

### III

## ANCIENT AND MODERN RESEARCH IN THE GIZA NECROPOLIS

THE pillage and destruction of the Giza Necropolis have continued from the Old Kingdom down to the beginning of this century. These acts of vandalism have, for the most part, passed unrecorded, having been carried out by obscure individuals in the search for treasure or in the removal of stone for building purposes, but have been clearly revealed during the removal of debris during excavation.

#### 1. THE CLASSICAL WRITERS

A list of twelve classical writers who made mention of the pyramids is given by Pliny (*Nat. Hist.*, Book XXXVI). The chief accounts are those of Herodotus (Book II, paragraph 124), Diodorus Siculus (Book I, lxiii), Strabo (Book XVII), and Pliny (*Nat. Hist.*, Book XXXVI). From the fables and inaccurate descriptions of these authors it appears clearly that the casings of all three pyramids were intact or practically intact, and that the descending passage of the First Pyramid stood open. Herodotus and Diodorus mention some of the Queen's pyramids and Pliny the Great Sphinx.

#### 2. ACCOUNTS OF THE ARAB HISTORIANS

The accounts given by the Arab historians are for the most part highly fantastic, but they show that the three pyramids had been pillaged long before their time. The Arab inscriptions inside the passages and burial-chambers prove that the chambers had been accessible from time to time during the Middle Ages.

It appears certain that the Caliph Māmūn (A.D. 813–833) opened the two upper chambers in the pyramid of Cheops. He visited Egypt to put down a revolt of the Copts and during his stay there explored the First Pyramid, obviously in a search for treasure. He cut a hole in from the north face about on a level with the beginning of the ascending passage and discovered the lower end of this passage when the blocking stone in the opening fell out into the descending passage. He cut upwards along the three granite plug-stones of the ascending passage and so came into the upper part of this passage, whence the way was clear to the grand gallery and the main burial-chamber. The portcullis stones had been of course already penetrated. In spite of the Arab accounts of the wonders and treasures discovered by Māmūn, it is obvious that he found nothing of value. The original pillagers had apparently cleared out the limestone (?) plug-stones of the descending passage and come up through the rough shaft known as the workmen's exit. The descending passage was seen in classical times, but had apparently become blocked with rubbish in Māmūn's time.

'Abd-el-Laṭīf (see Vyse, Vol. II, p. 337) says that Karakush, acting for Saladin (A.D. 1169–1193), destroyed a number of 'small pyramids' at Giza to obtain the material for the construction of a great dyke on the west bank of the Nile. The stone removed from the small pyramids hardly seems sufficient for the work as described, and it may be that the stone was taken also from the tops of mastabas.

'Abd-el-Laṭīf also says (*idem*, p. 343) that in A.D. 1196 El-Malik el-'Azīz, the son of Saladin,

attempted to destroy the Third Pyramid, clearly in search of treasure, and excavated the great hole in the north face seen at the present day.

It is very difficult to determine when the fine white casing of the First Pyramid and the greater part of that of the Second were removed. William of Baldensel (see Petrie, *Pyramids*, p. 219), who visited Egypt in A.D. 1336, appears to have seen those casings intact, but his statement is not sufficiently explicit to be positive proof. From the Arabic coins found at the Third Pyramid (see *Mycerinus*, p. 19) the destruction of the casing of that pyramid had begun in or before the time of the Aiyubides, a century or more before Baldensel's visit. It seems probable that the casing of the First Pyramid was attacked in this same period and that its destruction continued thereafter for a considerable period. It may be that stone was drawn from these casings for the various buildings in Cairo now said to be built with stone from the pyramids, but the documentary proofs are not now available.

### 3. THE EARLY EUROPEAN TRAVELLERS

From the early part of the fourteenth century to the end of the eighteenth century a succession of European travellers who visited the pyramids have left more or less copious accounts of what they thought they saw. A very enlightening series of extracts and summaries of these accounts has been given by Colonel Vyse in the second volume of his *Pyramids of Gizeh*. Many of these reports are characterized by speculations as to the origin of the pyramids quite as fantastic as those of the Arab historians. Even those which inspire the most confidence can be shown to contain erroneous statements and incorrect measurements. The great scientific expedition of Napoleon was only a little more precise than the travellers who preceded it. The modern scientific examination of the Giza Necropolis did not really begin until Mohammed Aly Pasha had been on the throne of Egypt for nearly ten years and had opened the country freely to Europeans. Books still continued to be printed with absurd accounts of the pyramids, but in recent times the publications of the pyramid mystics have supplanted all other kinds of fantastic speculation. To two of these mystics, Piazzzi Smythe and Morton Edgar, we are indebted for a number of exact measurements and observations made in a mistaken cause.

### 4. THE EXCAVATIONS IN THE NINETEENTH CENTURY

The modern excavation of the Giza Necropolis began about 1815. The chief operations and the most important expeditions were as follows:

- (1) 1817: Caviglia cleared out the descending passage of the Cheops pyramid, the chambers of the first plan, and the lower part of the workmen's exit: see Vyse, *The Pyramids of Gizeh*, Vol. II, p. 288, and Belzoni, *Narrative*, p. 136.
- (2) 1818: Caviglia, with the financial assistance of Mr. Salt, cleared the front of the Sphinx and the Roman approach from the east: see Vyse, *The Pyramids of Gizeh*, Vol. III, p. 107, and Belzoni, *Narrative*, p. 137.
- (3) 1818: Belzoni discovered the entrance to the Second Pyramid and explored its passages and chambers: see Belzoni, *Narrative*, p. 255; operations carried out at his own expense.
- (4) 1836-1838: Colonel Howard Vyse and Mr. Perring; Colonel Patrick Campbell and Vyse employed Caviglia under a *firman* to make excavations at the pyramids; Vyse's object was the further examination of the pyramids, while Caviglia was more interested in the Ptolemaic shafts east of the Second Pyramid (including Campbell's Tomb), and the work was taken out of Caviglia's hands on February 13th, 1837; Vyse opened the Third Pyramid, the three small pyramids south of it (G III-a, b, c) and the three east of the

First Pyramid (G I-a, b, c); he forced a passage upwards at the north end of Davidson's chamber and discovered four other relieving spaces roofed with granite above the main burial-chamber of the First Pyramid; Mr. Perring made accurate measurements and plans of all the Giza pyramids and a number of others: see Vyse, *The Pyramids of Gizeh*, Vols. I-III, and Perring, Part III of the same work.

- (5) November 9th, 1842, to January 29th, 1843: the Prussian Expedition under Richard Lepsius, assisted by six others (architects and artists); excavated and examined the chapels of about 97 tombs; published in Lepsius, *Denkmäler*, Vols. I and II, in *Textband I*, and in *Ergänzungsband*; map of the whole necropolis, plans of chapels and rock-cut tombs; copies of reliefs, some in colours; a work of inestimable value.
- (6) 1850-1880: Auguste Mariette, acting as agent for the Louvre, 1850-1854, began the excavation of the Valley Temple of the Second Pyramid, for the account of the Duc de Lueynes; appointed Mamur of Antiquities on June 1st, 1858; finished excavation of this temple and discovered the Chephren statue and others more or less fragmentary: see Hölscher, *Das Grabdenkmal des Königs Chephren*, p. 9, where he quotes from Mariette, *Sérapeum de Memphis*, pp. 91 ff., and *Questions, &c., Comptes Rendus*, 1877, pp. 427-473; Mariette also examined a few mastaba chapels: see Mariette, *Mastabas, Appendice*; see in particular chapels of Merytyetes (G 7650) and Khufuw-khaf (G 7140).

Beginning with the French Expedition of 1798-1801, a long series of scholars have copied reliefs and inscriptions in the mastabas. Of these the most notable are Champollion, Rosellini, Wilkinson, James Burton, Hay, Devéria, Nestor L'Hôte, E. and J. De Rougé (see Porter and Moss, *Bibliography*, Vol. III, *Memphis*).

The examination of the pyramids themselves continued with the object of obtaining complete and more accurate measurements:

- (7) 1864-1865: Piazzi Smythe, *Life and Work at the Great Pyramid*, Vols. I-III: the first of the modern pyramid mystics who studied the Great Pyramid on the spot; devised the Pyramid Inch and concluded that the British were descended from the Ten Lost Tribes of Israel.
- (8) 1880-1882: Sir Flinders Petrie, *The Pyramids and Temples of Gizeh*; made an accurate survey of the pyramids and their construction, now generally accepted by scholars.

After the commencement of the final excavation of the Giza Necropolis, the pyramids themselves have continued to be the subject of investigations as follows:

- (9) 1906-1927: John and Morton Edgar; pyramid mystics; *Great Pyramid Passages*; photographs and measurements of details.
- (10) 1928 (?): levelling by Survey Department.
- (11) 1894-1932: Ludwig Borchardt: a long series of treatises on the construction of the pyramid, the last of which, entitled *Einiges zur dritten Bauperiode der Grossen Pyramide bei Gise*, appeared in 1932.

## 5. THE SYSTEMATIC EXCAVATION OF THE GIZA CEMETERIES

The systematic excavation of the Giza Necropolis began with the concession granted in 1902 by the Department of Antiquities to an American and two European expeditions—the Hearst Egyptian Expedition of the University of California (represented by myself), an expedition of the Turin Museum represented by Professor Schiaparelli, and the Sieglin Expedition of the University of Leipzig repre-

sented by Professor Steindorff. Acting under instructions from Maspero, then Director-General of Antiquities, to divide the site amicably among ourselves, the parties interested met in November, 1902, at Mena House Hotel, Professor Schiaparelli, Professor Borchardt (acting for Professor Steindorff), and myself accompanied by Mrs. Reisner. The chief area in which all were interested was the great Western Cemetery. This area was divided in three nearly equal E-W strips numbered 1-3 from south to north. The numbers were written on slips of paper and drawn from a hat by Mrs. Reisner. The southern strip fell to the Italians, the middle strip to the Germans, and the northern strip to the Americans. The rest of the site was easily divided by agreement. The area of the Second Pyramid, including the Sphinx Temple, was assigned to the Germans, the area of the Third Pyramid to myself, and the area east of the First Pyramid up to a diagonal line from the SE corner of the First Pyramid to the Sphinx was given to Professor Schiaparelli, except that the part north of the medial line of the pyramid was assigned to me. These general lines have been maintained ever since with a few modifications. The Italian concession was given up in 1905 and assigned to myself. In 1905 the American concession was transferred to Harvard University and the Boston Museum of Fine Arts. The German concession was transferred in 1911 to Professor Hermann Junker, representing the Akademie der Wissenschaften of Vienna and the Pelizeus Museum of Hildesheim. In 1928 that part of the old German concession which lay in the quarry east of the Second Pyramid was granted to Professor Selim Bey Hassan, representing the Egyptian University. Since the War the Department of Antiquities have exercised their prerogative to make certain sporadic excavations at Giza, and have undertaken the complete excavation of the Sphinx and of the structures that lie east of it, executed by M. Baraize from 1923 to 1936 and continued by Professor Selim Bey Hassan to the present time.

The area south of the *wady* that bounds the Giza Necropolis on that side is dominated by a long, comparatively narrow ridge running out from west to east. This area was assigned by the Department of Antiquities, with my consent, in 1906 to Sir Flinders Petrie. During the winter 1906-1907 he excavated here a tomb of Dyn. I, a tomb of the end of Dyn. II, and others of the Old Kingdom and the Saite period (see Petrie, *Giza and Rifeh*).

#### a. The Excavations of the Hearst Expedition

The excavations of the Hearst Expedition of the University of California were confined to the northern strip of the field west of the Great Pyramid. When the concession was granted, in 1902, the Expedition was engaged in the excavation of several cemeteries at Naga-ed-Dêr, and we were unable to begin the systematic clearing which we had planned for the Giza site. In January 1903 I sent Mr. A. C. Mace, together with a small party of our trained workmen, to make a preliminary examination of the strip in question. The actual excavations were limited to fixing the western edge of the cemetery. About twenty more or less demolished mastabas were excavated, but the chief result reached by Mace was that it was unpractical to attack the cemetery from this direction owing to the long carry and the absence of a convenient dumping-ground. He proved that the proper method was to throw the debris out to the north. In 1903-1904 I took over the Giza work personally, leaving Mr. Mace and Mr. A. M. Lythgoe to finish up at Naga-ed-Dêr. I had the services of the greater part of our trained men, about one hundred in number, and purchased a light railway for use in the excavations. I planned to clear the western part of the strip from the great mastaba Lepsius 23 (G 2000), working westwards and dumping to the north. As a preliminary I examined the sandy *wady* north of this mastaba in order to find an unencumbered dumping-place. A little way down the *wady* I found a group of about fifty small mud-plastered rubble mastabas ('the *wady* cemetery'), but the upper part of the *wady* was entirely free

of tombs or other monuments. We cleared from south to north a strip of mastabas (G 1000) along the western side of Lepsius 23, the adjoining strip on the west (G 1100), and the old nucleus cemetery G 1200. In 1904–1905 we continued this excavation westwards, uncovering a field of c.b. mastabas (Cem. G 1400).

In the meantime the Sieglin Expedition had worked in the middle strip during 1902–1903 and 1904–1905. Professor Schiaparelli made some excavations in the Western and Eastern Cemeteries, but attempted no systematic clearing in the southern strip (Cem. G 4000; see Dr. F. Ballerini, *Notizia degli scavi della Missione Archeologica Italiana in Egitto, Anno 1903*).

#### b. The Excavations of the Harvard-Boston Expedition

In 1905–1906 the Harvard-Boston Expedition, under the personal supervision of Professor A. M. Lythgoe, began clearing the northern strip eastwards from the great mastaba Lepsius 23 (G 2000). This cemetery of small mastabas is labelled Cem. G 2000. Eastward of this the clearing began of Cem. G 2100, one of the nucleus cemeteries in this field, and six mastabas in this cemetery were excavated.

In 1906–1907 the Expedition was transferred to the Third Pyramid (see Reisner, *Mycerinus*). With the assistance of Mr. C. M. Firth I excavated the temple of that pyramid, the quarry, and the quarry cemetery.

In 1907 the work at the pyramids was suspended in order to engage in the Nubian Archaeological Survey instituted by the Egyptian Government. The whole Expedition was engaged in this work from 1907 to 1909. In 1908, during the summer, a gang of trained men was brought down from Quft and under the supervision of Mr. Oric Bates excavated the western part of the Valley Temple of Mycerinus.

Another interruption occurred in 1909. I resigned from the Nubian Archaeological Survey, leaving Mr. Firth and half the trained workmen to carry on that survey, and took over the Harvard excavations at Samaria, which were carried out in the summer of 1909 and 1910.

In the winter of 1909–1910 I continued the excavation of the Valley Temple, assisted by Dr. C. S. Fisher. We also excavated the temple of the small pyramid G III-a. During the winter of 1910–1911 the Expedition under Dr. Fisher excavated the layer pyramid of Zawiyet-el-Aryan and the surrounding cemetery. In 1911–1912 work was resumed in the northern strip of the field west of the First Pyramid, working eastwards from the edge of Lythgoe's excavations of 1905–1906. This work was continued in 1912–1913 and brought the excavation of this strip up to a line prolonging the western side of the pyramid northwards. In 1912–1913 we also completed the clearing of the rock-cut tombs in the Mycerinus quarry. I was assisted during these two years by Dr. Fisher, Mr. Earle Rowe, and Mr. L. C. West.

In 1913–1914 we began clearing the southern strip of the Western Field originally assigned to Schiaparelli, working from the west, and uncovered all the massive cores of Cem. G 4000 in rows 1–4 from line 1 to line 8. I was assisted by Mr. H. L. Story. The excavation of the eastern part of this strip was carried out in 1914–1915 and 1915–1916, working in from the east.

In the years 1916–1920 the Expedition was employed in excavating the royal monuments at Napata in Ethiopia, and during 1920–1923 the pyramids of Kabushiyah. This absorbed all our resources, and it was not until 1924 that the work could be resumed at the pyramids. In the summer of that year, with the assistance of Mr. Alan Rowe, the temples of the two small pyramids G III-b and G III-c were excavated and recorded. On November 1st, 1924, we began clearing the field east of the First Pyramid and excavated in that the two northern small pyramids (G I-a and b), the northern row of

four twin-mastabas, the great mastaba of Ankh-haf, and an area east of this mastaba. In February–March 1925, while I was absent in America, Mr. Alan Rowe, assisted by Mr. Greenlees, continuing the systematic clearing of the Cemetery, discovered the ‘secret tomb’ of Hetep-heres, the mother of Cheops.

The secret tomb was cleared and reported with the assistance of Mr. Dows Dunham and Lieut.-Com. Noel F. Wheeler during 1925–1926 and 1926–1927. Meanwhile the work of excavation proceeded on a reduced scale under Lieut.-Com. Wheeler.

In 1925–1926 we excavated the mastabas west of the Schiaparelli quarry in the southern strip of the Western Field, including the family group of Shepses-kaf-ankh, Ity, Iy-mery, and Ptah-neferbauw (Cem. G 6000). This work continued from November 18th to December 28th, 1925. On December 3rd we began exploring the ground south of Cem. G 7000 to prepare for the excavation of the southern part of that cemetery. On December 23rd the greater part of the men were engaged in Cem. G 7000, clearing the small pyramid G I-c, and by the 28th the whole gang had been transferred to this point.

The excavation of the Eastern Field (Cem. G 7000) proceeded steadily as follows:

- (1) December 23rd, 1925, to May 1st, 1926.
- (2) January 17th to April 24th, 1927.
- (3) March 13th to May 22nd, 1928.
- (4) February 4th to May 6th, 1929.
- (5) November 1st, 1929, to January 20th, 1930.
- (6) November 28th, 1930, to February 5th, 1931.

All the important mastabas in Cem. G 7000 have now been uncovered in one continuous series. There remain to be cleared a few small areas of denuded mastabas on the outskirts of the field, and without doubt a number of rock-cut tombs in the lower part of the Eastern Cliff.

In the season 1931–1932 the preparation of the final publication made it necessary to carry out certain subsidiary excavations in the Western Field, as follows:

- (1) March 6th to May 5th, 1932: Cem. G 1200 and northwards to the cliff.
- (2) December 24th, 1932, to March 11th, 1933: northern part of Cem. G 2100.

At intervals since 1924 small gangs of men (5–10) have been employed in clearing small points for the purposes of maps, plans, and other references.

### c. The Excavations of Other Expeditions

While our Expedition was engaged in the systematic clearing of the concession assigned to me and that originally assigned to Professor Schiaparelli, Professor Steindorff and Professor Junker made a similar clearing of the concession assigned to Steindorff (see Junker, *Giza I*, *Giza II*, and preliminary reports in *Anzeiger der Akademie der Wissenschaften in Wien*, 1913–1929). The Sieglin Expedition was occupied until 1909 in excavating the middle strip of the Western Field. In 1909–1910 they cleared the Pyramid Temple of the Second Pyramid and excavated the court of the Valley Temple east of Mariette’s excavation.

From 1911 Professor Junker continued the excavation of the middle strip until 1914. During the War the work on the German concession was suspended, and it was not until 1925 that Professor Junker resumed work at Giza. Having completed the middle strip of the Western Field, he excavated the Cem. G I S in the seasons 1927–1928 and 1928–1929.

In 1915, January to March, Dr. C. S. Fisher, for the Eckeley B. Coxe Expedition of the University

of Pennsylvania, excavated Cem. G 3000 and published his work in Fisher, *The Minor Cemetery at Giza* (Philadelphia, 1924). The cemetery lies in the northern third of the Western Field and adjoins on the north the Cemeteries G 1200, G 1300, and G 1400 excavated by the Hearst Expedition.

In 1923 M. Baraize began, on behalf of the Department of Antiquities, the excavation of the Great Sphinx and the constructions to the east of it. As a result of this work, the whole body of the Sphinx was exposed for the first time to the view of modern eyes. It was definitely determined that the Sphinx was carved from a natural nodule of rock left by the old Cheops quarrymen and was originally coated with white plaster and painted. It was also proved that the Sphinx was restored twice with a coating of small masonry over the whole body, the first time by Thothmes IV, who set up the famous granite stela between the paws, and again by a later king probably in the Ptolemaic period. An extraordinary building of massive blocks of stone has been uncovered, and the excavations were continued annually up to 1936, when the excavations were taken over by Professor Selim Bey Hassan.

In 1929 Professor Selim Bey Hassan, working for the Egyptian University, began the excavation of the great quarry cemetery east and SE of the Second Pyramid. In 1936 he had practically completed the excavation of the causeway of the Second Pyramid, the boat graves found by him north and south of the pyramid temple, the rock-cut tombs and the mastabas south of the causeway as far south as the Valley Temple of Mycerinus. In addition to the rock-cut tombs of members of the family of Chephren recorded by Lepsius he has cleared a large number of similar tombs of the same family whose names are known only from these tombs. He has uncovered and recorded a large secondary cemetery of tombs partly built and partly cut in the rock (see Selim Bey Hassan, *Excavations at Giza 1929-1930*, and *Excavations at Giza 1930-1931*). On the edge of the southern wady he excavated a mastaba built on a rock knoll which had puzzled archaeologists for a hundred years, and identified it as the tomb of Queen Khent-kauws of Dyn. V. East of that mastaba he uncovered an area of c.b. walls which appeared to belong to the same pyramid city found by us east of the Valley Temple of Mycerinus. The eastern side of the quarry south of the Valley Temple of Chephren is still covered with old dump-heaps which will be cleared away later. In 1936-1937 Selim Bey Hassan took over the clearing east of the Sphinx, begun by M. Baraize, and has there uncovered a c.b. temple dedicated to the god Harmachis (the Great Sphinx) and found in it a series of dedicatory stelae set up by kings beginning with Amenophis II and extending to the end of Dyn. XIX. The Egyptian Government has arranged for the gradual expropriation of the native village built against the cliff east of the First Pyramid and its excavation by Selim Bey Hassan. This excavation will be of the greatest importance and will recover for us not only the inaccessible rock-cut tombs in the lower part of the cliff, but perhaps some vestiges of the Pyramid City of Cheops. It will also recover all that is left of the Valley Temple of Cheops himself. It is also to be hoped that in time he may be permitted to excavate outer areas east of the necropolis, particularly the temple of Kha-em-wase (son of Ramses II) and the environment of the massive stone wall which appears to form the southern boundary of some pyramid city and remains to the present day a problem.