**This article was mislabeled in the AAI Curriculum as "Mummy Mystery" but it is the correct reading.

Mystery of the Mummy from KV55 Dr. Zahi Hawass



Akhenaten, Egypt's first and only monotheistic Pharaoh, has intrigued Egyptologists for centuries. Has the Egyptian Mummy Project finally found his mummy?

The Valley of the Kings, on the west bank of the Nile across from the ancient city of Thebes, is famous as the final resting place of the pharaohs of the New Kingdom — Egypt's "Golden Age." There are 63 known tombs in the valley, of which 26 belonged to kings. Beginning with the great female pharaoh Hatshepsut, or perhaps her father Thutmose I, almost all of the rulers of the eighteenth, nineteenth and twentieth dynasties built their tombs in this silent valley.

Only one king from this period, Amenhotep IV or Akhenaten, is known to have chosen a different burial site. Akhenaten rejected the worship of Amun, the

principal state god of his forefathers, in favor of the sun disk, the Aten. He abandoned Thebes, then the religious capital of Egypt, and moved his government to a virgin site in Middle Egypt known today as El-Amarna; it was near this new capital city that he had his final resting place prepared.

Akhenaten's tomb is similar in some ways to those built in the Valley of the Kings; it consists of a number of chambers and passages cut deep into the limestone cliffs of a remote valley. It is decorated, however, with unique scenes connected with the worship of the sun-god Aten, and with images of the royal family. Akhenaten's beautiful wife, Queen Nefertiti, figures prominently in his tomb decorations, as in much of the art of the Amarna period. Although Akhenaten's tomb at El-Amarna was never completely finished, there is little doubt that the king was buried there.

After Akhenaten's death, Egypt returned to the worship of the old gods, and the name and image of Akhenaten were erased from his monuments in an effort to wipe out the memory of his 'heretical' reign.

In January 1907, the British archaeologist Edward Ayrton discovered another tomb in the Valley of the Kings. This tomb, KV55, is located just to the south of the tomb of Ramesses IX, very close to the famous tomb of Tutankhamun. KV55 is small, uninscribed and

undecorated, but despite its simplicity it has great historical value, because it is also connected with the royal family of El-Amarna.

A flight of 21 stairs leads down to the entrance, which Ayrton found blocked with limestone. Although the blocking may have been opened and then resealed in ancient times, the excavators found that it was still stamped with the necropolis seal, a jackal atop nine bows representing the traditional enemies of Egypt. Beyond the entrance lay a corridor, partially filled with pieces of limestone, leading to a rectangular burial chamber containing a gilded and inlaid wooden coffin. Inside this coffin rested a badly decayed mummy, which had been reduced to little more than a skeleton. The lower three quarters of the coffin's gilded mask had been ripped away and the cartouches (oval rings containing royal names) that once identified the owner were removed, leaving the remains inside both faceless and nameless. The identity of the mummy found in KV55 is one of Egyptology's most enduring mysteries.



The newly renpvated Amarna room at the egyptian museum in Cairo. Photo by Mohamed Megahed

The contents of KV55 offer some clues to who the mystery mummy might have been. Although the tomb had been badly damaged over the centuries by floods that periodically inundate the Valley of the Kings, many intriguing artifacts were found inside. Apart from the coffin containing the mysterious mummy, the most spectacular objects were panels from a gilded wooden shrine that had been built to protect the sarcophagus of Queen Tiye, the

mother of Akhenaten. Originally, the shrine had borne the name and image of Akhenaten along with that of the queen, but these were erased in ancient times.

Other objects from KV55 included small clay sealings bearing the name of Tiye's husband Amenhotep III, and Tutankhamun, who may have been her grandson. There were also vessels of stone, glass and pottery, along with a few pieces of jewelry, inscribed with the names of Tiye, Amenhotep III and one of Amenhotep III's daughters, Princess Sitamun. Four 'magical bricks' made of mud were also found in the tomb, stamped with the name of Akhenaten himself. A beautiful set of calcite canopic jars made for Akhenaten's secondary wife Kiya rested in a niche carved into the southern wall of the burial chamber.



The Shrine of Queen Tiye. Photo by Mohamed Megahed

The presence of artifacts belonging to members of the royal family of El-Amarna led to the tomb being dubbed the "Amarna Cache." Most people think that KV55 was in fact used for the reburial of a mummy and funerary equipment that had originally been interred in a royal tomb or tombs at El-Amarna. Unfortunately, it is impossible to determine which of the many names found on the objects in the tomb belonged to the skeletal remains found in the gilded wooden coffin.

The cartouches on the coffin might once have held the key to the identity of the KV55 mummy. Even without them, however, many scholars have felt that the remaining inscriptions, which include titles and epithets, might reveal the identity of the coffin's owner. The great linguist Sir Alan Gardiner argued that the titles showed that the coffin had been made for Akhenaten, and that no one else could have been buried in it. Other scholars, however, have noted that the inscriptions were altered at some point, and it has been suggested that the coffin's occupant might not be its original owner. The French scholar Georges Daressy thought that it might originally have been made for Queen Tiye, and then

altered for Smenkhkare, a mysterious successor of Akhenaten who ruled Egypt for only a short time. Another possibility is that it was made for Smenkhkare during a time when he and Akhenaten ruled together as pharaohs, and then altered when he took the throne as sole ruler. The mystery of the coffin is made even deeper by the fact that part of it was stolen from the Egyptian Museum in Cairo. While its lid is mostly intact, the wood of the lower part had decayed to the point that nothing was left except the gold foil and glass and stone inlay that had covered its surface. The foil and inlay were taken from the Egyptian Museum in Cairo, and eventually resurfaced at the Museum of Egyptian Art in Munich, Germany. The foil and inlay were recently returned to Cairo, but there are still rumors that pieces of the gold foil from the coffin are still hidden away in storage, in museums outside of Egypt. I do not understand how any museum could purchase an artifact that they knew had been stolen from another!

Gardiner's claim that the inscriptions on the coffin could only have referred to Akhenaten, together with the presence of the 'heretic' pharaoh's name on other artifacts in KV55, convinced many scholars that this mysterious king had been brought to Thebes for reburial after his original tomb at El-Amarna was desecrated. The bones belong to a male, with a highly elongated skull. This trait is found in artistic representations of Akhenaten and his family, and can also be seen in the mummy of Tutankhamun, who may have been Akhenaten's son. In addition, the KV55 mummy shares a blood type with the golden king; studies have indicated that the remains from the Amarna Cache belonged to an individual closely related to Tutankhamun. Taken together, the clues lead to the seemingly inevitable conclusion that the KV55 mummy is Akhenaten.

Most previous forensic studies have concluded that the skeleton belonged to a man who died in his early 20s, or at the latest about 35. Historical sources indicate that Akhenaten must have been well over 30 at his death. The majority of Egyptologists, therefore, are inclined to believe that the KV55 mummy is that of Smenkhkare, who may have been an older brother or even the father of Tutankhamun. The identification of the mummy as Smenkhkare, however, poses problems of its own. Little is known about this short-lived king..

Re-opening the Case

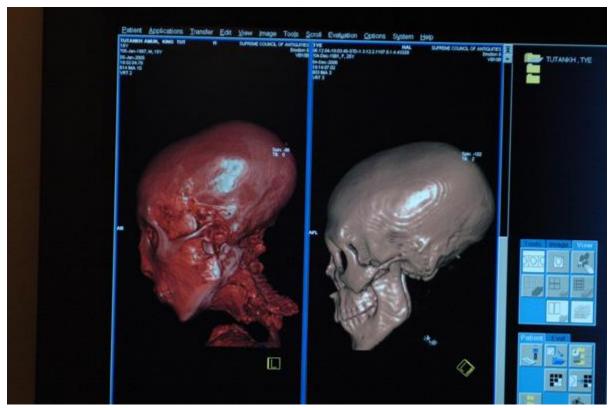
As part of the Supreme Council of Antiquities' ongoing Egyptian Mummy Project, we decided to CT scan the KV55 skeleton in the hope of discovering new information that might shed light on the debate. Our forensic team has studied a number of mummies, and made many exciting discoveries. Our most recent work resulted in the identification of the mummy of Queen Hatshepsut.



Dr. Hawass inspects the KV 55 mummy before its CT scan.

When we brought the remains from KV 55 out, it was the first time that I had actually seen them. It was immediately clear to me that the skull and the other bones are in very bad condition. Dr. Hani Abdel Rahman operated the equipment, and our gifted radiologist Dr. Ashraf Selim worked with us to interpret the results.

Our CT scan put Akhenaten squarely back in the running for the identity of the mummy from KV55. Our team was able to determine that the mummy may have been older at death than anyone had previously thought. Dr. Selim noted that the spine showed, in addition to slight scoliosis, significant degenerative changes associated with age. He said that although it is difficult to determine the age of an individual from bones alone, he might put the mummy's age as high as 60. The jury is still out, but it is certainly tempting to think that Akhenaten has finally been found.



Scans of Tutankhamun's mummy (left) and the bones from KV 55 seem to show similar elongated shape.

Akhenaten, Nefertiti and the Amarna period have received a great deal of attention in recent years. One of the main reasons for this continued interest is that I have requested the loan to Egypt of the head of Nefertiti in the collection of the Egyptian Museum in Berlin. So far, the Berlin museum has not agreed to our request to bring the head to Egypt for three months as part of an exhibition to celebrate the opening in 2010 of the Akhenaten Museum in Minya. I do believe that Egypt's people have the right to see this beautiful sculpture — a vital part of their heritage and identity — in person.

In the meantime, the wonderful artifacts in the newly renovated Amarna room at the Egyptian Museum in Cairo are reminders of the achievements of this period. The shrine of Queen Tiye and the lid of the coffin from KV55 adorn this gallery. A quartzite bust of Nefertiti, perhaps even more beautiful than the painted limestone bust in Berlin, also offers a glimpse of the splendor of the Amarna age. You can also see the gold foil and inlay from the bottom part of the KV55 coffin, mounted on a plexiglass base to show how they were arranged on the original coffin.

My friend Mark Linz, the head of the American University in Cairo Press, told me that he felt that the renovated Amarna room is amazing and unique, adding that he hopes that it will bring the glory of the Amarna period to life and tell people the story of Akhenaten, the first king to believe in a single god.

The Valley of the Kings still holds many mysteries. This coming year, we will begin DNA

studies of the mummy from KV55, along with those of Tutankhamun and others, with hopes that DNA evidence will add even more to our understanding of this period.

We will also embark on the first archaeological expedition in the valley ever to be conducted by an all-Egyptian team. It seems unbelievable that up to this point, every excavation in the Valley of the Kings has been the work of foreign scholars. We are working right now to the north of the tomb of Merenptah, the son and successor of Ramesses II. I truly believe that the tomb of Ramesses VIII may be located in this area. It is possible that even as you read this article, you will hear the announcement of a major discovery in the valley.

There are still more royal tombs yet undiscovered. The tomb of Amenhotep I, for example, is unknown, although it may lie in the area of Deir el-Bahri. There are also many mummies that have never been identified: The remains of Nefertiti, Tutankhamun's wife Ankhsenamun and many others may still await discovery or identification.

The sand and rocks of the Valley of the Kings hide treasure, both in the form of gold and in the form of information that can help us to reconstruct history. I hope that our new excavations will produce great stories, bringing the thrill of discovery and maybe even tales of the curse of the pharaohs, to the world. I am sure that the Valley of the Kings will reveal some of its mysteries to us — I can feel it, and I can see it in my mind's eye. Do not laugh... I know that this is true!