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The Fort Fixers

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	Membership





Hierakonpolis 2005/2006



Our new map. How did we do it? Thanks to you — see page 18.

We need you — to renew!

Thank you for your continuing support of our work at Hierakonpolis. Your membership in the Friends of Nekhen makes so much of what we do possible, and now there are several places to read all about it!

Technical difficulties kept us from bringing you updates from the field in 2006, but see www.archaeology.org for fully illustrated reports on the Fort and our adventures on Old Kingdom hill. Also check out all six issues of Ancient *Egypt* magazine (vol. 6) for full color coverage of our work past and present. In addition, Nekhen News 15 (2003) is now on-line at www.hierakonpolis.org. Hard copies of back issues 10, 12, 14-17 are available upon request e-mail us at friendsofnekhen@yahoo.com.







It's the Pits!

— by Renée Friedman

The 2005–2006 season of the Hierakonpolis Expedition will long be remembered, if for no other reason, for the number (and size) of the holes we managed to get ourselves into.

Starting off in November, there was the hole that mysteriously opened up near the tomb of Horemkhawef, leading into an unsuspected warren of subterranean burial chambers of the late Second Intermediate period (see p. 21). This was soon followed by Thomas Hikade, leading his first season of exploration at HK29B, near the predynastic temple, who discovered an oval arrangement of large posts that

may be part of the enclosure wall of the sacred precinct, or potentially much more (p. 4). Later, at HK6, both holes and posts were found in profusion, indicating that the already extraordinary Tomb 23 was surrounded by a vast complex of remarkably elaborate above-ground structures (pp. 7–13).

The discoveries at HK29B and HK6 will no doubt rewrite the history of predynastic architecture, but in light of the sheer number of posts and postholes encountered just this season, we may also need to reconsider the ecology of Predynastic Egypt. At Hierakonpolis, we have architecture made not simply of branches and bundled reeds, but of substantial logs that were tall enough to require postholes over 1m deep. Such

In the pits at HK6.

timbers indicate access to full forests of mature trees. In a climate that may still have experienced seasonal rains, flash flooding and a high inundating Nile, wood architecture is a good choice. It is only as the climate desiccated and wood became scarce that mud-brick became a useful, if secondbest, option. The continued imitation of wooden architectural forms, for example at the Step Pyramid complex at Saqqara and later in the screen walls of Ptolemaic temples, shows that wood had a special resonance for the ancient Egyptians. It is exciting to think that at Hierakonpolis we are finding the actual wooden prototypes on which this long-term love affair was based.

In the dry climate of Egypt, mud-brick stands up well, but after 5,000 years, it, too, needs a little help. The more enduring architecture of the Fort was also addressed this season, as substantial repairs successfully got underway, which are making a visible difference to the appearance and apparent demeanor of this august monument (p. 14). In addition, we also investigated more of the predynastic kilns at HK11C

> exploration in our own storerooms. Digging it up is, of course, only one part of the complicated process of understanding the past. This year, detailed analyses of previously recovered materials by a number of specialists have produced major new insights, sometimes found in the tiniest detail (pp. 23-26). Last, but not least, after years of collecting the necessary data and thanks to the Friends of Nekhen, our beautiful new topographic map has been produced (opposite page), giving us a whole new perspective on the past, present and future of Hierakonpolis. For making this another

super season, we are grateful as always to our many Friends of Nekhen, and especially to Tom and Linda Heagy, the LaSalle Bank, Francis Ahearne, Carol McCanless, David and Crennan Ray, Larry and Renee

(p. 19) and undertook some

Stevens and Stewart White. Grants from the National Geographic Society (for HK6), the World Monuments Watch[®], a program of the World Monuments Fund[®] (for the Fort), the Science and Technology Joint Fund of the US-Egypt Partnership Program (botanical research), and The Social Sciences and Humanities Research Council of Canada (HK29B) also made many aspects of the 2005–2006 season possible, all of which contribute to our greater understanding and appreciation of this remarkable site. Thank you all!





Our First Season at Hierakonpolis

— by Thomas Hikade, University of British Columbia, Vancouver, BC, Canada

The first campaign of the University of British Columbia's expedition to Hierakonpolis actually began with a shopping tour in the byways of Edfu — an introduction for team members new to work in Egypt every bit as intriguing as the prospect of the upcoming season! Upon arrival at Beit Hoffman and a brief tour of the site, everyone settled in quickly to their new "home". The next day, work began.

This year we focussed on the sandy tract north of the ceremonial center at HK29A (see *Nekhen News* 15), which we labeled HK29B and HK25. The excavation was conducted in 5x5m squares, and a total of 25 squares were opened in our one-month season. In some units the natural Pleistocene silt deposits were reached after removing only 5–10cm of sand, but in the southern part of HK29B these silts had a rippled surface. Detailed investigation of this feature suggests that the area was flooded several times and then reclaimed. Because the area is rather small, this cannot be seen as evidence for a major abandonment of the settlement, but rather as a temporary situation caused by the rising waters of the Nile or one of its branches. However, it shows that the flood waters at times came very close to the precinct at HK29A, and this may be significant for understanding its cultic function.



Intriguing evidence: rippled silts and post remnants.

From the beginning, almost all the squares contained indications of postholes, and the discoloration of the sand showed the remains of wood. But it wasn't until our workman Salah Mohammed el-Amir pointed us in the direction of a suspicious round depression in the northwestern part of the area that we really got ourselves into a hole — several in fact! Opening up on the slightly elevated area, we discovered 10 large postholes, some with a diameter of 1.10m and a depth of 1.30–1.40m. A few contained remains of wood posts, measuring up to 40–50cm in diameter, but



Salah in a posthole.

unfortunately in a very fragile condition due to termites. Eight of them formed an oval, measuring 6 x 5m, with two posts in the middle.

Both the size of the postholes and the wood remains allow for a reconstruction of wooden poles rising perhaps 6–7m above ground. From this oval group a trench with further postholes running in a southeasterly direction could be followed for a distance of approximately 30m.

When plotted, the architectural remains at HK29B show a striking alignment that is almost parallel with the orientation of the HK29A precinct, suggesting that they might be part of an enclosure wall for a large sacred complex. However, other reconstructions are also possible. Located 30–40m away from the "temple", the HK29B remains may, in fact, be a completely separate entity that can be reconstructed in a number of ways. One option would be to reconstruct the oval as a set of 10 flagpoles, but it is also possible to suggest a circular tent shrine with the inner posts set higher to carry the roof of the



At work at HK29B.







Map of HK29B and the "temple" at HK29A. Inset shows the mysterious oval arrangement of postholes.

tent. An intriguing third variant is to imagine carved wooden statues filling the holes. There are some indications that this idea might not be too far-fetched. It has recently been proposed that the famous colossal stone statues from Coptos, standing almost

3m high, were arranged to surround that early shrine. Although on a much smaller scale, several stone and ivory statuettes from the Naqada I period possess stylized heads of bearded males and lower bodies in the shape of a pole. Putting the two ideas together, we might suggest that the holes at HK29B were dug for carved wooden statues acting as imposing guardians for the sacred site at HK29A, the shrine of Upper Egypt.

The excavations produced only a few small finds, but thousands of sherds and lithics were recovered. The repertoire of forms is mainly consistent with a Naqada IID date (3300–3200 BC), making



Burnt flint knives from HK25.

HK29B broadly contemporary with HK29A; however, there was also earlier (early Naqada II) and later (Naqada IIIBC) material.

Further to the northwest, only a few units were opened in the area called HK25, revealing an unlined fireplace measuring about 2 x 1.5m. Some mud-bricks were found 2m away from the fireplace, but were not aligned in any particular order. In and around the fireplace were ash, charcoal and a large amount of remarkably large pieces of vats, indicating that food processing, most likely involving the brewing of beer, was conducted here. An intriguing sherd decorated with an incised bird was also found (see next article), but most puzzling are the many fragments of rhomboid bifacial knives and so-called fishtail knives, all of which had been burnt. These fine flint knives mainly occur in cemeteries and are very rare

in settlements, so what are they doing at HK25 and why have they been burned?

These are only some of the many questions that have arisen from our first season at Hierakonpolis, and in fall 2006 we hope to find answers for some of them.



Posthole closeup. What did they hold?



An Enigmatic Bird from HK25

— by Gillian Pyke and Rick Colman

The ceramic assemblage from the excavation of HK25 suggests that this area was used for food preparation, probably brewing and baking, on a large scale. One of the surprise finds among the fragments of large rough-ware vats, shale-tempered hole-mouth jars and bowls and other utility wares was a Red polished jar sherd incised with a picture of a bird.



The avian drawing appears complete, showing that it is not a pot-mark, but was incised on the sherd after the pot had broken, making it an ostracon. Other examples of this this type of reuse of sherds are known from Hierakonpolis, especially in the area of the "temple" at HK29A

The bird ostracon from HK25

(see *Nekhen News* 9: 10 and 15:8), and include depictions of cattle, antelope and the emblem of the goddess Bat. From HK25, we now have the drawing of a bird, but which bird?

The bird is drawn with a small head from which hangs a long plume (nape plume). Its beak is curved at the end, the neck long and the body plump with a short, flaring tail. The latter seems to be foreshortened to fit into the available space, as are the legs, which are rendered as simple lines with no feet indicated. There are several lines within the bird's body, but only the curved line descending from the back might be interpreted as indicating a wing. Behind the bird is an inverted V-shape, set at a diagonal pitch. This is clearly an intentional part of the motif, but its meaning, like everything else, is uncertain.

While the bird is shown with several seemingly distinguishing characteristics, it has proved very difficult to match it to a specific species. The curved beak and the shape of the neck are most closely comparable to those of the ibis family. Among them, the long nape plume suggests the hermit ibis (*Geronticus eremita*). This ibis is best known as the hieroglyph representing the sound "akh" (Gardiner's sign list G25, see above) and was used to spell various words, most notably *akh*, the spirit of the



Bird on the Main deposit ivory.

transfigured dead, accounting for a frequency in inscriptions at odds with its current place on the endangered species list. While the dynastic hieroglyph more realistically depicts the neck ruff of feathers, earlier representations tend to be more stylised. An Early Dynastic ivory panel (furniture inlay?) found by Quibell in the Main Deposit at Hierakonpolis shows a procession of humans and animals in several registers. In the middle of the fourth register is a bird that bears an uncanny resemblance to our example. More recently, similar depictions

have been found incised on the small ivory labels from the Abydos tomb Uj (Dynasty 0, c. 3200BC), where this bird, in particular, has become part of a heated discussion about early writing. Controversially, it has been suggested that the hermit ibis on several of the tags, shown in conjunction with mountains, is to be read phonetically as the word for "east" (*iakhet*), in the earliest combination of readable hiero-



lvory tag from Abydos tomb U-j.

glyphs meaning "eastern mountains", as opposed to, for example, "ibis mountain", if it were simply picture writing.

The debate rumbles one, but most scholars agree that these tags were used to identify the origin or destination of the goods or offerings to which they were attached. Might this be the function of the pottery ostracon at Hierakonpolis? Predating the Abydos finds by a few hundred years, if the bird on the sherd is a hermit ibis, it may also be of importance for the beginnings of writing, but unfortunately the identification is not ironclad.

Birds incised on the small bottle found in HK43 Burial 213, the intact grave of a small child, dating to Naqada IIB and, therefore, closely contemporary with HK25, also provide food



Like the HK25 bird, those on the pot have relatively plump bodies and curved beaks. Their small triangular wings identify them as ostriches rather than flamingos despite their problematic curved beaks. More important, however, are the enigmatic symbols placed below and to the right of the larger of the two birds on the HK43 pot. The rectangular sign above the HK25 bird is another point of comparison and may suggest

for thought (see Nekhen News 14:11).

Bird on the pot from HK43 Burial 213.

that our enigmatic bird is to be identified with the ostrich and/or flamingo, birds that are well known in predynastic art.

While the identity of the HK25 bird may remain an enigma and the ostrich versus flamingo debate far from solved, there can be no doubt that these incised pictures conveyed a message; we just have to decipher it!





Bigger Than an Elephant. More Surprises at HK6.

— by Renée Friedman

Last season's excavation of Tomb 23 at HK6, the largest known tomb of the Naqada IIAB period, was as exciting as it was significant. The scale of the tomb chamber (c. 5.40 x 3.10m; over 1.17m deep), its superstructure, "chapel", and enclosure wall, along with the many fine artifacts it contained, suggest that the tomb belonged to a powerful ruler who controlled the vast city of Hierakonpolis and probably a large portion of southern Upper Egypt at an earlier time than ever expected.

Further enhancing this ruler's high profile, exploration of the areas to the north, south and east of the tomb in February-March 2006 place Tomb 23 within, and potentially as the focus of, a mind-blowing complex of above-ground architecture. So large, its full extent was beyond our ability to investigate even after the two months of dedicated field work made possible by a grant from the National Geographic Society.

Our initial goal was to determine the relationship of Tomb 23 to the 10-year-old African elephant buried in Tomb 24 to the south (see *Nekhen News* 15:9–12). Hasty salvage excavations in 2002-2003 had led us to believe that the elephant's grave was surrounded by a superstructure composed of four big posts, only three of which had been excavated. Weren't we in for a surprise! Clearing back on all sides of Tomb 24, our one missing post turned into 10 large conical postholes, dug down over 1.3m to the bedrock. In addition, an actual post, a 45cm wide log of acacia complete with its bark, was found just below the surface!

Plotting their location, it soon emerged that these posts part of a structure 17m long — were arranged in 6 rows with at least three posts per row (the southern limits are still unknown). It also soon became clear that the two postholes



Tomb 24 and the surprising columned structure around it.



Amid the postholes, a remarkably well-preserved post!

found in 2003 strangely *within* the floor of Tomb 24, one partly covered with the articulating ribs and vertebrae of the elephant, were part of this arrangement. This can only mean that posts from this pre-existing multi-columned building were removed to accommodate the elephant's burial at a later date, though how much later, we don't know.

Although the elephant may be a later addition, he was not an afterthought, judging from the ritual deposits found at the two preserved corners of the structure. While tracing the lines of smaller posts that formed the north, east and west walls of the complex, in the northwest corner we came upon a mass of melted white gypsum plaster that once coated the walls (see A on map). The traces of green paint observed on the plas-

ter's surface were noteworthy enough, but even more fascinating was what lay below it. Here, in shallow depressions in the underlying soil, was a deposit of over 20 small trapezoidal arrowheads, two beautiful tanged arrowheads, a large piece of imported obsidian, and a full-sized imitation fishtail knife with incised lines and stripes of red paint indicating the bindings of a handle. Made of soft green steatite (soapstone), the cutting edge would not have been effective, yet its edges had been given the fine



Fake fishtail knife with fine serrations along the cutting edge.





serration of a flint original. However, the star find was an animal expertly chipped in flint (a dog or running gazelle), lending further support for the idea that these flint animal figurines were made specifically for use in votive offerings.

Even more exciting (at least for me), potsherds from this deposit could be refitted to give us our first complete exam-



The flint gazelle.

ple of the red slipped, unpolished ritual vessels known also from the temple at HK29A. After 20 years of trying to accomplish this feat, we were so

pleased with our lovely pot that we toured it around the house and posed it for pictures at various beauty spots (see back cover)!

Intriguingly, another vessel of this type had been partly reconstructed by Barbara Adams from pieces retrieved near the northeast corner (B) of the same compound in 2000. The parallels don't end there, as her excavations also produced a real flint fishtail knife and a large number of trapezoidal arrowheads (45 e x a m p l e s). Resuming the investigation of the northeast, we recovered 15 more trapezoids, two complete hollow-base

arrowheads with



A portrait of an elephant.

long elegant wings, and, most remarkably, part of a flint elephant! The head, pendant lower lip and trunk with a distinctive indent at the tip were carefully knapped in gray flint. Thus, it seems likely that the rituals of which these artifact concentrations are remnants were undertaken with the Tomb 24 elephant in mind. The symmetrical distribution of these rare artifacts is striking and suggests that similar rituals were performed near each of the north corners. It will be interesting to see what the southern corners have in store!

The relationship of Tomb 23 to the Tomb 24 complex is still unclear. Separating the two compounds is a corridor roughly 4m wide that appears to have been kept clean. At its west end the corridor is closed off by a row of posts designed to miss the corners. On the east side another cross wall is sim-



ilarly configured to avoid the corners of both the Tomb 24 complex and the enigmatic Structure D9 (see next article). While the full extent and nature of the Tomb 24 structure remains to be investigated, we can only assume that the elephant is associated with Tomb 23, although a larger and even more elaborate tomb may still be waiting to be found to the south. Watch this space!

The Tomb 24 complex was excavated with the assistance of Rick Colman, Stephanie McMullen, Bernie Dickman and Xavier Droux.







When is a Tomb Not a Tomb?

— by Liam McNamara, St John's College, Oxford and Xavier Droux, Bulle, Switzerland

The first day of work in the elite cemetery at HK6 began with a good omen. While re-establishing (and re-numbering) the site grid, several fragments from at least two new ceramic masks were observed lying on the surface at the eastern edge of the wadi terrace (square B7). The upper left portion of one mask could be reassembled: it features an arching eyebrow above a cut-out eye, a well-modeled ear with a deep circular impression for the ear hole, and a series of piercings along the scalp line, presumably for the insertion of hair. Continuing a theme developed last season, the ear of another mask and two more fragmentary, but possibly unrelated, ears were also recovered. Was it going to be another good y(ear)?



New masks and more ears!

Presuming that the masks had been thrown out from a tomb located nearby, we plotted their positions and began excavating in earnest. The surface in this area looked relatively intact, so the chances of uncovering a largely undisturbed tomb seemed high. Of course — at Hierakonpolis — things are never quite what they seem!

As well as recovering a few more mask fragments, our work revealed a line of closely spaced posts, c. 6–12 cm in



Fragments of painted plaster.

diameter, running north-south. Around some of the posts was a thick packing of coarse white plaster, in places still covered with an exterior coat of finer quality, some of which was painted! Although



The plastered wall. Arrow points to painted plaster.

small and poorly preserved, the designs include rows of dots, chevrons, alternating squares, and a motif reminiscent of the flowering stem of the so-called "Naqada plant". Comparisons with the famous Painted Tomb seemed inevitable, and we struggled to contain our excitement at the prospect of finding a new tomb to rival Tomb 23, located only 25m to the west.

Many days of digging in the hard desert soil on the west side of the wall, however, revealed nothing but natural deposits, pebbles and large rocks. High winds prevented us from exploring our fragile painted wall further at this time, and with our hopes of finding a tomb dashed, we abandoned the area and moved to squares D9–D10 on the east side of Tomb 23. Perhaps here, adjacent to the "real thing", we would have more luck, or failing that, at least find more fragments of the limestone statue (see *Nekhen News* 17: 5–7). After several more days of digging through sterile soil, we had a couple of ashy pits and only four more pieces of the statue to show for our efforts; sadly it seems that the core of the statue, to which the now over 560 fragments once fitted, must have been hauled away long ago.

Our enthusiasm was seriously beginning to waver, when suddenly we came across a large area of fire-discolored earth, 4m from, but parallel with the enclosure wall of Tomb 23. Further excavation revealed a line of closely-spaced posts, and eventually a rectangular structure about 9.5m long N–S and 5.75m wide. In total, more than 150 posts were observed, those on the west and east having been severely burned at some point in antiquity.

Surely this time we had found the enclosure wall for a tomb; yet, further excavation revealed a building whose focus was entirely above ground. There was no tomb or substructure within it! Instead, the walls surrounded two rows of rather shallow post-holes (c. 50cm in diameter) set approximately 2m apart running down the centre of the structure. In one of the eight pits, a wooden column (c. 20cm in diameter) was partly preserved.







Overview of Structure D9.

Although digging and plotting posts and holes can get a little tedious (especially for Hamdy, who we renamed Postman Pat), on occasion Structure D9 did give up some of its secrets. Near the northeast corner, a shallow pit (Deposit D — see map) contained two rare hippopotamus tusk figurines, both with a perforated loop at the tip. As usual, these figures occur in pairs, one of them solid, the other hollow for part of its length, the significance of which remains speculative. The same deposit also contained a worked ivory plaque, a selection of small round hematite pebbles, and several shells from the Red Sea coast including cowrie, Cerithidae/horn shell and cone shell. Another deposit (C), found near the southeast corner, contained 36 Nerita shells undisturbed in two clusters. Notably, this apparently votive offering was found beneath the lenses of ash produced when the wall burned, demonstrating that this deposit was made before the destruction of the building.

Structure D9 could be distinguished from the other areas under excavation not only by its lack of substructure and its concentrations of sea shells and ivories, but also by the large



Uncovering the sea shell deposit at Structure D9.

amount of ostrich eggshell found within it, two fragments of which bear incised decoration. Also conspicuous by their absence were the unpolished red ritual bottles and flint arrowheads of the other compounds. In fact, a long rectangular flint blade, c. 12×3.2 cm, was the only tool found in association with the structure. This differential distribution of artifacts suggests that each of the buildings surrounding Tomb 23 served a separate purpose, but whether each had a different focus remains to be determined.

Structure D9 remains a mystery. Is it part of a much larger funerary complex associated with Tomb 23? Could it be an offering chapel, or a covered storage area for commodities used during the burial rites? This type of architecture is unparalleled for the predynastic period, and is another first for Hierakonpolis.

While on the topic of firsts, towards the end of the season, excavations along the line of posts in squares B7–B8 were resumed, and the wall was traced for a total of 21m north–south; it continues under the sand for an unknown distance in both directions. It is tempting to suggest that this fence is the enclosure wall of the entire cemetery, and that the designs painted on it served as the highly visible prototype for the images which appear later in the Painted Tomb. This may also be the way the recurrent motifs on pottery and other small objects became known in the Naqada II period. But these conjectures can only be proven by further excavation, which we are now anxious to undertake in January 2007.

Locality HK6 undoubtedly has many more secrets to disclose — secrets that promise to challenge our understanding of elite burial practices in predynastic Egypt. So, when is a tomb not a tomb? Answer: when it's something potentially far more exciting!



Coming Up in 2006/07

Follow along as we try our hand at reproducing authentic Nekhen Beer (for scientific purposes only, of course!)

Updates at: www.archaeology.org (technology willing).



Beer vat being prepared.





New Tombs and New Thoughts at HK6

— by Renée Friedman

The area to the south and east of Tomb 23 may continue to baffle, but at least on the north side we knew what we had: tombs. Three new tombs were uncovered, probably of slightly later date than Tomb 23, but each with new information to impart.

Tomb 26, although only about half the size of Tomb 23, is not small. With a length of 3.30m, width of 1.45m, and depth of 1.07m, it ranks among the largest in Egypt for its time. Its high status is also clear from the above-ground architecture around it, showing that Tomb 23 is not unique in this respect. It was surrounded on four sides by walls of small posts set into a trench over 50cm deep, with eight larger posts flanking the tomb chamber; three on each long side, and one at each short end. Although badly disturbed, the grave contained the fragmentary remains of four individuals, including one juvenile, and a number of rare and surprising objects.

The most striking was a calcite statuette of a stylised scorpion found near the top of the tomb. Although the majority of its raised tail is lost, the tip with the stinger was found deeper down. In the center of the flattened body, a drilled hole apparently allowed it to be mounted on a stick. Similar in style and size to the more fragmentary examples found by Barbara Adams in Tomb 23, together these figurines stand at the beginning of the special, but still not fully understood, relationship that Hierakonpolis had with the scorpion. This is best exemplified by the large number (27) of scorpion figurines found in the Main Deposit. In addition to some lovely garnet beads, a fragmentary palette and limestone vessel, the tomb also contained an object of green serpentine carved originally with four protruding knobs of different heights. It resembles a macehead in the



The knobbed macehead from Tomb 26.

Petrie Museum (UCL 15407), although ours was apparently made in two pieces. The reverse is flat with a longitudinal semi-circular groove made by rotational drilling, suggesting that a matching piece was once present. The "knobbed" mace head is believed to represent influence from Southwest Asia, where such objects are better attested, and, as the only one ever recovered from an excavated context, our example may help to date these controversial connections.

Other foreign contacts are shown by sherds from a Palestinian loop-handled jar found scattered throughout the tomb. Although imported vessels are better known in Upper Egypt in the Naqada IICD phase, with an explosive increase in early Naqada III at Abdyos, an earlier date for the Hierakonpolis example is likely. Similar jars were found at the northern site of Maadi, near Cairo, and a connection with that



The excavated area around Tomb 23. New tombs and new questions.





site is further indicated by a fragment of a small jar with incised dashes at the shoulder made of Delta fibre-ware. A slab of translucent selenite (crystallized gypsum), a material common at Maadi, was also recovered.

Further west, Tomb 27 is a rectangular tomb with rounded corners (1.9m x 1.2m, c.1m deep). The legs of an adult were found scattered, but the torso of a juvenile, 14–17 years of age, was uncovered still in place, flexed on its left side, in an inset area

cut into the floor. The much degraded remains of a leather garment or bag were found near the pelvis.

Nearby were two fragile sealings made from unfired clay that had been molded over a twisted fiber and pressed into a shape resembling a date pit, 2.1cm long. Unlike similarly



The Maadi pot.

shaped seals from Abydos cemetery U, those from Tomb 27 are not impressed with designs and writing, but are painted in red with dashes and lines that have mostly flaked off. These unique objects are unlikely to be beads, as the clay was pressed over the twine with little care to ensure that

the string would emerge evenly at the ends. Instead, they may be the first glimmerings of early writing to be found at Hierakonpolis.

South of the tomb, a row of small posts may form part of the superstructure or wall around the tomb, but no further traces of it could be detected due to erosion.

Finishing off the season, Tomb 28 was excavated. It is roughly oval, measures 1.2m long by 40–70cm wide, and contained only sheep/goat and dog remains. Its date is unknown.

Although much remains enigmatic, the discoveries of the last two seasons at HK6 are shining an entirely new light on



Seals from Tomb 27 (drawings by J.Smythe).

Hierakonpolis and its role in the birth of the Egyptian state. With a volume of over 20m³, its burial chamber alone makes Tomb 23 the largest of its time, while the ever-growing architectural complex surrounding it



Palestinian import from Tomb 26.

leaves little doubt about the status of the man or the family interred here. The recovered pottery suggests a date not later than Naqada IIB, but tighter dating is difficult because much of the assemblage is influenced by ritual usage.

As elsewhere in the cemetery, indisputable evidence for a Naqada IICD phase is missing. This is a time when the locus of elite burials moved 2km away to the Painted Tomb cemetery. This relocation may

not have been peaceful, as the burning of Tomb 23 and Structure D9 and the intentional destruction of the statue suggest. The vulnerability of the above-ground architecture to such violence may well have been the catalyst for moving features like the chapel and the painted decoration underground, as seen in the Painted Tomb.

It is still hard to know what to make of all this architecture. A dynamic use of the buildings is obvious from their various modifications, but the walls running between the different complexes and the discrete nature of the artifact assemblage within them suggest that an explicit inter-connection was intended. Our knowledge of predynastic architecture is still very limited, but based on later evidence and a general understanding of the tomb as a house, we may propose that Tomb 23 and its associated complexes form a model of an elite residence or even a palace compound, constructed for the eternal use of its master and his family. More research is necessary, but we can now say at least one thing for sure: while the scale and materials may change with time, the dramatic display of power is not the invention of First Dynasty kings, but has much older and far richer roots.



Calcite scorpion statuette from Tomb 26.





A Scorpion for Eternity

— by Marcel Marée, British Museum

The scorpion from Tomb 26 is typical of early stone sculpture. Highly stylised, the animal's pincers are reduced to curvy stumps, the eyes and legs unmarked, and only the segments of its tail defined. Drilled through the body is a hole which served to fix it onto a support. Two comparable scorpion figures were found in Tomb 23. The grandeur of that tomb identifies its original occupant as a ruler, and invites the question whether these fig-



Scorpion figurines from Tomb 23.

ne question whether these figures are themselves a marker of kingly ownership. Could Tomb 26, also of exceptional size, have belonged to another early sovereign? Later evidence regarding scorpions seems to support this hypothesis.

Some four centuries after the figurines were made, King 'Scorpion' presented his votive macehead to the city temple at Nekhen. It shows, as his name, not simply a scorpion, but one atop a post. This betrays the

artist's familiarity with statues like those from HK6 and underlines their local significance. The scorpion on the macehead is depicted in the fuller detail that two-dimensional relief allows, but the same type of figure is surely intended.

Representations of a scorpion on a support recur throughout pharaonic history, when its iconography becomes fixed, both in terms of shape and its combination with other symbols. The scorpion is invariably shown in its smooth archaic form without legs, but the pincers look increasingly like human hands! The animal rests on what is now a sturdy, tapering base, which by the New Kingdom is mistaken for a cloak. Already in the first historical depictions, under King Djoser's Step Pyramid and in his South Tomb at Saqqara, the mounted scorpion joins other symbolic items: fans and door hinges. To the same group belongs a basin filled with water, first attested in the reign of Snofru. Wherever encountered, these enigmatic



Scorpion macehead.

items appear behind the king, at times carried by attendants, showing that they were originally physical objects, but usually held by quasi-animated hieroglyphs denoting qualities with which the king was deemed endowed: enduring life force and total power.

At the sed festival, the king renewed these qualities, which bestowed allembracing dominion. Initially, it is in this context alone that the scorpion and its companions occur. Only from the late Old Kingdom do the symbols turn up in other types of scenes, climaxing in boundless thematic variation in the reign of Queen Hatshepsut. She keenly employed these antique signs of royal divinity, although their original meaning was all but forgotten. From the late New



The scorpion and related symbols in Djoser's South Tomb.

Kingdom, their usage becomes restricted, and their depictions are often corrupt.

Sources are not explicit on the origin and meaning of the individual symbols, but the fans, used also as sunshades, ranked foremost and are the easiest to interpret. They rose over the king wherever he appeared in public, announcing the arrival of the deus praesens. They gave him protection, and since air and shadow are vehicles of divine manifestation, a fan also betokens godly presence within the king. The door hinges evoke the universal extent of Pharaoh's power. From the late Second Dynasty, depictions of the sky show its outer reaches shaped like door hinges, and later evidence suggests these referred to cavities at the borders of creation, where earth and heaven meet. Until the Third Intermediate Period, the sky is not normally shown over anyone but deities and the king, as theirs alone is a might that pervades the cosmos. The water symbol represents a key source of life, placed likewise under the king's control. But what to make of the scorpion?

In historic times, the scorpion on a post becomes associated with the scorpion goddess Selket(-hetyt), 'she who causes (the throat) to breathe', and so it has been suggested that the scorpion symbol represents control over the breath of life. While this may be correct, for various reasons it is unlikely that Selket, a Delta goddess, was originally connected with these figures. In earlier times, the scorpion seems to have been a more general symbol of singular power, to which the king was naturally assimilated — especially so at Hierakonpolis, where our scorpion figurines may already have played a role in rejuvenation ceremonies, asserting godlike power for eternity through their inclusion in the ruler's grave.





Fort-ified

- by Richard Jaeschke, archaeological conservator, United Kingdom

Thanks to the generous support of the Friends of Nekhen and the World Monuments Fund[®], the enormous task of conserving and preserving the massive structure we call the Fort (a.k.a. the Second Dynasty Enclosure of Khasekhemwy) continued during the 2006 season, using our now practiced approach of careful, manual construction.

Returning at the start of the new season, it was important to check how our previous efforts had weathered the summer. We were very pleased, for not only were the bricks we had laid still in place, but our improved brick recipe had achieved excellent results. A mud-brick that can be shaped with a mason's tool without crumbling *and* thrown against the dighouse walls without shattering is quite an impressive achievement for unbaked earth.

Repairs made the previous season needed only a little pointing with mortar to complete the join between the new construction and the ancient, but there had been no major settling or shrinkage due to water evaporation over the summer. Feeling confident of our methods, it was time to tackle some of the larger fixes, particularly the crumbling, but structurally important, southwest corner.

Having already reinforced the compromised foundations with compacted earth, we could get started at this corner without further ado. The first 14 courses were laid in early February, and included the sill or socle that juts out for half a brick length at the base of the walls, acting as a foundation or levelling course, as well as a springboard for the decorative pilasters. Although the number of brick courses in the sill vary around the monument to make up for undulations in the underlying topography, traces of it still present on both sides of the gap allowed us to rebuild it with accuracy. However, we decided not to reconstruct the pilasters that once adorned the corner, as none was preserved. After leaving the masonry to dry, we returned in March and took the construction up to 4m, nearly filling the gap. Before finishing it off, we must assess the effect of the over 6000 newly laid bricks on the restructured foundations. To



Plaster bar inserted to monitor movement.

monitor this, bars of soft plaster were inserted at the junction between the new and ancient brickwork; these will snap in two should there be any settling or shrinkage.

Our first major repair went off without a hitch, but what we had thought was a rather clever solution to the problem of raising the deflated ground surface along the west side proved to have unexpected complications. Last season we built firedbrick retaining walls to hold the re-deposited earth and create a strong base for a segment



The southwest corner fortified.

of perimeter wall. Unfortunately, over the summer the fired brick became the focus of a theft, though one quickly thwarted by our guard Gamal, who was as incredulous as we were. Since you can't protect against some people's stupidity, we had to rethink the approach; in the end, we opted simply to backfill the dips and pits that covered the entire area. This massive task was admirably accomplished by the workers transporting thousands of baskets of fill from the nearby spoil-heaps by donkey cart, and spreading it, wetting it and compacting it all by hand. By the end of the season, the ground surface around the entire monument had been raised to the level of the lowest brick or higher, securing the foundations against future erosion.



The loyal Guardians of the Fort.







The "pizza oven" method of repair.

We were also able to address some of the more tricky and dangerous aspects of the work, particularly the problem of filling the tunnel-like holes that range from foxholes, barely wide enough to admit your head, to caverns into which you could walk. As we have no way to protect against unsup-

ported bricks falling within these holes and the injuries that might cause to anyone below, instead we devised a method of laying bricks by remote control. Inspired by one of my favorite topics — pizzas and the ovens that bake them — I manoeuvred a long plank into the hole. I then buttered a brick with mortar, placed it on the plank, and, using a smaller length of timber as a pusher, slid the brick into place. Abdullah, the mason, quickly caught on to this method and was soon adept at the precise placement of each brick into these dangerous holes at a safe distance.

Wider areas of collapse, particularly the so-called "central gap" running for 30m along the west wall, pose a different problem. Destabilized by deep pits cut into the foundations, we needed to clear away the rubble and build secure new footings. But, this was a risky business: the unsupported masonry above was actively shedding bricks, and full removal of the rubble threatened to destabilize the area still further. Too large to repair all at one time, we needed a way to support the wall, whilst causing the least disturbance. To accomplish this goal, we cleared two small sections, each about 1.5m wide, spaced out within the gap. After filling and reinforcing the foundations, we built buttresses — pillars of brick — to support the overhang and create a safe working space in which to

carry out further repairs next season. While the buttresses start to fill the middle, we also attacked the gap from each end, where we were delighted to find the original hard desert foundation still intact, making it possible to implement repairs immediately. The new masonry on each side will stop the gap from expanding laterally. It can now only grow smaller!

Along with bricks and mortar, our guards have proved to be an effective conservation measure by keeping children (and others) at bay. As a result, the Fort has become an increasingly desirable residence for various critters. A couple of desert foxes, unnervingly observed to run into a hole on the interior and emerge seconds later on the outside of the west wall, had to be gently evicted as we plugged that breach. More welcome are the six bee-eaters, with their dazzling green feathers, who use the Fort as their base. If they want to keep down the population of hornets and wasps, we have no objections at all. Other residents, of great significance at the City of the Hawk, is a family of three falcons which has taken up the penthouse suite atop the wall. Frequently to be seen swooping down to observe our work, we do hope they approve.

Now visibly stronger and healthier, the Fort itself seems to enjoy all this attention, and lets us know in some rather spooky ways. One particularly windy day, the swirling dust made working conditions quite unpleasant. When we overstayed our breakfast break by just a few minutes, the wind rose to a howling pitch. I jocularly commented: "The Fort is angry because we are late," and everyone laughed; but the smiles froze on our faces when, as we picked up our tools, the wind immediately stopped.

What next? In 2007, thanks to a grant from the Annenberg Foundation, we can continue the repair of the exterior west wall and undertake the dangerous and daunting task of supporting the northeast corner. Here, a massive overhang created when the lower walls collapsed in 2001 is definitely not going to get better by itself. However, with your continued support, we are confident that it and the rest of this historic monument can, and will, be Fort-ified!



Building the buttresses in the "central gap."





Highlights of HK6



Ivories, shells and blade from Structure D9.



Looking up the wadi, an overview of the complexes surrounding Tomb 23.



Tomb 26 and surrounding architecture.



Garnet beads from Tomb 26.





Objects from Deposits A (upper) and B (lower) found at the corners of the Tomb 24 complex.





The Best of the Rest



At work at the Fort in 2006.



Nested bowls in the burial chamber.



The glint of gold: fragment of the gilded micro-face mask.



Fragments of painted plaster from a mummy mask.



The Fort-fixers.



Oval arrangment of postholes at HK29B.



Potters in Horemkhawef.



Kiln excavations at HK11C.





Mapping Hierakonpolis

— by Joel Paulson, San Diego, CA

Walking around Hierakonpolis, even a small area of it, for just a few days, one cannot fail to notice that it is big — really big! With archaeological remains stretching for roughly 3km SE–NW by 2.5km SW–NE, it a site of significant size. After spending several weeks in 2002 mapping New Kingdom Hill — not all of it mind you, just the part with the tombs — and returning in 2005 to map Old Kingdom Hill — again just the portion with the tombs — I fully appreciated the daunting task of mapping the whole site.

It was clear that the only practical and efficient way to map Hierakonpolis and its surroundings would be by photogrammetry based on aerial photography. Fortunately, recent advances in satellite imagery have made accessible high quality images with a resolution of less than one meter per pixel. Thanks to

the Friends of Nekhen, we had already obtained marvelous 0.7 m pixel imagery of Hierakonpolis in 2003 (see *Nekhen News* 15), which gave us an incredible bird's eye view of the site and started us on the way to an overall map. But we still lacked that elusive third dimension and the accuracy that it could help us obtain.

Our satellite image, like all photographs, suffers from distortion at the edges and some angular error because the picture is taken at a slightly oblique angle in spite of the high altitude of the satellite. Additionally, the changes in altitude of the target terrain further distort the



Out in the wadi, Joel sets the control points.

In practice, however, acquiring all the necessary information was not that easy. Only one of the two major commercial providers of satellite imagery, Digital Globe, could provide both the stereo pair and also the background information necessary for creating the map.

The next obstacle was finding a company that could compile the imagery and actually create the contours from satellite data. Although many agreed it was theoretically possible, only HJW Geospatial in Oakland, California, agreed to give it a try, and thanks to the generous donations to the *Let's Make a Map* fund, we were able to order the stereo pair images to our exact specifications.

Ground control for the photogrammetry consisted of the topographic survey, which I had done at rock-cut tomb sites

in 2003 and 2005, together with the original series of horizontal and vertical control points throughout the site established by David Goodman in the late 1980s. This control network provided HJW with the basis to obtain the 2m precision that we knew was theoretically possible and to create an accurate topographic map. The result is breath-taking (see page 2) and may well be the first topographic map of an archaeological site made in this way - another first for Hierakonpolis?

In addition to the detailed contours, we are now able to locate various

image; objects at higher altitude, being closer to the camera, look larger than objects at lower levels. The solution to these problems is to use a "stereo pair" of images, taken at slightly different angles. The parallax, or difference, between the two photographs allows the viewer to "see" the terrain in three dimensions. The relative differences can provide actual elevations for the region of stereo coverage as long as a number of spot elevations, i.e., control points, are used to calibrate the imagery, and camera parameters and altitude are known. According to my calculations, the stereo pair, along with suitable control points on the ground, should theoretically be able to provide a 2m contour interval for the whole Hierakonpolis region. localities and landmarks with high accuracy. The coverage goes beyond the site and includes both Elkab across the river and the pyramid of Kula, a few kilometers to the north. In future we will also be adding additional data for the local villages, agricultural fields and other modern cultural features.

Using the contour map and the stereo imagery as a base, I am now compiling the various plans made over the years at the different localities into a comprehensive series of maps that can be fitted precisely into the overall site topography. This will serve as a base to tie together the work of the past and the present at Hierakonpolis, and, more importantly, it will help us accurately chart the future. \triangle





The Pottery Kilns at HK11C Revisited

Upper Level

— by Masahiro Baba, Waseda University, Japan

Pottery is the most common find at all Predynastic sites (though perhaps more so at Hierakonpolis than anywhere else!). While some aspects of Predynastic pottery have been studied exten-

sively, its production technique is still obscured mainly because so few kilns and workshops have been found. It is for this reason that the excavation of Square B4 at HK11C in 2003 was so significant, as it revealed further clues about the method, scale and firing technology used in Predynastic ceramic production.

In that first season, the remains of several kilns were uncovered (see *Nekhen News* 16:18–19). The first, Kiln A, took the form of a man-made platform of burnt mud and potsherds about 30cm high, in which several circular firing pits, about 1m in diameter, had been cut. Indications of an earlier kiln structure were observed beside the platform at a lower level (Kiln B), and traces of a wall and dark ash to the south beyond the excavated area suggested a later kiln at a higher level (Kiln C).

Clearly, more work was needed, and in March 2006 excavations resumed. We opened two small units: Grid A, a 5x2m excavation area adjacent to the south, and Grid B, an area of 1x5m to the east. In the both units, at least two different phases of occupation were revealed on a lower and upper level, and what was previously a simple story became far more complicated — not a rare occurrence at Hierakonpolis!

In the lower level of Grid A, excavation of the feature tentatively identified as Kiln C in 2003 revealed a

horseshoe-shaped depression filled with charcoal and ash. This feature showed no evidence of high temperature burning, so was not a kiln. Instead, it was probably a disposal area for ash coming from Kiln A. Meanwhile, excavations in Grid B showed that the wall once believed to form part of Kiln C is actually an extension from Kiln A. Made of stones cemented with mud and potsherds, this wall was approximately 30cm high and pierced by two regularly spaced openings. Its full extent and purpose, however, are still unknown, as it continued eastward beyond the excavated area. On its north or interior side, the ground had

> been strongly burnt to a hard red and was covered with thick deposits of charcoal and ash. Potsherds from this level suggest that activity at the kiln can be dated to the early Naqada II period.

> In the upper (later) occupation, the area around the wall had filled up with charcoal, ash and other debris, and was transformed into a pottery workshop. In the east, two rounded holes, about 20cm in diameter, and a shallow basin coated with layers of white mud plaster suggest that the clay or 'paste' for pot making was prepared here, perhaps in the shade of a structure or awning to judge from the line of posts found in the vicinity. To the south, use of the disposal area continued; therefore, it appears that Kiln A was still functioning, but using the pits on the top surface of the platform rather than the side. These activities continued until at least the mid-Naqada II period.

> These new discoveries suggest that pottery production was carried out on a larger scale than previously thought. We now realize that platform Kiln A is not an isolated feature, but part of a large and more complicated complex that was used over many years. The construction may seem rather ad-hoc and the firing technology simple, involving the placement of the pots in pits and then covering them with mud and potsherds (see *Nekhen News* 17:20), but, if the pits in the platform were filled and fired together, a large number of pots could have been produced.

Although the shape and size of this complex are still unclear, even at this preliminary stage the excavations at HK11C are providing important insights into early Egyptian pottery production. The area obviously has the potential to tell us much more, and in February 2007 we intend to return for the next installment in the developing story of the kilns at Hierakonpolis.







The Forgotten Potter of Horemkhawef

— by Renée Friedman

For an understanding of Predynastic pottery technology we are dependent solely on the discovery of kilns, traces of the manufacturing process on the pots themselves, and experimental reproductions. In the Dynastic period, however, these lines of evidence can be supplemented by tomb scenes and models showing the ancient potters in action.

In 1977, R. Holthoer published an influential corpus of these important scenes of pottery production, but sadly left out the potter in the Second Intermediate period tomb of Horemkhawef at Hierakonpolis. Although the scene had been published (after a fashion) by Wreszinski in 1927, the conservation and study of the tomb, which was made possible by a grant from ARCE-EAP, have allowed us to see previously obscure details and realize its significance for the history of ceramic technology.

The scene is important for several reasons. Although the potters' workshop was a popular motif in the Old and Middle Kingdom, the scene from Horemkhawef is one of only two known depictions of pot-making in post-Middle Kingdom tomb art. The other scene is in the mid-18th Dynasty tomb of Kenamun at Thebes (No. 93), and both share much in common. The Hierakonpolis scene is also the earliest evidence for what has been hailed as a true innovation of the New Kingdom — the use of an assistant to turn the wheel and therefore allow the potter to form the vessel with both hands. Previously documented only in the tomb of Kenamun, the forgotten potter of Horemkhawef now pushes back this innovation by over 100 years into the Second Intermediate period.

The workshop in Horemkhawef's tomb is located in a small register on the west wall. It shows two men kneeling on either side of a low potters' wheel. The man on the left, helpfully labeled in hieroglyphs as "potter", is shaping a round-based pot. Steadying the vessel with his right hand, his left is inserted in the neck as he forms the rim. Remarkably, the hand is fully visible as if the pot were transparent. The man on the right is



The potters in Horemkhawef.

the assistant. He grasps the wheel with both hands, turning it round for the potter, who may be helping to keep it steady with his forward foot. Although potters' wheels with high or medium stands are commonly shown in Old and Middle Kingdom scenes, the potter in Horemkhawef works on what is called the "extralow wheel", a type that was in use from at least the 11th Dynasty and into the New Kingdom, where it is shown also in the tomb of Kenamun.

This turning device consists of a wheel-head, which either had a projection on its underside allowing it to rotate, or, more

likely by the time of Horemkhawef, was mounted onto a set of carved stones, one with a protruding pivot that fitted into the socket in the other. Actual examples of these stones have been recovered from late Middle Kingdom Saras



The potters in Kenamun's tomb.

in Nubia, Tel el Dab'a, and Canaan, where the technology seem to have originated. In Horemkhawef's scene, the wheel is shown seated directly on a socket stone that was probably partly embedded in the ground for stability.

When lubricated the hard stone pivot would allow for a good spin, and Dorothea Arnold has linked the use of this wheel type to various improvements visible on the pottery of the late 13th Dynasty. However, now that we know that the assistant was already present at this time to provide a continuous spin, it is possible that the improvements resulted from these two innovations together. If one will pardon the pun, the socket stones and the assistant may go hand in hand.

The technique appears to have been refined in the New Kingdom. In Kenamun's tomb, the assistant is shown at a slightly lower level, probably kneeling in a pit in order to turn the wheel more efficiently, an arrangement used until recently by traditional potters in Crete. While the assistant is now lower, the potter has moved up. Seated on a stool, his foot is more clearly shown against the wheel than in the tomb of Horemkhawef. However, whether he is aiding in its rotation, and thus heralding the very beginnings of footwork that would ultimately lead to kick wheel technology (attested by c. 500 BC) and the assistant's eventual unemployment, or simply steadying the wheel, is not clear.

Despite some minor differences, it is intriguing that these last two tomb scenes of pot-making should be so similar in detail. Now that the potter of Horemkhawef is no longer forgotten, it may be that the use of the extra low wheel and the assistant was more widespread at the dawn of the New Kingdom than the paucity of evidence suggests.





Adventures Underground: The New Tomb on Old Kingdom Hill

— by Joe Majer, San Francisco, CA

We had been warned, but nothing could have prepared us for the shock of seeing the hole that had opened up over the summer in the courtyard floor near the tombs of Horemkhawef and Ny-ankh-Pepy on "Old Kingdom Hill". Having walked this area hundreds of times while conserving the tombs, the discovery was both exciting, giving access to an unsuspected labyrinth of subterranean burial chambers, and worrying, as the quality of rock in to which it was cut was frighteningly poor!

Renée was the first to enter the hole, created by the partial collapse of the ceiling. What she found was an undecorated chamber 2.95m square and 1.3m high that had been relatively well cut into poorly consolidated sandstone on three sides. The fourth (east) side, however, was a perilous tumble of rock. A debris-filled corridor, leading down to a lower-level chamber, could be seen on one side of an unstable stone pillar, behind which were evidently more rooms. Testing with a probe indicated that the carved out areas extended at least another 3m, but because they were choked with rubble from the fallen ceiling, there was no way they could be entered safely.

In the main chamber, a test trench along the west wall revealed a dense jumble of disarticulated burials mixed with just enough pottery to provide a provisional date of late Second Intermediate period (SIP)/early New Kingdom (NK) and just enough painted plaster to keep us intrigued.

In January 2006, Renée assigned me the job of excavating and shoring up the tomb. Digging was difficult because of the low ceiling. Only two workers at a time could fit into the small chamber while the dirt was hauled up on a pulley attached to a tripod precariously positioned above. The unstable nature of the rock was always a concern; however, with the assistance of Rick Colman, we managed to clear about 80% of the chamber to floor level while staying clear of the collapsing east wall, which threatened to subside at any minute.



Investigating the hole in the courtyard with bucket, pulley and tripod.



Down below there was a very scary east wall!

The tomb chamber was originally entered from the south via a shaft descending from one of the mud-brick chapels surrounding the courtyard. It was an often-used entrance, judging from the nearby stratified remains. Beneath the loose upper debris, we first encountered the partly articulated remains of a burial, while just below were, miraculously, three complete bowls nested together. Two were of a rough type called "flower pots", but really of unknown function; the third was of better quality with a lustrous red coating and a white band at the rim. Both styles are characteristic of the late SIP and early NK. When three nearly intact burials of children were discovered a little deeper, it was disappointing to find only more disturbed burials below them. But as we neared the floor, things began to change markedly.

First, there was a red object, which in the gloom of the tomb was hard to make out, but a well-directed sunbeam

revealed the painted upper torso of a limestone statue! Although fragmentary, it can be dated to the SIP based on style: the strong rendering of the pectorals, the medial line of the stomach muscles and the drawn-in waist are typical of statues of that period.

The next pass with the trowel revealed something even more exciting — the glint of gold from a micro-face mummy



The limestone statue.







Plan of the courtyard and tombs (old and new) on "Old Kingdom Hill."

mask. Common in the SIP and into the early NK, they are called micro-faces because the face is so small, ranging in size from 12cm to just 4.5cm. Cast in a separate mold, the plaster face was incorporated into a helmet-like covering made of thinner plaster that was placed over the rest of the head, shoulders and upper chest.

The little micro-faces are an amazing piece of artistry, but the overall effect when in place on the mummy does seem a bit strange. It has been suggested that the face is not that of the person within, but their spirit or *ba*, which took the form of a tiny human-headed bird. The *ba* could leave the tomb and travel, but it had to return each night to reunite with the corporeal body. Without this periodic contact the deceased would perish. Perhaps the face of the *ba* on the mummy helped the spirit return home or magically insured that the two were reunited come what may.

Incredibly fragile, many excavators comment on how difficult it is to excavate this type of mask, and how easy it is to over-





The molded plaster micro-face.

Micro-face mask from Nubia.

look their tiny traces. With all of the excitement over the gilded fragment, we did not pay much attention to a lump of chalky white plaster found at the same level. Covered in mud, and only 6cm in diameter, we thought it was a bottle stopper until Richard Jaeschke pointed out the face on the other side! No doubt originally covered with gold foil, it shows that at least two of the tomb's many occupants were rich enough to afford such masks.

In all, the remains of 32 individuals (16 adults, 11 juveniles and 5 infants) were recovered. Painstaking mending and careful analysis of the pottery, including at

least three ceramic canopic jars painted with a scallop pattern in red to imitate alabaster, revealed no intrusive material from later periods. This was clearly a tomb that had been used often (and rifled occasionally) into the early New Kingdom.

When we finally reached the floor, another surprise awaited us: a large circular hole! It seems that when the ceiling collapsed, it hit the floor with such force that it broke into another chamber below, easily done since there was only about 20cm of rock between the two. Examination with probes suggests the lower chamber is about the same size as the upper, but to clear the debris and investigate would have made the structure more unstable and dangerous than it already was. We had always assumed that the hill was honeycombed with tombs, and we were right!

Now that the floor of one chamber had become the roof of another, stymieing plans to shore up the crumbling rock, it was time to stop, map and plan, for the fortuitous collapse of the burial chamber ceiling had opened up an entirely new window into the vast underground history of Hierakonpolis.



Joe and Hamdy in the hole.





Archaeobotany at Hierakonpolis: 2005/2006

Hundreds of soil samples

and pot contents collected

from various localities around the site were inves-

tigated for botanical

remains this season, thanks to a grant from the

US-Egypt Cooperative

Although we usually sepa-

rate plant macro-remains

from soil samples by dry-

sieving through 0.5mm

mesh, we applied the flota-

tion method this time

because we had so much to

process. Flotation is a fast

and simple method based

Program.

— by Ahmed Fahmy, University of Helwan & Mohamed Fadl, University of Beni Suef, Egypt

Research



Mohamed Fadl examines the results of the flotation.

on the nature of organic material to float on water. First, we carefully divided the samples, saving half for other analyses, and then poured the remaining soil into a bucket of water. After a quick stir, the botanical materials began to rise to the surface. We then collected the materials with a tea strainer, placed them gently on a small square of cheesecloth, tied them up in a bundle and hung them on a line to air-dry. Once dried, the remains were examined under a microscope where many interesting aspects of life and ecology at ancient Hierakonpolis were observed.

Particularly interesting was the analysis of the contents of the jar recovered from HK43 Burial 387 ("Marley"; see *Nekhen News* 16:6–7). This conical pot was found with its fragile basket lid still firmly in place. Although we tried to maintain this arrangement,



Marley's pot (HK43 Burial 387).



The loaf inside the pot.



5600 year old bread!

the lid detached over the summer, revealing a perfectly preserved loaf of bread resting on dark ashy sediments. Although similar to the round loaf found in Burial 71, which was so filled with chaff that it may have been a "false offering", the one from B387, made from well-prepared flour, appeared far more palatable. The dark ashy soil filling the rest of the pot is generally believed to be the remains of a funerary feast or residue from the family hearth. It contained the fruits of the Christ's thorn tree (*nebk* in Arabic, jujube in

English), melon seeds, emmer wheat and, significantly, freethreshing wheat, which is perhaps better known as durum or macaroni wheat. This archaeobotanical evidence shows that Predynastic Egyptians had the option to cultivate two types of wheat, but chose emmer, as demonstrated by



Rachis internodes of freethreshing wheat (grid = 1mm).

the high frequencies of emmer grain and spike remains at Hierakonpolis and elsewhere, lasting into Graeco-Roman times.

The grains and rachis internodes of the free-threshing wheat sealed in the Burial 387 jar are the oldest confirmed record of this type of wheat in Ancient Egypt! As the morphology and dimensions of the grains cannot be used to distinguish it from other types of wheat, the identification is based on the presence of spike remains.

As its name suggests, free-threshing wheat does not require laborious processing because the grains fall clear of the chaff during threshing. Emmer wheat, on the other hand, is much more labor-intensive. Threshing only breaks the cereal ear up into spikelets (grains still tightly surrounded by a hull, called a glume), which then must be processed by pounding, milling and winnowing to separate the grains from the chaff. Although considerably less work, free-threshing wheat is almost unknown in Egypt until the Ptolemaic period. As our recent discovery shows the Egyptians had the choice since Predynastic times, why did they chose to struggle with emmer wheat?

They probably did not care about the high protein, low gluten content of emmer wheat as compared to durum, and they may not have noticed its early maturity and resistance to drought and fungal diseases. What they almost certainly found appealing was its storability. The tough spikelets that were so difficult to remove also conferred significant protection over the stored grains against insects, pests and diseases. In a country where, until the widespread introduction of coinage by Alexander, wages were measured out in wheat and fortunes were stored in silos, the survival of every grain must have mattered. Although emmer wheat is now rarely cultivated worldwide, it clearly had its benefits in Predynastic Egypt.





Pillow Talk

— by Jana Jones, Macquarie University, Sydney, Australia

The recent discovery and excavation of KV63, the new 18th Dynasty tomb in the Valley of the Kings, have led to much web discussion of pillows in ancient Egypt. Mysteriously, none of the seven wooden coffins found in the tomb contained a body; instead, tightly packed within coffin "G" were six linen pillows stuffed with feathers or down. More "pillow talk" ensued from the recent analysis of the bitumen-based coating on a pillow stuffed with tiger-nut grass and yellow-nut sedge from a grave at Sedment el-Gebel in Middle Egypt (First Intermediate period; c. 2055-1985 BC). Most of our information on pillows and cushions is based on evidence gleaned from wall paintings and the few surviving examples in museum collections, such as the Sedment pillow mentioned above, now in Manchester, a down-filled chair cushion from the tomb of Yuya and Thuya now in Cairo, and an unprovenanced oval cushion or pillow in the British Museum. Inevitably, during the course of the dialogue the question of the first pillow was raised. The answer should of course be obvious - where else but Hierakonpolis!

To the best of our knowledge, the earliest extant examples of pillows in a funerary context come from the workers' cemetery at HK43. The burial of a 40–50 year old female with



an infant at her feet (Burial 92, Naqada IIB c. 3650 BC) yielded remnants of a leather pillow. It was stuffed with chaff of emmer wheat, including the forks, rachis and glumes. Although it had been broken during plundering, stuffed corners of the small and delicate pillow

Fragments of the leather pillow from HK43 Burial 92.

survived. The greatest concentration of chaff and leather was under the woman's head, leaving no doubt about its function.

In the slightly later Burial 333 (Naqada IIB–C), a linen pillow cradled the head of a woman, who, from the wealth of enigmatic, "magical" objects in the basket buried with her, appears to have been someone of importance in this community (see *Nekhen News* 15,18–21). The pillow consisted of approximately 35 layers of an open-weave textile that had been folded over numerous times, with a layer of leather apparently inserted between the folds. The pillow had compacted to a maximum thickness of 3cm, but was not stuffed at any stage.

Although there are early reports of leather "pillows" under the heads of two bodies in graves of the Badarian period (c.



The fabric pillow beneath the head in Burial 333 at HK43.

4400–4000 BC), their identification as such is not conclusive. One female burial excavated by Guy Brunton (Grave 5802 in *The Badarian Civilisation and Predynastic Remains near Badari*, 1928) had crumpled leather under the head forming what was perhaps intended to be a pillow. A male burial contained a similar "pillow", on which the presence of a seam and edge overstitched with a leather thong is reported (Grave 5806). The male was wrapped in skins and matting, and traces of textile and plaited leather remained. Whether these two examples were actually pillows, or remains of the skins in which bodies of the time were often encased, remains a moot point.

At the German Institute excavations on Elephantine, directed by Dietrich Raue, I recently analysed the textiles from two intact, wrapped First Dynasty burials dating to the time of Den (Naqada IIIC1, c. 3000 BC). The male had the remains of what appears to have been a linen pillow filled with grain under his head. The "pillow" had been torn apart by rats who feasted on the contents — and then met a gruesome death in the deep granite sinkhole from which they could not climb out!

Undoubtedly, examination of the evidence shows that Burial 92 from HK43 provides the earliest occurrence of a stuffed funerary pillow. But what was the significance of pillows in burial contexts? Was their inclusion a tender act of caring for the comfort of the dead? Or was the cereal fill in some of them evidence of early beliefs in fertility and regeneration in the afterlife? In typical Egyptian fashion it could be a mixture of both. Certainly the cooler, if seemingly less comfortable, option of the headrest, which is known possibly from the First Dynasty (according to Petrie at Tarkhan), but certainly from the Third Dynasty, was believed to have strong protective powers, keeping the head in place and eternally raised up, forming an image of the eternally rising sun. Υ





A Lot of Old Rope — Cordage at HK43

— by André J. Veldmeijer, PalArch Foundation, Amsterdam

Archaeologists excavating in Egypt have several advantages over colleagues working in other parts of the world, among them, a climate so favorable that organic materials are often very well-preserved. However, this fortunate situation does not mean that all classes of Egyptian organics have attracted many enthusiastic investigators, and it is only in recent years that scholars have started to study artifacts such as cordage and leather systematically. Analysis of this material is now underway at Hierakonpolis, and the cordage recovered from the workers' cemetery at HK43 was examined in 2006.

The idea of cordage as a separate category of small finds is a phenomenon that is not often encountered on excavations, yet its important role in society through the ages is undeniable. Cordage is a multi-purpose, multi-functional and, above all, reusable item that has been employed by humanity for a very long time. In fact, one of the oldest examples of cordage dates back to more than 35000 years BP, and a piece about 17000 years old was found in the Lascaux caves.

Cordage in one of its primary uses — to tie things together — is encountered in several graves at HK43, where it was used to tie matting or hide around the body of the deceased. The term "cordage", however, covers more than simple linear strands used for binding and tying. Netting used for fishing or to carry goods can also be regarded as cordage. While not as well-preserved as the fishnet found in the contemporary predynastic grave at Adaima (S416), a twisted network of cordage in HK43 Burial 379 probably served as a net-sling for carrying the little bottle found within it.

Of course, one of the most important features of a cord is the knots put in it. The variation, together with the quality and application of the knot, gives information as to how the maker



Net carrier bag in Burial 379 at HK43

worked with cordage. A detailed analysis of the knots encountered at Graeco-Roman Berenike, a port on the Red Sea coast, shows a larger variety among the few basic knot types in use compared to Qasr Ibrim and Amarna, where the same basic types could be recognized.



Pottery in a carrier net. Tomb of Wah, Thebes, New Kingdom (Drawing by E. Endenburg).

The reason for this is easy to deduce: Berenike was a harbor town, and the proper use of cordage and knots was of the utmost

importance for the fishermen and traders who lived there.

Owing to their great age, few of the knots in the cordage assemblage at Hierakonpolis have survived. One of the best preserved comes from HK43 Burial 215, in which the deceased had been placed in a mat and



The reef knot from HK43 Burial 215.

wrapped round with a stout rope of vegetal fibre that had been tied with a reef knot. Although the reef knot is very easy to

make, consisting basically of two "half knots" on top of each other, but tied in opposite directions, it is interesting to note that this knot was later used to bind together the plants symbolizing the two lands of Upper and Lower Egypt. Knots also had a magical significance in



A reef knot binding the Two Lands.

ancient Egypt and the predynastic origins of this and other practices may yet be illuminated with more detailed analysis of these most fragile remains from the past.





Vive la Différence: Examining Diversity in Upper Egyptian Cemeteries

— by Ezzat Refaei, Macquarie University, Sydney, Australia

Burial practices in Upper Egypt have generally been considered to be relatively homogenous throughout the predynastic period; however, studies of both the lithics and pottery from Upper Egyptian settlements indicate a higher degree of regional differentiation than previously suspected from the graves alone. In light of the recent and highly detailed excavations of cemeteries at Hierakonpolis, Adaima and Abydos Cemetery U, I thought that it was time to revisit the issue of local and regional diversity in burial practices as part of my current PhD research. Mortuary data have traditionally been used in chronological studies or to chart social stratification, but a collective, yet more nuanced, approach has the potential to illuminate many other aspects, such as the development of funerary practices, the evolution of different conceptions of the afterlife, and the attitude of people towards death and the dead.

To investigate regional diversity, a number of cemeteries were selected from the three main regions of Upper Egypt, which centered on Abydos, Naqada and Hierakonpolis. These cemeteries were carefully chosen to represent major and local centers, elite and non-elite populations, and include Abydos Cemetery U (elite); Mahasna, Naga ed-Deir Cemetery 7000 and Salmani; Naqada Main Cemetery, Cemetery T (elite) and Armant Cemetery 1400–1500; and Hierakonpolis HK6 (elite), HK43 and Adaima. In all, more than 3000 graves will be examined.

A collective analysis of burial customs in prehistoric Egypt must, of course, start with the reconstruction of the graves. This is being done with an Access database that records as many of the details of each individual grave as possible. To record these, an entry form has been created for each grave. Each entry contains 52 fields and sub-fields designed to include information such as grave architecture, occupant, grave goods, their position, date, and so on. The database will enable the grouping, sorting and analysis of data in many different ways with ease. With a key stroke it will be possible to chart a cemetery's layout and growth, and arrange the graves into different clusters based on grave size, period, sex, age, type and quantity of grave goods — you name it! It has already proved its utility by demonstrating that Tomb 23 at HK6 is the largest grave of its time — in case there was any doubt.

Although most of the data is drawn from publications, in the case of the recent excavations at Hierakonpolis I have been given access to the excavation records and the wealth of information they contain, and hope that their inclusion in the database will contribute to their publication. For Naqada, a site so basic to our understanding, I am also using the original field notes, since only 136 out of the 2200 graves excavated by Petrie in 1895 were ever published. The vast majority of information

about this cemetery is still contained in Petrie's notebooks, seven of which were found at University College London only in 1982. While much work in this area has been done by Elise Baumgartel and Joan Payne, reconstructing the graves and their contents has turned out to be a major task. Luckily my work was made much easier



A page from Petrie's notebooks Naqada Grave 1820.

through the kindness of Dr Stephen Quirke, curator of the Petrie Museum, who allowed me to examine all 11 notebooks from Naqada, making it possible to identify most of the objects and pottery types from the sketches and thereby clarify many issues.

Working with the notebooks, I soon realised that not all were written by Petrie himself; in fact, only three are in his handwriting. Four were by Quibell, two by Quibell with others, and one each by Hugh Price and Duncan. The notebooks contain records of 991 graves: 852 from the Main cemetery; 90 from cemetery B; and 49 from cemetery T. Some notes are better than others, but a huge amount of new information has now been recorded into the database, providing a clearer image of this great cemetery than ever before and a basis for comparison with cemeteries elsewhere.

This is a work still in progress. While my research aims to establish regional patterns, it is important to remember that funerary practices may also reflect general religious beliefs and the individual's relation to gods, ancestors, and their particular world views. Furthermore, this study of burial customs, supplemented with the data from the recent excavations, should shed light on the origins of symbolism, ritual and religion in this early stage of ancient Egyptian civilization. Preliminary analysis of the data collected to date indicates that the three regions had similar concepts of the afterlife, but expressed their beliefs in different ways visible in variations in the preparation and orientation of the body, and the types and distribution of grave goods around it. In this respect, the main cemetery at Naqada, the biggest of the period, is also the most diverse.





Resurrecting Horus and Pepi

— by Liam McNamara, St. John's College, Oxford

Recent visitors to the Egyptian Museum in Cairo will undoubtedly have seen a number of spectacular finds from Hierakonpolis restored and redisplayed to something of their former glory. As a joint project between the Supreme Council of Antiquities and the German Archaeological Institute in Cairo, Christian Eckmann of the Römisch-Germanisches Zentralmuseum, Mainz, and Saher Shafik of the Egyptian Museum, Cairo, spent six years conserving the two copper statues of Pepi I (6th Dynasty) and the gold-headed statue of Horus of Nekhen found during excavations at the site in the late 19th century. The painstaking removal of corrosive surface deposits, combined with careful analysis using the latest scientific techniques, has revealed previously unknown details about the original appearance and construction of these masterpieces of Egyptian art.

A preliminary report on the conservation of the smaller of the two copper statues can be found in Nekhen News 10, and this 64 cm high marvel has now been joined by its larger counterpart. The life-size copper statue (178 cm high) was discovered in 1897 by J. E. Quibell, dismantled in a pit beneath the floor of one of the rooms in the five-chambered building in the centre of the temple enclosure. Adhering to its chest was a crumpled sheet of copper bearing an embossed inscription of Pepi I. To the excavator's astonishment, the statue's torso was later found to contain a second, smaller copper statue, and it was originally suggested that the pair formed a group representing Pepi I with his son and successor, Merenre. The current consensus is that both statues depict Pepi I: the accompanying inscription mentions the king's first sed festival, and the smaller, child-like statue could therefore be an image of the young Pepi following his rejuvenation during that ceremony.

The two statues were first restored at the beginning of the



The smaller Pepi statue conserved.

20th century by the Italian conservator, A. Barsanti, whose nickname Baracementi (chosen because he used so much cement in his restorations) proved particularly appropriate: before they could proceed, the modern conservators had to remove large amounts of plaster that had been poured into the feet of the large statue in order to make it more stable! More recently, various resins had been used to seal corroding parts of the statues. X-rays were made to gauge the extent of the damage and revealed that in the first reconstruction some parts had been glued together incorrectly: one fragment from the torso of the small statue, for example, had been inserted into its right foot, while the left leg had been attached to the inside of the torso, making the legs appear out of proportion. All of these problems have now been remedied, and the two statues can finally stride forward with confidence.

The eyes of both statues are inlaid with limestone and obsidian; other details, such as the toe and fingernails, were picked out in gold leaf, of which only traces now remain. The polychrome effect of the original statues must have been an impressive sight! Some parts, including the large statue's crown, the small statue's uraeus, and the kilts worn by both (suggested by the remains of gilt plaster), were made of different materials, probably wood, that have not survived. A series of holes on the neck of the small statue may have served for the attachment of a Horus falcon, whose wings would have wrapped protectively around the figure's head. Similar compositions are seen on the famous statue of Khephren

(4th Dynasty), and that of Reneferef (5th Dynasty), both now in Cairo.

The statues were constructed from several sheets of copper, hammered into shape and fastened together with rows of nails. For a long time it was assumed that the copper plates were nailed onto a wooden core how else would it have been possible to fix them? However, with the exception of two small pieces of burnt wood recovered from inside the large statue's torso, the conservators could find no trace of its existence. Barsanti's attempts at restoration cannot be blamed for this lack of evidence: the right arm of the small statue was still packed with earth in which any wooden remains should have been preserved. The wooden core may have completely rotted away, but this fails to account for the fact there is no evidence that the copper of the larger statue was bent



The nail pattern of the larger Pepi statue. (Eckmann and Shafik, 2005: pl. 56)





out of shape in order to remove the core and insert the smaller statue. The question still remains exactly how the copper plates were joined together (the nails were not bent over on the inside, so why didn't they fall out over time?), and this construction technique remains unparalleled in ancient Egypt.

In the central room of the same five-chambered building, Quibell discovered the gold-headed statue of the falcon buried



inside a small brick-lined pit covered with a rough basalt slab. The bird, with its inlaid obsidian eyes, wore a double-plumed headdress adorned with a uraeus. Its stylised body of thin copper plate was largely intact when first unearthed, but exposure to the air quickly caused it to disintegrate. Beneath the bird's beak was a statuette of a king; slotting into the base was a cylindrical copper carrying pole, and the whole assemblage was supported on a pottery stand. The statue was immediately identified as a representation of the local god, Horus of

Nekhen, and is one of the few cult images of a deity to have survived from ancient Egypt.

When the objects were transferred to the new Egyptian museum on Midan Tahrir at the turn of the 20th century, many of the statue's pieces became disassociated and only the head and crown were put on display. Almost 100 years later, as work progressed on the copper statues, a box containing metal fragments from Hierakonpolis was found in the Museum basement, from which the team were able to reconstruct sections of the falcon's body and carrying pole using Quibell's original drawings as a guide. The cylindrical pottery stand was also rediscovered, its identification confirmed by the excavation mark written inside it. Unfortunately — and despite an extensive search — the royal statuette could not be relocated, and the identity of the depicted king remains a mystery.

The date of the falcon has been the subject of lengthy debate. Some Egyptologists assumed that all the elements were made at the same time, some time in the 6th Dynasty. Others believe it could be a montage: an Old Kingdom head to which plumes, a uraeus and a statuette were added, perhaps during the New Kingdom. The head, which remained in pristine condition, would thus have been nailed onto successive wooden cores, each of which deteriorated over time. As a result of the recent conservation work, an alternative reconstruction has been proposed. Remains of wood and plaster found on the interior of the copper plates of the bird's body may be evidence for the existence of an ancient wooden statue that was once covered with gypsum and perhaps painted, although the overall appearance of this early icon is otherwise unknown. At a later stage, probably during the Old Kingdom, the statue was completely overhauled: the wooden body was sheathed in copper and the gold head was nailed onto it. Parallels with the construction technique of the two Pepi statues may support this theory. The feather crown was then added to the head in a third phase, perhaps during the early Middle Kingdom. The end of the sculpture's cultic life occurred when it was buried under mysterious circumstances in the central chamber of the temple sanctuary.

Many questions still surround the falcon, the answers undoubtedly lying



The statue in its component parts. (Eckmann and Shafik, 2005: fig. 45)

behind the bird's beady black eyes, which — thanks to the dedication of Christian Eckmann and Saher Shafik — have been polished to perfection for future Followers of Horus to gaze at in wonder and amazement!

For the fascinating full story see the lavishly illustrated new book by Christian Eckmann and Saher Shafik, *Leben dem Horus Pepi*, Mainz, 2005.

Transitions

Mohammed Es-Sayya 1942–2005

After 26 years of loyal service, we mourn the passing of site guard Mohamed Es-Sayya, in August 2005 at the age

of 63. Hired by Mike Hoffman in 1979, Mohamed's keen knowledge of the desert and good humor made him a valued team member, who will be deeply missed. The father of 7 children, his son Ahmed will follow in his footsteps, having recently been appointed by the SCA to guard the site.



Mohammed Es-Sayya





Why Bury the Bird?

— by Renée Friedman

The discovery of the cult statue of Horus, with its golden head and copper body, within a special brick-lined pit by J.E. Quibell in 1897 during his *first* week of work (see above and *Nekhen News* 9: 12–13), is one of the great stories of archaeology. But how it came to be in that hole has remained a mystery; one made even more intriguing by the mention of its presumed replacement, which was carried back from the capital at Lisht at the very end of the 13th Dynasty by the inspector of priests, Horemkhawef. So proud of his role, Horemkhawef relates the story not only on his limestone stela (now in New York), but also in a painted version inside his tomb at Hierakonpolis. As the superbly crafted original still survives to this day, it begs the questions: why did they need a replacement? Why did they bury the bird?

An inscription recently discovered in the Second Intermediate period tomb of the governor Sobeknakht at El Kab may now provide the answer. Hidden for over a century beneath soot and the modern blockage of a doorway, the inscription preserves a chapter of history the Egyptians later preferred to forget. It tells of a raid by Nubian tribes and an attack on Elkab, in this case perhaps successfully fought off. However, we know from the large number of Egyptian artifacts, including pieces from Hierakonpolis, in the royal tombs at the Nubian capital of Kerma that other raids had been effective. They were probably a recurrent problem, as the Pan-Grave/Medjay mercenaries stationed at Hierakonpolis (whose graves we investigated in 2001 — see *Nekhen News* 13: 22–26) are unlikely to have been there simply for show.

Putting the pieces together, it seems possible that either because they had been defiled during a raid, or as a precaution against feared incursions, the valuable metal statuary (the falcon and Pepi statues) and portable objects (such as the Khasekhem statues and the marvellous ceramic lion) in the Hierakonpolis temple were honorably and safely buried in special pits by the priests. But once interred they were effectively dead, and in need of replacement. While the new statue so proudly brought back by Horemkhawef has not come down to us, the measures taken to protect the original served their purpose perhaps better than the priests could have ever imagined. Now restored, with efforts that were nothing less than heroic, Horus presides again as one Egypt's most precious treasures.

Join the Friends of Nekhen and help us continue to make these exciting discoveries. See page 31 for details.



The pit and chamber in which the bird was found (*Hierakonpolis* I, 1900: pl.xlii).



Gold and copper statue of Horus, restored. (Eckmann and Shafik, 2005: pl. 43)





THE HIERAKONPOLIS HOME PAGE

Christmas at Hierakonpolis

— by Jane Roy, Vancouver, BC

For the UBC team it was our first Christmas in Hierakonpolis, and for many team members their first away from home. With a mixed contingent of Australians, Canadians and Germans, at first it seemed difficult to decide on exactly what form the festivities should take, but as the Germans traditionally celebrate on Christmas Eve, it was the perfect excuse to do it twice and please everyone with a dinner on the 24th in Northern Hemisphere style and a lunch the next day for those from Down Under.

As the time approached, "special things" began to emerge from people's luggage. Sarah Bryant was the leading lady in this respect, having brought a veritable Christmas hamper of goodies from Canada including smoked salmon and pâté and even some decorations for our holiday "tree" (okay it was a branch). In addition, our chief guardian Sidain surprised us with a wonderful dish of *mahshi* (stuffed cabbage rolls) prepared by his wife for our special occasion. It was a truly delicious Christmas Eve supper washed down with some Obelisk Cabernet Sauvignon — Egyptian wine certainly has come a long way!

The next day (after a slightly late start), it was the Australians' turn to celebrate the "proper way" with a Christmas Day barbecue. A barbecue, of course, requires a fire, but as you may know, wood is not in great supply in the desert. After scavenging around the site for sticks and branches, no doubt to the great entertainment of the locals, we finally obtained a large bag of charcoal from Edfu — the perfect Christmas gift!



Courtesy of Christmas crackers smuggled in from Canada, silly hats!

So we now had the means to make a fire. but we didn't actually have a barbeque. After mulling over several possibilities, our mudir. Thomas Hikade, suggested a technique developed in the Delta, in which the sieves used to sift the excavation dirt were transformed (after cleaning) into grill plates. Necessity is, after all, the mother of invention.

Once the fire was eventually started with assistance of the sons of Sidain, who found the entire process fascinating, and supported on a 'borrowed' few bricks, the sieve-grill worked flawlessly. Under the watchful eye of Rick Colman, Tandoori the chicken was cooked to perfection and went quite well with the leftover Egyptian cabbage rolls (one can't make just a



Rick tends the barbecue.

little *mahshi*). To top off the meal, we feasted on Barbara Böhm's famous German crêpes.

Christmas in Egypt was never going to be a particularly traditional affair, and the culinary theme was certainly somewhat mixed, but in the true spirit of the day, it showed what a little international cooperation can achieve.



The Cat

The lure of good life (and the bad girls) in the village proved too much for Belly Boy. Over the very hot summer, he abandoned us to the mice, who have returned in numbers to play

following his departure. New recruits for the mouse patrol will be inducted from the village this autumn and, knowing our boy, we have a pretty good idea who they might resemble!



Bye-bye to Belly Boy.





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.

As a Friend of Nekhen 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. Membership in the Friends of Nekhen also entitles you to special rates on Expedition publications.

Help the Hierakonpolis Expedition to continue its important work. Your contribution (tax-deductible in the US) 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.

Membership Application

I would like to help the Hierakonpolis Expedition by joining (renewing my membership in) the Friends of Nekhen. In return for my contribution (tax deductible in the USA), I understand that I will receive the annual newsletter and qualify for reduced rates on expedition publications.

The membership category I prefer is:

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Hierakonpolis Highlights 2005–2006



HK6 reconstructed — more amazing than ever!... .see page 11



Bird on a sherd — page 6



Scorpion on a stick — page 13



A complete one, at last! — page 7

