

ONLY TOMB WILL TELL TUTANKHAMEN

Today when the body of a dead boy turns up, a team of specialists is sent to the scene. By examining the body, scientists can learn a great deal about that person's life, and often the cause of death. But in 1922, when archaeologist Howard Carter found Tutankhamen, no one thought a dead body had much to tell. In fact, people had so little regard for mummies that locals used them for firewood. Archaeologists sipped their afternoon tea by the fire with human bones—even skulls—at their feet. For scientists then, it was all about the tomb.

When Carter uncovered the first step to an ancient sunken stairway, he knew he had discovered the entrance to a tomb. But whose? On Sunday, November 5, 1922, Carter wrote in his diary, "The seal-impressions suggested that it belonged to somebody of high standing but at that time I had not found any indications as to whom."



“ HOWARD CARTER
AND TUTANKHAMEN'S
MUMMY

A MUMMY A DAY KEEPS THE DOCTOR AWAY

For centuries ground-up mummy was a must-have in every medicine cabinet. People thought it was a miracle drug. They used it to treat everything from bruises to paralysis. King Frances I of France liked his mummy with rhubarb.

“ Howard Carter, diary,
November 5, 1922

Howard Carter leans over King Tutankhamen's mummy. When people present at the opening of the tomb began to drop dead, including the person paying for the dig, rumors began that Tut had placed a mummy's curse on those who had disturbed him.

66 Howard Carter, diary,
November 24, 1922

When the workmen finished clearing the stairway on Friday, November 24, Carter wrote, “reached as far as the first doorway. There proved to be sixteen steps.” After examining the first doorway, Carter found “various seal impressions bearing the cartouche of Tut-ankh-Amen.” He had discovered King Tut’s tomb.

Not much is known about Tutankhamen. He had taken the throne when he was only ten years old, and guided by his advisers, had set out to restore Egypt. But his father was probably the despised Akhenaten, the king who had robbed Egypt of its gods, and so Tutankhamen was guilty by association. The kings who followed him tried to erase the whole family from history.

Carter’s thrill at finding the tomb of this little known king quickly turned to dismay. The seals revealed that Carter wasn’t the first to discover Tutankhamen’s resting place. “In the upper part of this sealed doorway traces of two distinct reopenings and successive reclosings were apparent.” This could mean only one thing—tomb robbers! With so much wealth heaped inside the royal tombs, it was impossible to keep thieves out. The priests of Amun had tried. They sealed the doors and filled the passageways with limestone chips, but still the robbers tunneled through.

After Carter passed through the first doorway, he found another descending passageway much like the first. Carter and his crew dug their way down the passage, every bucketful of rubble they removed bringing them closer to the second doorway. They must have wondered as they worked,

Tut’s servants, or ushabtis, wait to serve him in the afterlife. They hold the crook and flail, symbols of authority and power. Scholars believe the crook is a shepherd’s staff and the flail is a shepherd’s whip or flyswatter. Kings held them across their chests, symbolizing a shepherd leading his flock.



MIGHTY MONARCHS

1350–1334 BCE
Akhenaten

1336–1334 BCE
Smenkhkare

1334–1325 BCE
Tutankhamen

1325–1321 BCE
Ay

1321–1293 BCE
Horemheb

66 Howard Carter, diary,
November 24, 1922

would this be another disappointment? Would this be another once-glorious treasure-house, destroyed by thieves? What would they find?

Sunday, November 26

After clearing . . . the descending passage . . . we came upon a second sealed doorway, which was almost the exact replica of the first. It bore similar seal impressions and had similar traces of successive reopenings and reclosings in the plastering. The seal impressions were of Tut.ankh.Amen . . . Feverishly we cleared away the remaining last scraps of rubbish on the floor of the passage before the doorway, until we had only the clean sealed doorway before us. . . . we made

a tiny breach in the top left hand corner to see

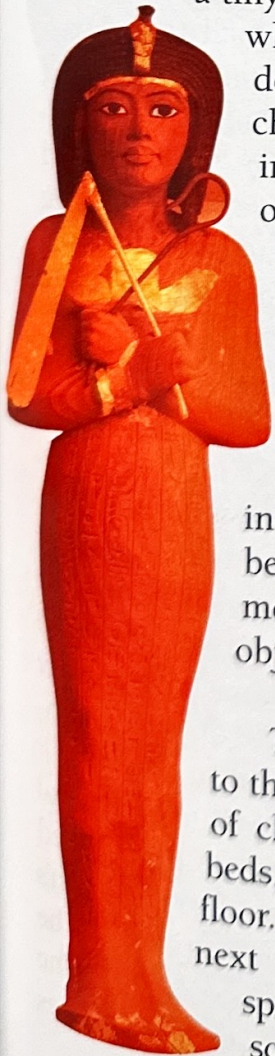
what was beyond. . . Perhaps another descending staircase . . . ? Or maybe a chamber? Candles were procured—the all important tell-tale for foul gases when opening an ancient subterranean excavation—I widened the breach and by means of the candle looked in. . . . It was sometime before one could see, the hot air escaping caused the candle to flicker, but as soon as one's eyes became accustomed to the glimmer of light the interior of the chamber gradually loomed before one, with its strange and wonderful medley of extraordinary and beautiful objects heaped upon one another.

The room Carter peered into was packed to the ceiling. A jumble of chests piled on top of chairs, piled on top of chariots. Statues, beds, game boards, and pottery littered the floor. Everything the king would need in the next life had been crammed into the small space. The tomb robbers must have been scared away before they could do much

“ Howard Carter, diary,
November 26, 1922

RESTORATION

Tutankhamen's short reign was dedicated to restoration. He rebuilt the army, administration, temples, and trade agreements that his father had allowed to deteriorate. The army was enlarged, retrained, and outfitted with the latest weaponry, armor, and chariots. The administrative offices in Memphis were reopened and restaffed. Building began at the temple of Karnak. New trade agreements were negotiated. Restoration took revenue, so a new tax system was worked out. Peasants no longer were taxed on how much grain they grew, but on a rate officials determined they should grow. The rate was based on yearly nilometer readings.



“ Howard Carter, diary,
November 27, 1922

“ Howard Carter, diary,
November 26, 1922

“ Howard Carter, diary,
November 27, 1922

damage. Carter writes, “we had found the monarch’s burial place intact save certain metal-robbing.”

But what was it they had found? If this was a tomb, where was the tomb resident? There were no mummies in sight. Carter writes, “A sealed doorway between the two sentinel statues proved there was more beyond, and with the numerous cartouches bearing the name of Tut.ankh.Amen on most of the objects before us, there was little doubt that there behind was the grave of that Pharaoh.” The doorway to the burial chamber had been broken into as well. Carter writes that the hole was “large enough to allow a small man to pass through, but it had been carefully reclosed, plastered, and sealed. Evidently the tomb beyond had been entered—by thieves!” Would they find King Tut?

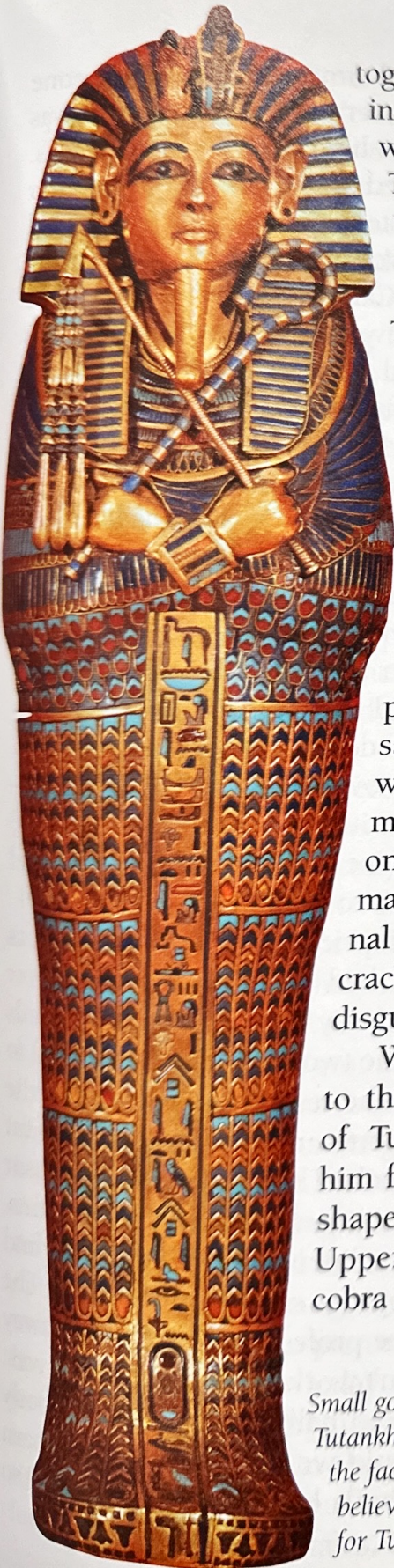
Before they could open the burial chamber, the antechamber had to be cleared. This was no small task. First, every object was photographed from all angles, recording their details and placement in the antechamber. The photographer’s past experiences had taught him well. He told *The New York Times*, “I remember, when we were clearing a series of 18th Dynasty tombs, which had been infested with white ants, the preliminary photographs were literally the only record of most of the wooden objects found. The coffins appeared to be in perfect condition, but when touched they collapsed into dust.”

Wood wasn’t the only fragile material in King Tut’s tomb. Linen crumbled in the excavators’ hands. One garment embroidered with more than 50,000 beads needed special attention. If they touched the garment it would turn to dust and the beads would scatter. The pattern was recorded so that the beads could be put back in the same way on new linen. It took three weeks to empty a single chest of clothing. The antechamber took more than a year to empty.

Finally, Carter was able to break through to the burial chamber—and there he found a golden room. Four gilded shrines, each nested inside the next, boxed in King Tut’s **sarcophagus**. When Carter took the shrines apart he noticed the hieroglyphs “front” and “rear” painted on the panels—assembly instructions. Whoever put the shrines

sarx + *phagos* =
“flesh” + “eating.”

The Greeks believed a particular kind of stone ate flesh, so they make coffins out of the stone. A sarcophagus is essentially a flesh-eating box.



together must have ignored the instructions because the shrines were assembled backwards. The doors should have faced west so that King Tut could exit directly into the afterlife. They faced east instead. Poor Tut was turned around.

Carter pulled back the bolts on the innermost shrine's doors. Barely breathing, he swung open the doors. Inside, filling the entire shrine, was King Tut's stone sarcophagus. Winged goddesses carved into the yellow quartzite at each corner protectively embraced the sarcophagus and what lay within. The lid, however, was made from pink granite. Someone had painted it yellow to match the base. Had the original lid broken? This lid had cracked, too. The crack had been disguised with plaster and paint.

When Carter hoisted the lid to the sarcophagus, the likeness of Tutankhamen looked up at him from the seven-foot human-shaped coffin. The symbols of Upper and Lower Egypt—the cobra and the vulture—seemed to

Small gold mini-coffins held King Tutankhamen's internal organs. Because the face is not Tut's, some scholars believe that the container was intended for Tut's predecessor.

THE WORMS CRAWL IN, THE WORMS CRAWL OUT

Medical examination of mummies reveals that parasites were a problem for ancient Egyptians. The worms that plagued them weren't necessarily life threatening, but they were unpleasant. Guinea worms infected Egyptians through drinking water. Once inside the human body, a larvae matures into a three-foot-long worm, which painfully exits through the skin after a year. Strongyl worms enter the body through the feet and lay their eggs in the intestines, causing abdominal pain, and they migrate to the lungs and throat, causing a constant cough. Parasites didn't just infect the living, they fed on the dead as well. One mummy had more than 270 beetles in its skull.

sprout from Tut's forehead. And around the crown someone had lovingly placed a tiny flower wreath. The wreath was made of olive leaves, blue water-lily petals, and cornflowers.

When the workmen raised the coffin's cover, Carter began to worry. The coffin nested inside had been damaged by water. What if King Tut were badly damaged? Fearing the lid was too fragile to lift, Carter decided to remove the whole coffin. But when the workmen hoisted it, it was much heavier than it should have been. It wasn't until Carter opened the second coffin that he found out why. The third and innermost coffin was made of solid gold. It weighed 250 pounds.

When the last lid to the last coffin was finally raised, three years after the discovery of that first step sliced into the valley floor, Carter and King Tut were at last face to face.

Later, when Carter tried to put down on paper how he felt at that moment, he found he couldn't. There were no words to describe his intense emotions. He was overwhelmed by the realization that it had been more than 3,000 years since another human being had looked into the golden coffin.

The priests who performed Tut's funeral had poured sacred oils over the mummy and the coffin. The oils glued the two together. Carter tried to loosen the resin by warming it in the hot desert sun, but it was no use. Tut was stuck. They called in a professor

of anatomy to perform the examination on Tut's remains. The professor sliced away the linen wrappings only to find that it wasn't just the wrappings stuck to the coffin. The body was stuck, too. First the professor tried to chisel away the body, and when that didn't work, he tried heated knives. Finally, he hacked the torso in half and removed the body by sections. How much would we have been able to learn using today's scientific methods had the body not been so brutally handled?

“ Tutankhamen, Valley of the Kings, 1325 BCE



Howard Carter dusts off Tutankhamen. Today the pharaoh is back in his original resting place, inside his three coffins. He is the only pharaoh left in the burial grounds the Valley of the Kings—at least the only one we know about!

The arm and leg bones pulled from their joints allowed the professor to calculate King Tut's age. He was about 18 years old when he died. He was thin, and five feet six inches tall. Cause of death was never considered.

In a small side room, along with the jars that held King Tut's internal organs, Carter found two tiny coffins holding two tiny mummified fetuses. They were the mummies of the children Tut would never have—

his wife's miscarriages. The professor cracked open the skull of one. The embalmers had removed the brain and stuffed the hollow with linen. The professor found a wire that had been used to push the linen up into the skull, the only embalming tool ever found inside a body—and the professor threw it away.

If a mummy is discovered today, a team of scientists is sent to the scene. Botanists could have told Carter in what month King Tut died by studying the funeral wreath—cornflowers bloom in March in Egypt. Radiologists could have told Carter that King Tut did not die from tuberculosis as many had guessed, but may have been murdered by a blow to the back of the head. Or he may have fallen and hit the back of his head on the ground. King Tut's eye sockets were fractured in a way that is caused by the brain snapping forward when the head hits the ground in a backwards fall (or is clubbed from behind). Neurologists could have told Carter that the vertebrae in King Tut's neck were fused. When Tut turned his head, he had to turn his whole torso, too. Fiberoptic tubes with miniature cameras could have been inserted under the linen to take pictures and samples without ever having to unwrap Tut. Today scientists use DNA to reconstruct family trees. Computers re-create faces. And if we can learn that much more in the time since Carter discovered King Tut, imagine how much we will be able to learn in the future. The dead do tell tales. It's up to us to listen.



This calcite chest holds four jars with stoppers crafted in Tut's likeness. The jars hold Tut's internal body parts. The brain was the only body part embalmers threw out, believing it was not essential. Everything else was saved for when it would return to the body in the afterlife.

THE USUAL SUSPECTS

Who murdered King Tut? The most obvious suspects were those who had the most to gain from Tutankhamun's death, and they were his top three advisers. Was it Maya, the treasurer? Or was it Horemheb, the general? Or Ay, who in the end stole Tut's throne, wife, and tomb?