

ARCHAEOLOGY

The Sphinx Tells All

It Develops That He Is No Lady, So He Has Revealed His Age and Dispelled Much of the Mystery About Him

By EMILY C. DAVIS

AFTER all these centuries of "telling nothing," Egypt's Great Sphinx has abandoned his line of mystery glamor, and is telling all.

We now know his age—his right age—and a good deal more of the inside story. Luckily he's no movie star and no lady, so there's little fear that the Sphinx of Giza will lose his charm for the public. The old stone face is still his fortune.

A modern Egyptian, Prof. Selim bey Hassan of the University of Cairo, is the man who has narrowed down the Sphinx's age to a very close date. Dr. Hassan, Egypt's best known archaeologist, is soon to publish the story of his two years' excavations at Giza around the Sphinx.

It turns out that Pharaoh Chephren engaged in some very complicated construction work at Giza cemetery, ending with the dramatic climax of creating the Sphinx.

Pharaoh Chephren had to play second fiddle to his brother Cheops in pyramid building. No other Pharaoh ever did break Cheops' record for sheer massive bulk in a tomb. But Chephren cleverly made his own pyramid look taller by placing it on high ground. Actually it was nine or ten feet shorter. Still, he gained a point of distinction; it looked taller. And then came the brilliant idea of the Sphinx!

New in 2700 B.C.

Prof. Hassan's conclusion that the Sphinx was the last part of Chephren's cemetery project means that the Sphinx was new and exciting for Egypt in the years shortly before 2700 B.C.

Chephren's reign is now usually said to have begun in 2766 B.C. Exactly how many years he reigned, however, is debated. As he built a very impressive pyramid and temples and the Sphinx after that, he can scarcely have started his Sphinx before 2750, and probably it made its appearance a few years later. That is close figuring on the age of so ancient a celebrity.

Sand around the Sphinx is still revealing clues to its experiences, and the

people who have been drawn to visit it. A tablet inscribed with 31 ears—pictures of human ears—has been unearthed by Prof. Hassan in the sand north of the Sphinx court. He has found altogether nine representations of human ears near the Sphinx, and he has an answer to the question: Why did people carve ears and put them by the Sphinx?

Prof. Hassan thinks it likely that long ago religious-minded Egyptians used to make pilgrimage to the Sphinx, and there, standing before the awesome face, the pilgrim would dedicate an ear tablet to the god symbolized in the image. The god was remote and hard to reach. But the pilgrim could whisper his prayer into the carved ear in his own hand, and then tuck it away beside the temple or bury it in the sand. By magic transference, the god's own ear would hear and he would answer.

Carried Advertising

The tablet with 31 ears supports this interpretation of the ear mystery. The tablet bears a picture of a suppliant kneeling before the Sphinx and the inscription, "Hor-Em-Akhet, the great god, hears." Hor-Em-Akhet means Horus in the Horizon and was the name with which Egyptians addressed the sacred and symbolic image of the Sphinx.

A line of advertising on the ancient tablet speaks volumes regarding early business enterprise. It says: "Made by the clever scribe, Mer."

Pharaoh Chephren organized his huge cemetery project with considerable ingenuity, judging by the revelations of the sand.

First, it seems, he built his pyramid not far from that of his brother Cheops.

He followed tradition by building a temple close beside his pyramid. This would be used when the Pharaoh eventually took up residence in his pyramid house of the dead. Faithful, and doubtless well paid, servitors would bring food, drink, and clothing to this temple for the dead king.

Chephren also had to have a funerary temple nearer the village, where the people could pay him homage. The cemetery of Giza was on a desert plateau. In time it developed into a city of 1,500

noble and royal dead. The village of living Egyptians was below in the valley, and there the Pharaohs set "valley temples" for public worship.

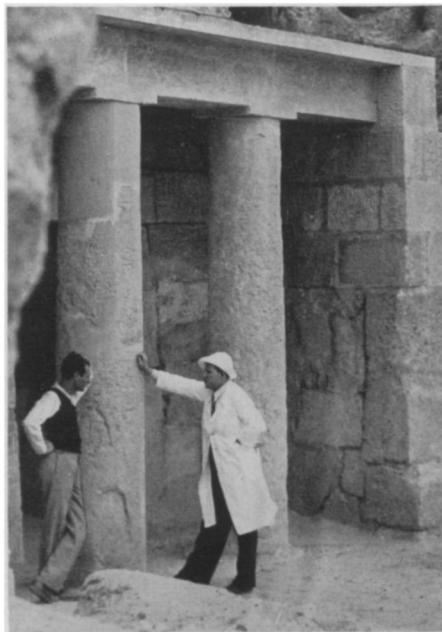
One thing led to another when a Pharaoh worked on his funerary plans. Chephren imagined crowds frequenting his temples, and he planned for the traffic problem.

Three Lane Road

The good road Pharaoh Chephren built to link his valley temple with his tomb-temple has been excavated by Prof. Hassan, who had to dig it out from under three to 45 feet of sand, rock, and debris. Its existence had been only vaguely recognized, as a sort of path.

The excavation has revealed to our generation—which can appreciate a novel traffic job—Pharaoh Chephren's three-way highway, 75 feet broad and stretching for more than half a mile from temple to temple. Center lane traffic was reserved for priests and processions. Sight-seers and ordinary worshippers kept to side lanes.

Pharaoh Chephren even ran a subway, or underpass, beneath his raised road at one point. It prevented congestion when



DIGGER

Prof. Hassan (right) at the entrance to a rock tomb in the cliffs that surround the Sphinx.



CAUSEWAY

Modern tourists boldly walk on Pharaoh Chephren's three-lane highway, from his Pyramid to his temple near the Sphinx. Original traffic rules reserved the middle lane for priestly officials only. A trench beside the raised road used to dump water into the amphitheater around the Sphinx.

traffic was headed for Cheops' part of the Giza cemetery and had to cross Chephren's road.

After all this, Chephren took up an esthetic problem—a huge hump of stone that certainly added nothing to the landscaping of his royal pyramid. His brother Cheops had left him this problem. When Cheops was alive and was seeking stone building blocks for his pyramid, his workmen got material at a huge quarry close by, but they avoided one inferior mass of alternate hard gray and soft yellow layers. Around it was the rough amphitheater dug out by the quarrying. It occurred to Pharaoh Chephren, or to some genius near him, that this lone problem rock would make a monument. So the rejected hump became the Sphinx.

Drainage a Clue

One reason why Prof. Hassan is sure that the Sphinx emerged after Chephren worked out the rest of his plans, is that a trench was cut alongside Chephren's raised highway to carry off rain water (there was more rain then) or drainage from temple sacrifices. This trench emptied into the amphitheater around the Sphinx. It would never have been allowed, had Chephren already ordered the Sphinx carved, for the image was royal and sacred.

The Great Sphinx is Pharaoh Chephren's portrait. Visitors still sometimes speak of it as a woman, but they are

confusing the Egyptian Sphinx with the Greek Sphinx and her troublesome riddle about Man.

Egypt's Great Sphinx has a lion's body and symbolizes the king in his divine role as the sun god Ra. Egyptians linked the lion with their worship of a sun god.

Old Even Then

Chephren did not have to conjure up the fantastic man-beast as a new religious idea. Smaller sphynxes were old in Egypt, even in pyramid days. And more than 2,000 years after Chephren, Egyptians were still carving royalties in sphynx form. A whole avenue of sphynxes recently unearthed at Medinet Habu is recognized as a portrait gallery of the Ptolemy dynasty. But no one can identify Cleopatra nor any other Ptolemy in this religious guise. Egyptians did not emphasize good likenesses in their official and religious statuary. They had other standards of good art.

Prof. Hassan says that we know more about the Giza Sphinx than the man who designed it. He means that the mystery about its origin is dispelled, and in addition we know the extraordinary career that the Sphinx has had. Chephren never could have guessed what curious things would happen to his Sphinx.

Just for example:

The Sphinx was visited by tourists, beginning at least several centuries be-

fore Tutankhamen's reign. A sixteenth century B.C. sight-seer is the first on record at the Sphinx. The great stone face was then over a thousand years old.

Instructions in Dream

Sand had so blanketed the stone body by the time Thotmes IV ruled Egypt, shortly before 1400 B.C., that this Pharaoh undertook to clear it off. Tradition has said that he got instructions to do so in a dream, as a religious duty. Archaeologists have doubted that Thotmes had anything to do with the first renovating of the Sphinx. But then they found a tablet—Egypt's official record—stating that Thotmes IV did restore the Sphinx.

Accustomed as Egyptians were to sphynxes, they lost track of origins and people began to read queer, mysterious meanings into this biggest of sphynxes.

They said the image represented the god Hor-Em-Akhet, and they made pilgrimages to ask petitions.

An idea gained circulation that there was something inside the Sphinx—maybe a Pharaoh's treasure. Vandals dug holes, seeking a secret passage. One hole was dug in the head so big that a man can stand shoulder deep in it.

Arabs in the Middle Ages named the Sphinx the Father of Fear. The Turks fired cannon-balls at its face.

Napoleon's soldiers had the bright idea of remodeling the stone face to resemble their hero. They started chipping, but their work caused a bit of the Sphinx's ear to fall off with such a crash that it scared them away.

Pharaoh Chephren would doubtless be pleased with present efforts to appreciate his monumental masterpiece. In fact, the big cemetery city at Giza with its rows of nobility's tombs and its big and little pyramids of kings and queens, is revealing Egypt's distant Pyramid Age more clearly for the world to respect and wonder at. Prof. Hassan and Egyptologists of other countries have made many important finds there in recent years.

Oldest Mummy

In this cemetery, Prof. Hassan found the oldest Egyptian mummy yet discovered. The wife of one of Chephren's leading noblemen, who died while expecting motherhood, is this earliest of Egyptians—so far as we know now—to receive the elaborate attention of preserving the body which became an Egyptian specialty. Before finding this ancient and noble lady, archaeologists had supposed mummification a later de-



FOR PRAYER

Devout Egyptians, it is believed, would whisper their pleas to such a carved ear held in their hands and then would bury it beside the god's temple. By magic transference, the god's own ear would hear and he would answer.

velopment in Egypt. Now, they think it may have started even before Chephren's day.

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PUBLIC HEALTH

Federal Health Officials See No Danger of Smallpox

NO DANGER of a general spread of smallpox throughout the nation from the outbreaks in New York and Tennessee is foreseen by officials of the U. S. Public Health Service.

At the same time, they advise widespread vaccination against the disease.

Everyone who has not been vaccinated is susceptible to smallpox. Babies should be vaccinated before they are one year old, and children should be revaccinated before entering school. The immunity conferred by vaccination may last as long as 20 years, but often wears off in about five years. To be absolutely safe, therefore, one should be revaccinated every five years.

Each week throughout the nation more than double the number the New York and Tennessee outbreak cases occur, despite the fact that smallpox is the one disease for which medicine has a very

sure preventive, vaccination. This is due to the fact that everyone does not get vaccinated.

As a matter of fact, health authorities are much more concerned over this continual week-after-week prevalence of smallpox than they are over any one or two specific outbreaks.

As a result of vaccination laxity, the United States stands third among leading nations in number of smallpox cases and deaths, being outstripped in this unenviable situation only by India and Mexico.

Science News Letter, June 17, 1939

MEDICINE

New Smallpox Vaccine Announced By Rockefeller

ON the heels of news of smallpox outbreaks in New York and Tennessee comes an announcement to scientists of a new smallpox vaccine which eliminates the severe scars and other inconvenient features of ordinary vaccination.

The new vaccine was developed by Drs. Thomas M. Rivers and R. D. Baird and S. M. Ward of the Hospital of the Rockefeller Institute for Medical Research. It is made by growing vaccine virus on a special medium consisting of minced chick embryo tissue and Ty-

rode's solution. Vaccinations against smallpox ordinarily are made with calf lymph vaccine virus.

Vaccination with the new vaccine virus should be followed, within six months to one year, by revaccination with calf lymph virus, the Rockefeller scientists advise in their report to the *Journal of Experimental Medicine*.

"In this way," they state, "vaccinated individuals will not become sick and will not be subjected to the dangers associated with primary vaccination with calf lymph virus, but will obtain a solid and lasting immunity to smallpox."

No scar forms after the primary vaccination with the new vaccine virus, it is reported, if the inoculation is properly made. Nor is there any fever and discomfort. Following revaccination later with calf lymph virus, very few of the children had fever or other symptoms, and what scars occurred were only "small superficial" ones.

Science News Letter, June 17, 1939

MEDICINE

Smallpox Outbreak Gives New Chemical Remedy Trial

SMALLPOX patients in New York are being treated with the new chemical remedy, sulfanilamide, it is learned from Dr. Edward S. Godfrey, State Health Commissioner.

The outbreak in Onondaga County Penitentiary is thus giving physicians a chance to learn whether this chemical remedy, which has saved lives threatened by childbed fever, erysipelas, pneumonia and many other ailments, will prove equally valuable in treating cases of the serious and disfiguring plague of smallpox.

Sulfanilamide hastened recovery and prevented scarring in four cases of smallpox, Dr. Walter O. McCammon, of Springfield, Ky., reported recently to the American Medical Association. This is a small number on which to base conclusions so medical scientists will doubtless welcome reports of other patients treated with the remedy in New York.

At present it is impossible, Dr. Godfrey says, to state the results of sulfanilamide treatment in the epidemic.

Vaccination for protection against smallpox is urged by health authorities.

Science News Letter, June 17, 1939

The British flag flies over about four million square miles of the Western Hemisphere.