ORIENTALIA MONSPELIENSIA IX

CENTRE D'ÉGYPTOLOGIE FRANÇOIS DAUMAS
INSTITUT D'ÉGYPTOLOGIE — UPRES-A 5052 DU CNRS

Études sur

l'Ancien Empire et la nécropole de Saqqâra

dédiées à Jean-Philippe Lauer

réunies par Catherine BERGER et Bernard MATHIEU

publiées avec le concours de l'URA 995 du CNRS



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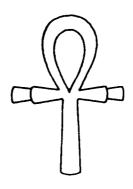
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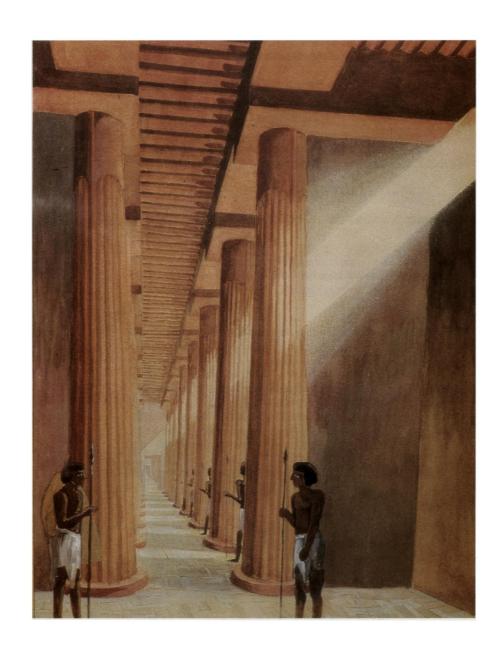
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Préface

Certaines existences sont tracées en ligne droite par le caractère et le destin. Celle de Jean-Philippe Lauer appartient à cette lignée. Le sillon qu'il a creusé tout droit est porteur d'une riche moisson.

Au soir de sa vie, Jean-Philippe Lauer est devenu une figure emblématique de l'égyptologie du siècle qui s'achève. Sa longue carrière, au lent mûrissement, délivre un message : la force intellectuelle et morale qui résulte d'une parfaite adéquation entre la pensée et l'action, l'œuvre et la vie.

Dans le monde souvent baroque des pionniers, découvreurs, savants, archéologues, que l'Égypte a fascinés depuis Champollion, « Monsieur » Lauer occupe une place à part. Il n'appartient pas à la cohorte inspirée de ceux pour qui l'Égypte était une vocation impérieuse, souvent inscrite depuis l'enfance dans leur imaginaire. Il n'a pas brassé, comme Mariette ou Maspero, les mille trésors de l'antiquité pharaonique. Il n'a pas, comme une Desroches Noblecourt, soulevé les temples de Nubie, ni, comme un Leclant, entassé les savoirs et les chantiers. Il est venu en Orient pour exercer sa profession d'architecte. Sa vocation est née sur le terrain, cette terre sacrée de Saqqâra où l'avait appelé Firth. Elle l'a investi progressivement jusqu'à occuper toute sa vie, cette longue vie qui semble par sa durée même être l'écho des siècles dont elle est le témoin ébloui. Sa femme à l'esprit si vif, ses enfants qui ont cheminé avec lui dans ce site inspiré, ont partagé sa noble obsession et accepté qu'il vive pleinement sa passion.

Un homme de science et de raison, obéissant à l'esprit de géométrie qui marque sa profession, a donc voilà soixante-dix ans voué son intelligence et sa capacité technique à servir l'ordre mystique conçu à l'aube de l'histoire pour conduire l'homme vers l'éternité. À l'âme de l'architecte primordial que fut Imhotep, celle de Jean-Philippe Lauer s'est amalgamée. Il lui fallait comprendre, deviner, recréer par une anastylose soigneusement méditée la grandiose cité funéraire d'un pharaon au génie orgueilleux qui avait voulu, comme dit Malraux, « traduire le périssable en éternel ».

Pour la première fois, le génie humain transcendant son propre destin mortel exprimait dans un rêve de pierre l'aspiration à sa propre renaissance. Le cycle de la vie se régénérait pour Djoser dans le parcours jubilaire de trente ans. La pyramide à degrés le conduisait vers le ciel. Le cycle de la vie et de la mort s'enfermait tout entier à Saqqâra.

À cette « demeure d'éternité », Jean-Philippe Lauer a consacré les forces de son intelligence rationnelle, de sa patience attentive, de la maîtrise technique du tailleur de pierre ou du maçon qui connaît le fruit d'une muraille ou qui, comme l'artiste, sait retrouver dans l'évasement d'une colonne la forme végétale du papyrus.

Cet interminable cheminement, une reconstitution respectueuse d'un ensemble monumental, fut le travail quasi monastique d'un homme modeste et obstiné, arpenteur infatigable du même espace clos. Au fur et à mesure de sa quête, il a marqué son parcours et donné les résultats de sa réflexion scientifique dans de nombreuses études et communications dont on trouvera ici le choix impressionnant. Un musée de site dont les autorités égyptiennes viennent de reconnaître l'urgence viendra compléter son œuvre, en montrer l'étendue et l'agencement, révéler enfin l'étonnante variété des trouvailles d'un chantier exceptionnel.

Dans son monde à moitié enseveli dans les sables dont l'âme appelait résurrection, il fallait cet homme de foi, scrupuleux et résolu, dont l'inlassable recherche portait le sceau de la probité. Aucune des péripéties de l'histoire n'a pu entraver durablement son œuvre. Ni la guerre de 1939-1945, ni la révolution nassérienne, ni la rupture diplomatique et culturelle qui a suivi la malheureuse expédition de Suez n'ont découragé Jean-Philippe Lauer. Il a toujours su renouer le fil de son entreprise, acquérant par son entêtement même la légitimité qui le rendait inexpugnable. Du ministre à l'ouvrier sur le chantier, qui n'aurait été sensible à la sincérité de sa démarche et à son désintéressement ? La popularité dont il jouit aujourd'hui atteste cette reconnaissance. Son engagement total pour la sauvegarde de ce fleuron du patrimoine humain est ressenti comme une valeur morale par un large public comme par les équipes égyptiennes et françaises qui l'ont entouré.

La petite maison de fouilles où sa vie s'est écoulée porte témoignage de la simplicité et de l'harmonie qui ont tissé ses travaux et ses jours. J'en ai souvent usé moi-même lors de mon séjour au Caire et j'ai pu voir combien les grands de ce monde qui y faisaient escale y puisaient sérénité et réconfort. Aux approches de la tumultueuse mégapole moderne, à l'orée du désert face à l'immuable palmeraie nilotique, elle se niche au haut de la falaise, adossée à la grande cité funéraire. Dans l'espace lumineux qui la baigne le jour où dans les ténèbres de la nuit, elle est une vigie studieuse où le vieux pilote revient sans cesse, affable et dispos, hôte discret et chaleureux, conteur souvent malicieux, inépuisable guide du patrimoine intemporel dont il a la garde.

Pierre HUNT Ambassadeur de France

An Exploration of the Pyramids of Dahshur and Gîza directed by Robert Wood in 1750

I.E.S. EDWARDS †

One day early in December 1937, when I was on my first visit to Egypt, Jean-Philippe Lauer called at the house of Bryan and Mollie Emery, with whom I was staying at Saqqâra, and invited me to accompany him on brief tour of the Step Pyramid and its South Mastaba, where he had been working at first under C.M. Firth and, since Firth's death, on his own. What I saw that afternoon and Lauer's personality did much not only to kindle my own interest in pyramid studies, but also to lay the foundations for a close and lasting friendship which I have always regarded as one of the most precious benefits witch I have derived from devoting life to Egyptology. His contributions to pyramid studies have assured him of a place among the immortals in that branch of Egyptology.

At the Congress of Egyptologists held in Turin five years ago, I read a paper entitled « An Anglo-Italian Survey of the Pyramids of Dahshur and Giza in 1750 ». It was heard by Lauer, who was kind enough to express an interest in what I had said and particulary in the drawings which I had shown to illustrate my paper. My intention was to submit a slightly expanded version of what I had said in the Proceedings of the Congress, but a serious loss of sight necessitated my devoting my time to previous commitments while it was still possible to do so. Now I am no longer able to do more than make some small adaptations and minor corrections.

The subject of my paper was an expedition made by Italian and two British archaeologists, named Robert Wood, who was thirty-four years of age, and James Dawkins, twenty-eight years of age. The Italian, an architectural draughtsman of remarkable skill (whose drawings of the pyramids are reproduced in this article), was named Giovanni Borra; his age I do not know. Their work in the Aegean and the Levant — in particular the publication of the temples of Palmyre and Baalbek — is well know to classical archaeologists, but no one on them is recorded in the first edition of W.R. Dawson, Who was Who in Egyptology, and I have found only one mention of Roger Wood's survey in a footnote in Vyse's Giza II, p. 288. A third Englishman, John Bouverie, of whom I shall say more, was originally a member of the party.

Dawkins and Bouverie were wealthy young men and they chartered from London ship of about 160 tons, the *Matilda*, to transport them and to serve as a base during their explorations. Each of them had three servants with him and one of them, I suspect,

must have been fully employed looking after Bouverie's wardrobe. And any rate a note in his diary records that he took the following items with him on one expedition lasting a few days in Turkey: "six pairs of riding-stockings, four Indian dimity waistcoats with sixteen buttons, four striped Spitalfields linen waistcoats, Nankin coats, shoes, pumps, boots, thread stockings, bob-wig and two bagg'd breeches". They hired horses for their journeys over land.

The *Matilda* picked them up at Naples on 5th May, 1750, bringing from London a library consisting chiefly of the Greek historians and poets, some books on antiquities and the best voyage-writers, any mathematical instruments which were thought necessary and such things as might be proper presents for the Turkish Grandees or others to whom in the course of their travels they might be obliged to adress themselves.

From Naples they proceeded to Smyrna and spent six months surveying ancient monuments in the Aegean. During this time Bouverie died, as the result of an unidentified illness. His death occurred at Guzul Hissar, not very far from Smyrna, on 19th September. The over three members of the expedition reached Egypt on 4th November. The Diary says: "We came to anchor at four o'clock in the evening, but we found that, by mistake, we were in the harbour of Abuqir... Next morning we set out, mounted upon asses, and in four hours reached the Consul's house in Alexandria — a distance of sixteen miles". At dusk on 9th November they left for Rosetta. Four hours later they arrived at Rosetta early on the following morning.

After a few hours' rest, they were able to make preparations for their journey up the Nile. The *Matilda* had arrived from Alexandria, bringing their equipment, and they were able to unload it on to a transport vessel called a *girm* (pl. *gurum*), which conveyed it to a river-boat large enough to take fifteen persons. Leaving Rosetta at 3.45 on the afternoon of 10th November, they sailed through the night and by the following morning reached Fouah, described in the Diary as "formely a very considerable place, inhabited by Venetians and other merchants". From 11th to 12th November, they were "anchored a quarter of a mile above 'Mohammed el-Mali', where lies a guardvessel to examine whether ships coming from Cairo had paid their duties".²

Sailing through the night, they reached El-Teirieh, which, according to the Diary, was considered to be to located half-way between Rosetta and Cairo. It continues: "13th November: Leaving the great western branch of the Nile (the wind being not altogether favourable) for one of the inland streams, where the current was not so strong and where we might have the advantage of tacking... 14th November: the wind having been favourable at Bulak before midnight on Saturday, 14th November (slightly more than five days after leaving Rosetta)".

They spent ten days in Cairo, sightseeing by donkey, which is described in the Diary as "the ordinary voiture of this city and country, and the only one that is permitted to Franks (i.e. Europeans)". Leaving Cairo on 24th November, they spent one night at Gîza with the British Consul, Mr. Vernon, and moved on to Saqqâra on the 25th.

Leaving Gîza at 7.30 a.m., they did not reach Saqqâra until 4 p.m., a journey of eight and a half hours — their slow progress being ascribed to the two camels needed to carry their baggage and equipment. On arrival, they lodged with a Sheikh Selim in the village of Saqqâra, close to the pyramid of Djedkare Isesi.

The scientific work of the party began some two miles further South, and the first pyramid which they examined was the Northern Stone Pyramid at Dahshur. They measured it "with the greatest exactness, with our quadrant, but the base is so much decayed all round that it is impossible to fix the corners or to measure it with lines". The remaining pieces of casing-stone on the North face are shown on Borra's drawing [fig. 1]. They observed, correctly, that the entrance was 12 1/2 feet (3.81 m.). East of centre, and recorded the dimensions of the entrance corridor, but not its length. Two ground-level chambers and their eleven overlapping courses were noted, as also the length and width of the passage between the two chambers. Incorrectly, the Diary records the height of the entrance above ground as approximately 80 feet / 24.38 m (actual height 94 feet / 28.65 m.) and the length of the entrance corridor as 218 feet (66.45 m.), though the actual length is 230 feet (70.10 m.). Whereas the vertical axis actually passes through the second chamber, Borra shows it between. With regard to the burial-chamber, they recorded that the entrance was "perhaps 20 feet (6.09 m.) from the floor (actual height 25 feet / 7.62 m.). "We could not contrive to get up to it, there being no footing to ascend by to fix our rope ladder... a long ladder could not be brought thither by reason of the declivity of the entrance (passage)" — unless they had taken the precaution to provide themselves with a joint ladder. On the quality of the masonry, the Diary records: "The workmanship of the two chambers is quite perfect, and the stones are so well laid that the cement does not appear".

From the Northern Stone Pyramid, they proceeded to the Bent Pyramid, which the Diary describes as follows: "It is a most beautiful fabrick and the North side so entire that it is now as smooth as it was the first day it was finished. This side is indeed the most perfect, but neither of the others has suffered so much as the most perfect side of any pyramid which I have yet examined. In so much that, though the corners of its base were a little damaged, yet we could so well distinguish them as to be able to measure with two poles, carefully marked 20 feet (6.09 m.)" each, and found that the two sides were exactly aqual, 610 feet each (185.9 m.).³ The casing-stones are correctly stated in the Diary to be tilted downwards, but they are wrongly shown in a sketch as belonging to the Northern Stone Pyramid.

There has been some discussion about whether or not the entrance corridor was blocked in 1750.4 The Diary says: "We descended 130 feet (39.62 m.) through this walled passage, which is cut into the rock. The Arabs carried the line 80 odd feet (24.38 m.) further, where they were obliged to turn back again". That clear description would seem to show that they could not have reached the lower chamber. The corridor measures 260 feet (79.24 m.) in length and therefore they were still 50 feet (15.24 m.) short of it when they stopped.

As a preface to the account of the Great Pyramid, the Diary says: "It is so fine in proportion that, from a distance, it appears small, but, when near, the prodigious size of the fabrick strikes the beholder with awe and veneration. We immediately prepared for ascending it and sent men in the meantime to clear the passage and the entrance... We counted the steps as we descended; some made it 205, others 206 and some 207. These steps are not of equal depth or height, but more regular towards to top... After our descent from the top we made a Meridian 5 upon the eighteenth step at the S.W. corner and found the pyramid situated exactly towards the North, South, East and West, and that our compass had varied fourteen degrees to the westward... confirming the opinion that all pyramids fronted the four points of the world, as they inclined to the East as nearly a possible the fourteen points which we found our compasses varied to the westward... I am persuaded that the stone of this, as well as the other pyramids, was dug partly from the spot they stand upon and the rest from the eastern chain of mountains (i. e. Tura and Masara)".

Borra drew his plan on three visits to the top of pyramid. It seems to compare favourably with the plans drawn fifty years later for the *Description de l'Égypte* and in some respects it is more accurate [fig. 2].

With regard to external measurements, the Diary points out the difficulties: "The measurement of these pyramids is not so easily taken as is generally imagined. The corners of all of them are greatly disfigured and the ruins at the sides cover at least 16 or 20 steps". Nevertheless the scale on Borra's drawing shows that their estimate of the base of the Great Pyramid was about 730 feet (222.50 m.), as compared with the actual measurement of 756 feet (230.43 m.) [fig. 3].

The Diary describes the difficulties encountered in the attempt to penetrate the rubbish which had accumulated in the Descending Corridor. The explorers grated their backs against the roof and it is clear from Borra's drawing that they were unable to make a plan of it. They certainly did not reach the Subterranean Chamber, but they did reach the western recess and they were able to the measure the angle of the slope correctly.

The Ascending Corridor is difficult to measure, owing to the plugblocks at the lower end, but it is hard to accept 111 feet (33.83 m.) for its length (instead of 129 feet / 39.31 m.) and also "about 5 feet (1.52 m.)" for its height and width, instead of 3 feet 11 inches (1.19 m.) and 3 feet 5 inches (1.04 m.) respectively. It is possible that these mistakes may have arisen in transmission. The well is recorded as "lined with white marble, and its descent contrived, like most of wells and cisterns in Alexandria, by holes cut in the sides for the hands and feet. This well is not above 20 feet (6.10 m.) and is almost stopped up with rubbish". In fact, the well is very much deeper than 20 feet (6.10 m.). According to Vyse, 6 it was explored by Wood, which suggests that it was clear of obstruction — obviously an error.

The dimensions of the Queen's Chamber given in the Diary are only approximations — because it was "half full of rubbish" — but they are roughly correct. The Diary calls the Grand Gallery a "very stately piece of work" and the description is very correct (it gives the length as 154 feet (46.94 m.), its actual length being 153 feet / 46.63 m.). The width of the side ramps, 1 foot 8 inches (51 m.) is also given correctly, but their height is not quite the same as their width, as he alleges; the other details mentioned are fairly accurate.

The describing the King's Chamber, the writer of the Diary can hardly find words to convey his admiration for every aspect of it, calling it a "sumptuous and finely proportioned room". He continues: "This magnificent chamber stands East and West... its floor, sides and roof are made of large tables of the finest sort of red granite that I ever beheld. From the stop of it to the bottom, there are six ranges of stones, all being respectively fixed to an aqual height, that runs very gracefully round the room. The stones which cover this chamber are of a stupendous height, like so many huge beams, lying flat and traversing the room, and (for aught we know) supporting that infinite mass and weight of the pyramid; of these there are nine which cover of roof, two of them are considerably less in breadth than the rest, the one at the East end and the other at the West".

Among further details given, it is noted that the measurements of the room are correct and that it is situated equidistantly from all sides of the pyramid and almost in the midst between the basis and the top, thus standing at the heart of the pyramid. (If the diarist had know the exact level of the base, he would have known that the chamber was, in fact, in the middle.) The dimensions of the sarcophagus which he gives are such that it must have been placed in the chamber before the roof was put on to it.

The writer describes the "ventilation shafts", but says that they had nothing with which to measure their length, adding: "That on the South is longer and somewhat round. I do not doubt they had their use, probably for lamps, as they are black within".

The Second and Third Pyramids were not opened until the times of Belzoni and Vyse (1818 and 1837 respectively) and consequently Wood and his companions only give the external measurements and comment on their architecture. "The Second Pyramid suffers by its situation; it lacks the grandeur and majesty of the First and the delicacy and gentility of the Third. The Third Pyramid is by far the most pleasing to my eyes. I could not perceive any entrance into it or inscriptions on its sides" [fig. 2].

Finally, as evidence that some things have not changed since 1750, one more passage may be quoted from the Diary: "We found great numbers of petrified skins of oranges, limes, etc. round the Second Pyramid". In the time of Evelyn Perkins, Reisner's secretary, who lived in the house of the Boston-Harvard Expedition, her donkey's favourite walk was to the area around the Giant Sphinx, where the dried — but not petrified — skins of citrus-fruits littered the ground in all directions.

- 1. The information in this article is derived from the diaries kept by Wood and Dawkins, which in 1926 were presented, together with other diaries referring to work outside Egypt, by Mr. A.H. Wood to the Society for the Promotion of Hellenic Studies. They are now in Joint Library of the Hellenic and Roman Societies at the Institute of Classical Studies of London University. I am greadly indebted to the Committee of the Institute of Classical Studies for permission to make use of the information in the diaries, to Mrs. Naomi Alvarez, Librarian of the Institute, for allowing me to study them, and to her successor, Miss Jane Fisher, for obtaining the necessary authority for me to publish this article. The drawings by Borra of the pyramids, now in the Paul Mellon Collection at the Yale Center for British Art, were brought to my knowledge by Miss Jane Ayer Scott, Executive Director of the Harvard University Sardis Expedition. Mr. Patric Noon, Curator of the Collection, kindly gave me permission to reproduce them. A summary of diaries by Miss C.A. HUTTON, sometime Honorary Secretary of the Hellenic Society, is in the Journal of Hellenic Studies 47, 1927, p. 102-128, and a brief catalogue of their contenents by J.A. BUTTERWORTH appeared ibid., 106, 1986, p. 197-200.
- 2. It is unlikely that a place would embody the name of the Prophet in its name, and I think that what was thought to be a place-name was in fact the name of the estate (*ezba*) of someone named Mohammed el-Mali, but I have not been able to identify such a person. It may have been situated in the neighbourhood of Sais Sa el-Hagar.
- 3. Length of the base is given as 621 feet (189.28 m.) by V. MARAGIOGLIO and C.A. RINALDI; see *L'Architecttura delle Pyramidi Menfite* III, pl. 8.
- 4. See K. PICKAVANCE, JEA 67, 1981, p. 136-142.
- 5. In letter dated 27th June, 1996, Sir Ivrine Goulding has kindly given me the following information: "I think that the expression 'we made a meridian' in the passage which you cite means that the travellers observed the bearing of the sun at its highest point (i.e. at local noon) and so ascertained the direction of true South. On doing this they found that the sides of the pyramid agreed with the four true cardinal points. They also found that the magnetic variation is a quantity that differs from place to place, and from year to year at the same place. I see no reason to doubt the travellers' observation of 14°W".
- 6. See Operations carried on at the Pyramids of Gizeh in 1837, II, p. 288n.
- 7. It is strange that Diary omits to say that every one of the nine beams is cracked.

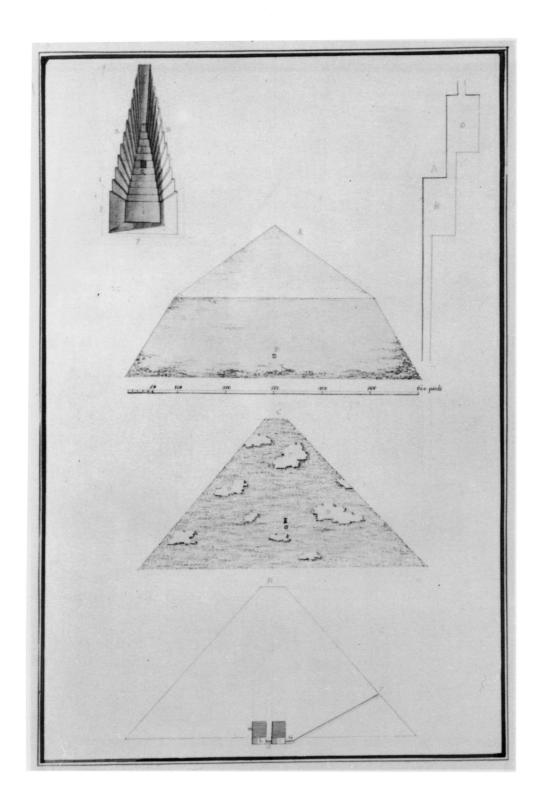


Fig. 1. Bent Pyramid and Northern Stone Pyramid at Dahshur.
Entrance to corridor leading to the third chamber, Northern Stone Pyramid. Bent Pyramid.
Ground-plan of first two chambers in Northern Stone Pyramid. Northern Stone Pyramid.
Plan of Northern Stone Pyramid, showing the entrance corridor and the first and second chambers.

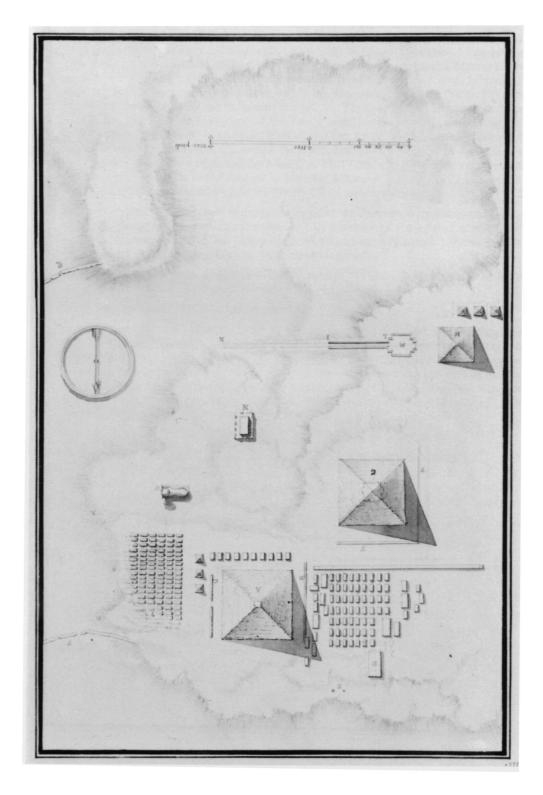


Fig. 2. The Gîza Plateau. Pyramid of Mycerinus, Mastaba of Khentkaues, Pyramid of Chephren, Giant Sphinx, and Great Pyramid and mastabas.

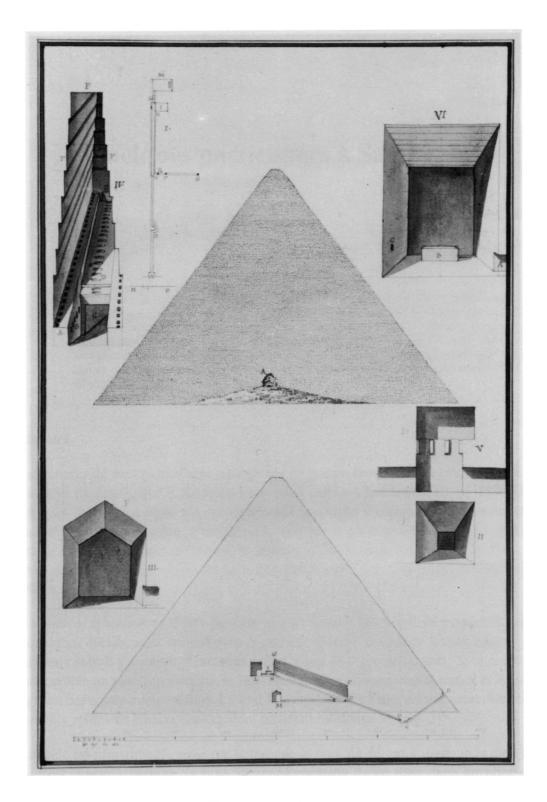


Fig. 3. The Great Pyramid.

Grand Gallery, West wall and entrance to Queen's Chamber corridor.

Plan of the corridor leading from the Grand Gallery to the King's Chamber.

Great Pyramid, North face. The King's Chamber, with side and end views of the sarcophagus.

The Queen's Chamber. Portcullis grooves in the antechamber to the King's Chamber.

King's Chamber. Plan of the Great Pyramid, looking West.

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