomb.

first from Hierakopolis. Making them more special still, traces of yellow ochre spotted during conservation indicate they were used as containers for pigments. Together with the tusks were 29 flint bladelets arranged around the corner of the tomb—the first time we have found such blades in position. Many could be refitted together, so that it is likely that they were knapped by the side of or even within the grave as part of the burial rituals.

While I was still busy recording these finds, the workmen continued to clear the opposite side of the tomb, revealing what looked like a large bone. That is what I thought until I moved closer—only then did I see that it was a large ivory figurine of a man, resting face down! I managed to blurt out this extraordinary revelation before my jaw fell open and a flurry of activity ensued. Renee rushed back to the house to fetch consolidant while I carefully cleared away the surrounding soil, marvelling at the carving and itching to see its face. And the figure was not alone. Below it, the rim of an intact jar began to emerge. Aching to see that too, with great restraint, I waited for the statue to be treated and then lifted—its facial features greeted with stunned amazement. We had not yet recovered when the lower half of another human figurine made of coarse clay, just below the statue, took us by surprise. Broken at the narrow waist, the conical lower body bears traces of red paint. It survives to a height of 17cm, but may have been over 25cm high when complete, making it a worthy companion for the ivory statue. It probably represents a female, but we cannot be sure.

When we finally got to the jar, another surprise was in store. Lifting it and turning it upright, the large silhouette of a lion impressed into the clay was revealed to even more gasps. Lions are rare in early Predynastic art, but comparison with the Painted Tomb leaves no doubt about its identity. The odd shape and surface treatment of the pot, however, find their best parallels in Lower Nubia, where comparisons can be made for several of the other finds to

come. Degraded organic matter in the area and adhering to the pot suggests that the figurines and the vessel had been placed within a wooden box or a basket which was subsequently eaten by termites. Their voracious activities also had a sad effect on the ivory statue, its surface, once delicately polished, was mostly destroyed, yet it remains a masterpiece of Predynastic art (see below).

With so many new discoveries, it just became too much—not for us, but for the wind, which began to blow a gale, forcing us to pack up early and seek shelter. Thanks to Feisel we were able to obtain a (funeral) tent at short notice and install guards for the night since word of our discoveries had begun to circulate, and over the course of the night many visitors had to be seen off.

The next day, flush with anticipation and equipped with every box, brush, and tool we could think of, we returned to the tomb. Now the focus of a large crowd of inspectors and guards, the tomb put on an amazing show for us all. It would not be exaggerating to say that every time we turned around there was something new and astounding.

Starting in the east side, just south of where the tusks were found, brushing back the sediment revealed a large trapezoidal palette made of 'diorite'. Below it, another stone palette of rectangular shape was surrounded by five rubbing pebbles just as they had been deposited. Hard stone palettes are more common in Nubia, where they date back to the 5th millennium. Generally dated to Naqada III in Egypt, earlier examples are attested and it seems quite likely that the tomb's palettes were special heirlooms from an earlier time, used here to grind pigments, perhaps to dress the dead. Not only were several chunks of malachite found with them, but under magnification traces of malachite dust could also be observed on both the pebbles and the larger palette, while traces of red ochre were visible on the smaller one.

Augmenting this theme of personal adornment, surrounding the grinding set were six ivory combs. One, with





Hard stone palettes and rubbing pebbles just as they were deposited. Microscopic detail of malachite powder on one of the pebbles.



The hippo comb uncovered.

long teeth, was surmounted by the figure of a 'donkey' (but see below), which had sadly lost its ears even before the funeral took place. The other five combs were undecorated, and eventually three more plain combs were found on the north side of the tomb. But the most remarkable comb was found near the center. As a big hippo fan, I was particularly delighted to see the delicately carved shape of this animal appear at its top, still complete. In total, the tomb contained ten hippopotamus ivory combs, the largest number ever found in one tomb.

Also from the centre of the tomb came the only in situ human bones: a few fingers near the south side, and part of a sacrum. This suggests that the tomb owner was laid out in the standard position: on the left side, head south, facing west. Analysis of the bones together with those from the surface by Anna Pieri indicates they belonged to a single individual, possibly male, who died at 17 to 20 years of age.

More objects were arranged in front of the body. By his hands was the scapula of cattle, a food offering known from other Predynastic tombs. Immediately below it was a stunning flint spearhead, yet another example of the high level of craftsmanship attained by the flint knappers of Hierakonpolis. By the lower body, further food offerings in the form of juvenile and newborn sheep/goat were still present, while a left foreleg of cattle was recovered in the tomb fill.

Supplementing the food theme, further to the west, two serrated triangular sickle blades were found clustered with two quartzite grinding stones. The grinding stones had been used in life and show polish on the upper surface from handling and

abrasions on the working sides. The sickles had also been much used. The teeth were broken or worn and one showed evidence of resharpening. Such bifacially worked sickle blades are found only sporadically in graves. Their grouping with the grinding stones may be connected with food preparation for the funeral or for use in the afterlife.

That was Day 2: it was now 3PM, hot and exhausted and almost out of boxes, we still weren't finished, but simply had to go home. The following day, a Thursday, was meant to have been the last digging day. We certainly weren't going to finish on time this year, but it actually didn't take us long to finish up the tomb. A few more combs were found on the north side along with one hollow base and six transverse arrow heads showing that the tomb owner was also equipped with a small selection of weapons. Traces of termite-eaten matting covered the floor.

After three intense, but rewarding, days of excavation, we were now left with 70 new objects to conserve and record and several questions to answer. First, how come there was all this stuff but no stiff? In other words, why were most of the objects remarkably still in place, but not their owner? We still aren't sure. The pattern of removal suggests that the disturbance of the tomb took place long ago, probably in the Predynastic period, and may have been an act of aggression against the tomb owner, rather than motivated merely by robbery. Burnt bones from the surface suggest that the body had been hauled out of the tomb, and together with the wooden superstructure, set ablaze. Yet it is clear that the structure was rebuilt later, adding the second post wall and replacing the burnt posts with new ones, probably in the



Grinding stones coming to light.





Tomb 72 with a reconstruction of the original placement of the owner's body in the midst of the offerings.



Detail of a sickle blade showing heavy use.



Young sheep/goat food offerings on the floor of the tomb.

early First Dynasty, given the number of jar stands. This may have been an act of pious restoration and a way of showing respect to the ancestors, but since the bones were not re-interred, it seems the idea of an ancestor was more important than their actual remains.

Who was the young person originally buried here? The sheer wealth of material certainly suggests that he was a ruler, but it is hard to judge since all of the other main tombs were severely plundered and may have been richer still. Nevertheless, he was certainly someone of importance since the area covered by the tomb's enclosure (13 x 9m) is the second largest of the cemetery, surpassed only by that around Tomb 23, (16 x 9m). Considering the orientation and size of the tomb (it is the largest with only a single occupant), this young man no doubt owned the 'main tomb' of the East Complex.

The majority of the objects date the grave to Naqada IIA–IIB; however, many show evidence of use prior to deposition. Was his death so unexpected that new objects could not be assembled? Or were these items, once used by his predecessors, spiritually charged and preferred for special rituals of body adornment and food preparation? While parallels for the objects can be found in tombs across Egypt, some, like the lion pot, grinding stones and the hard stone palettes, are more comparable with tombs in Lower Nubia. Does this point to a cultural or political linkage in that direction?

The discovery of this nearly intact tomb has left us with so many new things to ponder, we haven't had time to deal with them all. But we now know better than ever that this remarkable cemetery still has the ability to surprise and amaze. ☺



## The Ivory Statuette from HK6 Tomb 72

—Liam McNamara, Assistant Keeper for Ancient Egypt and Sudan, Ashmolean Museum, University of Oxford

Arguably the most significant object discovered in Tomb 72 is the ivory statuette of a standing male figure, found in the north-west corner of the grave. The statuette is 32cm tall and carved from a single hippopotamus incisor, one of two large, straight tusks from the animal's lower jaw that can grow up to 40cm in length and 5–6cm in diameter. The size of the figure suggests that the raw material came from a particularly large animal.

Very little of the original finished surface is preserved, but the quality of the carving is indisputable. A deep hole in the

top of the head (the remains of the tusk's tapering pulp cavity) was perhaps originally used for attaching separately modelled headgear or hair. The figure's well-modelled ears are very large and protrude from the sides of the head. The aquiline nose is also disproportionately large, and this apparent emphasis upon the extremities of the face may relate to the statuette's intended (but ultimately unknown) function. Scant traces show that the almond-shaped eyes and arching eyebrows were originally modelled in raised relief. Below the slightly protruding mouth, the figure wears a short pointed beard,





with the chin-strap still visible in places along the jawline. These facial features strongly resemble the pottery masks known from the cemetery at HK6, and it has been suggested that the statuette and the masks might depict the same entity.

The figure has a broad neck but weak shoulders. The right arm appears as a pointed stump; the broken surface on the left might suggest that the arms originally extended down the sides of the body, carved free, or with the hands placed on the sides of the upper legs. Alternatively, the arms may have been abbreviated, with features that were not essential to the statuette's function deliberately reduced in order to prevent damage.

The figure is naked except for a simple penis sheath which projects from the abdomen, but no indication of a belt or girdle survives. The figure has broad hips and wide buttocks. The space between the legs is carved through, so that the legs were originally separated, but the gap was left filled with earth pending final conservation. The legs are slightly bent at the knees and end in short projections for the feet, with incised vertical lines across the front perhaps representing the toes. It is unlikely that the statuette was intended to stand without support: the head is large and the feet are small, so the piece is rather top-heavy. The shape of the feet rather suggests that they were originally slotted into a base, although no trace of this element was found in the grave.

Comparable examples of human sculpture from the Predynastic period are extremely rare, particularly from excavated contexts, making the Hierakonpolis statuette one of the most securely dated and well-provenanced objects of this type ever found in Egypt. The closest parallel was found in Tomb H29 at Mahasna, near Abydos, in 1911. It is now in the Egyptian Museum, Cairo. This ivory statuette is 34cm tall; his arms extended down the sides of his body, but the hands are not indicated. The schematically rendered head is bald, with eyes made of small cylindrical blue glazed steatite beads. The mouth is an incised slit. However, like



The ivory statue from HK6 Tomb 72.

the Tomb 72 statue, the ears are large and protruding, the nose prominently modelled and the chin covered with a broad beard.

The Cairo statuette is closely paralleled by several unprovenanced examples in ivory as well as others in different materials including the two golden statuettes found at Tell el-Farkha in 2006, and the controversial stone statue known as 'MacGregor Man' in the Ashmolean Museum, who also wears a long, pointed beard.

Later parallels for these early statuettes come from the 'Main Deposit' excavated in the temple enclosure at Hierakonpolis in 1897–99. This spectacular cache of objects, which included some of the most iconic works of early Egyptian art (such as the Scorpion and Narmer mace-heads, to name just a few), also contained hundreds of fragments of human statuettes, ranging from almost complete examples, to the detached heads, arms, legs, feet and bases of others. The majority of the ivories were sent to the Ashmolean Museum at the University of Oxford (over 700 pieces) with others now in the Petrie Museum, Cairo and Philadelphia. Many of the male statuettes have a short pointed beard, and some examples wear an elaborate penis sheath suspended from a belt around the waist. Other statuettes in the group include women with bouffant wigs; figures wrapped in elaborate cloaks; children crouching with their fingers in their mouths; male and female dwarves; and bound prisoners. It has been suggested that these objects represent discarded votive objects from the early temple dating to the late Predynastic–Early Dynastic period, although this remains a subject of considerable debate. It is possible that the 'Main Deposit' statuettes depict members of the king's court, whose images were set up in a royal precinct where rituals of kingship were performed before they were gathered together and ritually deposited at a later time.

Who does the new Hierakonpolis statuette represent? A god or a spirit; an early ruler; the tomb owner; a member of his family or court; a friend or foe? Why was it deposited in the tomb? As a representation of the deceased; to act on his





The closest excavated parallel: the male statuette, 34cm tall, from Tomb H29 at Mahasna (Cairo JdE 41228).

in original setting—from tomb to ‘temple’—and this may also indicate a change in practice or belief. At the very least, the discovery of the statuette in Tomb 72 demonstrates that the tradition of fine ivory carving at Hierakonpolis can be traced back to the early Naqada II period. Further investigation of these rare early representations of human beings promises to tell us more about the inhabitants of Predynastic and Early Dynastic Egypt, their hopes, fears, desires and beliefs. The new statuette from Hierakonpolis is therefore a most valuable addition to the corpus.



Join the Friends of Nekhen  
and help us continue to make  
these exciting discoveries!

See pages 35 for details.



behalf in the afterlife; as part of the funerary rituals performed at the time of the burial; to protect the deceased against attacks from enemies? Interpreting the function of such early statuettes is extremely speculative. In later periods of ancient Egyptian history, statues could function in various ways: as a representation of a god (a cult statue), or as a receptacle for the spirit of the deceased (a tomb statue); they could provide a means of communication between the living and the deceased (an ancestor bust), perform activities that were necessary for the sustenance of the deceased in the next life (a servant statue), or possess magical powers connected with a specific ritual (fertility figurines, etc.).

The inclusion of statuettes among Predynastic grave goods was not typical, so the figures may have been associated with a particular person or role in society, or else they could have served a purpose that only a few individuals desired or expressed. The later examples from the Hierakonpolis ‘Main Deposit’ and other sites seem to suggest a shift

## A Selection of Statues



The controversial ‘MacGregor Man’, 39.5cm tall. Allegedly found near Naqada (Ashmolean AN1922.70).



Bearded male statuette of ivory, 25cm tall, from the Hierakonpolis ‘Main Deposit’ (Ashmolean AN1896-1908 E.174).



Ivory male statuette, 22.4cm tall, from the Hierakonpolis ‘Main Deposit’ (Ashmolean AN1896-1908 E.180).



Ivory head of a bearded male statuette, 5.3cm high, from the Hierakonpolis ‘Main Deposit’ (Ashmolean AN1896-1908 E.342).

All photographs © Ashmolean Museum, University of Oxford

# Special Finds: the Combs from HK6 Tomb 72

—Candelaria Martín del Río Álvarez, Universidad de La Laguna. UDI de Prehistoria, Arqueología e Historia Antigua, Tenerife, Spain

Since 1898, Hierakonpolis has been showing its potential and with every archaeological campaign its role in the political and economic development of Upper Egypt, from Nubia to the north, becomes clearer. This power game is demonstrated in the diversity and expansion of its settlement areas, production zones, ceremonial complexes and cemeteries.

Although each of its cemeteries has its own points of interest, the excavations at HK6 have generated a series of discoveries that make it unique. The presence of a great number of animal burials, both domestic and wild, offers unique insights into special rituals and ceremonies, which are supplemented by the masks as well as anthropomorphic and zoomorphic figures of different sizes and materials. This aspect has been demonstrated again with the discovery of Tomb 72. The tomb itself, its condition and the materials recovered from it are of great importance for current research on the Predynastic period.

The special quality of this tomb is especially exemplified by its combs. These objects then, as today, were used to dress and organize hair. The addition of a figurine (zoomorphic or more rarely anthropomorphic) made them decorative objects, which could carry a symbolic message and, perhaps, denote social identification. In Tomb 72, both the utilitarian and decorative aspects of combs are represented.

Ten combs were discovered in Tomb 72. Eight of them are undecorated. These plain combs are square or rectangular in shape with a straight-edged top. The number of prongs range between 6 and 13, depending on the model. Among them two sets were observed. One set was composed of three examples of nearly identical dimensions, all with six teeth. Two nearly identical combs with seven teeth form the second set. Their design and size, ranging from 5 to 7cm high with teeth usually about 2.5cm long, suggest they could actually function for combing or teasing the hair. However, the raw material used—hippopotamus ivory—places them in the category of luxury item.

The decorated combs are, of course, the most intriguing. The hippopotamus is an animal with great symbolic importance, but it is rarely represented on combs. In fact, only four others are known, and only one has a known provenance. Sadly, this one excavated example from Naqada Tomb 1649 is poorly preserved, the head missing. However, on the specimen from Tomb 72 we can see the excellent rendering of all the main physical traits of the animal: its tail, ears, snout, and prominent abdomen. The comb itself, with its rectangular body and thirteen prongs, is of a size (9.2cm high with teeth 3.4cm long) that would make it functional, but the exclusivity of its decoration suggests it had a greater symbolic purpose.



Hippo combs from HK6 Tomb 72 and Naqada Tomb 1649 (Petrie Museum UC 5615) at same scale. These are the only examples with known provenance.

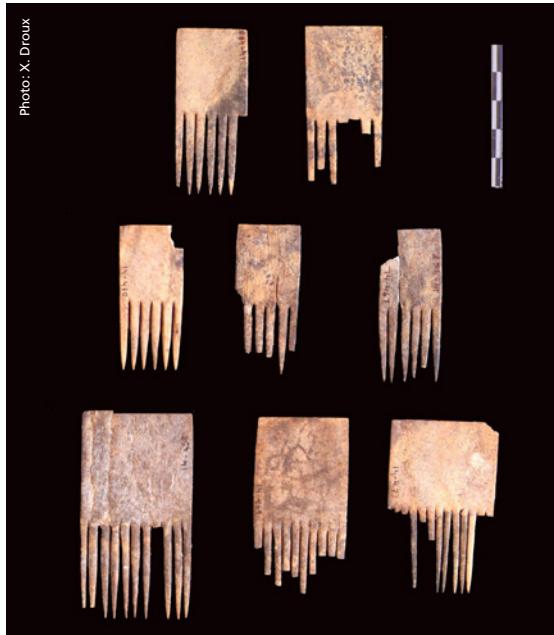
Supporting this, a spot on the top of the hippo's back seems to have been intentionally burnt, perhaps as a way to protect against the danger this powerful animal posed.

Regarding the other quadruped comb, its particular morphology renders its identification difficult. Here, too, there are few parallels. Only one of them has a known origin. It comes from Mahasna Tomb H29, perhaps not coincidentally the same rich tomb that provides the only excavated parallel for Tomb 72's ivory statue. The identity of the animal on this comb has long been a matter of discussion: it has been affiliate with the god Seth, described as a donkey, an anteater, a jackal or associated with other mythological creatures. However, the latest research suggests it is a donkey or a canine, specifically a wild dog (*lycaon pictus*) with its large erect ears. The comb from Tomb 72 has a tall rectangular body and eight long teeth (10.3cm), making it useless for combing. Therefore, the combination of its decorative motif and dimensions suggests it was a hair ornament placed in the tomb as a votive object with great symbolic meaning.

Combs are objects with unequal representation among grave goods. At some sites there are none, while in others they are numerous. In those burials that contain them, it is normal to find only one or two combs. Naqada Tomb 162 exceptionally contained five combs: three decorated with birds, one undecorated and one too poorly preserved to tell.



Donkey combs from Tomb 72 and  
Mahasna H29 (MM 5076 - 5077a)  
at the same scale.



Combs and comb sets from HK6 Tomb 72.



Detail of the 'donkey' comb:  
a controversial animal.

The ten examples from Tomb 72 beat that record, and the tomb now holds the title for the greatest number of combs in a Predynastic grave.

The tomb's combs represent a very special assemblage not only with regard to quantity. The symbolic role played by the decorated combs is of note. On one hand, the hippo

represented danger and chaos, while the canine can be identified with control. Having both icons in this tomb may be interpreted as an attempt to control both concepts, and thus have the power to dominate any situation. This duality of chaos and control is often linked to representations of warriors and hunters and, therefore, the elite. 



## Confessions of a Conservator: Treating the Ivories from Tomb 72

—Charlotte Baron, Independent Objects Conservator/Artefact Illustrator, London, UK

I came to Hierakonpolis to give my artefact illustration skills some exercise on the array of beautiful and functional artefacts found over the years. Little did I expect that I would be testing my conservation skills as well, but as the jaw-dropping objects from Tomb 72 started coming into the lab on the last days of the season, I had to trade my pencil for a pipette, and fast. Luckily, coming from an archaeological background, with three years of post graduate study on object conservation, this change of outfit was straightforward. Nevertheless, the pressure was on—in total 10 combs, 4 tusks and one amazing statue of ivory needed my help, along with several clay figurines each from Tombs 72 and 73. The priority was to stabilise these fragile, fragmentary objects, and make them readable as entities once more so they could be examined, studied and photographed before removal to the magazine. More importantly, of course, they needed to be preserved for posterity.



Charlotte at work on the combs.

The salinity of the desert sand, acidity, and the fluctuations in humidity and temperature are hugely destructive to





The 'donkey' comb arrives in the lab.

objects made of materials such as ivory. The artefacts from HK6 had certainly suffered from the effects of being interred in this environment for over 5500 years. Acid present in the soil had attacked the inorganic (calcium phosphate in association with carbonate and fluoride) structure, and hydrolysis had deteriorated the organic protein collagen (ossein), leaving a crumbling and flaking assemblage in need of fast, and radical treatment.

The carved ivory statuette of the standing man had been consolidated in situ with much of the surrounding soil matrix in order to allow for swift transit. Once in the lab, further cleaning was undertaken and the large, delaminating parts of the structure were stabilised. The surface was cleaned with dental tools and the superfluous grains picked away, though some of the dirt served as a support and was left in place. Of all the objects, this one required treatment most urgently. It was very nerve-racking as the light and time was fading fast, but between us, it was cleaned and stabilised within hours of being unearthed.

The combs were a true test of patience and poise. They might have looked good in the ground but these fragile items did not lift well. The first part of the treatment involved laying out the collected fragments for observation and photography. I recorded the condition and dimensions, and then went about dissolving with acetone the acrylic resin (Paraloid B72) used during on-site stabilisation. Under magnification, the sand and dirt were carefully removed with fine dental tools, leaving each fragment as free from dirt as possible, ready for consolidation and the process of reconstruction.

I started with the 'donkey' comb, which arrived in over 30 fragments. Each piece was consolidated several times with a weak (5%) solution of acrylic resin in acetone. The break surfaces were then further consolidated with a stronger solution (10%). Once the fragments were stabilised and strengthened, I began the process of refitting fragments ranging in size from 1mm to 8cm. I did a dry run, and then

joined the pieces, one by one, using a stronger solution of the resin as an adhesive, with my hands as a clamp, until I had completed this amazing object.

I repeated this process on the other combs. Salt crystals present on some were removed as far as possible with a scalpel and brush under a microscope but time did not allow for full desalination. Once all the major pieces had been refitted, the task of matching up the stray fragments, collected over several days of excavation, began. From the dirt coating on the break surfaces, it was clear that some of these strays had been broken and separated in antiquity. Finding the correct body for each tooth fragment was a long process of elimination, but in the end just about every stray found a home.

Once all 10 combs were reconstructed as far as possible, they were photographed, repacked on a soft acid free bed, and made ready for their trip to the antiquities magazine at Elkab. Although our acquaintance was brief, we were all sorry to see them go.

Conservation requires close observation and in this way interesting discoveries can be made. The hippo tusks with perforated rims arrived in a very fragmentary and friable state. These hollowed out, conical objects were not as easy to read as the combs. The delamination was advanced, so reference points for reattachment had been lost. Under



The hippo comb before conservation.



Yellow ochre inside a tusk.

magnification (8x), I examined them in order to learn more. It was during this process that I noticed concentrations of yellow earth pigment in the sediments on their interiors. I was greatly excited by this unusual feature and to my delight so was everyone else. The function of these hollow tusks has long been a question and now, at least at Hierakonpolis, we know they were used to hold yellow ochre pigments.

After having treated these remarkable discoveries in record time, I look forward to putting on my artefact illustrator cap again and drawing them with a bit more time to spare. 

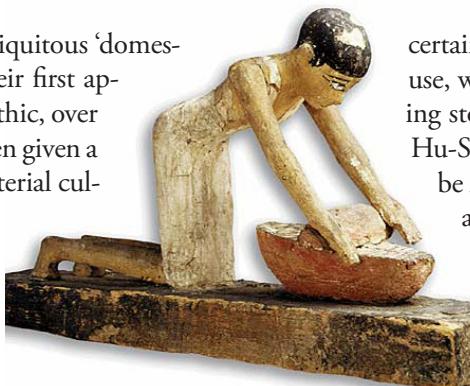
—Elizabeth Bloxam, Cardiff University, UK

# Symbolism and Place: Investigating the Origins of Hierakonpolis Grinding Stones

Grinding stones are some of the most ubiquitous ‘domestic’ objects found in settlement sites, their first appearance dating back to the Late Palaeolithic, over 16,000 years ago. Although they have been given a rather lowly place in the hierarchy of material culture found in archaeological sites, these artefacts can provide important clues into the processing of plant remains for food, as well as ochre and pigments for decorating pots and tombs.

Grinding stones can come in a range of styles and materials depending on what purposes they served. Simple hand-held grinders were used to crush pigments, while the better known and appropriately loaf-shaped variety was for processing grain by dragging them back and forth over a boat-shaped lower stone called the ‘saddle quern’. Grinding is often depicted in Dynastic tomb scenes and models, therefore telling us a lot about the symbolic importance of this activity in social life. The precursor of this symbolic attachment to grinding goes back into prehistory, given that grinding stones were included in the burial equipment of some of the earliest graves. The presence of the two ‘quartzite’ grinding stones in HK6 Tomb 72 at Hierakonpolis, dating to Naqada IIA–B, is further evidence of the importance that these objects held to individuals, not only in everyday life, but also in the afterlife.

Grinding stones obviously had abrasive properties, and quartzite (or more correctly ‘silicified sandstone’) was a particularly favoured rock to use. However, we have yet to fully explore what importance was placed on the origin of the grinding stones, in terms of the source of the material. Although silicified sandstone is a common rock found in Egypt, its quality can range significantly and therefore grinding stones from



Wooden model of a saddle quern from a Middle Kingdom tomb.

certain sources, perhaps distant from place of use, were often specifically sought-after. Grinding stones found in Naqada I–II settlements at Hu-Semaine in Middle Egypt were found to be imported from sources upwards of 150km away in the Wadi Hammamat and Aswan regions. So, what might the origin of the Hierakonpolis grinding stones be? Were some sources especially preferred because of links (ancestral, political or cultural) to specific places like Nubia?

The Aswan West Bank, 130km south of Hierakonpolis, is certainly a possible contender as a source for the stones because of the high quality of the silicified sandstone deposits found there. ‘Quartzite’ from the Aswan West Bank has been more famed as the stone for the obelisks and statues connected with New Kingdom kings, but our recent research here revealed this to be just the tip of the iceberg. We discovered this area was actually a hub of grinding stone production spanning an incredible 15,000 years from the Late Palaeolithic to the early Roman Period (30 BC). Over 80% of the quarries that cover 60km<sup>2</sup> of the Aswan West Bank were dedicated to the production of grinding stones, largely because of its especially fine quality silicified sandstone. The earliest of these quarries, at Wadi Kubbaniya dating to 18,100 BP, established the crucial role played by grinding stones as essential equipment for food processing in some of Egypt’s first settlements. Little did its founders know that this ‘industry’ would continue to be one of the largest in the region. Therefore we should consider whether the grinding stones at Hierakonpolis have their origins in Aswan and whether there is a Nubian connection with this particular source.



Silicified sandstone (quartzite) hand-held grinder (right) and base (left)—Wadi Kubbaniya, Late Palaeolithic settlement site, Aswan West Bank.



A typical array of grinding stone quarries (sand-filled pits surrounded by quarry waste) at the base of the hills along the Aswan West Bank.



Rough-out of an oval-shaped hand-held grinding stone.

We found grinding stone quarries in pockets along the Aswan West Bank dating to the Predynastic period. These shallow, sand-filled pits surrounded with waste and rough-outs of grinders are very difficult to see and hence were missed by previous surveyors of the quarries. The technique for producing grinding stones changed little from earliest times, so hinting at a long line of traditional generational production. Essentially, already loose boulders of silicified sandstone, usually lying at the bases of the hills, were split into smaller pieces and then roughly shaped into mostly oval, but also rounded, grinders. Establishing if there is a Nubian ancestry and connection to this source, and quarrying, is of course a tricky one, although we have some indicators of this possibility from rock art left by A-group and C-Group people in the quarries. A Nubian connection is further supported by the discovery of A-group and C-Group settlement and burials on the West Bank at Aswan and up to Hierakonpolis (see pages 23–25). It is also worth noting that this Nubian lineage associated with the West Bank of Aswan remains into the present day.

Although we have a long way to go in understanding the distribution and desirability of grinding stones from Aswan, within larger patterns of trade and exchange, we must not forget the ways in which symbolic values attached to these objects may be connected with source through ancestry. Numerous studies of this phenomenon in Australia, particularly associated with silicified sandstone grinding stones, have shown how important one particular stone source might be. In this context, the stories of landscape and ancestry linked to source meant that grinding stones were externally traded, and therefore travelled enormous distances. Understanding how important some stone sources were in the past, even for what might seem the most mundane of objects, can enlighten us about several aspects of social life in ancient times. This may not only concern trade and exchange of valued items over large distances, but might also tell us about a bigger picture of contact between people and places, the symbolism and resonance of which may extend back (and forward) through generations. ■



Rock art (Nubian A-Group) near Predynastic grinding stone quarries.

*I would like to acknowledge the great team of Tom Heldal, Per Storemyr and Adel Kelany for their contribution to the discovery of the grinding stone quarries on the Aswan West Bank during the 'Quarry Scapes' project. Thanks also to the SCA for providing us with the opportunity and permission to carry out the work. For more information see [www.quarryscapes.no](http://www.quarryscapes.no)*

## Grinding Stones from Tomb 72

Two stones were found in Tomb 72. One was of the typical, oblong, loaf-shaped, variety with a shiny polish on the top showing that it had been used often, both for grinding with its smooth bottom, and for crushing with one of its short ends. Pecked out on the long sides are ergonomically placed finger-holds, but only for digits of the right hand. The smaller, flatter stone also had a pecked out finger-hold on the top surface, making it the Predynastic version of a 'mouse'. The divot was again perfectly placed for use by a right-hander.

Traces of black pigment were observed on the larger grinding stone, while the smaller one bore traces of red. Grinding stones are known sporadically in Predynastic graves in Egypt, where they generally occur in the richest graves, but are especially common in Nubia, and often show traces of pigments, even if their original function was for grinding cereals. This mixed use hints at the importance of both processes in Predynastic times. ■



Photo: X. Droux

Grinding stones from Tomb 72, top and sides.



Grinding stones in hand (the right hand).





# Getting to the Bottom of the Big Hole: Tomb 73 at HK6

—Renée Friedman, Director, Hierakonpolis Expedition

After leading us on a merry chase, the Big Hole (see *Nekhen News* 25) finally conceded defeat this year and resolved itself into a surprisingly small (considering the size of the hole) rectangular tomb, which we now call Tomb 73. Despite holding on to a glimmer of a hope that something might be left within it, this proved not to be the case. Only one small figurine was found inside of it; however, what was found around it, once put back together, was of great interest.

The tomb turned out to be about 2m long, 1.20m wide and 96cm deep. Pottery from the vicinity dates it to the Naqada IIA–B period, just like its neighbour Tomb 72. It appears to have contained the bodies of three children, and the thick pads of resin-soaked textile gathered from around the tomb indicate that at least one of them was wrapped in the same manner as known from the cemetery at HK43. Several of the pads retained the impression of body parts, and one still had hand bones in place between the linen layers. Careful clearance around the tomb's edges also revealed the remains of its superstructure: a wall made of small wooden posts, with larger posts at the corners and mid-way. This wall was originally coated with white plaster which had been painted with red, yellow, green and black pigments. At many points around the exterior we observed clusters of fallen and melted plaster, and along the east side were spots of paint and pigments that must have dropped as the wall was being painted. To the north, remains of a wooden post enclosure wall were also detected, which seem to situate the tomb within a rather large court (see map, page 2).

It was within this court that the most interesting finds were made, supplementing discoveries made last season. Several figures made of clay, all with stylized bird-like heads,

were recovered, making quite a family with the upper part of the small male figurine, with outstretched arms, found within the tomb itself. Near the enclosure wall we uncovered the upper half of a female figurine made of red painted clay. Her arms extend down in front of her body, her hands probably clasped together below the waist. Last year's male model was found close to the same location. Numerous other fragments from the lower half of male and female figurines were also retrieved in this area, but of course do not mend with the upper parts—that is simply a law of archaeology! All are conical in shape, with the legs undivided. Both the lower and upper parts show how the larger figures were made on a clay core that was left to dry before an outer layer of clay was applied for modeling the details.

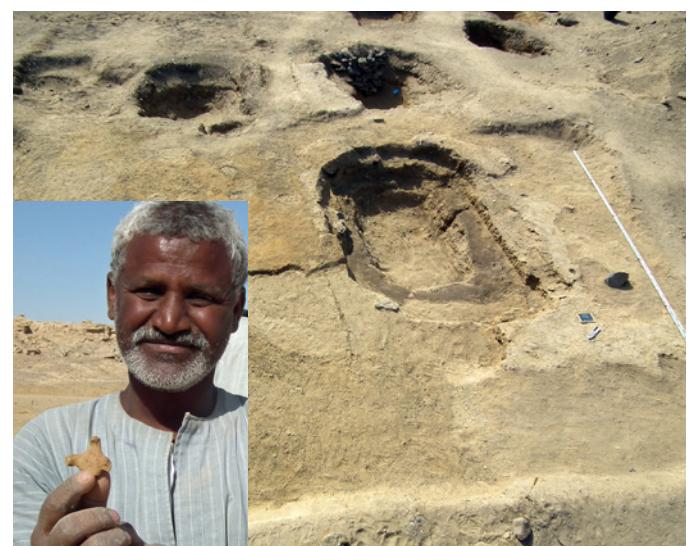
These figurines are extremely important as some of the very few examples known from scientific excavations. So far, there seem to be at least six individual figures, all different in details. While all appear to be standing, the variation in arm position and attitude is intriguing. Were these male and female figurines originally arranged together as a scene? Are they meant to be dancing, praying or engaged in a ritual? As the court around Tomb 73 has not yet been fully explored, we hope to find more (and the missing mending bits) that might answer these questions. 



Wrapped hand from Tomb 73.



Clay figurines from in and around Tomb 73



View of Tomb 73 and Kamal holding the figurine found inside it.





# Piercing Insights: Experiments in Predynastic Craftsmanship

— Kazuyoshi Nagaya, Waseda University, Tokyo, Japan

At the Predynastic ceremonial centre at HK29A distinctive ritual activities were carried out, as shown by the special pottery and animal bones found there, but nearby craftsmen also toiled to produce luxury goods as hundreds of small borers called ‘micro-drills’ attest. These tiny objects are important evidence for understanding Predynastic craft-production and have attracted the attention of researchers in the past (see *Nekhen News* 4.1 and 21). While both micro-drills and pierced objects, such as carnelian beads and pendants, are well-known, they rarely occur in the same place. So, while their connection is probable, it is not definite. Furthermore, we hardly know anything about how Predynastic craftsmen actually could have perforated these objects using micro-drills.

In order to gain better insight on this issue, and determine the materials on which the drills might have worked, I carried out an experiment. First, I made 25 replica micro-drills from flint. I mounted them onto shafts, and using a bow to create the rotation, tested the drills on various types of materials: leather (cow skin), wood (acacia, tamarisk and cedar), animal material (cow bone, deer horn, elephant ivory and ostrich eggshell), and stone (sandstone, limestone, mudstone, breccia and carnelian). Following the perforation tests, I observed the drills with a digital microscope to see what types of damage had occurred during the process. Comparing the patterns of damage with the condition of the ancient drills from HK29A, I was then able to estimate what materials these ancient drills were used on in Predynastic times.

The results of the trial showed that flint micro-drills were capable of cutting all kinds of material. Even carnelian, which has the same hardness as flint, could be drilled—it just took a very long time! Predynastic craftsmen probably used an abrasive to make carnelian drilling more efficient (but more on that next time).

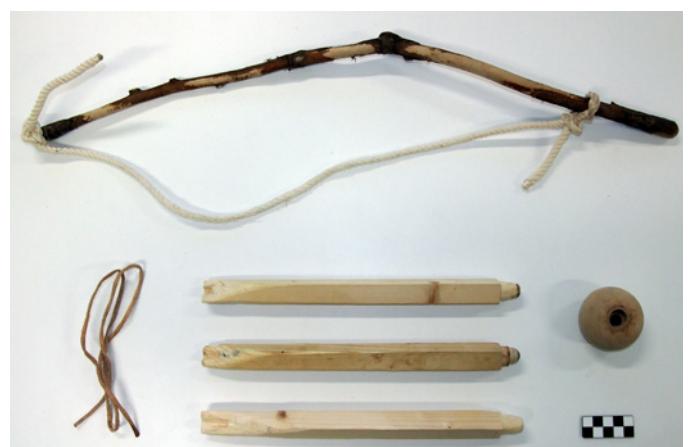
Detailed examination of the worked tips of the replica drills allowed me to classify the damage into three patterns: vertical flaking, lateral flaking and deformation. Significantly, these patterns are the result of both the stage in the drilling process and the hardness of the drilled materials.

Vertical flaking is caused by a phenomenon called initial fracture, which occurs at the early stage of the perforation process, when the drill and the material first interact. The drill surface showed an elongated scar (negative of removal) as a result of forces upon its tip.

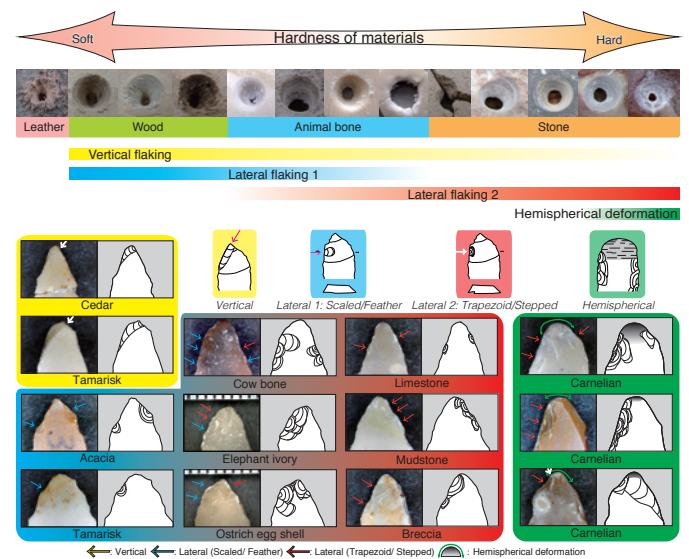
Lateral flaking is a result of forces applied to the sides of a drill. This can be divided into two shape types. Type 1 is a rather shallow, elongated scale-shaped scar. Type 2 is shorter and trapezoidal in shape; in profile it can be deep



Micro-drills from HK29A

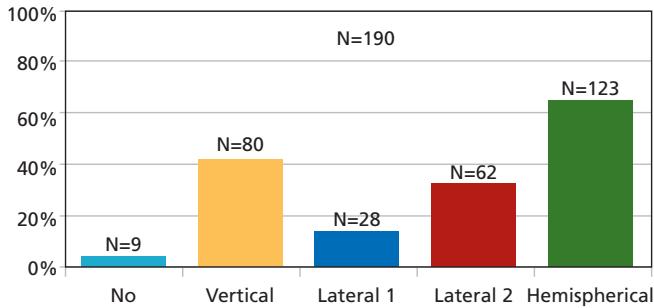


Perforation equipment used in the experiment : components of a bow drill.



Experimental result: damage patterns according to target materials.



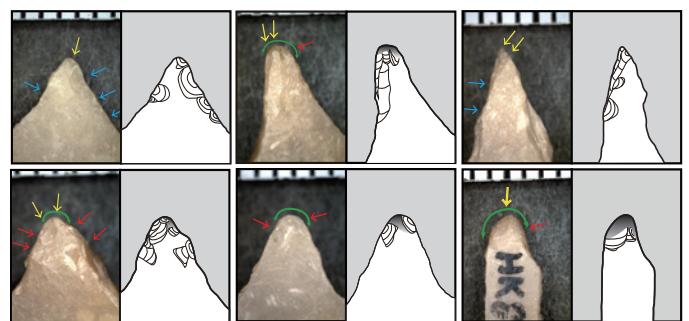


Proportion of damage patterns observed on the micro-drills excavated from HK29A.

with a distinct stepped end. This damage occurs in a step-wise progression from Type 1 to 2 depending on the hardness of the drilled material. Type 1 mainly occurs when drilling wood (soft). Type 2 appears when drilling stone (hard). Animal bone, an intermediate category in term of hardness, causes both types.

Deformation is a change of tip shape, i.e., blunting, which turns a point into a hemisphere. This occurred only when drilling carnelian, an extremely hard stone, which is hard enough to completely exhaust a flint drill.

Now equipped with a classification of the types of damage and what caused them, I examined 190 micro-drills excavated from HK29A. On 95% of them at least one of the above-mentioned patterns of damage were observed. Since the damage is specifically due to drilling, there is no doubt that the micro-drills found at Hierakonpolis were used for perforation. The proportion and type of damage

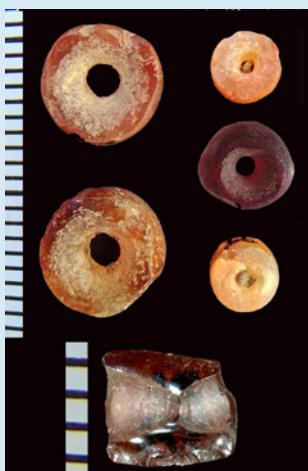


Examples of damaged micro-drills from HK29A.

suggest that the principal target material was stone, including carnelian. The dominant type of damage is hemispherical deformation, representing 65% of all damage observed. It is caused when a drill is used on carnelian. Lateral flaking Type 2 came next in prevalence, representing 33% of all damage. It mainly appears when drilling stone.

There can now be no doubt that micro-drills from HK29A were used for piercing and many were used on carnelian ornaments. Bow-driven rotation is only known from the Old Kingdom and it is first depicted in the tomb of Ti at Saqqara. Yet, it was probably already used by Predynastic craftsmen, especially as the damage patterns on the ancient micro-drills show they were used on hard and very hard materials, which would have been too difficult or time consuming to drill in any other way. Perforation clearly didn't come easy, but through this experiment we now have some piercing insights into Predynastic techniques. 

## Bow Drill Technology: A Brief History



The hardness of and drill pattern on Predynastic carnelian and garnet beads suggest the use of a bow drill for piercing.



The bow drill is first graphically attested in the hands of a carpenter in the Tomb of Ti at Saqqara, Old Kingdom.



Once perfected, bow-drill technology changed little. A carpenter with a bow drill in the Tomb of Rekhmire, Thebes, New Kingdom (facsimile drawing in New York, MMA 31.6.29).

# Hierakonpolis 2014



CM 1 2 3 4 5 6 7 8

# Treasure from Tomb 72



Photo: X. Droux

# Meat and Potatoes: A Food Factory at HK11C

—Masahiro Baba, Waseda University, Japan

As we suspected last year (see *Nekhen News* 25:12–13), the mud-brick building at HK11C Square C3-4 really was used for some fishy business and more!

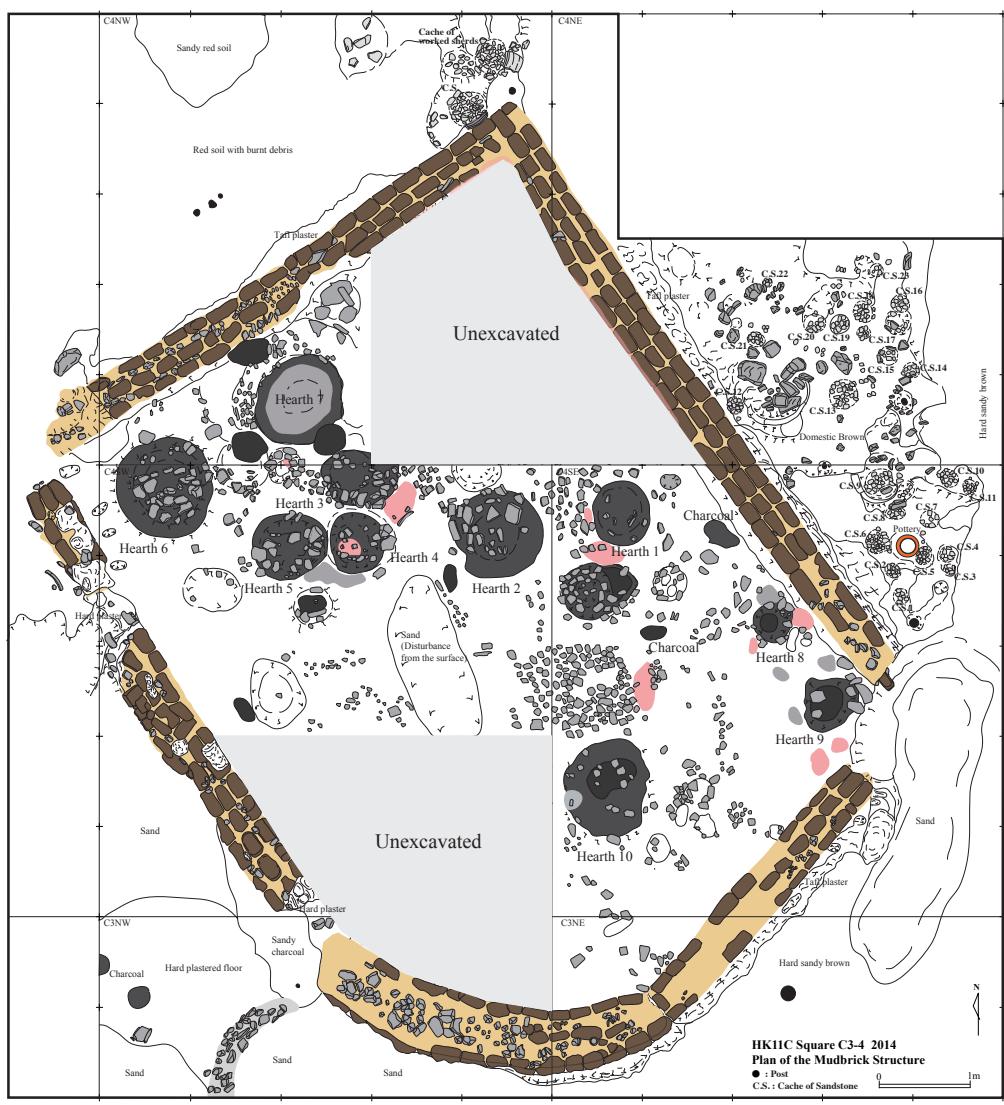
Since 2011, our work at HK11C has focussed on the mud-brick structure in Square C3–4, located on the large mound of debris created by the Operation B brewery and pottery kilns. Last season we uncovered the full plan of the roughly rectangular structure, which measures about 9 x 7.5m, while in the previous season, investigations along the east wall revealed those curious caches of small shaped stone (over 1200 of them!), which we called ‘potatoes’ (*Nekhen News* 24:10–11). Examination of the interior, with its accumulated layers of burnt debris, began last season with a trench cut across the center. Under layers of charcoal and ash, up to 20cm thick, we succeeded in reaching the original floor and on it we found six hearths. Around them was an abundance of bones and scales from large fish (*Nekhen News* 25:12–13), but considering the site is today about 4km from the river, this seemed pretty fishy. So this season we returned with the aim of expanding the exploration of the interior to confirm our initial impressions.

Working both in the east and west, we stripped away the debris layers to reach the original floor. Four new hearths were uncovered, ranging from 50cm to 1m in diameter, and composed mainly of charcoal, ash and scorched stones. Although there is still more to do, so far at least ten hearths have been defined mainly in the northern half of the interior, below dark, ash-filled debris. What is going on below the brown organic soil in the southern half remains to be seen.

During the excavation, we paid extra attention to the collection of faunal remains. All the sediments were sieved in order to catch the smallest bone. As a result, large

numbers of bones and fish scales were retrieved, especially from in and around the hearths, with a major concentration in Feature 4 near Hearth 10. As discussed in the next article, detailed study of the faunal assemblage revealed a significant amount of Nile perch and cattle bones, but mainly from the less fleshy parts of the animals, which are in essence the left-overs from the preparation process, not the meal itself.

Given the many hearths inside the structure, the Nile perch and cattle were probably cooked or even smoked here before the prepared meal was taken away to be eaten elsewhere. The size of the structure and the sheer quantity of bones suggest that these activities operated on an industrial scale. This walled structure is in fact a food factory and we can now suggest that to keep track of all this meat they used ‘potatoes’ — the shaped stones found by the east



Plan of HK11C Square C3-4 in 2014.



Overview of the factory.

wall. Like the Operation B brewery, which was able to produce a total of 325 litres of beer at one time (equivalent to 650 bottles of Stella beer!), the structure of Square C3–4 is another industrial facility for food production, quite possibly catering for feasts taking place in (or near) the elite cemetery. Judging from the scale of production, the guest list must have been long.

Other than bones and fish scales, the finds from the interior were mainly pottery and lithics. The pottery assemblage is dominated by roll-rim jars, as usual. Yet, there was a notable frequency of small necked bottles, which were previously rare at HK11C. These may have had some specific function in the production process, or could simply have been water jugs for the workers toiling in what must have been hot and smoky conditions. A rim sherd of a large bowl with crescent decorations below the lip is an import from the Delta. Such bowls are known from several Lower Egyptian sites dating to Naqada IIB–D, and this is helping us to date the factory's activities.



Detail of a hearth with fish scales.

While the function of the factory in Square C3–4 has become clearer, the story behind the structure in Square C10–11 remains vague. Located on the southern side of HK11C, this huge building was constructed with mud-bricks for the north and west walls and stone slabs for the south. Its full size is still unknown, so we resumed clearance along the south wall to learn a little bit more. Brushing the surface revealed another 7m of the stone slab wall, which still continues to the west—running right under backdirt pile from earlier excavations! Although further exploration in this direction is hindered for the moment, the exposed length of the wall is now an impressive 25m. Along with the food factory in Square C3–4, it is one of the oldest mud-brick constructions in Upper Egypt, and the two might well be related. However, the several hundred cubic meters of ash dumped inside Structure C10–11 after it was abandoned are going to make its mysteries a lot harder to solve. 

*This work is supported by the Japan Society for the Promotion of Science.*



Imported bowl from the Delta.



Little bottles like this were used in the factory.



Running right into the spoil heap: investigation of Structure C10–11 is stymied!



# For Take Away and Delivery: Food Preparation at HK11C

—Wim Van Neer and Bea De Cupere, Royal Belgian Institute of Natural Sciences, Brussels

The 2014 excavations within the mud-brick structure in HK11C Square C3–4 yielded a vast amount of animal remains of all sorts. There was not just the usual bones and teeth, but also feathers, fish scales, tufts of hair, pieces of skin, and mammal horns—tissues that rarely survive at most archaeological sites. Also striking was the large amount of bone showing traces of burning. This was clear from their colour, which ranged through light to dark brown, black, grey, blue tinged and white, each a reflection of the different duration and intensity of their exposure to fire. These finds, along with several concentrations of fish scales, indicate that activities related to food preparation took place here.

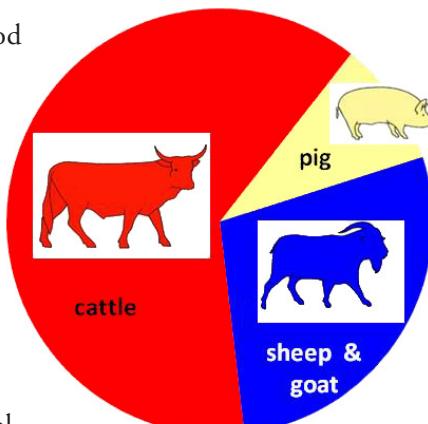
Our analysis of more than 6000 animal remains reveals a wide spectrum of species: 13 species of fish as well as two reptile, three bird and seven mammal species. Among the mammals, a single hippo and a few gazelle bones show that hunted animals played only a minor role. The major food animals were fish and domestic mammals. The domestic fauna is dominated by cattle, followed by sheep and goat, with a small contribution of pig. In terms of meat yield, the major source was cattle. They were not only the most prevalent numerically, but also represent more meat than any other domestic animals.

The fish remains included various types of catfish and members of the carp family. However, Nile perch was by far the best represented species, even without counting the scales, which amounted to about 1200 this year alone! Not only the most frequent, Nile perch was also the largest fish encountered on the site. The smallest specimens were from fish between 40 and 50cm long, but the majority measured between 1m and 1.2m. There were also some exceptionally large individuals, estimated

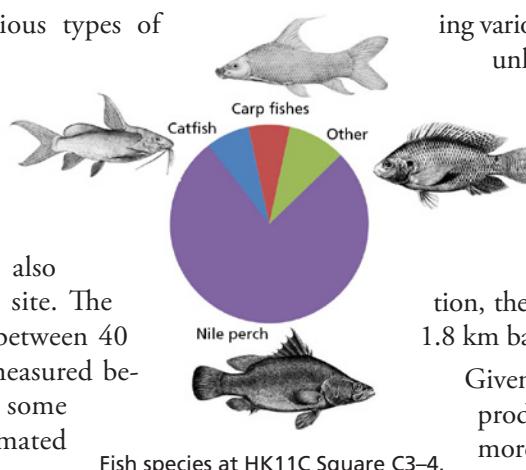
to be more than 1.5m in length, so roughly to scale with Rahotep's tomb drawing.



Cattle and Nile perch bones showing various degrees of burning.



Major food mammals in HK11C Square C3-4.

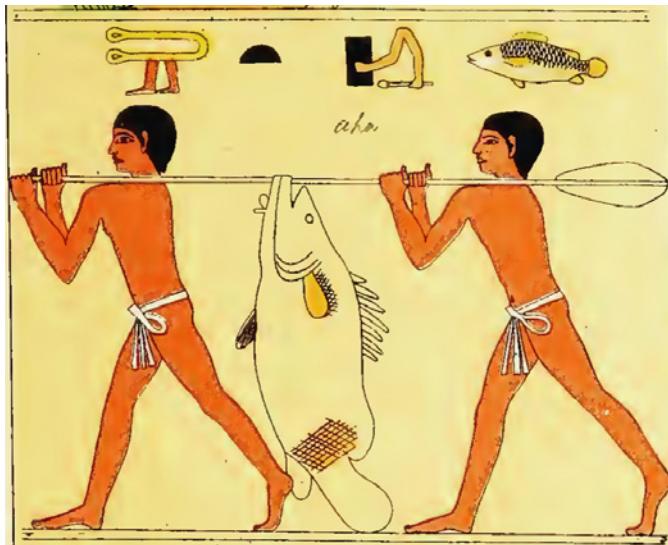


Fish species at HK11C Square C3-4.

The skeletal elements by which these major species are represented make it obvious that something special was happening here. Among the Nile perch we found bones mainly from the head and shoulder girdle, whereas vertebrae and fins were extremely rare. This indicates that the bodies, which are the meatiest part of the fish, were taken away from the site after preparation. The remains of the domestic animals also show an uneven distribution. In cattle, the skull and the extremities of the legs, which bear little meat, were most prevalent. The skulls and feet of sheep and goat were also over represented, even if there were some vertebrae and ribs. Again, bones from the legs, the meatiest part, were missing. All this indicates that hearty meals of meat were being prepared here, but taken somewhere else for consumption. The question is: Where?

So far, none of the faunal assemblages from elsewhere on the HK11 terrace have yielded remains suggesting that the prepared food was consumed by the community living there. It is only at the ceremonial centre at HK29A that numerous large Nile perch vertebrae have been recovered, indicating the consumption of prepared fish probably during various ritual feasts. However, it seems most unlikely that the fish deliveries were coming from HK11C, since this would mean that after catching these large Nile perch, most more than a metre in length, and transporting them over a distance of about 2 km up the wadi to HK11C for preparation, they were then taken to HK29A which is 1.8 km back in the direction of the Nile.

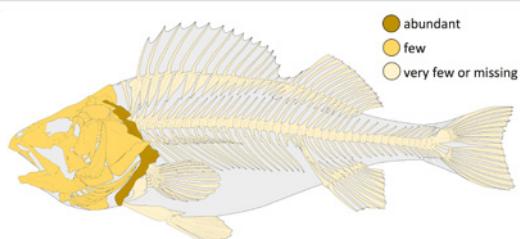
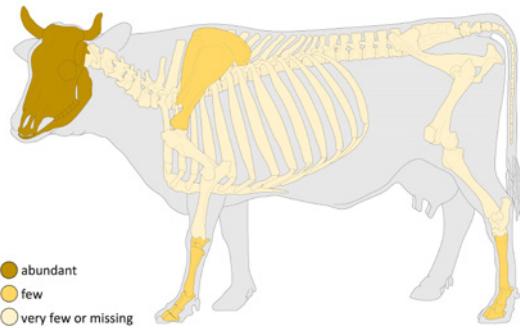
Given the proximity of the HK11C food production and brewery areas to HK6, a more logical destination for these products



A big fish in the Tomb of Rahotep (Petrie, *Medium* 1892).

would be the elite cemetery. Yet, so far there is no evidence of meat consumption of any type in or around the excavated tombs or pillared halls. The cattle, sheep and goat found in many tombs were deposited as complete animals, or in the case of cattle, sometimes as forelegs only.

This leaves us with a problem. Can we suppose that food refuse was thoroughly removed from the area around the HK6 tombs after a funerary meal? Or was there a specific



Skeletal elements of cattle and Nile perch found at HK11C Square C3–4 (line drawings of cattle and perch from [www.photos.archeozoo.org](http://www.photos.archeozoo.org)).

area within or near the cemetery that was reserved for feasting which has so far remained undetected? Could the area at the north end of the cemetery that Hoffman described as the Amratian settlement be that place? We will begin the search in February. Let's see what we find! 



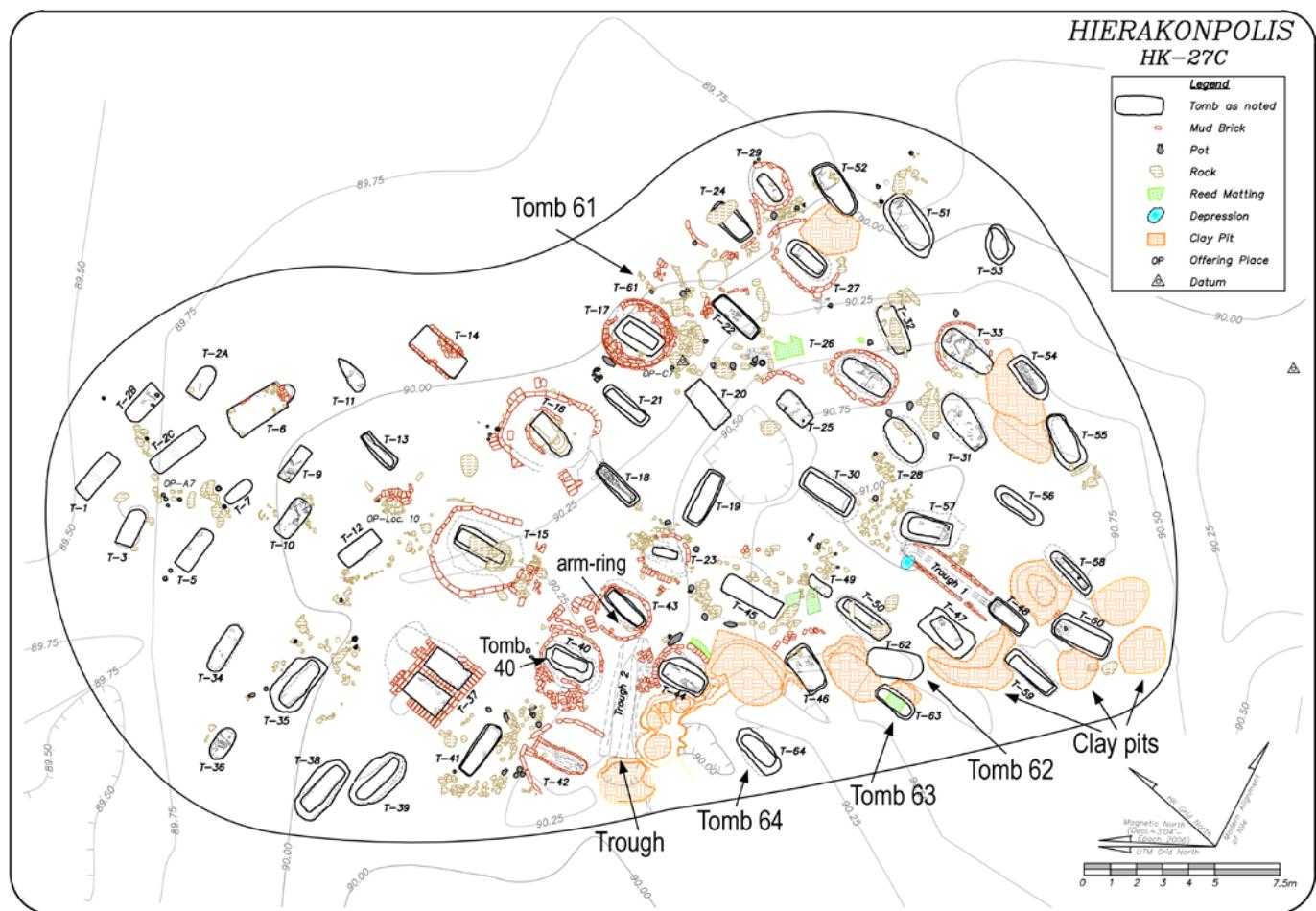
## HK27C C-Group Cemetery Revisited

— Renée Friedman, Director, Hierakonpolis Expedition

Thanks to a grant from the *White-Levy Program for Archaeology Publications*, we have put together a team of experts to work up the various threads of evidence from our important Nubian C-Group cemetery, the northernmost known and probably the last one of this culture still extant. This cemetery was excavated in 2001, 2003 and 2007 (see *Nekhen News* 13, 16, 20), revealing a total of 60 graves, many with distinctive mud-brick tumuli surrounding the grave shafts and offerings of Nubian and Egyptian pottery, which date them to the 11th–13th Dynasties. Cemetery highlights had been published in the past, but now it was time to delve into details.

Careful review of the documentation revealed a few discrepancies in the cemetery plan in need of rectification (the devil is always in the detail!). Since the site had not been backfilled, this should have involved only a brief visit. However, returning

to HK27C in early February, we soon realized it wasn't going to be that simple. Scatterings of Nubian and Egyptian sherds littered the surface, eroding out of the fallen bricks we had been too timid to shift during the excavations, but Mother Nature had no such qualms. Amongst the sherds we recognized several as belonging to pieces now in the (painful) process of being mended. Clearly some housecleaning was urgently required. Concentrating on areas of brick fall, this clearance revealed several clusters of Nubian sherds, providing important information about the original placement of the pots around the superstructures, which has helped to clarify the tomb attributions for several vessels. Many were recovered from shallow depressions close by the walls, so we made a special effort to investigate all soft spots or discolorations that might hold more. Such efforts were amply repaid when a beautiful arm-ring made from



Revised map of HK27C showing the new features uncovered during clean up (cartography by Joel Paulson).

the shell of a hawksbill sea turtle emerged from a shallow pit by the tumulus of Tomb 43. Pieces of similar arm-rings had been found before, but this was our first complete example. Not bad for just the second day of work! Further cleaning around the site also yielded more fragments of decorated Nubian vessels, as well as two new tombs. Tomb 61 was a tiny burial of an infant, hidden under some bricks near Tomb 17, while Tomb 62, obscured by a sand-filled pit on the west edge of the cemetery, was for an adult, but only the legs and bits of the wooden coffin

remained. More intriguing was the new trough feature between Tombs 42 and 44. This long, mud plastered feature, with sloping sides and a flat bottom, was cut into the natural silts prior to the construction of the surrounding tombs. It is in many ways similar to the brick-lined trough uncovered in 2007 by Tomb 57. Unfortunately, having two of them doesn't make their purpose any easier to understand. They may have served a ritual or ceremonial function, but both were filled only with soil.



Cleaning around the tumuli.



Nubian sherds found beneath the fallen bricks.





The tortoise shell arm-ring from Tomb 43.



The naturally mummified body in Tomb 63 with inset detail of the arm-ring as found.

Happy with our new discoveries, we moved off to HK6, only to find ourselves back again three weeks later as a result of another revelation from an unexpected source: the brick analysis. Mud brick architecture is not native to the Nubian C-Group culture and we assumed the bricks used in the tumuli had been ‘borrowed’ from other sites. However, compositional analysis of the bricks undertaken by Tessa Dickinson showed this assumption to be incorrect. Her analysis suggests the bricks were made from the same sediment as the hill into which the graves had been dug. This being the case, then the many pits observed across the site might not be from plundering as we always thought, but from clay mining by the Nubians themselves. Now, we just had to return to take a closer look, especially at the sandy areas along the western edge of the cemetery that had never been fully explored.

Beneath the deep filling of sand along the west, several pits/clay mines were revealed. Separating the pits from adjacent tombs, distinct lips of natural soil proved these pits were not from plundering. Further discoveries of bricks still *in situ* within some of the pits also showed that the

pits predated the tumuli. In addition, investigation in two of these sand filled depressions showed they were more than pits: they were tombs. Tomb 64 was badly disturbed with only a few bones of a possible male in association, but Tomb 63 again repaid the effort. It contained the legs and lower torso of the naturally preserved body of a woman, still clad in a patch-work leather skirt even though the body had been disturbed and rotated from its original position. Only the upper left arm was still *in situ* in the west side of the tomb. Near it, and below the feet of the rotated lower body, much to our amazement, was another complete tortoise shell arm ring! In the C-Group cemetery at Kubbaniya (just north of Aswan), such arm-rings were often worn on the left lower arm and this may well have been the case in Tomb 63 also.

Our two weeks revisiting the C-Group cemetery certainly paid dividends: two arm-rings, four new tombs, many sherds that provide the important connection not only to other sherds, but also to the original place of deposition. And yes, we managed to fix the glitches on the map too! ☺

*Housekeeping at HK27C was undertaken with the assistance of Anna Pieri and Xavier Droux, with mapping of the new features by Joel Paulson.*



The new trough feature running between the tumuli.



Join the  
Friends of Nekhen  
and help us continue  
to make these exciting  
discoveries!  
See page 35 for  
details.

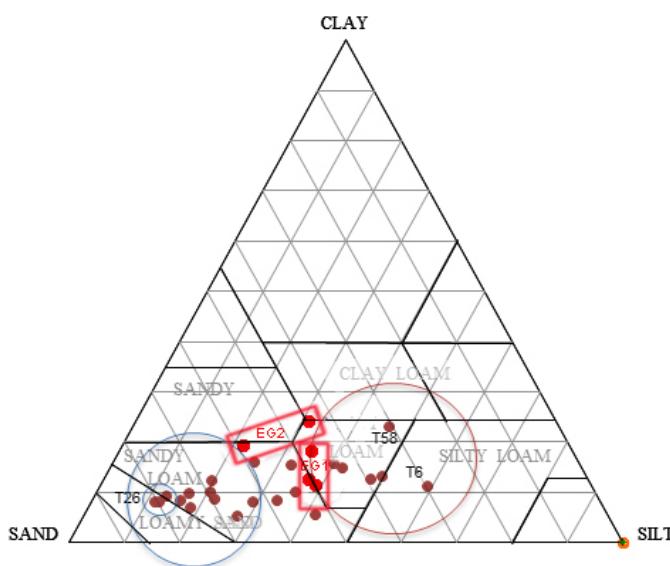
# Messages in Mud: Analysing Mud-bricks from HK27C

—Tessa Dickinson, University College London, UK

Of the 64 tombs identified in the Nubian C-Group cemetery at Hierakonpolis, at least 27 employed mud-brick, either for the tumulus superstructure or, more rarely (three cases), for creating a vaulted structure within the tomb pit. This is notable because mud-brick is rarely attested in the archaeological record of Nubian C-Group's culture and the use of this material has been considered an Egyptian influence. Therefore, we decided to investigate the matter further.

A mud-brick's composition provides information about the decision-making process involved in its manufacture as well as access to expertise and resources. Through the analysis, we wanted to see how the Nubian bricks compared with Egyptian bricks of about the same age. A field grain-size analysis was conducted on bricks from the C-Group cemetery and from two Egyptian tomb chapels of the Second Intermediate Period on nearby Old Kingdom Hill. The results revealed that the Nubian bricks differ enough from their Egyptian counterparts to suggest a separate production with different access to materials and expertise.

The Nubian bricks tend to be yellowish brown and compositionally fall into two groups. The bricks of the first group are very sandy and characterised by a low clay content, well-sorted fine sands and a very limited use of the tempers seen in Egyptian bricks, such as potsherds, charcoal, ash and chaff that make bricks stronger. The majority of the Nubian bricks were in this sandy brick category.



Scattergram showing the different sedimentary textures of the bricks from HK27C with the two main groups circled compared with the two groups from the Egyptian tomb chapels in red boxes.

The bricks of the second group were siltier with a somewhat higher clay content, very-well sorted sands and a greater use of organic tempers. This made for slightly better quality bricks that approach Egyptian norms at Hierakonpolis in terms of texture and temper.

Photo: X. Droux



Tessa at work.

Still, the quality of these bricks was not quite as good as the Egyptian ones.

The composition of the Nubian bricks indicates that at least two resources were used: a silty sediment that is identical to the silts into which the C-Group tombs were cut and a micaceous sand. These were mixed in variable proportions. Such mixing is common practice in mud-brick manufacture. While it would be logically advantageous to use silts obtained from excavating the tomb shafts, this may not have provided enough material. Numerous pits into the silts visible across the site bear witness to past quarrying. Whether the mining pits adjacent to most tombs were contemporaneous with them is unclear; however, there is no doubt that the local silts were being used and may have had a special ritual or religious significance.

The Egyptian bricks from the tomb chapels also fall into two groups. The first are a darker brown than the Nubian bricks and of better quality. Their loamy texture is similar to the siltier bricks of the C-Group, but with well-sorted fine sands and much more of the typical Egyptian tempers, i.e., chaff, charcoal and potsherds, as well as workshop waste, including chips of flint and copper slag.

The bricks of the second group are a light yellowish brown and have a high clay content, very well-sorted sands, and employed the traditional Egyptian tempers in lesser quantities, possibly because the high clay content made them unnecessary. These are very good quality bricks. High clay content can be seen as a sign of prestige, as clayey pastes make stronger and longer lasting bricks but at a cost. Clay-rich pastes are harder to work than those



with little clay (such as the C-Group's sandy bricks) and proper tempering requires a certain amount of know-how.

The compositional differences between the Nubian and Egyptian bricks may be tied to variable access to resources, here understood as both raw materials and expertise. The composition of the C-Group bricks, especially the sandy ones, suggests that other, better materials were not available to those manufacturing the bricks. Expertise might have been lacking; alternatively, the desire to make longer lasting bricks may not have been the important issue. Intriguingly, the siltier Nubian bricks tend to be found in the earlier tombs (11th–early 12th Dynasty), and the

sandy bricks in later tombs. Although such a distribution could be due to a sampling bias, it may point to a trend whereby the first mud-bricks produced for the C-Group were more 'Egyptian' (though not quite as good), while later the sandier bricks were produced specifically for the tomb without reference to Egyptian methods. The differences may then be connected to changing cultural preferences and identities within the C-Group community over their tenure at the site. This is just the beginning of the study, but already we have achieved a greater understanding of Nubian burial and building practices by reading the messages in the mud. ■



## Nubian Pots at HK27C: A Case Study

—Marie-Kristin Schröder, Leipzig University, Germany

In 2014, the Nubian pottery from the C-Group cemetery HK27C was the focus of an intensive six weeks of scrutiny. Many days were spent staring at a sea of seemingly identical black-topped sherds, but eventually their individual characteristics emerged, allowing us to join them up into 93 vessels (66 black-topped bowls, 18 with incised decoration and 9 other). Of these, 69 Nubian pots (or fragments thereof) could be assigned definitively to 35 (out of a total of 64) tombs around whose superstructure they had originally been deposited. The majority of the others could be placed in the general vicinity of several tombs, but exact attributions could not be made. In addition, the fabrics of the pottery assemblage were analyzed and eight different ware types were distinguished.

It is probable that most if not all tombs had Nubian vessels offered at them, but some had more than others. Tomb 40, situated near the centre of the cemetery, can be considered one of the richest in terms of Nubian pottery, with



Photo: J. Rossiter

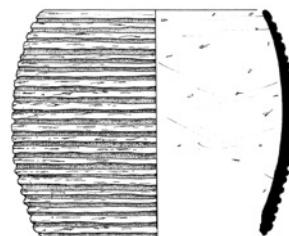
A selection of the Nubian pottery from Tomb 40.

seven certainly and another five possibly belonging to it. Its date within the late 11th to early 12th Dynasty (reigns of Mentuhotep II to Senusret II) is defined by the ten Egyptian pots also placed by the tomb. Badly plundered, like all of the tombs, nothing other than the notable concentration of Nubian pottery makes Tomb 40 stand out. It contained the usual faience beads, along with two clam shells probably used to hold cosmetics. A few braided locks of the owner's hair were also recovered as well as enough bones for the physical anthropologists to tell us he was an adult male. The tomb pit was the usual rectangle surrounded by a circular tumulus made of mud-bricks, many of which had toppled to the east covering and preserving the position of the offered pots. Four Nubian vessels were found together with some Egyptian bowls on the northeast side, adjacent to the head end of the burial, while three or four more were found in the northwest.

Among the twelve C-Group vessels of Tomb 40 (many now mended almost to completion), the most frequent type was the black-topped hemispherical bowl. This is not surprising since this



Mending the Nubian pots.



Drawing of the cooking pot.





is the most prevalent Nubian pot type across the cemetery. Tomb 40 was supplied with five small, three medium-sized and two large examples. In addition, part of a black incised cup was found by the head end of the tomb, while fragments of a so-called cooking pot were found in the general vicinity. These few fragments are special, because cooking vessels are usually only known from settlements. The vessel can be reconstructed with a conical body and a 'corrugated' surface of deeply incised parallel lines.

The Nubian ceramics in general correspond to the typical C-Group assemblage found in the Nubian homeland. However, one bowl is different because this black-topped bowl has a distinctive Egyptian feature: a spout. Spouted vessels are rare in Nubia, but were common in Middle Kingdom Egypt. This mixing of traditions underlines the negotiations these people had to make between the two cultures, a relationship we intend to explore further as we prepare the final publication.

Another special feature of the Tomb 40 pottery is the ritually disabling of eight out of twelve black-topped vessels with a punch-like impact from the outside. This practice is



Black-topped bowl 'killed', front and back

also seen on Nubian bowls around other tombs of HK27C, but as Tomb 40 has so many bowls, it occurs rather more often. It seems that the vessels were deposited upside-down and were then hit mainly on their bases. The fracture marks are distinctive and after a while easy to recognize. On the outside of the 'killed' vessels, only a small hole is visible, while on the interior the breakage is more beveled. The bowls thus disabled were no longer functional. Why one would want to disable these offering vessels remains a mystery, but it must be connected with a ritual of some sort.

Most of the tombs with firmly attributed Nubian pottery at HK27C had only one or two, sometimes up to three, vessels offered at them. Twelve Nubian vessels around Tomb 40 are therefore a lot for one tomb. Should the tomb

owner then be seen as one of the richest men in the cemetery? For sure, it isn't that simple. The severe plundering of the cemetery makes it hard to tell what denoted material wealth, but if we can view the pots as a measure of effort, respect and love, there is no doubt the owner of Tomb 40 was a wealthy man indeed.



## A Tattooed Trio at HK27C

—Anna Pieri and Daniel Antoine, British Museum

As the physical anthropology team began the final check of the skeletal remains in preparation for the final publication of the Nubian C-Group cemetery at HK27C, we also took the opportunity to re-examine all of the preserved skin with our new infra-red camera in search of tattoos. While the tattoos on the lady in Tomb 9 have been known since her discovery in 2003, it was only in 2012 that infra-red photography revealed the tattoos on her neighbour in Tomb 10 (see *Nekhen News* 25:26). Substances commonly used in tattooing, such as carbon, show up much better in the infra-red spectrum, so could we now find more? The answer was yes: examination of the naturally mummified tissue of the woman buried in Tomb 36 revealed several previously undetected tattoos on her upper torso and pelvic region. We now have a tattooed trio!

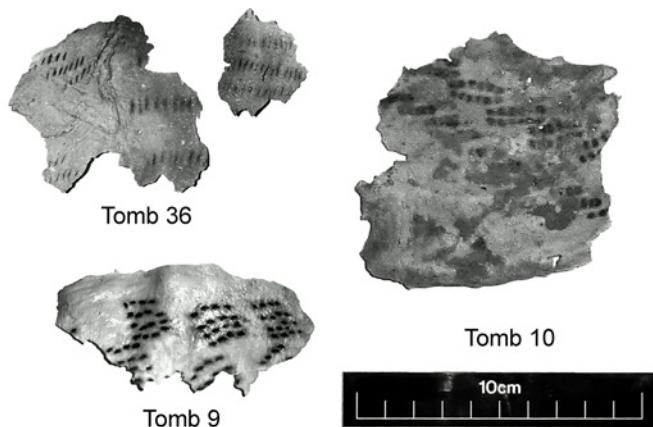
The designs on these three individuals are all slightly different. While dots arranged in zigzags or lozenge patterns were favoured in Tomb 9, the dots were larger and closer

together in Tomb 10. By contrast, short thin lines, almost like slashes, were found running in wavy lines across the pelvis in Tomb 36. The areas covered with tattoos were the hands, arms, rib cage and pelvis, while a few dots on the poorly preserved cheek on the skull from Tomb 36 suggest the face was also treated. No tattoos were found on the back, despite ample preservation.

Interestingly, tattoos are not the only thing these three ladies have in common. Analysis of their skeletons revealed a surprising number of shared traits between them. All were ladies of a certain age, ranging from the latter part of the 35-50 age span to over 50 years, and at least two of them, if not all three, had signs of some serious dental disease.

The woman from Tomb 9 suffered from extensive ante-mortem tooth loss and had lost all of her upper teeth long before her death, possibly due to wear and abscesses. Her lower teeth, however, were fully preserved but show extensive wear.





Tattoos of the trio.

The lady in Tomb 36 suffered similar tooth loss, but mainly concentrated in her lower jaw. The teeth that are preserved were in a sorry state, with 18 of them showing substantial carious lesions (cavities). In some cases the crown was completely destroyed and the caries involved the root, exposing the pulp chamber in the centre of the tooth to bacteria which led to some large and probably quite painful abscesses. Further examination of this individual revealed healed fractures of the arm, fingers and head, suggesting she had a rather 'active' lifestyle.

Because the skulls from both Tomb 9 and Tomb 36 were so well preserved we could not only examine their dental health, but also get an idea of their dress sense. The impressions on the preserved ears show that both wore hats or scarves of fine cut leather, the actual remnants of which were retrieved from Tomb 9. Whether this specific item of apparel was related to their age or their aching teeth remains unknown.

Unfortunately the skull of the individual from Tomb 10, the youngest of the trio, was not recovered, so we can't say more about this part of her anatomy. However, in addition to her tattoos, another connection to her neighbour in Tomb 9 is the presence of a sixth lumbar vertebra. This extra bone at the base of the spine is a non-metric variation present in about 4% of the population. Such traits tends to run in families, so it is quite

possible that these two tattooed ladies, buried in similar tombs, side by side, were closely related. The lady in Tomb 36, buried a short distance to the north, had the usual number of lumbar vertebrae: five.

Tattoos, as permanent body modifications, were used by different societies in many ways. For example, they may mark different roles or status within a society, convey information about tribal or ethnic affiliation, or enhance beauty and supernatural protection. Tattoos can also be applied for medical reasons, such as to alleviate pain in muscles or joints. What tattoos meant at HK27C will take some time to figure out, but from the clues left by these three women we have some important leads. Despite the substantial skin preservation noted on several bodies, tattoos were observed only on these individuals; thus it seems tattoos were exclusively applied to women, and only during the later phase of the cemetery.

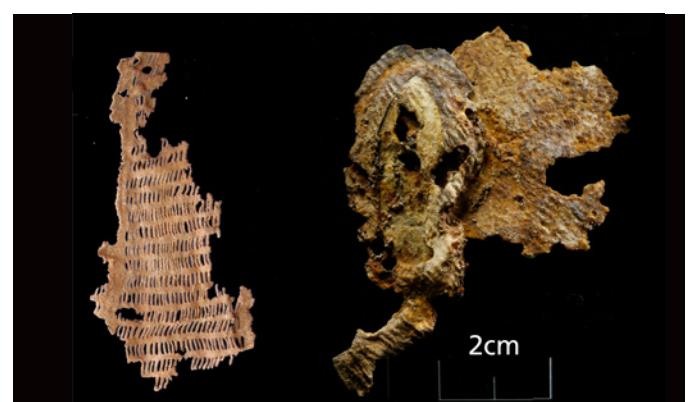
The tattoos on the arms and hands are located on body parts that would have been easily visible, thus at least some of them were meant to be seen by all. Moreover, the complexity of the designs suggests they had special meaning and may have marked these ladies as different. This hypothesis finds support in the skeletal remains. Heavy tooth wear and dental pathologies were common at HK27C, but the examples from Tombs 9 and 36 are outstanding. The reasons (other than age) that their dental health was so poor might be a special diet different from the others, or a different method of preparing it. Did they have a special status or role in this small C-Group community or did they do different things or come from a different place or family? We still can't be sure what made them special then, but they are certainly very special to us now.



Close up on the bad teeth from Tomb 36.



Skulls from Tomb 9, with no teeth, and Tomb 36, with bad teeth.



Leather cap fragment from Tomb 9 and impressions on the ear from Tomb 36. All photos: J. Rossiter.



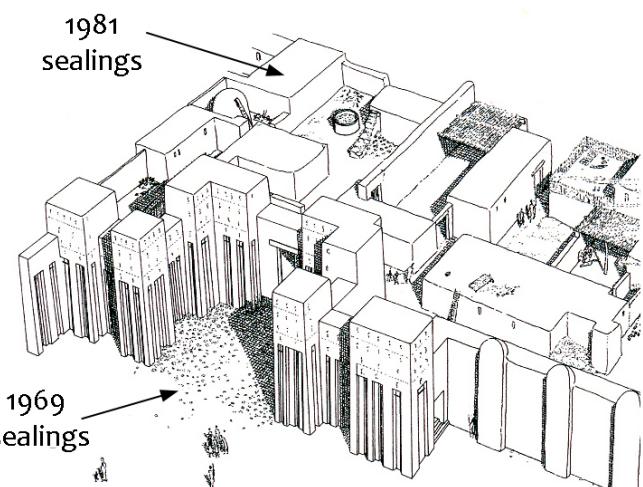
# Sealings from the Palace at Hierakonpolis

—Richard Bussmann, University College London

The Kom, or town mound, in the flood plain at Nekhen/Hierakonpolis is justly famous for its temple, where the Narmer Palette and Main Deposit were found, but it also contains the only example of niched brick architecture known in a non-mortuary context. This is the so-called niched façade palace. It was discovered in 1969 and investigated further in 1981 and 1988, yet it remains enigmatic. At present, study of the archives and excavated finds remains the primary source for gaining more information about it. Among the items discovered there by Walter Fairservis and Michael Hoffman are about a dozen Early Dynastic seal impressions. Today, most are kept in the antiquities magazine at Elkab and during the 2014 season I had the opportunity to examine them. Although fragmented, the sealings offer insight into the material context of administration and what a ‘palace’ might have been in early Egypt.

In 1981, a group of seven sealings was found in one of the palace rooms. One seal inscription shows the serekh and name of Qa'a, the last king of the First Dynasty, juxtaposed with the title of a royal official, probably to be read *imi-khenet* or ‘chamberlain’. The royal name might suggest that the palace was in use during the reign of Qa'a; however, dating with the help of seal inscriptions is complex. The cylinder seal may have continued to be used after Qa-a's reign, or the clay sealing opened only later; once broken, the fragments could have been mixed and discarded with even later material. Given these caveats and the limited contextual evidence, it is probably safer to date the palace and its many phases to the Early Dynastic through early Old Kingdom.

The other seal inscriptions do not refer to the king and the seals probably belonged to local officials. One of them is an excellent example of a so-called peg sealing. It shows the impression of a peg, a cord wound around it, and the wall holding it. The cord connected the peg with a door. The sealing was applied onto the cord and prevented the door



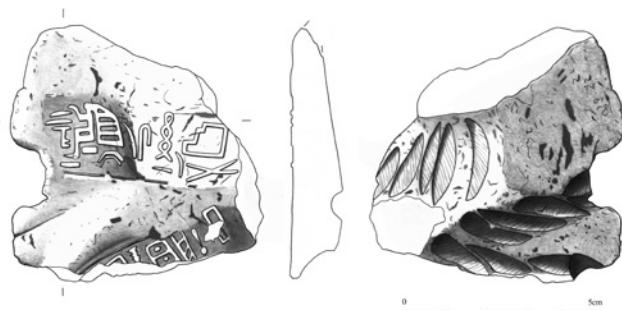
Palace: Sealing find spots on an artist's reconstruction of the niched-façade palace at Hierakonpolis (after Kemp, *Ancient Egypt: Anatomy of a Civilization*, 2006).

from being opened unnoticed. The sealing pattern includes an individual seated in front of a pile of offerings. It was argued in the past that cylinder seals with this motif were used only as amulets in burial contexts, with the offering table scene symbolically guaranteeing funerary provisions. The sealing presented here belongs to a growing body of evidence that these seals were employed in actual administrative practices.

A third impression shows a vertical standard on the left, followed by a ram. The standard represents the goddess Neith; the ram is the hieroglyph of the god Khnum. Both are probably parts of personal names, as compound names with Neith and Khnum were especially popular during the Early Dynastic period. The reverse side is uneven and has a bulb in the centre, suggesting that the sealing clay was squeezed directly into the mouth of a vessel before the cylinder seal was rolled over it.



Sealing of King Qa'a.



Peg sealing with offering table scene.



Sealings from the palace.

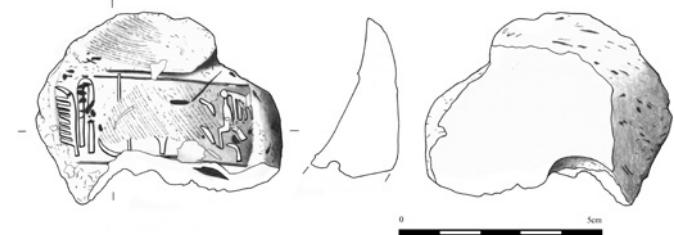
Another group of four sealings was found in 1969 near the niched gateway of the palace. One of them, previously unpublished, is again a peg sealing whose impression includes an offering table scene. The seated individual is rendered differently from the sealing found in 1981, so a different seal and probably also a different official were involved. Given the find location, it is tempting to suggest that the sealing once locked the door to the palace, but we cannot be sure.

A different type of locking system is evident from a sealing excavated in 1978 near the north-eastern gate of the temple enclosure wall. The impressions on the back reflect a horizontal door bolt (turned at a right angle on the illustration), a wooden door wing, and a cord running over the bolt. The locking mechanism can be reconstructed from doors and bolts excavated from various settlements and cemeteries. The bolt was held in place by a cramp on the door and slid into a cavity in the wall when the door was opened. In order to lock the door, the bolt was pulled out of the wall with the help of a cord running through a hole in the bolt's outer end. The sealing was then pressed onto the bolt, the cord and the door wing. The sealing pattern is difficult to decipher because the surface is partially eroded and the seal was rolled three times over the clay, producing overlapping impressions. Contrary to what one might assume, it may well be that legibility was not needed, nor was the seal impression intended to identify the responsible official. Rather, eyewitnesses at the sealing procedure could report who sealed the door.

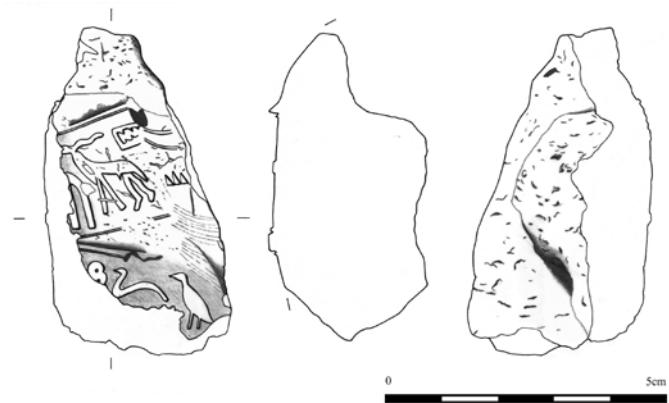
The low number of sealings discovered in the palace and by the British expedition in 1897–99 (see *Nekhen News* 25) stands in contrast to recently excavated sites such as the fort on Elephantine island, the residence of the provincial



Peg sealing from the northeast gate of the temple enclosure.



Sealing with offering table scene from the niched gateway.



Jar sealing with Neith and Khnum.

governors at Balat in Dakhla, the settlement of the pyramid workmen at Giza, and the pyramid town of Sesostris III at Abydos South, where upwards of 10,000 sealings have been found. Whether the palace of Hierakonpolis would yield similar numbers if re-excavated, is difficult to say. Judging from current evidence, this palace does not seem to have been much of a centre for the distribution of goods, but maybe it had different and changing functions over time. Of course, we won't really know until we have a chance to explore this tantalizing palace once more. ☺



# Walking in Annie's Footsteps

—Lee Young, Bath, UK

'Life is not about following in someone's footsteps but making your own.' This is a maxim I have long tried to follow but this year I broke that rule and deliberately set out to trace footsteps not my own. Let me explain...

For many years I have been researching archaeological artists and have developed a particular interest in one, Annie Pirie, as you may remember from last year's *Nekhen News*. After initially going out to Egypt as a copyist with Flinders Petrie in 1895, Annie went on to marry James Edward Quibell (of Hierakonpolis Main Deposit fame) in 1900 and spend the rest of her life working in Egypt with her husband.

Spending so much time concentrating on Annie and her contemporaries I began to ponder how difficult it must have been for women to live and work in those 'Glory Years of Egyptian Exploration'. As I got to know Annie through her writings, her work and the writings of others, I wanted to find out more about her life in Egypt first-hand and understand how she managed day to day tasks in living conditions that were certainly different from home.

So, imagine my excitement when I was given the chance to visit Elkab and Hierakonpolis, and see where she lived and worked in 1896–1898.

In late February, armed with Annie's writings and copies of the photos from Quibell's 1896 Elkab album (recently identified in the Griffith Institute Oxford — see



Annie (on left) at Elkab in 1896 (Petrie photograph 5.1.26, © Griffith Institute, University of Oxford).

*Nekhen News* 25), I went off to match up the sites with the photos and literally walk in her footsteps.

The visit to Elkab began with an early morning *felucca* ride across the river together with the British epigraphic team working at the site.

Once on shore, we walked past the massive mud-brick town walls and then up to the rock tombs. Birds sang and flitted, the air was cool, the sun shone: it was magical.

At Elkab we were able to pinpoint the tombs used as living quarters by Quibell's team (two for the diggers, one for dining and just one more for 40 workmen!). Some of these tombs have now been cemented shut, so that deep insights were precluded, but this left more time for the tomb of Pahery where Annie did a lot of drawing. I couldn't help but smile as I studied the banquet scene and remembered Annie's description: "one of the ladies has been overcome by the liquor she has absorbed and some of the others make most suggestive remarks about the thirst that consumes them."

Everywhere I went I was imagining Annie doing the same before me, wearing one of her superb hats, marvellous creations usually adorned with flowers. Even without an elaborate Victorian hat of my own, it was exhilarating to step back in time and we had great fun recreating the original photos.

I then went on to Hierakonpolis which is, of course, amazing as well as very large. Nevertheless, I managed to



Walking in Annie's footsteps in 2014.



New Kingdom Hill at Hierakonpolis, where Annie lived in 1898.

walk virtually the entire site in the time available, including a visit to the Kom now in the modern village, the site of Quibell's excavations of the temple and the Main Deposit. The many objects found there were to keep Annie quite busy. In the publications, drawings with the initials AAP are examples of her work.

From the Kom to the New Kingdom rock tombs, where Annie lived, is about a 2km hike. The daily walk must have kept them fit, and the climb up the hill is definitely an aerobic exercise. Quibell's team used the tomb of Hormose as their main living area. Now encased in a metal cage for protection it is hard to get a feel for what Annie must have experienced, but further along the terrace other tombs also used during their stay are still accessible. Most were used as bedrooms, but the one furthest along the terrace was evidently the designated latrine tomb as the expedition discovered (with dismay) during their excavations in 1998. This might seem to be walking too closely in her steps, but the view



Detail of the banquet scene in the Tomb of Pahery, Elkab.

Annie must have had is a marvel. If there had been a best loo view competition in the 19th century, this one would have won hands down. In fact the view from the whole of the ridge is superb. In modern parlance one could say: "a des. res. with an outstanding view, must be seen to fully appreciate (in need of some updating)."

Annie clearly enjoyed tomb living, extolling its virtues in her book *A Wayfarer in Egypt* (1925):

*'Of all the different dwelling places, give me, for choice, if not for too long a time, a good tomb. It is sometimes objected to, by those unacquainted with the merits of a tomb as a place to live in, on the ground that, as one is sure to spend a great deal of time there eventually, it is a mistake to begin too soon.'*

The entire trip was thrilling for me. Walking with my friend Annie, I now have a better understanding of what these women experienced in the 19th century, and my admiration for them grows ever stronger. ↗

## The Loo and the View



Lee in the loo.



The view from the loo!



# THE HIERAKONPOLIS HOME PAGE

Things one rarely sees and things one hopes to see only rarely!

## Green Wadi

Despite our best efforts, water continued to flow down the wadi over the summer, turning it into a veritable garden—even some tamarisk trees took root! While this proves what a significant aquifer the wadi must have been in ancient times, and this ribbon of green gives us some idea of how it may have looked when the burials at HK6 were created, it has done nothing to promote the preservation of these remains now. Thanks to the Edfu antiquities office, a more substantial dam was put in place this season, which we hope will stem the tide for the future. 🌿



## Rainy Day Blues

There are many sounds in the night at Hoffman House, but one I never thought I would hear was the splash of water leaking through the roof. Yet for three days in March bursts of fairly substantial rain hindered our sleep and our work—on one occasion we

had to drop tools and run home amid the rain drops. Thankfully, other than a few soggy centimeters of strata and some wet floors, no significant damage was done. For the Fort (which has seen it all), it was like water off of a duck's back. Nevertheless, even with a glorious rainbow to follow, it's an experience we would rather not repeat. 🌈



Photo: A. Pieri



## Summer Residents

The heat of April usually chases us away before the creepy crawlers come out to play, but for various reasons—the discovery of Tomb 72 and the Origins 5 conference on Predynastic studies in Cairo—we stayed on-site later than usual this year. As a result, we had the chance to meet some of the house's summer residents, including a large (and frankly quite frightening) scorpion. Introductions were arranged by our guard Mohammed, who met her at the gate. He suggested we might all do lunch together before our departure, but as you can understand, we had to decline—just too busy for that one! 🐈

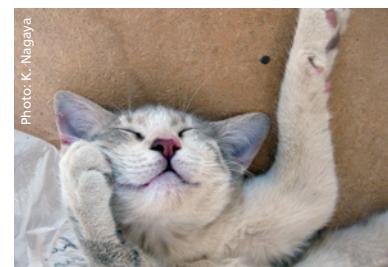


## Dusty

As the rarity we *would* have liked to see more of, Dusty is the odd one out on this page. Although she was with us this season, she preferred to spent her time in solitude atop the boxes in the store room where she could catch a few winks, if not a few mice. Whether she will deign to join us again in the coming season remains to be seen, but in the meantime she continues to be happy and healthy at Chicago House, Luxor. As always, we thank Tina Di Cerbo and the folks at Chicago House for making her feel so (perhaps too) welcome there. 🐱



Photo: K. Nagaya



# The Friends of Nekhen

Nekhen is the ancient Egyptian name for the site of Hierakonpolis, the city of the hawk, and one of Egypt's first capitals. The Friends of Nekhen is a group of concerned individuals, scholars and organizations that is helping the Hierakonpolis Expedition to explore, conserve, protect and publish all aspects of this remarkable site. The largest Predynastic site still extant and accessible anywhere in Egypt, Hierakonpolis continually provides exciting new glimpses into this formative — and surprisingly sophisticated — age, and more.

In return for your contribution you will receive the annual newsletter, the *Nekhen News*, produced exclusively for the Friends. Lavishly illustrated, the *Nekhen News* keeps you up-to-date on all of the Expedition's latest discoveries.

Help the Hierakonpolis Expedition to continue its important work. Your contribution (tax-deductible in the USA) will support vital research that might not otherwise be possible. Share in the excitement and the sense of commitment by making a genuine contribution to the search for understanding. Join the Friends of Nekhen. 

## Ways to Contribute

I would like to help the Hierakonpolis Expedition to explore and conserve the site of Hierakonpolis, ancient Nekhen. In return for my contribution (tax-deductible in the USA), I will receive the annual newsletter, the *Nekhen News*.

The contribution category I prefer is:

- Regular (\$25/£17/€25)
- Sponsor (\$250/£150/€250)
- Patron (\$500/£250/€500)
- Sustaining (\$1000/£500/€1000)
- This is a renewal for the 2014–2015 season.  
(If you have already renewed, thank you!)

Make your US \$ check / GBP £ cheques payable to  
(we are unable to accept cheques in Euros):

United Kingdom/Europe—  
The Friends of Nekhen Trust  
c/o Hierakonpolis Expedition  
Dept. of Ancient Egypt & Sudan  
The British Museum  
London WC1B 3DG  
UK

Prefer to pay by Paypal or bank transfer? Visit our web site at [www.hierakonpolis-online.org](http://www.hierakonpolis-online.org), then select Become a Friend on the main menu.

USA—  
American Friends of the  
British Museum, Inc.  
275 Madison Ave  
6th floor  
New York, NY 10016  
USA

Please mark checks with  
'Nekhen Excavations'.  
For online payment see:  
[www.afbm.org](http://www.afbm.org)



The bone room.

## Termite Trouble

Over the years we have managed to put a lot of skeletons in our closet. The on-site storeroom now holds over 800 of them, both human and faunal (including two elephants!). For keeping our skeletons, cardboard boxes, custom-made in 2001 have served us well, but they have one drawback—termites find them delicious. Recently, changes in the climate and water table have made these voracious creatures a real problem for us, as they devour our boxes at speed. In order to preserve the integrity of our important and unique collections we need to re-box them in plastic—and soon. Now available in Egypt, plastic boxes cost about \$15/£10 apiece. Not bad, but we are going to need over 600 of them. So, we could really use your help. Your extra donation would be greatly appreciated and will help keep these skeletons safely in a closet, where they belong. 

Special contribution for  
**Skeleton Storage**

\$/£/€ \_\_\_\_\_



Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Province: \_\_\_\_\_ Postcode: \_\_\_\_\_

Country: \_\_\_\_\_



Prefer to receive the *Nekhen News* as a PDF file?  
Let us know at: [friendsofnekhen@yahoo.com](mailto:friendsofnekhen@yahoo.com)

## Fabulous Finds in 2014



Smiles all round as the statue appears (page 7).



Photo: M. Baba

More big wall at HK11C (page 20).



Treasures from Tomb 72 (page 4).



The ivory statue as found (page 4).



The C-Group comes together (page 27).



The next generation.



C-Group secrets: a complete arm-ring at last! (page 23).