

THE OSTRACON

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The Tausert Temple Project

2008 Season

By Richard H. Wilkinson

The Memorial Temple of Queen Tausert in Western Thebes was briefly examined by William Flinders Petrie¹ in 1896, but after preliminary study the University of Arizona Egyptian Expedition decided that it would be worthwhile to fully clear, record, plan, conserve and publish the remains of this temple. The Supreme Council of Antiquities granted the Expedition permission to begin this project in 2004, and we have completed five field seasons since then with important results.² This article details our latest field season, which was conducted throughout January 2008.³

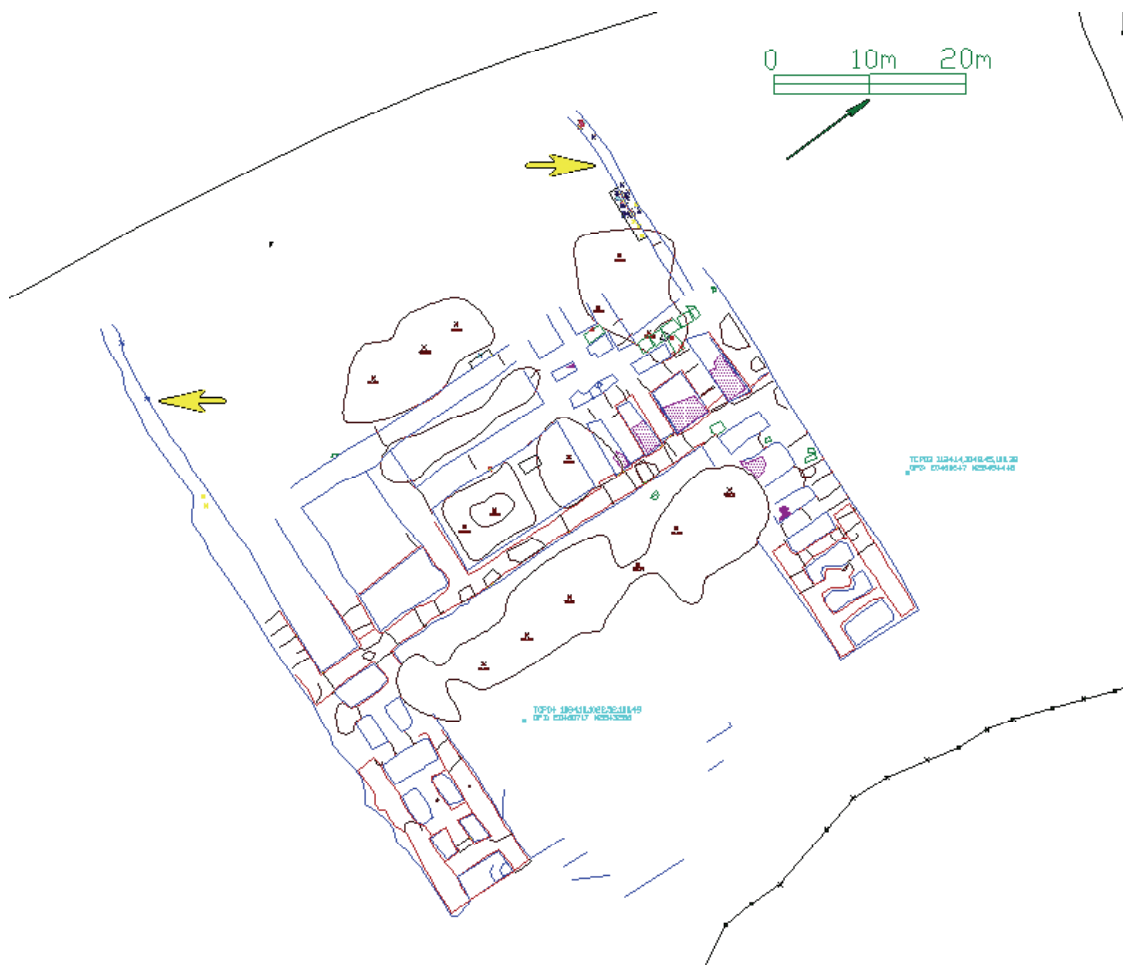


Fig. 1. Small-scale copy of the AutoCAD plan of the Tausert Temple site showing areas excavated to date as well as key features and artifacts found. Yellow arrows indicate the sondages dug in the 2008 season.

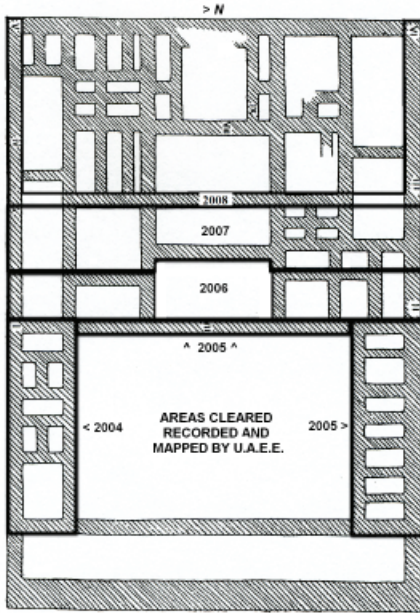


Fig. 2. Modified from Petrie's Plan of the Temple of Tausert (1897) showing the areas cleaned, recorded, and mapped in the University of Arizona Expedition's 2004–2008 seasons.

NEW AREAS, NEW QUESTIONS

Rather than attempting to clear a single arbitrary area in our 2008 season,⁴ we chose to run a test sondage along each side of the inner temple area (Fig. 1) to try to determine its remaining length and better plan the completion of our project in coming seasons. These sondages were dug at half the width of the temple's north and south foundation trenches at a depth sufficient to determine the line of their gebel walls. (Gebel walls are the sides of the trench formed by the gebel where it is present.) We also continued our work to the west of the temple's courtyard area and were able to clear a narrow band of trench and surface units across the entire width of the temple, essentially excavating a narrow U-shaped area around three sides of the inner core of the temple (Fig. 2).

Work in these carefully delimited areas proved very profitable. The precise extent of the temple on its western side has always been unclear, as Petrie's men stopped their selective digging at the point where the temple runs into—or under—the embankment along the western edge of the site. By means of our sondage cut along the remaining length of foundation trench⁵ TA1, we were able to determine the approximate location of the inner temple area.

As in earlier years, some of the sections of the trenches we cleaned this season contained mixed sand and dirt, but virtually no artifacts. We believe these sections were areas where Petrie's men probed when they briefly examined the site. Yet other units were undisturbed and contained a number of features and artifacts. Few features were found in the Trench TA1 units on the southern side. Petrie's men seem to have destroyed cross-trench walls and



Fig. 3. Northwest corner of the Tausert Temple site where much of the work of the 2008 season was focused.

foundation pits in this area, judging by the scattered mud bricks which remained on the southern side. In the TA14 units on the northern side, however, we found no evidence of previous digging, and cross-trench walls were intact. Also, in cleaning this trench we uncovered the edge of a large surface area (designated S30) and found very large, protruding mud bricks, over 40 cm in length. These bricks appear to be part of a room or wall running along the edge of this surface unit, and we plan to clear this part of the temple core in our next season.

TEMPLE TOMBS

Our progress in proceeding into the inner temple area this season was slowed considerably, however, by the discovery of mummified human remains and other associated funerary objects in the TA14 area. These remains are probably associated with one of a number of tombs noted (but not all excavated) by Petrie⁶ on the temple's western edge. One or more of these tombs may well have been robbed in antiquity, and it appears that some of the tomb contents were broken up and divided by the robbers on the adjacent area at the northwest corner of the temple site.

Among the artifacts, apparently from the remains of this transported burial assemblage, we collected a number of large sherds of red and white pottery (Fig. 4) unlike any others found on the temple site, but which are typical of Third Intermediate Period types and which would seem to date the assemblage to that period.

The sherds are from fairly large storage vessels. A large number of clay jar seals (Fig. 5) were also found, which indicates that more of these smashed storage vessels will likely be found as we continue our excavation.

We also found, in this same area, sherds with a highly distinctive incised and painted triangular decoration (Fig. 6). These sherds are unlike anything we have seen in Egypt. Our own ceramicist, Rexine Hummel, and experts at the British Museum and elsewhere have concluded that the pottery is

perhaps a Nubian import. We hope to confirm this in our next season if more diagnostic sherds are found.

Many fragments of mummy cloth were found in this area, along with chunks of unpainted and painted wood which appear to be pieces of the smashed sarcophagus or sarcophagi from the plundered tomb(s). None of the fragments of wood found so far was larger than a few centimeters, but several bore decoration (and in one case, hieratic characters) which appeared to be from the Third Intermediate Period, which strengthens our belief regarding the date of the first pottery type discussed above.

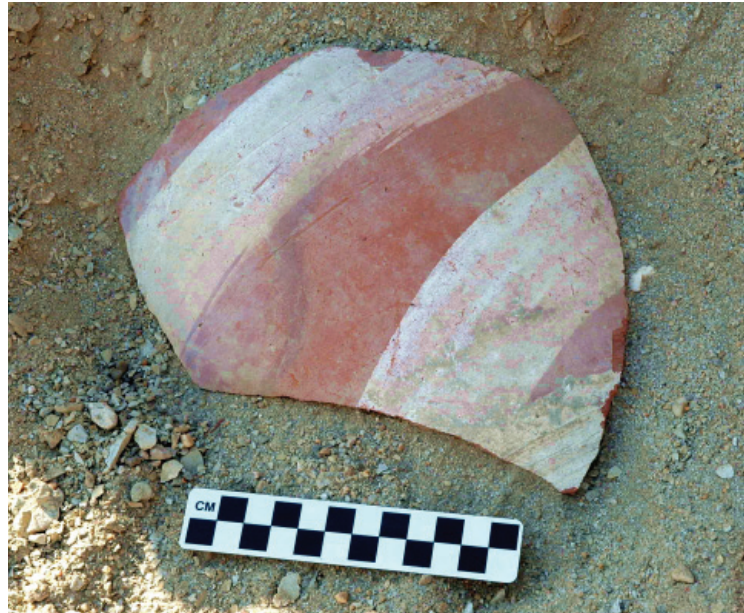


Fig. 4. Sherd of Third Intermediate Period type pottery found in the excavation of TA14 and probably associated with the remains of a robbed tomb adjacent to the temple site.



Fig. 5. Some of the many clay seals from storage jars—probably associated with the Third Intermediate Period storage jar pieces found in trench TA14.

Among the fragmentary human remains we collected in this area were partial upper and lower mandibles (Fig. 7), sections of cranium, a number of vertebrae, several long bones—including a humerus, radius, and an ulna—and parts of a pelvis, a hand, and foot. We are grateful for the examination of images of these remains by Expedition member Dr. Gonzalo Sanchez. According to Dr. Sanchez's report, the cranial fragments seem to be those of a young individual, perhaps pre-teen, based on the lack of fusion of the suture processes. Likewise, examination of one of the mandibles shows the teeth are still well embedded, suggesting this person was relatively young, as there does not appear to be any bone resorption around the roots. Another mandible exhibits bony resorption and appears to be from an older person. The epiphyseal lines on the recovered humerus are not visible, so the person was doubtless post-pubertal. Likewise, our examination of the vertebrae indicates that they are from two different individuals. One series shows bony proliferation which has fused the vertebral bodies across the disc space. There is also a cavity which appears to represent loss of bone. Loss of bone integrity and the reactive proliferation of bone are most characteristic of inflammatory lesions which might be due to tuberculosis or an abscess from some other cause such as staphylococcus or streptococcus.

Thus, the human remains found so far seem to represent at least two individuals—one young and one older. We plan to continue the medical examination of these remains next season and hope to gain more information regarding the age, sex, and health of the individuals.

All of the human remains and artifacts found during the 2008 season were catalogued and placed in storage in the SCA magazine behind the Carter House on Luxor's West Bank.



Fig. 6. These distinctive, possibly Nubian, pottery sherds found in the excavation of TA14 are probably associated with the fragmentary remains of a robbed tomb.



Fig. 7. Two of the partial mandibles from the scattered human remains. The two fragments shown are likely from two different individuals.

CONSERVATION ISSUES

Conservation of discovered features is an important aspect of careful excavation, and this is an aspect of our project which is given a good deal of attention. In the process of cleaning the temple's surface areas, foundation trenches, walls and pits, we have continued to carefully assess each unit in terms of its condition. Every excavated unit is assessed as being *intact*, *good*, *fair*, *poor*, or *destroyed* (using a percentage range breakdown). Units are then coded in terms of needed treatment as follows:

- 1 = Very unstable, needs treatment soon;
- 2 = Somewhat unstable, should get treatment in near future; 3 = Fairly stable, might need treatment in the future; and
- 4 = Stable.

Fortunately, most sections of the foundation trenches we have excavated are quite stable though some units have been given immediate stabilization, and a number have been noted for conservation treatment in our future seasons. The condition of each of the site's surface units—the courtyards and rooms of the temple, the walls, the pits, and the other features—is recorded utilizing the same range of assessment categories applied to the trench sections in order to keep all our conservation data consistent and fully searchable. This enables us to record the level of preservation needed for every section and feature and then to group units of similar level of preservation need together for parallel treatment according to need.

REASSESSMENTS

Another important aspect of successful excavation is the practice of constant re-assessment of evidence as new data are discovered. The smaller area of excavation attempted this season allowed us to re-examine some of our previous data and to produce improved interpretations. For example, the many shabtis found in the foundation trenches surrounding surface area S11 were initially thought to be symbolic offerings associated with the Osiride suite of rooms traditionally found at the southwest corner of royal memorial temples of the New Kingdom. After reexamination of the location data, we

now believe that the area in which our shabtis were found is too far east of the traditional Osiride area for that interpretation to be correct; instead, they may represent symbolic offerings associated with the shrine of the ancestors. Similar offerings occur in other nearby memorial temples (e.g., the Temple of Sety I shrine for Ramesses I, and the Medinet Habu shrine for Ramesses II).

Although no new inscriptions were found this season, the inclusion in our team of an expert hieraticist, Dr. Robert Demarée of the Department of Egyptology at the University of Leiden, enabled the re-examination and reassessment of some of the texts we found last season. This led to two improvements in translation. The small hieratic note we found painted onto a stone on the east side wall of the unit 7 of trench TB10 was initially believed to record the name *nsw-m3't-r'*, but Dr. Demarée has corrected this reading with *r' Wsr-h3.t*—"Section of Userhat (with determinative of the sitting man)." Similar notes are known from the Valley of Kings, Deir el-Bahri, etc., and indicate either the section of work under supervision by someone, or sometimes an amount of stones or other materials delivered by someone. In this case, the former meaning certainly applies.

We also now realize that the hieratic inscription found last season on the western edge of a foundation block from Unit TA13:5–6 does not read "Regnal year 7" with the number "129," but rather: *rnp.t-sp 7 3bd I 3x.t sw 23*; i.e., "Regnal year 7, first month of Akhet, day 23." We are very grateful for these improved translations. We are also pleased to report that Dr. Demarée has confirmed that our preliminary translation of the historically important inscription found on the top surface of this same stone, which mentions Tausert's *eighth* year, is correct.

New assessments were also made regarding the original extent of the building of Tausert's temple. Based on his limited examination, Petrie presumed that very little building was conducted on the site and that, apart from some mud brick structures, only a few stone foundation blocks were laid down at the very rear of the temple. Our work has shown that the temple was actually much more developed. Not only were foundation trenches dug over the whole site, but also we can already state the following:

- 1) Clean sand was placed in all the foundation trenches to receive foundation stones.
- 2) We have found more foundation blocks, over a much more widespread area than Petrie was aware of, including a number in the front part of the temple.
- 3) *Dekka* (that is, gypsum-mud flooring) found on many of the surface units we have uncovered indicates that walls were already built around these areas, as the *deka* surfaces would be destroyed in the building process if put in first.
- 4) Stone fragments have been found over the whole site. Most of these fragments were clearly broken rather than cut, which indicates that stone features were demolished throughout the site.
- 5) Plaster found on many of the stone chunks we have uncovered indicates that walls and other features were built and plastered before being later demolished for their stone. The

quantity, size, and damaged nature of the plastered stone pieces (and fragments of plaster) indicate this scenario to be much more probable than one in which plastered stones were taken to the site.

All these facts point to the probability that Tausert's temple was far more developed than previously believed. They indicate that not only were foundation blocks placed throughout the foundation trenches, but also that a considerable amount of building was accomplished upon the foundations and that these stone-built features were demolished for their stone by one of Tausert's successors, perhaps Sethnakht, or by another king of some subsequent dynasty.

NOTES

1. Petrie's cursory exploration of the site of the Tausert Temple is recorded in his book: Petrie, W. M. Flinders, *Six Temples At Thebes* (London, 1897), pp. 13–16. The plan and many of the statements included in his account are inaccurate, however.
2. Summaries of the first four seasons of the Tausert Temple Project have appeared in earlier issues of *The Ostrakon*: The 2004–05 seasons are summarized in 16:2 (2005), pp. 7–12, and 17:1 (2006), p. 9; the 2006 season in 17:2 (2006), pp. 9–12; and the 2007 season in 18:1 (2007), pp. 3–10. These summaries are also available online at <http://web.arizona.edu/~egypt/fieldwork>.
3. We would like to thank Director General Dr. Zahi Hawass and the members of the Permanent Committee of the Supreme Council of Antiquities for granting us permission to continue this project. We would also like to thank Mr. Magdy El-Ghandour, Director of Foreign Missions, for his kind and continued help in arranging our work in Egypt. In Luxor, the Director of Upper Egypt, Mr. Mansour Boraik was of great help—as always—and we thank him particularly. We also thank Mr. Ali El-Asfar, Director of West Bank Antiquities, as well as our assigned inspector, Zahara Ragab Mahmoud, and Reis Ali Farouk Sayed El-Quftawi, along with Reis Omar Farouk Sayed El-Quftawi and Assistant Reis Kamal Helimy, who were all a great help to us. It was a pleasure to work with our Egyptian colleagues and we thank them all. As before, our thanks are also due to the American Research Center in Egypt, which facilitated our Expedition—and especially to Shari Saunders and Amira Khattab whose kind and able help we greatly appreciate.
4. Our project staff for the 2008 season consisted of Dr. Richard Wilkinson (director), Ashleigh Goodwin (assistant director for mapping), Damian Greenwell (assistant director for excavation and section leader), Richard Harwood (associate director for photography and section leader), Kehaulani Kerr (photographic assistant), Danielle Phelps (object registrar), and Linda Regan-Gosner (excavation assistant and section leader). We employed 35 Egyptian workmen as well as reis, associate and assistant reis, drivers, and boatmen for the season.
5. The numeration employed in our designation of trench and surface units in the Tausert site is documented in our reports and publications but may be briefly explained here. The temple's foundation trenches were assigned designations TA1–14 for east-west trenches and TB1–12 for south-north trenches (with 2-meter sub-units) in the areas cleared so far. This system makes possible a better analysis of artifact distribution than a regular grid system would allow. Surface units defined, studied or cleaned so far are designated S1–S40.
6. Petrie, *Six Temples at Thebes*, p. 18.

Dr. Richard H. Wilkinson is professor of Egyptian archaeology at the University of Arizona and director of the University's Egyptian Expedition, which has conducted research and excavation in Egypt since 1989. He is the author of many articles and books on ancient Egypt and editor of Egyptology Today, published by Cambridge University Press.

A Mummy Mystery

By Bonnie Sampsell

In 2006, I volunteered to design and install a new exhibition at the Wayne County Historical Museum (WCHM) in Richmond, Indiana, my home town. The exhibit was to feature the museum's 3,000-year-old mummy in its decorated coffin (Fig. 1) along with other objects from the museum's Egyptian collection. I knew that several studies had been conducted over the years by local radiologists and others, but many things about the mummy were still unknown, including its origin, its gender, its age, and its cause of death. Clearly, a lot of research would be needed before our exhibit could tell a coherent story to the visitors.

From the museum's records I learned that the coffin and mummy had been purchased by the museum's founder, Julia Meek Gaar. Mrs. Gaar decided to use her wealth and leisure to travel the globe buying objects to display in a museum for the edification of Richmond's citizens, especially the children. She bought the coffin with its mummy along with many other items on a trip to Egypt in 1929.



Fig. 1. Mummy in the Wayne County Historical Museum, Richmond, Indiana.

She was very pleased because mummies were rarely available for purchase in those days, and she did have difficulty with the Egyptian authorities in getting permission to export her coffin with a mummy inside.¹ Mrs. Gaar reported that the Cairo dealer told her the coffin belonged to an 18th Dynasty princess. He said the coffin had been in his shop for 40 years and that it had been

discovered in the Valley of the Kings (Fig. 2). Of course, she had only his word for all of this. I wondered whether any part of this story could be verified.

Over the years, the WCHM staff and board of directors had tried to learn more about the coffin and mummy. In 1974, Mark Millis, a local college student, came to the museum for an interim project. He arranged to have the mummy X-rayed at the local hospital. The X-rays revealed an almost intact skeleton

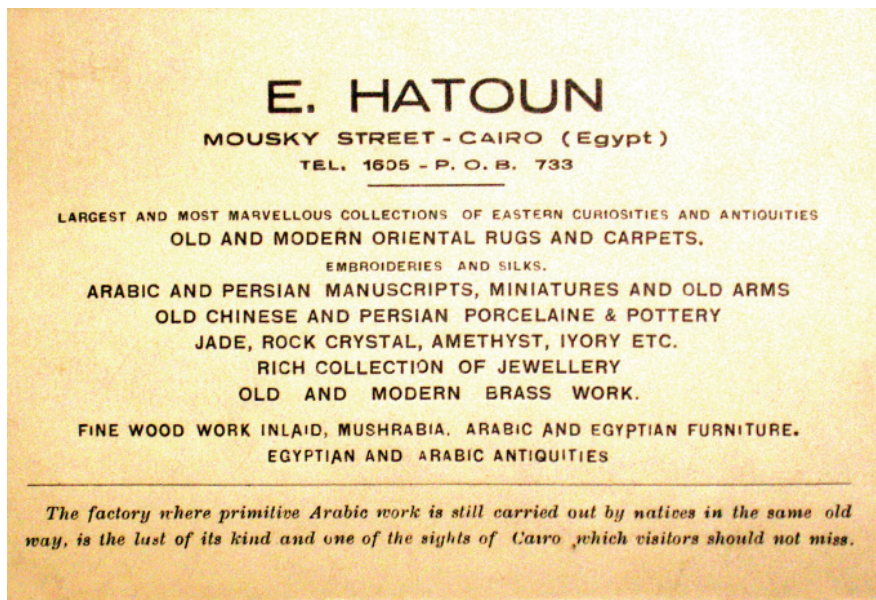


Fig. 2. Business card from the Cairo establishment where Mrs. Gaar purchased the WCHM coffin and mummy.

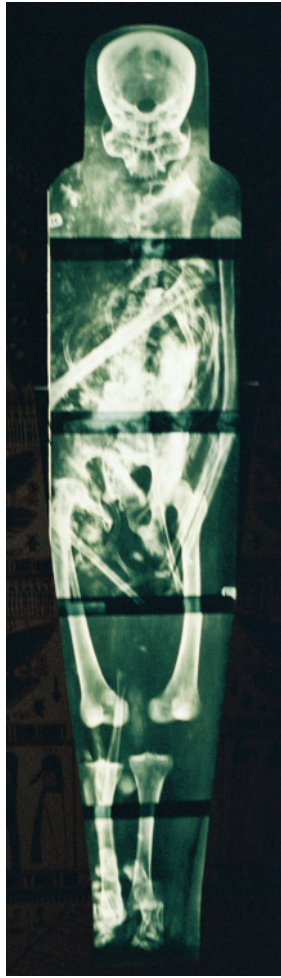


Fig. 3. X-ray of the WCHM mummy.



Fig. 4. WCHM mummy with bare skull.

of a mature individual (Fig. 3). The bones were somewhat disarranged, however, probably as a consequence of handling and shipping. The radiologists noted that the pelvis was broken and hard to visualize, but they thought the body was that of a woman.

While the mummy's body is still wrapped in what appear to be ancient bandages from the neck down, the skull is bare of wrappings and is loose (Fig. 4). We think this desecration occurred when the Egyptian authorities searched the mummy for valuables in 1929. Although this damage to the mummy is regrettable, it does mean that the skull is available for direct examination. Most of the teeth are missing (some can be seen among the bandages of the chest), but examination of the upper jaw reveals that the person once had wisdom teeth. This means the person was at least 20 years of age and probably older since the remaining teeth showed considerable wear. Such tooth abrasion was often caused by grit in the diet of the ancient Egyptians.

The mummy was X-rayed again in 2000 with better results, but there was still no agreement among the attending doctors over its sex. Nor was the issue settled by a third examination in 2003 when the mummy starred in a television episode of *The Mummy Road Show*.² *The Mummy Road Show* hosts, Ron Beckett and Jerry Conlogue, decided the skull's brow ridges and mastoid bone looked masculine. They suggested that the skull might not go with the mummy's body, citing a period of "mummy-mania" in the early 1800s CE when uncontrolled digging in the cemeteries in Egypt, especially around Luxor, produced hundreds of coffins and mummies.³ It was common for the tomb robbers to make up combinations of the best coffins with best mummies and even parts of mummies before passing the objects on to dealers who sold them to eager tourists. Even assuming that a mummy was sold in its original coffin, this practice of tomb plundering separated the mummy from a potentially important source of information: its tomb or burial place.

So how could we learn more about the Wayne County Museum mummy? I began by doing library research and talking with several Egyptologists. Many people think that the ancient Egyptian society was extremely conservative and that funerary practices established in the early dynastic period were continued slavishly for three millennia. This is in fact not true. Certain beliefs were a continuing influence, such as the need to prepare for the afterlife, but the actual styles of tombs, coffins, and mummification techniques varied over time.⁴ Through concerted efforts, Egyptologists have developed criteria for different periods based on firmly dated finds. These objects now form a reference set for analyzing unprovenanced or "orphan" objects.

By comparing pictures of the WCHM coffin lid to those in museum catalogs, I found that our lid matched several found in tombs on the West Bank at Thebes (modern Luxor) that are known from inscriptions on them to be from the 21st Dynasty. The WCHM coffin lid is an example of a Type V lid according to the exhaustive study of coffins of this period by Andrzej Niwinski.⁵ Type V lids are characterized by the great width of their beaded and floral collars and the presence of crossed red bands (called mummy braces or stola) on the chest (Fig. 5). They were



Fig. 5. Left: Lid of the WCHM coffin. Middle: Lid of 21st Dynasty coffin in the British Museum. Right: Carefully wrapped mummy in the British Museum coffin. Note the painted interior of this coffin.

produced from around 970 BCE to 890 BCE, a period that encompasses the end of the 21st Dynasty and the beginning of the 22nd. The fact that the WCHM coffin lid has no separately-carved hands applied to it indicates that it was actually produced in the early 22nd Dynasty.

Coffin lids of this type were often fashioned ahead of time as stock items with a blank space left at the end of the inscription where the deceased's name could be inserted when the coffin was purchased. The inscription on the coffin lid reads, "May Osiris, the Foremost of the Westerners, Lord of Eternity and Ruler of Everlastingness, give funerary offerings of bread, beer, beef, fowl, incense, alabaster and clothing for . . ."6 No name appears below this inscription; rather the foot area looks as if it has been restored or repainted. As discussed below, the coffin may have been usurped for a later burial.7

The WCHM coffin case has a design that can also be traced to the 22nd Dynasty. Compared to other published examples, this case has a very simple design on the exterior and lacks any painting at all on the interior. For example, the coffin at the Burke Museum in Seattle, which dates to this same period, has much more elaborate decorations on both the exterior and interior.8 As shown in the photo enlargement of one section of the coffin (Fig. 6), the WCHM coffin carries many repetitions of five different motifs arranged in vertical columns. These designs all have funerary significance.

Number 1 is the hieroglyphic sign for "the west." The land of the west is the land of the setting sun, and so the ancient Egyptians thought that was the place of the Afterlife.

Number 2 is the *djed* pillar hieroglyph. Its meaning is stability and endurance. It is also the symbol of the god Osiris, lord of the underworld.

Number 3 is a coiled snake probably representing the god Mehen. In Egyptian mythology, there were several snakes in the underworld. Mehen was the one who protected the sun god, Re, on his nightly journey through the underworld. By extension he was thought to protect all the dead.

Number 4 is an offering formula for the dead person's benefit. It says, "The one revered by Osiris, Lord of Eternity." Several variations of this formula are painted on the coffin.9

Number 5 is the falcon-headed Qebhsenuf, one of the four Sons of Horus. Symbols of the other three sons also appear on the coffin and can be identified by their heads. They are Imsety (human), Hapy (ape), and Duamutef (jackal); protective deities that appear in many funerary scenes and, from the 19th Dynasty on, as lids on canopic jars.

Before turning to the mummy itself, it should be noted that the mask displayed on the WCHM mummy is not contemporaneous with the coffin but dates to the late Ptolemaic or early Roman period (see Fig. 1). Mrs. Gaar purchased this mask in the same shop in Cairo where she found the coffin. We do not know her original intentions for it, but it is easy to imagine that when she saw the miserable state of the mummy after the Egyptian authorities "opened" it, she decided to place the mask on the mummy's head, where it has been displayed ever since.

Third Intermediate Period burials often included a set of coffins, with coordinated designs, including a full-length mummy board (instead of a mask that would cover only the mummy's head and chest), an inner coffin and lid, and another larger outer coffin and lid.¹⁰ The WCHM mummy lies in a single inner coffin. This is a sign, along with the poor quality of the case and the anonymity of the lid, that suggests the burial was a modest one. The mummy's body, too, seems to have had a low-budget treatment.

One might naturally assume, having determined the WCHM coffin's date and its likely origin from a minor workshop in or near Thebes, that this would date the mummy as well.¹¹ Unfortunately, as many museums have discovered, their mummies do not belong with the coffins in which they arrived. A "mismatch" is recognized if the sex of the mummy differs from the sex of the person shown or named on the

coffin, or if the style (and therefore date) of the coffin does not agree with the style of mummification. There can be several causes for such mismatches.

In antiquity there was much reuse of funerary materials with old coffins usurped to bury later bodies. Similarly, bodies vandalized by robbers might be placed into new coffins and reburied by the cemetery authorities. Both practices were common in the 21st and 22nd Dynasties. As already indicated, 19th century CE dealers frequently created new combinations of coffins and mummies. A final reason for mismatches is carelessness on the part of some museums that have many coffins and mummies, but that does not apply in the WCHM case with its single coffin and mummy.

What does the WCHM mummy itself have to tell us? Forensic anthropologists primarily look at the pelvis and the skull for clues about the sex of skeletons. Each of these complex bones has a number of features that tend to differ between males and females. However, for each sex, these features all vary and the range of variation in male bones partly overlaps that in female bones. Therefore, it can be difficult to make a positive sex determination on an isolated skeleton.

Each of the variable features of the skull and pelvis also shows variations among different human populations. Ideally a person analyzing the skeletal remains should have wide experience

with the population from which the mummy comes. The museum was fortunate in obtaining the assistance of Dr. Azza Sarry el-Din, a physical anthropologist at the National Research Center in Cairo, who has extensive experience in studying skeletons from ancient Egyptians. She studied photos of the 1974 X-rays and pictures of the skull and, in March 2007, provided the results of her analysis. Dr. Sarry el-Din was able to evaluate five features on the X-ray of the pelvis: all were judged to be male. Her examination of the head of the femur suggested an age at death of 30–35 years.

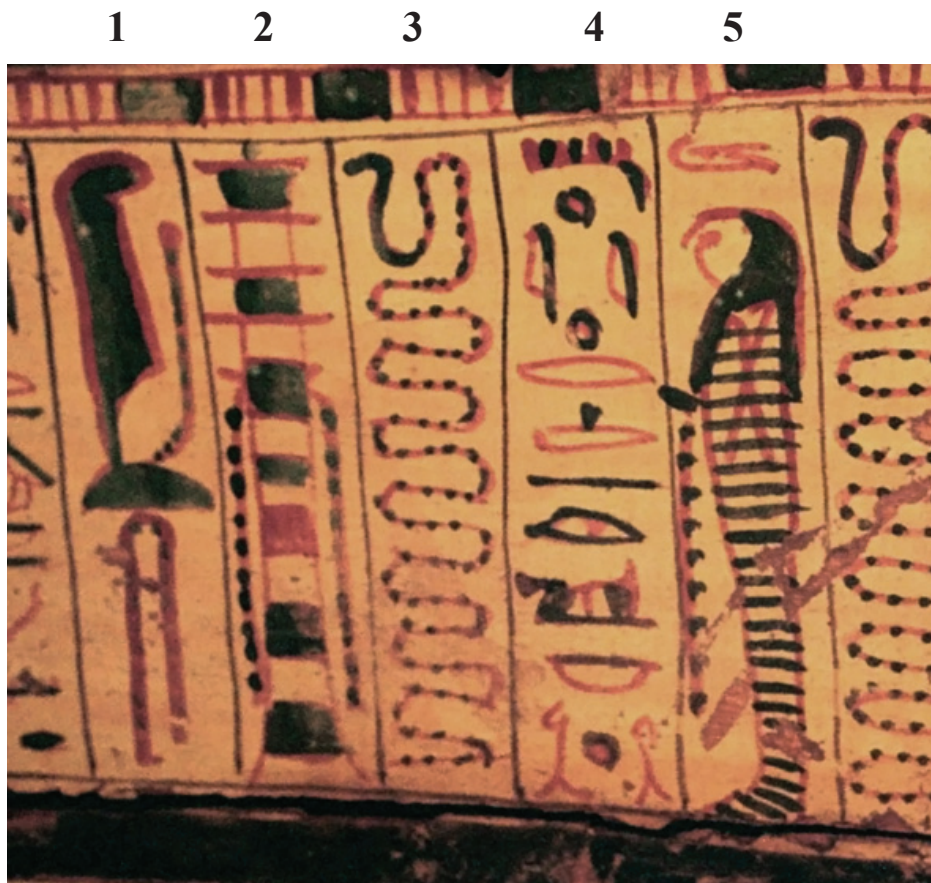


Fig. 6. Several of the motifs on the case of the WCHM coffin. Variations of these designs continue around the entire case.

Based on photographs of the skull, Dr. Sarry el-Din was able to score seven features using this scale: 5 = typical male, 4 = slightly male, 3 = indeterminate gender, 2 = slightly female, and 1 = typical female. The average for the seven features was 3.86—indicating that the skull most likely came from an ancient Egyptian male (Fig. 7). By studying the sutures on the skull, Dr. Sarry el-Din estimated the age as 30–35 years. Thus the head and body are probably from the same individual, who was in fact a man, instead of a woman as is depicted on the WCHM coffin lid.

Scientists at the National Research Center in Cairo use the formulae developed by Trotter and Gleser to estimate the stature of a person from measurements of his long bones.¹² I was able to measure the length of the mummy's left femur from the X-rays; it is 44.75 cm long. Putting this into the Trotter and Gleser formula results in an estimated height for the WCHM mummy of 164.77 ± 3.94 cm. (This is equivalent to a height between 5' 3.3" and 5' 6.4".)

During the 21st and 22nd Dynasties, Egyptian mummies were prepared in distinctive ways that make them easy to identify and date. For example, the mummified viscera were wrapped and returned to the body cavity instead of being placed in canopic jars. Also, packing material in the form of linen rolls or mud or sawdust was placed inside the body and inserted under the skin in an attempt to restore the natural contours of the body. The X-ray of the WCHM mummy shows that it has some sort of foreign material inside it. An endoscopic examination during *The Mummy Road Show* revealed a piece of linen, which may or may not contain internal organs, and a packet covered in resin. The endoscopy also showed that the cribriform plate was intact. This bone, which forms the roof of the nasal cavity, was usually broken when the ancient embalmers extracted the brain through the nostrils. The WCHM skull is nonetheless empty; it is clean and free of any resin or other extraneous material.

The fact that this mummy's bones became so disarranged suggests that the body was not wrapped with the care usually shown in this period, in which the limbs were first wrapped and then secured to the torso. Nor does the mummy display any of the neat outer ties like those on the 21st Dynasty mummy from the British Museum (see Fig. 5). And while we will never know if the Egyptians found anything of value on the mummy in 1929, the X-rays do not reveal any amulets or other jewelry among the remaining bandages. In fact, everything about this mummy and its coffin suggests a modest interment.

The coffined WCHM mummy was probably buried in a so-called cache tomb along with others of his class.¹³ The construction of large decorated tombs for individuals or families at Thebes had ceased at the end of the New Kingdom.¹⁴ In contrast, in the Third Intermediate Period, large undecorated chambers were excavated to house large groups of burials, especially those of priests of Amun.¹⁵ Coffins were also placed in older, i.e., New Kingdom,

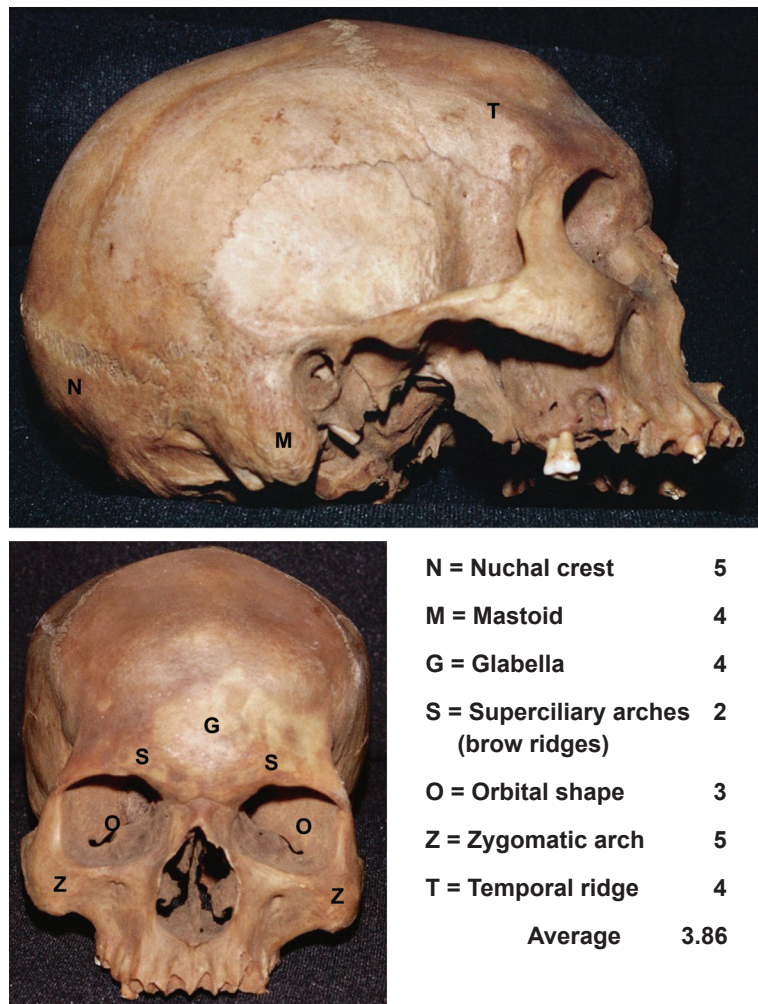


Fig. 7. Two views of the unwrapped cranium of the WCHM mummy. Dr. Azza Sarry el-Din scored the indicated features on a scale in which 5 = typical male, 4 = slightly male, 3 = indeterminate gender, 2 = slightly female, and 1 = typical female.

tombs all over the West Bank. It is from these sites that the 19th Century CE tomb robbers extracted many of the 21st Dynasty coffins sold to tourists and later donated to museums throughout the world. Such was probably the manner in which the WCHM mummy came back into the light of day and found its way to Cairo.

As I researched the history of the WCHM mummy, I learned that many museums have faced similar mysteries with their own mummies. In fact the Richmond museum story has many parallels to that of the Toledo Museum of Art.¹⁶ Toledo's mummy was purchased by the wealthy industrialist and museum founder, Edward Drummond Libbey, on a trip to Egypt in 1905. It was housed in a 26th Dynasty coffin inscribed for a woman named Tamit. The upper part of the Toledo mummy has been unwrapped; its crossed-arm position suggested to many Egyptologists that the mummy should be dated to the Ptolemaic period when that was the common arm position.¹⁷ Carbon-14 dating, however, gave an age in the 22nd Dynasty—a date consistent with the high quality of mummification to which the body had been treated. Experts studied X-rays and CT scans of the Toledo mummy and concluded that the pelvis looked feminine, but that the skull looked more masculine. This issue was settled when DNA analysis showed the body to be male. A forensic reconstruction was made showing the mummy as it looked in life as a young priest.¹⁸

Today the WCHM mummy lies in its coffin at the center of the small Egyptian Gallery surrounded by displays reminiscent of a New Kingdom tomb (Fig. 8). Copies of actual tomb scenes provide a background for objects similar

to those that would have been placed in a well-stocked tomb. Some people have criticized the practice of displaying mummies to the public in museums, but I feel the WCHM mummy is displayed respectfully. The Greco-Roman mask gives the desecrated head a pleasing and dignified appearance. “To live forever and have one’s name remembered” was the goal of every ancient Egyptian; although this man’s name is lost to us, he has certainly not been forgotten.

NOTES

1. This may be a consequence of a law passed in Egypt in 1912 that forbade the export of antiquities. See Wakeling 1912. Many antiquities were exported after that time, however. For examples see Berman 1999.
2. Engel, Steven, and L. Engel. 2002. *The Mummy Road Show: Mummy Mismatch*. The National Geographic Channel.
3. Beckett and Conlogue 2005.
4. Ikram and Dodson 1998.
5. Niwinski 1988.
6. Translation by Dr. Lorelei Corcoran, University of Memphis, and Dr. Edward Wente, Oriental Institute.
7. Cottman 2003, 4.
8. Cottman 2003.



Fig. 8. Contents of a display case adjacent to the WCHM mummy showing typical items placed in a tomb to provide for the afterlife.

9. I'd like to thank Dr. Emily Teeter of the Oriental Institute for translating this and the other inscriptions.
10. Intact sets of coffins have generally only been recovered from tombs that were excavated under modern controlled conditions. Tomb robbers may have separated the parts of a set and sold them separately to obtain more profit. This would explain the large number of individual outer or inner coffins in museum collections. See Niwinski 1988.
11. Opinions of A. Niwinski in letter to B. Sampsell, March 2007.
12. Trotter and Gleser 1952; Hussien et al. 2003.
13. Ibid.
14. Niwinski 1988, Taylor 2000, Niwinski 2007.
15. For example, the Bab el-Gusus tomb discovered in 1891 had 153 burials of priests and priestesses of Amun and other functionaries of his cult.
16. Knudsen 2001.
17. Prior to this period, crossed arms had only been known on the mummies of New Kingdom kings.
18. The mummy can no longer be seen in its coffin at the Toledo Art Museum. When I visited in April 2007, I found that the beautiful 26th Dynasty coffin is still displayed in the gallery of ancient and classical art, but the mummy is in storage.

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The Black Pyramid

Amenemhat Is Mighty

By Kathryn Michel

Each time I visited the Dahshur area I looked out longingly toward the black, amorphous hump called the Black Pyramid. It intrigued me as it didn't look like a pyramid, just an oddly shaped natural land formation. But I was told there was no way a car or bus could get there. And I knew I couldn't walk across the desert that far.

But after four or five trips to the Dahshur area, I found out that although a bus or a car couldn't get there, a four-wheel drive could. So in February 2006 Sarah Greenfield and I, accompanied by our guide, the driver and a security officer, set out. We left the road at the Bent Pyramid and headed east across the desert with the Black Pyramid in plain sight, looking like an island in the desert sea. It was not a difficult drive, but the driver had to do a lot of meandering and back-tracking to find a route over the rough desert. As we approached the big black heap, it became more and more impressive as it loomed ahead. We parked at the northeast corner.

I felt as if I had been here before. Whenever I am in Egypt, and especially at some sites, I have a hard time separating actual time from the time of fiction. This pyramid was the setting of two of

Elizabeth Peters' Amelia Peabody* novels, *Lion in the Valley* and *The Mummy Case*. Much of what I know about this pyramid I learned from these novels, so now I thought of Amelia and Emerson left to die in the inner burial shaft, and I expected to see Ramses, their son, hanging around exploring. However, I returned to real time and concentrated on seeing as much as we could, as the guard with us was in a hurry to leave. We were allowed to walk around but only close to the vehicle. Seen this close and in the bright sunlight, the pyramid is not at all black. It is more of an earthy black-brown, the shade of the skin of Osiris, the color of good rich Nile mud.

This is the pyramid of Amenemhat III (Amenemhat Nimaatra), who ruled from around 1831 BCE to 1786 BCE. His was a long and peaceful reign, about forty-six years according to most sources. A graffito on the pyramid casing suggests that he began this pyramid in the second year of his reign when he was only about twenty years old.¹ According to Verner, this pyramid was passed over by the earliest Egyptologists, as Perring describes a brief visit in 1839 and Lepsius noted it but gave it little attention in 1843. It wasn't until 1865 that De Morgan began excavations and exploring the inner passages here. It was not completely excavated until Dieter Arnold and the German Archaeological Institute in Cairo worked here between 1976 and 1983.²

One wonders just what the builders of this pyramid were thinking. Why build here so close to the waters of Lake Dahshur? Amenemhat wanted to identify with the grandfather of pyramid builders, Senefru of the 4th Dynasty. By the 12th Dynasty, Dahshur must have been an impressive site, with the Bent and the Red Pyramids in full view.

One really has to imagine a pyramid shape here as nothing remains to even suggest a square base or a central apex. Until one is close and can see the mud bricks, it merely looks like an unusual land formation. The original base length was 344 feet, and the height was 246 feet. The angle of the sides was about 57 degrees. Due to the removal of the limestone casing sometime in antiquity, leading to erosion of the structure, the current height is only about thirty meters at its highest point.³

It is the building material I find fascinating—unfired mud brick made from rich black Nile inundation soil.



The top of the Black Pyramid.

*Editor's note: Amelia Peabody, her Egyptologist husband Emerson, and their son Ramses are the main characters in the Peabody mystery series set in late 19th and early 20th century Egypt.



Lake Dahshur

Fortunately much of it remains on the site and has not been removed, but little of the limestone casing remains, now mostly scattered chips and fragments.

It seems Amenemhat had problems with the Nile. In the early years of his reign, unusually high inundations caused planting delays and major flooding. (Then, later in his reign, low Nile flooding led to political and economic decline.) As a result, this pyramid had one problem before even one mud brick was laid. When this pyramid was built, the site was much closer to Lake Dahshur, which was much larger then. The *Baines Atlas* shows Lake Dahshur in modern times as a good-sized

body of water.⁴ However, by 2006–2008, it had shrunk to a series of marshy ponds. This is an area of a rather high water table due to the proximity of Lake Dahshur, yet it is the lowest of all pyramid sites, only 108 feet above sea level.⁵

It is also an area close to the valley floor, where the bedrock is unstable. There is no firm limestone foundation below. There wasn't even a compacted gravel foundation as in the case of the Bent Pyramid. Here the pyramid was built on a foundation of compacted clay.⁶ Structural problems were inevitable and began to appear during the fifteenth year of Amenemhat's reign. The most serious problem was that the core was made of mud brick, but it had no stabilizing stone framework. Instead, the brick core was built in step form. The weight of the whole pyramid caused the ceilings and walls to be crushed as they were pushed down by the weight. Door frames buckled and long fissures appeared; therefore, no more limestone was used, and the remaining rooms were finished and packed with mud brick. Cedar beams were used to support broader chambers. These structural problems became so hopeless that Amenemhat stopped work on this pyramid and began a new pyramid at Hawara. What remains is the tower-like core with the outer limestone casing removed.⁷

Our first impression was that this pyramid seems to be decaying. Luckily there is little heavy rain here, but when it does rain a little bit more is lost. All along the sides, one sees black clumps where parts of the pyramid have slid down. The whole structure seems fragile and unprotected.

Amenemhat was buried elsewhere, but the pyramid didn't go to waste. Six royal family members were interred at the pyramid site. De Morgan discovered the intact burials of two queens. The remains of Queen Aat and another queen were found in corridors on the north side of the pyramid, in burial chambers that had separate entrances to the outside. These might have been added after the main entrance was sealed. The pyramid was constructed so that the royal burial area was entered from the east, not centered but closer to the southeast corner. The burial chambers for the queens were reached from a west entrance directly opposite the eastern entrance.

The queens' burial chambers included separate *ka* chambers with canopic jars. Usually this feature had been used only in burials



Limestone blocks.

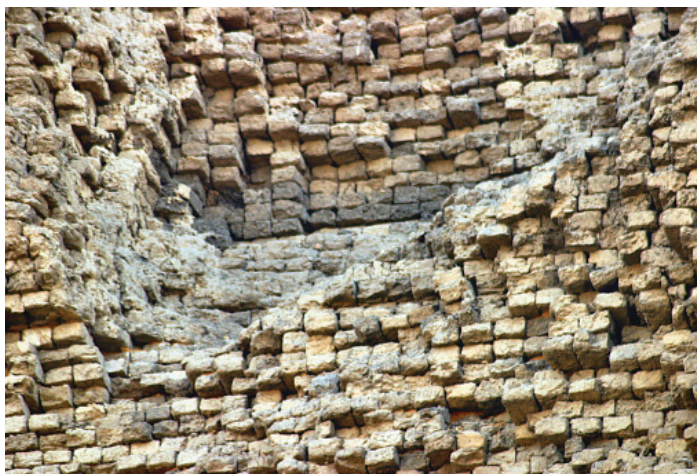
of males. These queens' burial corridors were connected to the king's interior burial chamber.

De Morgan also discovered the burial site of another pharaoh who used this pyramid as his own. This pharaoh was from the 13th Dynasty and his name might have otherwise been lost to history. He was Aibre Hor, also known as Hor Aibra. This pharaoh was listed on the Turin Canon list of kings in the 13th Dynasty. Steven Quirke, in *Who Were the Pharaohs?*, lists him as the third pharaoh of this dynasty, who reigned only a few months.⁸

There is evidence restoration work occurred a hundred years after the time of Amenemhat III when Aibre Hor and his princess were buried in two of the ten shafts on the north side of the outer enclosure. It is suggested that he was a descendant of Amenemhat III, who ruled after the end of the 12th Dynasty.

Aibre Hor is best remembered because of the marvelous *ka* statue found buried with him in a rather small and sparsely furnished tomb. This life-sized statue has the most remarkable eyes, unusually penetrating, which seem to look through the reality of this world and straight into the hereafter. These eyes are made of white and blue glass, colors rarely used for eyes in statues. The statue is in the Cairo Museum. Luckily, his tomb remained intact. The mummy was found in a wooden coffin with a small amount of funerary equipment. Aibre Hor is tentatively dated around 1776 BCE. Whether he reigned for only a few months or a few years is unknown.

The pyramidion of this pyramid was found in a rubble pile on the east side of the pyramid. In 1900 it was moved to the Cairo Museum. This pyramidion was found in remarkably good condition. The image of Amun is damaged but its other inscriptions are in good condition. Was the image damaged during the reign of Akhenaten? It seems likely it was never placed atop the pyramid but was placed on the ground in front of it as a votive pyramidion shrine and was later covered with rubble. Lehner suggests that it was kept in the temple area after work on the



Mud bricks on the side of the pyramid.

pyramid stopped.⁹ I know it is seen by many at the Cairo Museum, but it seems to me it should be returned to the pyramid site, as an additional reward for those of us who make the effort to visit this pyramid. It seems to belong here.

I wanted to walk around the pyramid, or at least over to the west side, to see if I could detect any openings. But the official who was accompanying us said we could only be in the area near the vehicle as walking was “unsafe.” We were going to head for the White Pyramid nearby, so I took one last look at the Black Pyramid just in case I could catch a glimpse of Ramses or his parents. But this day I remained rooted in 2006, which is probably a good thing as De Morgan would have been even more reluctant than our site official to let us explore the site and would have ordered us away. I would love to spend a night here. In the moonlit darkness, who knows what I might see?

AMENEMHAT III REVISITED

My first off-road exploration of the Dahshur area was in February 2006. Later, in November 2006 and in November 2007, I continued my exploration of the area in search of Mazghuna and other sites. Each time, however, I returned to the Black Pyramid, and after the first visit I learned something: Never take the security official if he can be talked out of accompanying you. Tell him you will be out for a long time and he will be wasting a whole day of his valuable time. Tell him you know exactly where you are going (even if you don't). The first time we went, the man who accompanied us was surly, tried to hurry us, and wanted us to stay close to the car. He later took us to what he called the White Pyramid, but in fact it was not. It was the pyramid of Senusret III, where we could only briefly leave the car but could not walk around. Then he took us to Mazghuna—Mazghuna Village, that is—even though I insisted the pyramid sites were reasonably close to the Black Pyramid and it was the pyramid ruin we wanted to visit, not the village. On the next several visits we managed (after a great deal of discussion, argument, examination of paper work, telephone calls, bribery, etc.) to get out to the sites on our own.

Some people aspire to climb pyramids. But my goal is to walk all the way around them, moving slowly, studying all sides and getting to know the pyramid. In spite of the fact this practice might be “dangerous” and “not allowed,” with only my guide and driver on the following visits, I was finally free to walk all around the Black Pyramid and spend as much time as I wanted there.

Dodson describes the remaining core as “heaps of pulverized decomposed brickwork,” but this seems unnecessarily harsh.¹⁰ This is a beautiful pyramid. The bricks that remain in place are surprisingly firm and durable. They are placed in a tight, intricate interwoven pattern, almost like a basket weave. The mud brick core that is now the exterior was built to last.

There seem to have been no subsidiary pyramids planned at the site. The plan was to bury the king’s wives within the pyramid with separate entrances but to connect these burial chambers with the king’s. This pyramid was built on an east-west layout used by Senusret III rather than the traditional north-south plan of earlier pyramids. Plans in various books show the entrance for the king’s chambers to be on the east side, more to the southeast than centered, and for the queens’ chambers to be on the west side, again more to the southwest. These entrances were originally encased in white limestone as was much of the substructure, and the king’s chamber had a stairway at the entrance. Still, it is difficult to walk around with a book in hand, and try to locate these features. The plan shown in books is of a typical pyramid structure with a square base, and what remains here is anything but square, so a “southwest” corner is at best an approximation as there are no actual corners left.

It is too bad this pyramid was never finished and used, as it would have been truly remarkable. It is strange it was deemed unsuitable for the burial of Amenemhat, but the area for the queens’ burials was completed. Both queens buried here seem to have died rather early in the reign of Amenemhat, so they were buried before the pyramid construction was abandoned. It was probably later in the 13th dynasty that the shaft tombs used by Auihre Hor were added to the north side.

Am I satisfied? No, my wish list grows with each visit. I long to see the east side lit by the rays of the rising sun and the west side in the oblique light of sunset. These would be the best picture-taking times here. I would love to go at least a little way into the king’s burial shaft and descend the steps leading to the chamber. Above all I would love to see the giant sarcophagus, which is still in the burial chamber. Hopefully someday this pyramid may be re-opened and my wish to go inside will be granted. Who knows what the future will bring?

NOTES

1. Lehner 1997, 179.
2. Verner 1997, translated 2001, 421–422.
3. Lehner 1997, 179.
4. Baines and Malek 1980, 135.
5. Ibid.
6. Verner 1997, 427.
7. Lehner 1997, 180.
8. Quirke 1990, 55.
9. Lehner 1997, 180.
10. Dodson 2003, 94.

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