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WINTER '90-'91 \$8

A Modern Journal of
ANCIENT EGYPT

BOSTON
at
GIZA
1902-1990

'LOST QUEEN'
Ankhesenamun

Beginner's
Guide to
EGYPTOLOGY

KAEMWASET
The First
Egyptologist

Ptolemaic Baroque
KOM OMBO

The Art of
**WINIFRED
BRUNTON**

plus
TRAVEL TIPS
for Egypt



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Editorial Director
DENNIS C. FORBES

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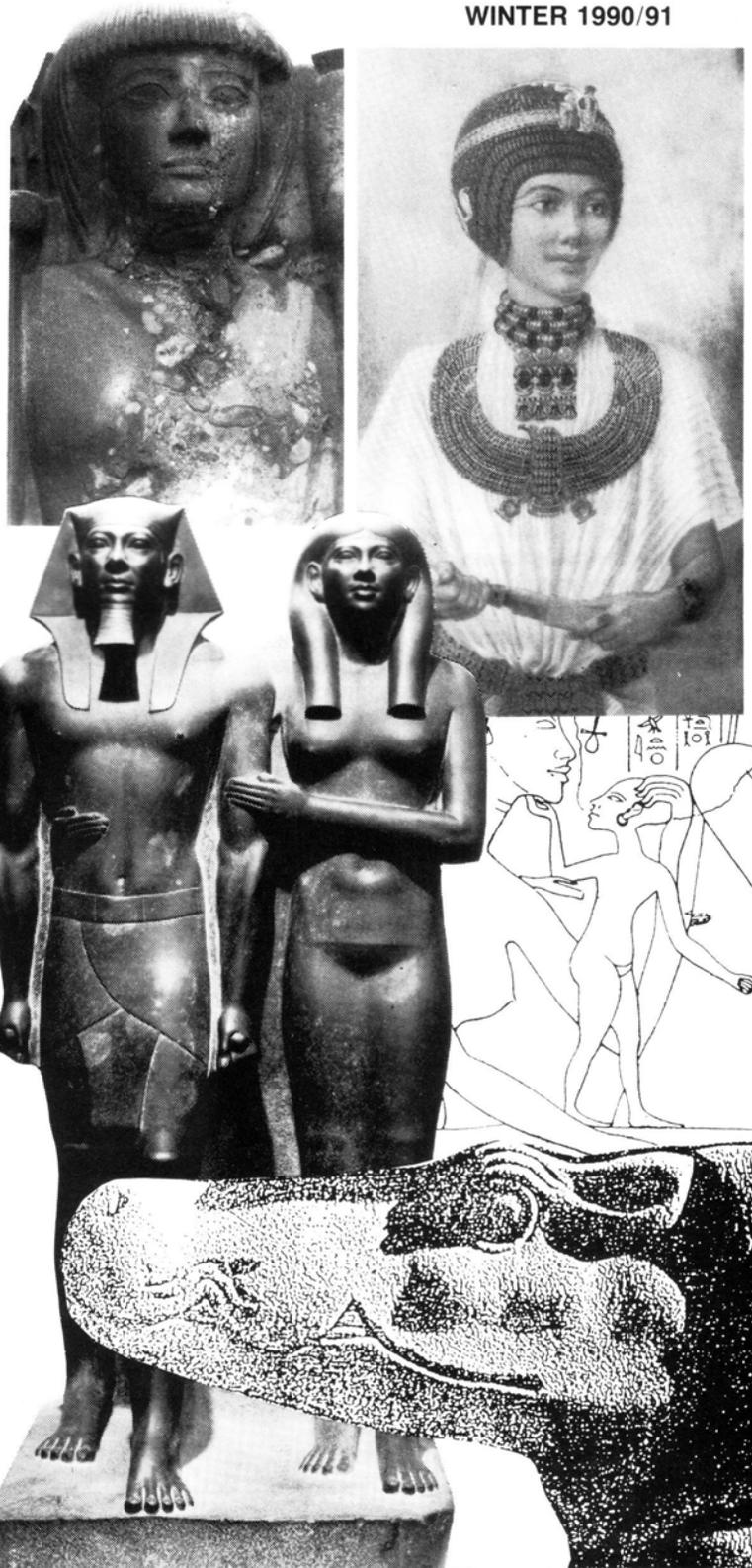
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Cover Photos: *Front*, Relief at Kom Ombo (Photo: KMT/Forbes); *Back*, North wall of tomb of Queen Meresankh III, Giza (Photo: Museum of Fine Arts, Boston); *Inside front*, Relief detail, Tomb Chapels of the Nobels, Qubbat al Hawaii, Aswan (Photo: KMT/Reeder).

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BOSTON AT GIZA

The year is 1902. The place is the veranda of the Mena House Hotel, in the shadow of the pyramids on the Giza Plateau. At stake are the excavation rights to the vast Old Kingdom necropolis at Giza (2630–2250 B.C.), pyramids and all. Too much illicit digging has been going on at this site and Gaston Maspero, director of the Egyptian Antiquities Service, has decided to put a stop to it. How? By inviting trained professionals to excavate the necropolis before too much irreparable damage has been done and valuable information on all aspects of ancient Egypt lost.

An offer to work at the only remaining ancient wonder of the Seven Wonders of the World doesn't come along every day, and Maspero suddenly had plenty of takers. An Italian team led by Ernesto Schiaparelli of Turin was ready to take on the challenge. For the Germans, Ludwig Borchardt represented Professor Georg Steindorff of Leipzig. And the Americans were accounted for in the person of George Andrew Reisner, one of the founding fathers of scientific and responsible archaeology.

Reisner's credentials were unassailable. Born in Indianapolis in 1867, he earned B.A., M.A. and Ph.D. degrees at Harvard University. In 1893 he became a Traveling Fellow of Harvard and studied

The Museum of Fine Arts' Race Against Time in the Shadow of the Pyramids

1902~1990

by Peter Der Manuelian



Top, Pyramid of Khafre framed by satellite pyramids, Giza (Photo: KMT/Forbes); Above, Aerial view of the Giza Plateau; Right, American Egyptologist G.A. Reisner in June, 1938 (Both photos: Museum of Fine Arts, Boston).

Semitics in Berlin. Eventually he was drawn away from Assyriology and over to Egyptology, and briefly served as an assistant in the Berlin Museum from 1895–96. After returning to Harvard as an instructor in Semitics, his field work in Egypt was financed by Phoebe Apperson Hearst, mother of the renowned newspaper publisher. Then came the chance to work at Giza. By 1902 the Egyptian Antiquities Service had granted three concessions there to the Italian, German and American missions, and it was up to them to split up the site.

Much negotiating had to be done. Of course Giza was the location of the three famous Great Pyramids of the Fourth Dynasty (2630–2524 B.C.): the Pyramid of Khufu (the Greeks' Cheops, 2606–2583 B.C.), the Pyramid of Khafre (or Chephren, 2575–2550 B.C.) and, smallest of the three, the Pyramid of Menkaure (or Mycerinus, 2548–2530 B.C.). But surrounding these pyramids were vast mortuary complexes, including pyramid temples, causeways, valley temples,¹ workmen's quarters and magazines, and whole cemeteries of administrators, court officials and members of royal families of the kings of the Fourth Dynasty. The site epitomized the height of classical Old Kingdom civilization, with its highly centralized administration,

INSTITUTIONAL REPORT



**George Andrew Reisner
(1867—1942)**

power concentrated in the hands of the ruling house, and relatively little contact with the foreign lands of Egypt's Mediterranean, Syro-Palestine or Nubian neighbors. There was no telling what architectural wonders, artistic masterpieces, cultural artifacts and historical texts lay waiting to be unearthed by methodical, context-conscious archaeologists. It was time to begin.

Back to the Mena House Hotel. In Reisner's own words, from his unpublished notes in the Museum of Fine Arts, Boston, the site of the Giza pyramid complex was divided thus:

In December, 1902, the three concessionaires met on the veranda of the Mena House Hotel. Everybody wanted a portion of the great Western Cemetery. It was divided in three strips East-West. Three bits of paper were marked 1, 2, and 3 and put in a hat. Mrs. Reisner drew the papers and presented one to each of us. The southern strip fell to the Italians, the middle one to the Germans and the northern one to me. Then we proceeded to divide the pyramids...²

The American team ended up with the Pyramid of Menkaure, the entire royal cemetery east of Khufu's pyramid, and fully two-thirds of the Western Cemetery, for in 1905 the Italians turned their portion over to Reisner.³ He began with the westernmost part of the Western Cemetery, first sending Arthur C. Mace out for preliminary excavations, and thereafter supervising most of the digging personally up until his death in 1942.

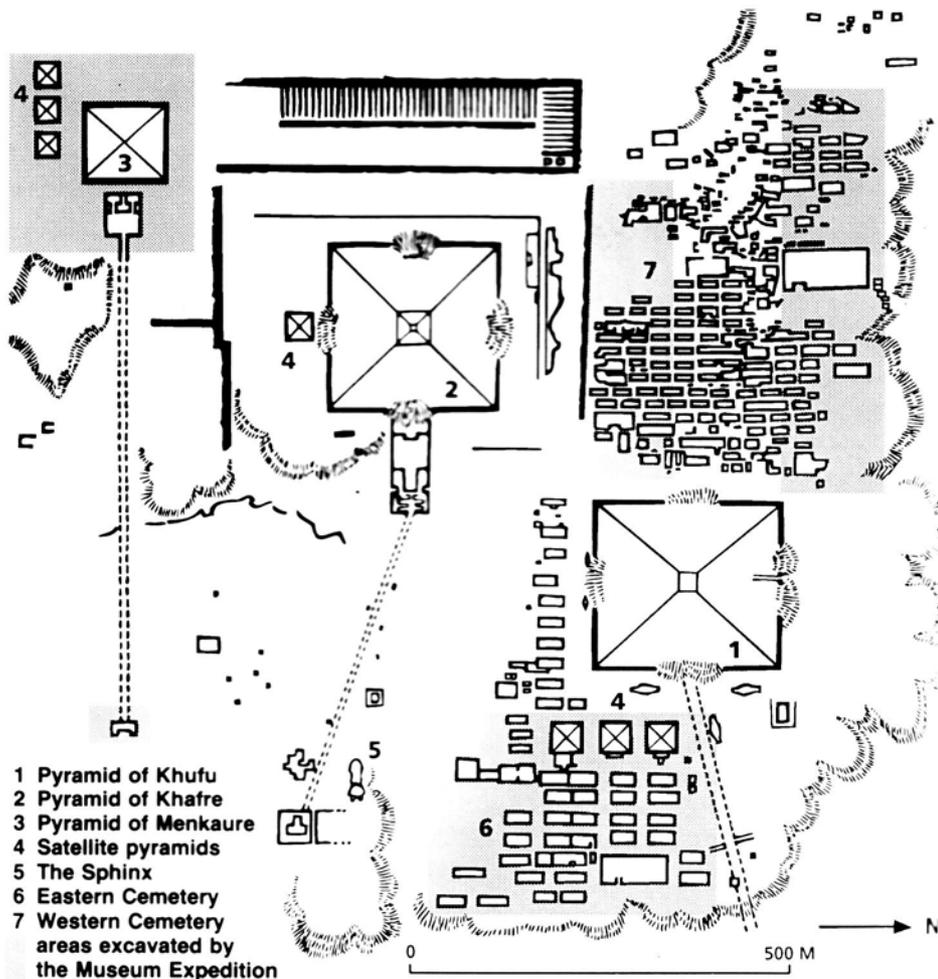
The Germans excavated the central strip of the Western Cemetery, the tombs on the south face of the Pyramid of Khufu, and the large pyramid complex of Khafre (including the Sphinx), producing a number of volumes on their work.⁴ Eventually the Egyptians, under the leadership of Selim Hassan, excavated the rock-cut tombs in the cemetery south of the causeway of King Khafre.⁵

From 1902-05 the Hearst Expedition made a solid beginning in unraveling the development of the necropolis, and many fine examples of Old Kingdom relief and three-dimensional sculpture reached the Lowie Museum of Anthropology and Ethnology of the University of California, Berkeley. In addition Reisner excavated at Deir el Ballas (in Middle Egypt),⁶ at Naga ed Deir,⁷ Mesheikh, Mesaeed, El Ahaiwah and even in Nubia.⁸

But Mrs. Hearst was unable to con-



Above, The MFA, Boston Expedition at work in the Western Cemetery, Giza, 1939, with pyramids of Khafre and Menkaure in background; Below, Author's plan of the Giza pyramid and mastaba fields; Opposite, Rock-cut chambers in the tomb of Queen Meresankh III (1927) (Photos, plan: Museum of Fine Arts, Boston).



- 1 Pyramid of Khufu
 - 2 Pyramid of Khafre
 - 3 Pyramid of Menkaure
 - 4 Satellite pyramids
 - 5 The Sphinx
 - 6 Eastern Cemetery
 - 7 Western Cemetery
- areas excavated by the Museum Expedition

tinue funding Reisner's work and, thus, the expedition was transferred, to become the Joint Expedition of Harvard University and the Museum of Fine Arts, Boston. Reisner's list of administrative responsibilities grew, to be almost as lengthy as those inscribed on the statues of the ancient officials whose tombs he was excavating. By 1910 he was or had been archaeological director of the Nubian Archaeological Survey by the Egyptian Government (1907–09), director of the Harvard Excavations at Samaria, Palestine (1909–10), assistant professor of Semitic Archaeology (1905–10), director of the Harvard-Boston Egyptian Expedition, professor of Egyptology, and curator of the Egyptian Department of the Museum of Fine Arts, Boston (1910–42).

The Expedition dig house—affectionately known as Harvard Camp—west of the pyramids at Giza flourished. Although most of Reisner's duties cited above had to do with America, he was content to remain in Egypt for most of each year, leaving the teaching and curatorial responsibilities back home to others. The arrangement worked to the benefit of all concerned. The Egyptian antiquities authorities replaced illicit pilaging at the pyramids with responsible, scientifically conducted and documented excavations. The trustees of the Museum of Fine Arts saw their Egyptian galleries burst to overflowing with artistic masterpieces, artifacts of ancient Egyptian daily

life and inscriptional material, all legally excavated and exported. Countless articles detailing the Expedition's successes filled the pages of the Museum's bulletin.⁹ The Antiquities Service sent half of the finds to Boston; back in Cairo the curators of the Egyptian Museum were equally pleased to receive the other half. And Harvard University proudly continued to support and publish Reisner's accounts of his scientific explorations at one of the great archaeological sites in the world.

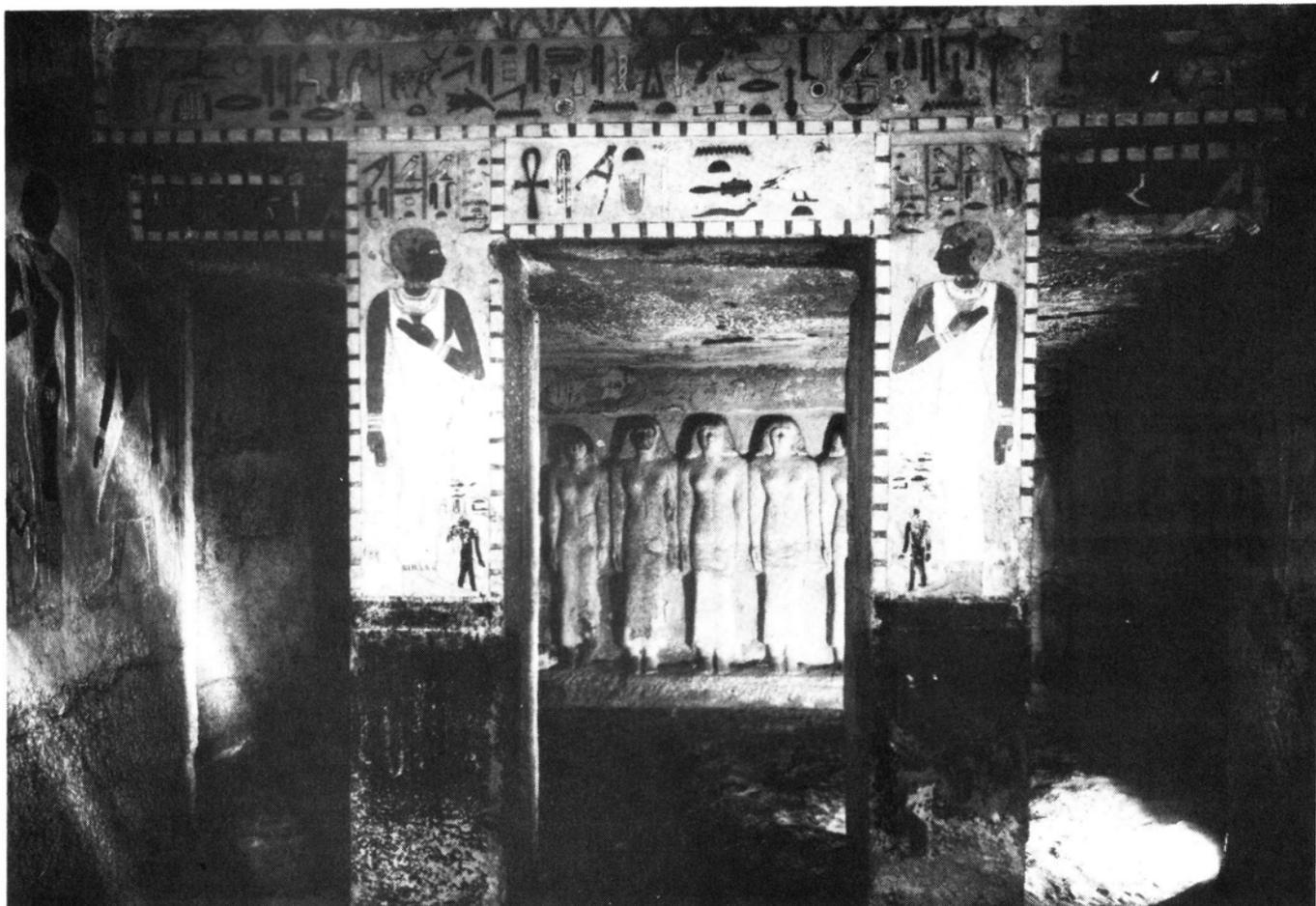
Dows Dunham, a student of Reisner's at Harvard and eventual successor to his post at the Museum of Fine Arts, joined the Giza team in 1914. He remembers his former boss thus:

I still have a vivid recollection of Reisner sitting at his work table, surrounded by notes and papers, sucking on his inevitable pipe, which was usually out or being constantly relit. I would bring him a drawing I had labored over for an hour or so, together with the object itself; he would take one look and say, "It's not right, do it again," and would indicate what was wrong ... Reisner himself was a tremendous worker and never voluntarily took a day off. We assistants were supposed to work a six-day week and and to have one day off for

relaxation; this was always the local market day wherever the expedition happened to be working ... Reisner was not happy at our stopping work for that one day a week and often grumbled ...¹⁰

Tomb by tomb the Expedition proceeded, clearing streets of mastaba tombs of the Old Kingdom's highest officials. Thousands of plans, maps and sections were drawn. Reisner's crew also documented every step of the Expedition's work with photographs taken with a large-format camera using glass-plate negatives. Inscriptions were recorded and translated, and all finds were logged in hundreds of object registers. These were large notebooks purchased in Cairo and paginated from right to left, Arabic style. It was methodical, painstaking work, but over some thirty-five years, Reisner and his team were rewarded with more than their fair share of sensational discoveries. A few of the most fascinating ones can be mentioned briefly:

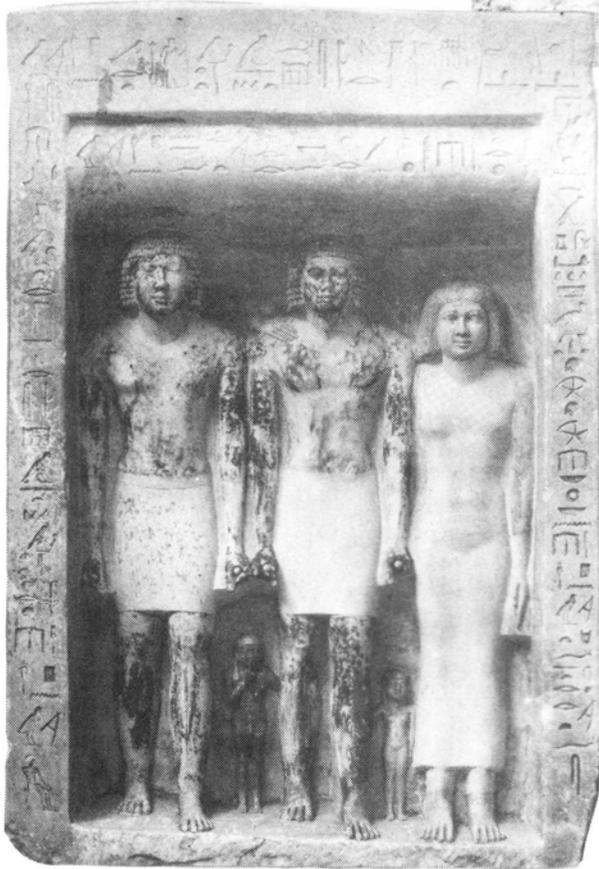
- In the Eastern Cemetery the beautifully painted subterranean tomb chapel of Queen Meresankh III, granddaughter of Khufu and wife of Khafre, came to light.¹¹ The rock-cut chambers were unusual, since most tomb chapels were constructed above ground, incorporated into the superstructure of the mastaba itself. In addition, Meresankh's chapel was filled with statuary carved from the bedrock in niches cut into the walls.





EXCAVATION OF A MONUMENT:

Top left, The *serdab*, or statue chamber, of mid-5th Dynasty official Penmeru emerging from the sands of Giza on April 11, 1912; Left, The same large stone statues, some retaining their original color, freed from their millenia of entombment; Below left, A statue group of Penmeru (shown twice) with this wife and son and daughter, now part of the Egyptian collection of the Museum of Fine Arts, Boston; Below right, The offering formula inscribed on the architectural framework of the Boston Penmeru group translated by the author (Photos and graphic: Museum of Fine Arts, Boston).



A gift which the king and Anubis, foremost of the divine booth, give, that he might be buried in the western cemetery, having reached a very ripe old age, Pen-meru.

The inspector of ka-priests, well provided before the god, possessor of a burial in the western desert, royal acquaintance, controller of the dining pavilion, Pen-meru.

The royal acquaintance, director of the dining pavilion, one well provided before his lord, who performs what his lord desires, Pen-meru.

May an invocation offering come forth for him on the Wag festival, the Thoth festival, the first of the month festival, the first of the half-month festival, and the festival of every day, for the director of the dining pavilion, Pen-meru, and his wife, the *meiter*, Meretites.

Pen-meru Seshem-nofer Pen-meru daughter, Nefer-seshem

Right, Site of the Pyramid Temple of Menkaure on December 1, 1906, before excavation by the Museum Expedition; Below, The same site following excavation, May 18, 1907 (Photos: Museum of Fine Arts, Boston).

• From 1905 until 1927, the Expedition expanded our knowledge of the Old Kingdom royal mortuary complex through its excavation of the third Giza pyramid and funerary temples of King Menkaure.¹² Reisner was cagey enough to suspect that this pyramid might yield great results despite its small size. In fact, this one turned out to be the only pyramid at Giza with wall decoration in its interior chambers—a fact that many tourists who visit the site today fail to notice. In 1837–38 the English Colonel Howard Vyse had discovered Menkaure's beautifully carved but empty sarcophagus in one of the pyramid's burial chambers. It was lost at sea, however, when the ship transporting it to England foundered off the coast of Spain. The Pyramid Temple of Menkaure yielded up a colossal alabaster (calcite) statue of the king, which the Expedition found in fragments in at least three different locations, and which now greets visitors entering the first Egyptian gallery in the Museum of Fine Arts.

The Valley Temple of Menkaure went through several building stages and was even occupied as a settlement, offering an enlightening contrast to the funerary architecture of the rest of the Giza site.¹³ Moreover, some of the finest examples of Old Kingdom royal sculpture ever to come out of Egypt were discovered there, among them more alabaster colossal statues,¹⁴ a greywacke pair-statue of Menkaure and his queen, Khamerernebty II, and a series of greywacke triads depicting the king with the goddess Hathor and various provincial deities. There were even unfinished statuettes of the king at various stages of completion, showing the ancient sculptor's craft in detail.⁵

• Inscriptional materials of all kinds found at Giza allow glimpses into administrative, legal, architectural and historical aspects of Egyptian society of the third millennium B.C. There are next to no ancient timetables for the completion of ancient Egyptian tomb construction, but Reisner found an inscription which sheds light on the question. At the northwest corner of the Great Pyramid, the king's chief architect, Senedjemib-Mehi, inscribed on the outer wall of his father's tomb that it took eighteen months to complete the work. Not far from the Senedjemib tombs in the Western Cemetery, the official Penmeru inscribed a legal decree in one of the niches of his mastaba, explicitly designating



land and individuals to tend to his funerary cult in the Giza necropolis, and forbidding any legal injunctions against his decree.¹⁷ Several group statues of this individual and his family, some retaining their original colors, were also unearthed by Reisner's team. And a massive false door—now in Boston—of a chief flutist named Khufuankh bears a text noting that it (the door) was prepared for his Giza tomb under supervision of the king himself at the entrance to the royal audience hall.

• In 1925, while Reisner was on one of

his rare stays in the U.S., the tripod leg of the Expedition's photographer sank into what should have been limestone bedrock; upon examination a 100-foot-deep shaft was revealed, which, when cleared, led to a tiny chamber containing the sarcophagus and funerary goods of Queen Hetepheres, wife of King Snefru and mother of Khufu. This discovery, coming three years after the opening of the Tomb of Tutankhamen at Thebes by Howard Carter, is still the only intact royal burial of the Old Kingdom ever discovered.¹⁸ The Expedition diary for

Sunday, March 8, 1925, records the following events at the bottom of the tomb shaft:

At 11:00 am Rowe first looked through the wide hole made by this clearing, using reflected sunlight from above. The others in the pit looked in afterwards. Towards the east side of the chamber (which was wider N-S than E-W) stood a perfect and large alabaster sarcophagus, of good stone and cutting. No inscription was visible upon this. Upon the sarcophagus a number of wooden(?) staves or maces with heads of gold or(?) in some cases of copper or bronze lay side by side. Decayed wood from this had trickled over the lid of the sarcophagus. All these were sheathed in gold. Beyond, to the east, on the floor was a good deal of gold in strips which seemed to bear some embossed design. Upon the sarcophagus also is what seems to be a mat(?) of gold lacery wherein the name Snefru is clearly legible from the door besides the vulture of the title *Nefty*. This *may* belong to a bed or canopy of which the "staves" above are parts. The whole space west of the coffin and to the south is packed with the deposit of *royal* furniture. There are a great number of vessels of the rarer stones,—a large alabaster bowl is very prominent towards the south-west corner; Near the centre of this space are a fine copper or bronze ewer and basin; two golden head-rest supports stand beyond these. There is a great deal of gold (much of it in strips) laid out all over the area.

Immediately upon having ascertained the character of this discovery Rowe sent a code cablegram to Dr. Reisner announcing the simple facts about it.¹⁹

• As if the spectacular finds of the Old Kingdom at Giza were not enough, the Expedition also unearthed many monuments from later ages. The necropolis continued to survive, if not flourish, as both a cemetery and a place of pilgrimage long after the pyramid age. Rich discoveries from intrusive burials of the Twenty-sixth Dynasty (664–525 B.C.) at Giza also enhance the collections in Boston.

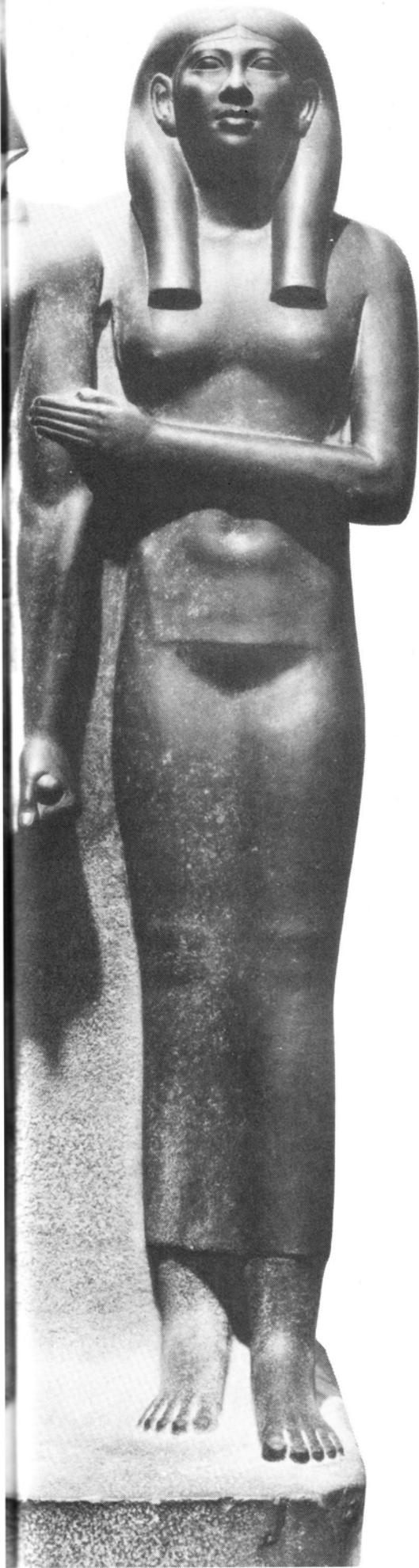
Massive publications, produced by Harvard University Press, accompanied the spectacular finds by the Museum Expedition at Giza. The table of contents alone for the massive tome titled *Giza Necropolis I* (1942) runs on for 22 pages;



FINDING ONE OF THE GREAT MASTERPIECES OF ANCIENT EGYPTIAN SCULPTURE:

Above and below, On June 19, 1910, Museum excavators uncovered a greywacke pair-stature of King Menkaure and his queen, Khamerernebty II, in a trench of the 4th Dynasty ruler's valley temple; *Right*, This magnificent group, now a centerpiece of the Boston Egyptian collection, achieves the idea of the majesty of kingship, despite being incomplete—the heads are polished, but the lower part of the figures is rough and the base was never finished, probably owing to the king's death (*Photos: Museum of Fine Arts, Boston*). *Far right*, Author's detail plan of the Valley Temple of Menkaure, showing find spots of several royal statues now on display in the MFA, Boston.





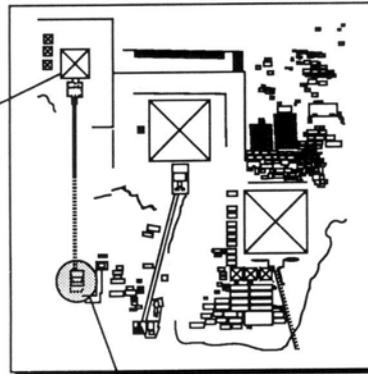
and the book itself ends on page 532, followed by seventy-five pages of plates. Reisner produced another volume titled *Mycerinus* in 1931. *Giza Necropolis II* (1955), published after Reisner's death by William Stevenson Smith, covered the discovery of the Tomb of Queen Hetepheres; and his comprehensive volume, *The Development of the Egyptian Tomb, down to the accession of Cheops* (1936), traced early funerary architecture in Egypt, based in large part on the hundreds of tombs Reisner himself had excavated.

In fact, Reisner's primary interest focused on developments, typologies and methodologies, so much so, that he opted not to produce a series of reports proceeding tomb by tomb through the Giza necropolis. This was the approach taken by his German and Egyptian colleagues, Hermann Junker and Selim Hassan respectively, who between them produced twenty-two volumes on their

Giza tomb excavations. In a sense then, Reisner proceeded with secondary source publications before the primary source material was made available to scholars and interested laypersons. An obituary entry on Reisner put it succinctly:

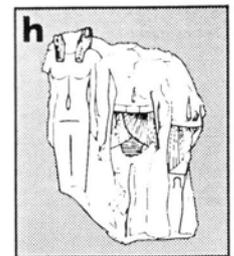
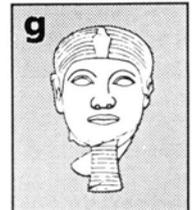
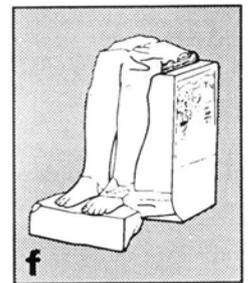
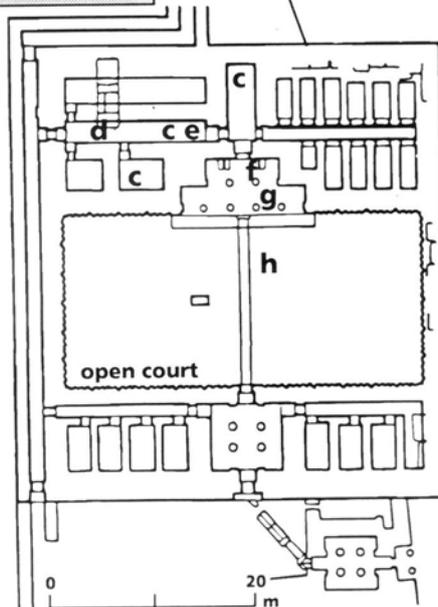
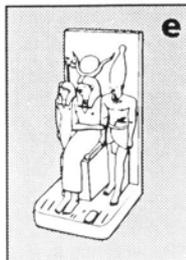
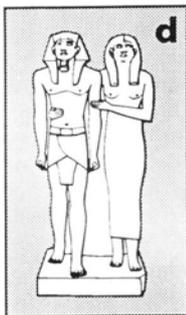
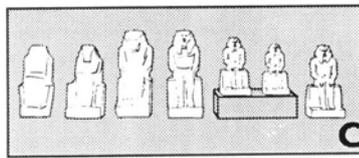
Reisner was the first person to make fully systematic excavations in Egypt, exploiting the technique of recorded digging much further than Petrie and earlier archaeologists had done; this attention to every detail and the scrupulous care taken meant, however, that although his reports were much fuller than those of his predecessors, they also required much more time for preparation, resulting in a great part of his work remaining incomplete and unpublished at his death.²¹

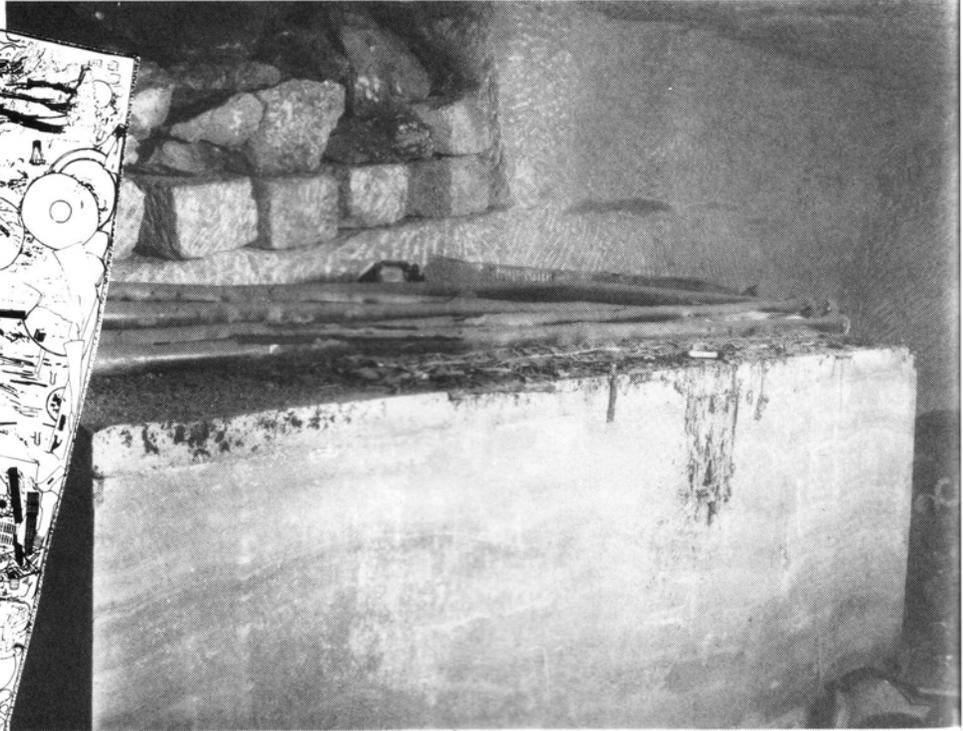
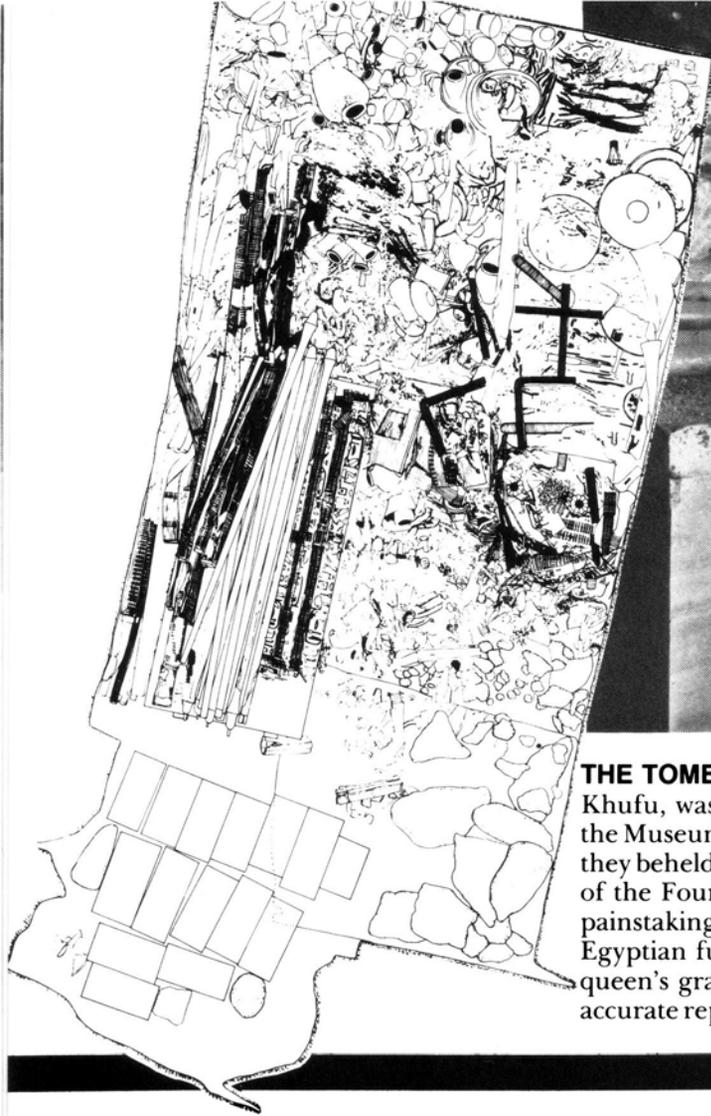
Pyramid Complex of King Menkaure



Overview plan of the Giza necropolis

Valley Temple of King Menkaure circled above, with enlarged view below





THE TOMB OF QUEEN HETEPHERES, widow of Snefru and mother of Khufu, was found on the Giza Plateau in 1925 by happy accident. When the Museum Expedition excavators opened the tiny subterranean chamber, they beheld the decayed refuse of what appeared to be an intact royal burial of the Fourth Dynasty. The fragile contents were carefully removed and painstakingly restored, revealing some of the finest examples of ancient Egyptian furniture and jewelry ever recovered. The original pieces of the queen's grave furnishings are now in the Egyptian Museum, Cairo, with accurate reproductions on exhibit at the Museum of Fine Arts, Boston. When

But even if Reisner postponed a tomb-by-tomb publication series to later years, he nevertheless saw the importance of documenting every aspect of his excavations to allow one day for such publication by others. This resulted in the compilation of a vast archive of all types of records, all of which are still stored in the Museum of Fine Arts today. Sixty thousand glass-plate negatives document every aspect of both Reisner's Giza work and all of the Harvard-Boston Expedition sites throughout Egypt and the Sudan. Thousands of pages of object registers carefully record each object as it came out of the ground at the site. Excavation diaries describe each day at each excavation. The Registrars' Department of the Museum continues to document the objects from Reisner's excavations, with new Museum accession numbers and other records; and new studio photography is provided by the Museum's Photographic Services Department.²²

Reisner died at Giza in his beloved Harvard Camp in 1942. He was buried in the Christian cemetery in Cairo, and his passing marked the end of the era of

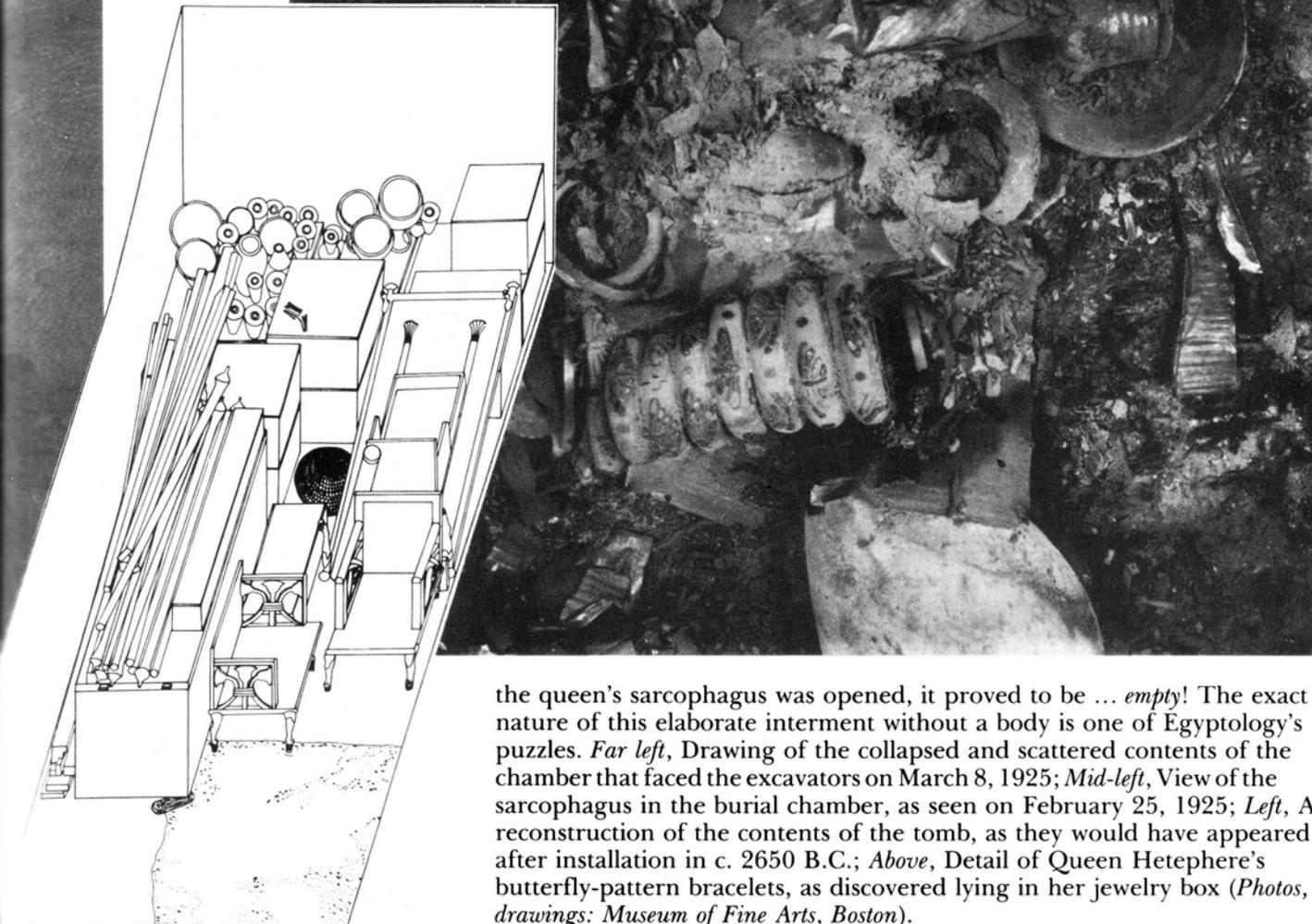
excavations in Egypt employing hundreds of workmen. Since then funding has grown scarce, methods have improved and consequently slowed down the excavation process, while transforming it from massive clearing projects to modern scientific archaeology. Nowadays much smaller areas are tackled in the limited time available to scholars away from their home institutions.

Dows Dunham was sent to Egypt by the Museum in 1947 to close Harvard Camp. When he returned to Boston he proceeded with the publications of the Harvard-Boston Expedition. William Stevenson Smith, who had joined the Expedition in 1930, succeeded Dunham as curator in the Egyptian Department in 1956, thus freeing the latter to publish a masterful series of volumes on Reisner's work in the Sudan. Smith concentrated on the art-historical aspects of the Giza work, producing a seminal study in 1949 titled *A History of Egyptian Sculpture and Painting of the Old Kingdom*.

Giza remained unexplored by Museum of Fine Arts personnel from 1947 until 1970. Smith's untimely death in 1969 brought William Kelly Simpson to

the Museum as curator. In an attempt to try to preserve a record of the rapidly deteriorating Giza mastaba tombs, at least on paper, Simpson reopened Giza work again in 1970, supported by grant moneys from the Bureau of Educational and Cultural Affairs of the U.S. Department of State. Much funding remained from this grant after the completion of the campaign to salvage Nubian monuments from the then-impending Aswan High Dam. The Harvard-Boston Expedition now added the names of the University of Pennsylvania and Yale University to its title,²³ and the long-awaited tomb-by-tomb publication series that Reisner envisioned finally began.

To date four volumes of the *Giza Mastabas Series* completely document some sixteen mastaba tombs. These primary source books serve those interested in any and all aspects of ancient Egypt, and are the volumes to consult for basic information on architecture and the development of the necropolis as a whole. The wall reliefs, represented in both photographs and painstakingly produced facsimile line



the queen's sarcophagus was opened, it proved to be ... empty! The exact nature of this elaborate interment without a body is one of Egyptology's puzzles. *Far left*, Drawing of the collapsed and scattered contents of the chamber that faced the excavators on March 8, 1925; *Mid-left*, View of the sarcophagus in the burial chamber, as seen on February 25, 1925; *Left*, A reconstruction of the contents of the tomb, as they would have appeared after installation in c. 2650 B.C.; *Above*, Detail of Queen Hetepher's butterfly-pattern bracelets, as discovered lying in her jewelry box (Photos, drawings: Museum of Fine Arts, Boston).

drawings (a process combining the work of photographer, artist and Egyptologist), document ancient Egyptian culture in a way that gives a glimpse into all corners of ancient life. The carved and painted scenes exhibit the artistic styles of the Old Kingdom, the dress and costume, religious ritual and even the administrative titles and duties of officials and royal family members. Historical, biographical and legal texts reveal the language, grammar and social structure of this early civilization.

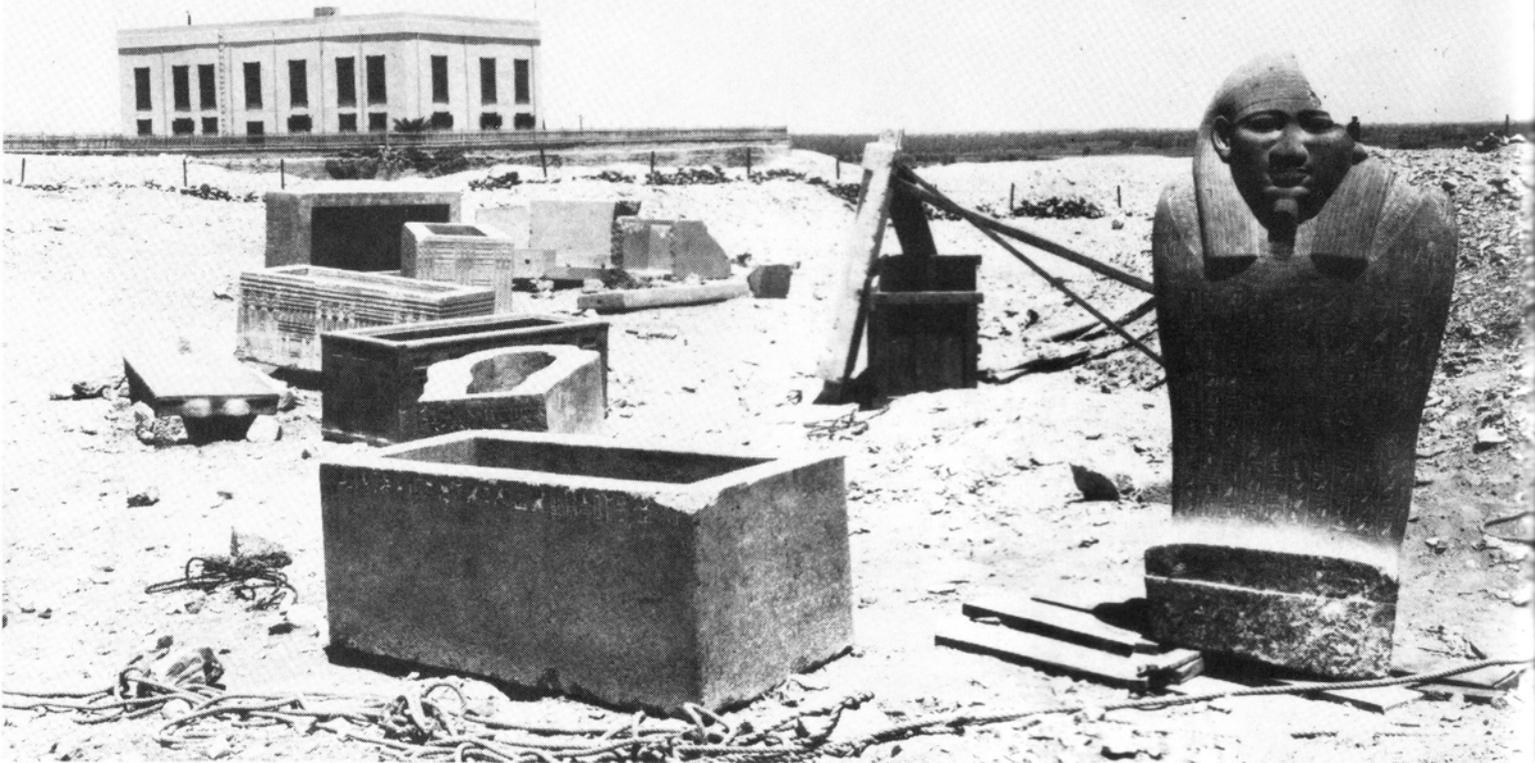
While W.K. Simpson continues to publish the tombs of Giza, the race against time has intensified, and more scholars have answered the call to record this irreplaceable archaeological site before it is too late. Edward Brovanski, also of the Museum of Fine Arts, is preparing volumes on the tomb complex at the northwest corner of the Great Pyramid belonging to the powerful Senedjemib family, as well as tombs of royal family members buried in the Eastern Cemetery. Kent Weeks, of the American University in Cairo, will soon publish four massive tombs in the

western G 6000 cemetery, whose bright colors and excellent state of preservation led Zahi Hawass (director of the Giza Plateau and Sakkara antiquities areas) and the Egyptian Antiquities Organization to open them recently to the public for the first time. And Ann Roth, formerly of the University of California, Berkeley, is completing a volume on a complex, connected group of tombs in the western G2000 cemetery, next to the largest (and still anonymous) mastaba tomb in the entire necropolis.

Beside the efforts to record the individual private tombs of the Giza necropolis, many other types of research, excavation and publication projects are now in full swing at Giza. A temple to the goddess Isis constructed in the Eastern Cemetery at the foot of one of King Khufu's three satellite pyramids will be the subject of a forthcoming volume by French Egyptologist Christine Zivie-Coche.²⁴ Mark Lehner, of the University of Chicago, has already written a reinterpretive volume on the pit-tomb of Queen Hetepheres and the surrounding area (see note 18 above). Lehner's interest lies in the building methods used

to construct the pyramids, and the organization and settlements of the actual pyramid builders themselves. His expedition, the Giza Plateau Mapping Project, is an invaluable aid to understanding the site.²⁵ His work began more than a decade ago when, under the auspices of the American Research Center in Egypt, he and James P. Allen (now of the Metropolitan Museum of Art) began investigations at the famous Giza Sphinx. Restoration work on the Sphinx has recently been undertaken by the EAO [see article in *KMT*, fall 1990]; and Zahi Hawass has made spectacular discoveries in several areas of the necropolis in recent years.²⁶

The site of the Giza Plateau is daunting in its scale and complexity. And the limited budgets of academic research threaten scholars' abilities to document this most important world archaeological heritage at a pace ahead of its rate of decay. One tool that might help close the gap in this race is the computer. Traditional methods of investigation and recording tend to dissect a site into discrete and artificial com-



Above. Coffins and sarcophagi discovered by the Museum Expedition at Giza. The anthropoid coffin at right dates to the Sixth Century B.C., some 2,000 years after the Old Kingdom and construction of the pyramids (Photo: Museum of Fine Arts, Boston).

ponents: artifacts, photographs, diary reports, site plans, maps and sections. The computer has the power today to reintegrate all of these separate archives into one unified, cross-referenced network, from text to line drawings to full-color site photographs, all on the screen and linked together. By clicking a button one can jump, all on the computer screen, from, say, a map of Egypt

- to Giza, to the Western Cemetery,
- a plan of one specific tomb,
- an excavation photograph of the decoration of the chapel wall,
- the excavation diary entry on the discovery of the chapel,
- fragments of the wall now housed in museums all over the world,
- the museum number and information on a given fragment,
- a studio photograph of the piece,
- a plan of its current gallery location,
- a report on its conservation history, and back again, in any order desired.

The computer can already produce typeset-looking hieroglyphs for use in transcribing and translating inscriptions. And the implications for scholarly research are limitless. Not only is such a modern approach more convenient and productive, becoming a powerful research tool in its own right, it is nowadays a must, since the "originals" themselves are rapidly decaying. The monuments are losing the battle against time, now accelerated by climatic changes, tourism, vandalism and lack of adequate funds for protection and conservation.

Equally disturbing is the fact that even the recording materials back in excavators' home institutions

are deteriorating: Diary pages are often too brittle to turn; photographic negatives on glass plates tend to crack and fade with exposure to humidity, acid-bearing envelopes and human handling. And the lack of sufficient climate-controlled galleries in most museums can pose threats to the ancient objects both on display and in storage. The Museum of Fine Arts is doing all that it can to fight these battles, but such non-profit institutions need help from interested individuals in the private sector in order to preserve and protect its priceless holdings. With such help outdated basement areas could be miraculously transformed into state-of-the-art storage facilities; aging records and invaluable photographs—whether they contain information no longer preserved on the ancient monument in Egypt itself, or are historically important for other reasons—could be computerized and stored digitally; and the research and publication process could be speeded up immensely with the aid of modern equipment. Who knows what new discoveries await us with the power of the computer to study and organize the vast quantities of data—already excavated but still largely undigested—about Egypt and its ancient dwellers on the Nile.²⁸

NOTES

1. The Valley Temple of the Great Pyramid of Khufu lies underneath the modern village of Nazlet es-Saman, and has only recently been located during sewage excavation [see story on the Sphinx by Lyla Brock in *KMT* 1:3, Fall 1990; also interview with Zahi Hawass, same issue].

2. George A. Reisner, unpublished diary,

stored in the Museum of Fine Arts, Boston. I am grateful to Dr. Rita Freed, curator of the Department of Egyptian and Ancient Near Eastern Art, for permission to quote from these manuscripts.

3. The only publication of the Italians' brief tenure at Giza is by Silvio Curto, *Gli Scavi italiani a el-Ghiza, 1903* (Rome, 1963).

4. See Uvo Hölscher, *Das Grabdenkmal des Königs Chephren* (Leipzig, 1912); H. Ricke and S. Schott, *Der Harmachistempel des Chephren* (Wiesbaden, 1970); and Hermann Junker, *Bericht über die von der Akademie der Wissenschaften in Wien... unternommenen Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Giza, 12 volumes* (Vienna and Leipzig, 1929–55). The Great Pyramid of King Khufu was the subject of V. Maragioglio and C. Rinaldi, *L'Architettura delle Piramidi Menfite*, vol. 4 (Rapallo, 1965).

5. Selim Hassan, *Excavations at Giza*, 10 volumes (Oxford, 1932–60).

6. The excavations at Deir el Ballas were reopened and carried to a successful conclusion by Peter Lacovara, assistant curator in the Department of Egyptian and Ancient Near Eastern Art of the Museum of Fine Arts, Boston; see his *Deir el-Ballas. Preliminary Report on the Deir el-Ballas Expedition, 1980–1986*, American Research Center in Egypt Reports, vol. 12 (Winona Lake, 1990); also, "The Riddle of Egypt's Ancient Settlements," *Archaeology* (July-August, 1988), pp. 62-66; and "The Hearst Excavations at Deir el-Ballas: The Eighteenth Dynasty Town," in W.K. Simpson and W.M. Davies, eds., *Studies in Ancient Egypt, the Aegean, and the Sudan, Essays in Honor of Dows Dunham* (Boston, 1981), pp. 120-24.

7. This work will be published by Edward Brovanski, research curator with the Department of Egyptian and Ancient Near Eastern Art of the Museum of Fine Arts, Boston, in his *The Inscribed Material from Naga ed-Deir* (forthcoming).

8. Reisner's Nubian work has been expanded since 1986 by Timothy Kendall, an associate curator in the Department of Egyptian and Ancient Near Eastern Art of the Museum of Fine Arts, Boston. He has worked primarily at the site of Gebel Barkal; see his *Kush: Lost Kingdom of the Nile* (Brockton, 1982) and "Discoveries at Sudan's sacred mountain of Jebel Barkal reveal secrets of the Kingdom of Kush," *National Geographic Magazine*, vol. 178, no. 5 (November, 1990), pp. 96-124.

9. The now-defunct *Bulletin of the Museum of Fine Arts, Boston* contains articles by Reisner, Dows Dunham, William Stevenson Smith, Edward L.B. Terrace and William Kelly Simpson, among others. It has recently been resurrected as the *Journal of the Museum of Fine Arts, Boston*. In recent issues readers may find Egyptian articles by Ann Macy Roth and Catharine H. Roehrig, "The Bersha Procession: A New Reconstruction," vol. 1 (1989), pp. 31-40; by Peter Lacovara, "An Ancient Egyptian Royal Pectoral," vol. 2 (1990), pp. 18-30; by Richard Newman, "Technical Examination of an Ancient Egyptian Royal Pectoral," *ibid.*, pp. 31-37; and by Andrej Bolshakov, "What did the Bust of Ankh-haf really look like?," vol. 3 (1991, forthcoming).

10. Dows Dunham, *Recollections of an Egyptologist* (Boston, 1972), p. 12.

11. Published by Dows Dunham and William Kelly Simpson, *The Mastaba of Queen Merysankh III (G 7530-7540)*, Giza Mastabas I (Boston, 1974).

12. George Andrew Reisner, *Mycerinus* (Cambridge, MA, 1931).

13. The pottery from the Valley Temple of Menkaure is currently being studied by Brigit Crowell of the University of Pennsylvania.

14. See Peter Lacovara and C. Nicholas Reeves, "The Colossal Statue of Mycerinus Reconsidered," *Revue d'Égyptologie* 38 (1987), pp. 111-115.

15. *Ibid.*, pl. 4b.

16. The mastaba-tomb complex of the Senedjemib family is scheduled for publication by Edward Brovanski in the Giza Mastaba Series.

17. See William Kelly Simpson, *Mastabas of the Western Cemetery, Part I*, Giza Mastabas 4 (Boston, 1980), p. 24, pls. 46b-47.

18. The significance of this find, especially in light of the fact that the queen's sarcophagus was empty, has recently been reassessed by Mark Lehner in his *The Pyramid Tomb of Hetepheres and the Satellite Pyramid of Khufu* (Mainz, 1985).

19. Giza Diary (unpublished), 1925, p. 281.

20. The massive anthropoid stone sarcophagus of the general Kheperre and his burial equipment were recently studied and published by Joyce L. Haynes in Sue D'Auria, Peter Lacovara and Catharine H. Roehrig, eds., *Mummies and Magic; the Funerary Arts of Ancient Egypt* (Boston, 1988), pp. 176-180 (cat. 127).

21. Warren R. Dawson and Eric P. Uphill, *Who Was Who in Egyptology*, 2nd edition (London, 1972), p. 244.

22. Today these key tasks are headed by Linda

Thomas, the registrar of the Museum, and Janice Sorkow, the director of the Museum's Photographic Services Department, both of whose talents and staffs are gratefully acknowledged here.

23. The co-directors of the Pennsylvania-Yale Expedition are David O'Connor at Abydos and William Kelly Simpson at Giza.

24. On the Isis temple, see Michael Jones and Angela Milward, "Survey of the Temple of Isis Mistress-of-the-Pyramid at Giza," *Journal of the Society for the Study of Egyptian Antiquities* 12 (1982), pp. 139-151; and for Giza in the Late Period, Christine M. Zivie-Coche, *Giza au premier millénaire, ou Autour du Temple d'Isis, Dame des Pyramides*, (Boston, forthcoming).

25. See his article, "Unlocking the secrets of the Giza Plateau," *Smithsonian Magazine* (April 1986), pp. 78-93.

26. One of Dr. Hawass's most recent publications is *The Pyramids of Ancient Egypt* (Pittsburgh, 1990).

27. This particular computer-generated hieroglyphic typeface (for Apple Macintosh personal computers) was developed by Cleo Huggins, with the assistance of Dexter Sear.

28. I am grateful to Dr. Rita Freed, curator of the Department of Egyptian and Ancient Near Eastern Art of the Museum of Fine Arts,

Boston, for permission to make use of the Giza Expedition archives housed in the Museum; and to Janice Sorkow and Marty Wolfand of the Museum's Photographic Services Department, for supplying some of the prints of the excavation glass-plate negatives; and to my colleagues in the Egyptian department, Timothy Kendall, Edward Brovanski, Peter Lacovara, Joyce L. Haynes and Yvonne Markowitz, for their support and assistance.

ABOUT THE AUTHOR: Dr. Peter Der Manuelian is curatorial assistant in the Department of Egyptian and Ancient Near Eastern Art, Museum of Fine Arts, Boston. From 1984-87 he served as staff artist for the Epigraphic Survey of the Oriental Institute, University of Chicago, in Luxor, Egypt. He is the author of *Studies in the Reign of Amenophis II*, Hildesheimer Ägyptologische Beiträge 26 (Hildesheim, 1987); *Hieroglyphs from A to Z; A rhyming book with ancient Egyptian stencils for kids* (Museum of Fine Arts, Boston, 1991); and *Studies in Archaism for the Egyptian Twenty-sixth Dynasty* (London, forthcoming).



An example of the deterioration of the monuments at Giza: Above, The north wall of an anonymous tomb, G7560, as it appeared in 1939; Below, The same wall of the tomb in August, 1989 (Photos: Museum of Fine Arts, Boston).

