

Egypt's Pyramids

Early Egyptian literature barely mentions the pyramids. Can research fill the void?

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The pyramids of Egypt, perhaps not the most beautiful buildings of antiquity, have inspired a literature of formidable extent in the last century and a half. This commenced at the very beginning of the 19th century, and by 1842 one of the basic works had appeared; by the close of the century the imaginative nonsense of the pyramid mystics had come out. In our century great monographs on individual pyramids, works of the greatest importance, have been numerous. In addition to these scholarly works and the many articles on specialized aspects of the pyramids, there have been several books written primarily with the purpose of coordinating scattered information and making it available and interesting to the general reader. Chief among these have been the publications of Grinsell, of Lauer, the great specialist on the Step Pyramid, and, in particular, the very comprehensive book by Edwards of the British Museum.

The most recent addition to this last and small group carries the classically simple title **The Pyramids** (University of Chicago Press, Chicago, Ill., 1961. 260 pp. \$5.95). It is written by one of Egypt's foremost scholars, Ahmed Fakhry, whose long career in Egyptian archeology well qualifies him to undertake an exposition of what certainly were the greatest architectural and engineering projects of antiquity.

While the sheer bulk of the pyramids has inevitably directed interest toward their material aspects, an absorbing field, their religious, economic, sociological, and artistic implications are of even greater interest. Unfortunately for us, knowledge of these aspects rests largely on inference and speculation, for Egyptian literature barely mentions the pyramids and the very few refer-

ences that exist are so incidental and vague that they tell us nothing. The first reference of any substance is by the chatty Herodotus in the 5th century B.C., limited in context and inaccurate but interesting and valuable as the first account. Probably no amount of research will ever fill this void of silence.

Fakhry presents the pyramids in chronological or historical sequence, commencing with the famous Step Pyramid of Dynasty III, the beginning of that great period which continued through Dynasty IV, which originated the pyramid as an architectural form, developed it into a setting for the complex rites due to the deceased divine king, and, having reached its climax in Dynasty IV—as so many elements of Egyptian culture did—rapidly declined in Dynasties V and VI. These dynasties collectively are called the Old Kingdom and cover roughly the period from 2780 to 2280 B.C. Almost 80 percent of the book is devoted to this time, and with justification, for though pyramids continued to be built in Egypt for another six or seven centuries, they never rivaled the great ones of the early period.

Establishing Identity

Among the mightiest of the pyramids are those of Dahshur, the North and South pyramids which Sneferu built at the very beginning of Dynasty IV. Together they represent a mightier effort in one lifetime than the Great Pyramid of Giza which was the work of Sneferu's son Cheops. The South or Bent Pyramid (see Fig. 1), set in romantic isolation, is for some reason one of the most impressive buildings in Egypt. For years it was believed to be a transitional form intermediate between the Step Pyramid and the slightly later

true pyramid. The supposition was logical, but the excavations of the late Abdel Salam Hussein at this pyramid in 1946 proved, in his opinion, that the change in angle was necessitated when the architect realized that the original plan would place a crushing weight on the central chambers. Fakhry, on the other hand, suggests that the change in plan was due to the necessity for completing the pyramid in haste, perhaps because of the death of the king. Hussein was convinced that the intact burial chamber still existed in the complex interior and concentrated all his energies on locating it. At that time the identity of the builder was still unknown, and for historical purposes it is well to record that this point was first established by W. Stevenson Smith one morning early in 1947 when we visited the site together. While the interior of the pyramid was being torn apart to locate the chamber no one noticed quarry inscriptions on several of the stones removed to the desert as obstructions. It was Smith who noticed and read the name of Sneferu, thus settling a long-standing puzzle.

An interesting and useful feature of this book is the mention, almost a listing, of the pyramid areas yet to be excavated. In fact, almost no site in Egypt has ever been thoroughly excavated, but one is inclined to suppose that a unit as compact as a pyramid and its enclosure would be easy enough to uncover. Fakhry constantly mentions the unexcavated areas, and some future excavator could well use this work as a guide to excavation in Egypt. The North Pyramid at Dahshur, the first true pyramid in Egypt, is indeed identified, but its temples are still covered with sand and so are unknown. Both pyramids at Dahshur and the Great Pyramid at Giza have magnificent and complex interiors actually built within the mass of the pyramid itself. With the exception of a very few other examples, the Egyptian pyramid was not usually a functional building. Whatever its origin—an unsettled question—it was in most cases a solid mass built over a tomb chamber cut in the bedrock. The opulent halls of Sneferu and his son Cheops were beyond the means of their successors.

When the use of the pyramid as the royal tomb was resumed in the Middle Kingdom, a great change took place. The impressive, solid, stone construction typical of the early pyramids was abandoned, one suspects for financial rea-

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sons, for a shoddy series of cross walls filled in with sand, rubble and even mud brick. The tradition of a fine outer casing in limestone was retained, and so the effect was fine—for a time. But combined with this wretched construction the architects used great imagination, effort, and the finest stones in designing the novel interiors usually built into the rock under the pyramid. Clearly, they were attempting to make the burial chambers with their great wealth inaccessible to thieves. These efforts for security imply that the earlier pyramids had already been robbed. It is curious that, with their constant fear of robbery after death, the Egyptians never sublimated their funerary beliefs into something unsubstantial and so made their burials unattractive to thieves. In turn one wonders if the omnipresence of tomb robberies indicates a skepticism among the Egyptians which too has found almost no expression in their literature.

At all events the pyramid went out of use as a royal tomb early in Dynasty XVIII, perhaps about 1575 B.C., and was replaced by the equally costly but hidden rock-cut tomb, presumably because the futility of the pyramid was all too obvious. In the 8th century B.C. the pyramid was copied far up the Nile in the barbarous land of Cush where it long survived as a royal tomb. In Egypt, however, the form was never revived, so far as we know, which is strange, for in Dynasties XXV and XXVI there was a general adulation of the past with widespread copying or working in the spirit of earlier ages. Perhaps these late descendants of the pyramid builders did not want to duplicate these unique structures, but the chances are that they lacked the resources to do so.

Charge for Posterity

A brief paragraph (page 213) carries a wonderful suggestion which some future generation will surely carry out. Here Fakhry suggests that it would be well to dismantle the pyramid of Amenemhet I at Lisht, which is known to be constructed, at least in part, from reliefs and inscriptions taken from the great Dynasty IV temples and monuments at Giza and elsewhere. The idea is sound, for the pyramid is mediocre and in poor condition, and the recovery of these early reliefs would surely enlarge our knowledge. Whether, in using these blocks which entailed at least

great damage to ancient buildings, Amenemhet was motivated by greed or, as is more probable, hoped to gain something magical or spiritual from contact with the work of his distant predecessors is a matter of opinion. The Egyptian Expedition of the Metropolitan Museum of Art did indeed extract some of these reliefs from the pyramid years ago with rich results; the results are soon to be published. The registration and storage problems involved in reverse construction of a pyramid are so gigantic that most museum men will willingly leave the project to posterity.

The drawings and photographs in this book are admirable and numerous, adding greatly to its interest and utility. Some of the photographs are of unusual and rarely reproduced views of pyramid interiors, the best substitute for those who can never get to Egypt. They

give a feeling of the gigantic scale and fine construction of these great monuments of early Egypt, which still impress and fascinate men. The treasures they, or more probably their related temples, once held are forever lost to us, with the exception of stray scraps—a magnificent gold uraeus of Dynasty XII, dropped by thieves and rarely reproduced today; two caches of jewelry from the same period which alone have established that time as the apex of all jewelry design; a few wooden items; and a fair number of sculptures.

On Crowning Kings

Books, like individuals, rarely achieve perfection and, in any case, a review is not considered "serious" unless it includes some critical comment. Most of

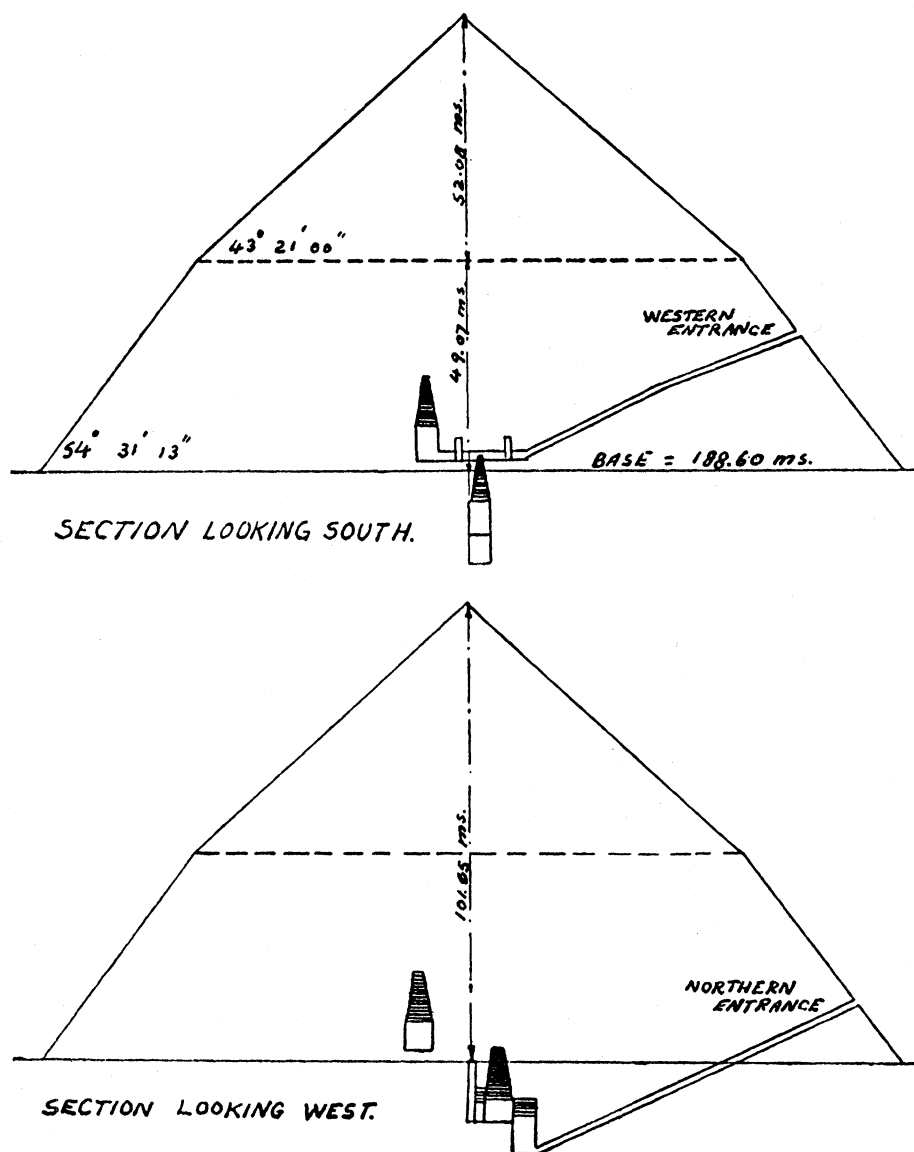


Fig. 1. Dimensions and angles of the Bent Pyramid at Dahshur. [Hassan Mustapha]

the errors in this book are trivial, but a few are of importance and should be corrected in any subsequent edition. On page 12 there occurs one of the classic editorial errors of Egyptological literature, here enlarged and expanded to Miltonic proportions. This is the "correction" of *Nomarch* to *Monarch*. Ancient Egypt was divided into a series of districts or provinces which the Greeks called "nomes," the governor of one of these nomes being a "nomarch." Since this rare noun is almost never included in English dictionaries, it has become a matter of course for editors to smile and transpose the first and third letters of this noun, thus elevating a provincial governor to royal rank. In the present instance the editorial boner has created a new king, Dhutihotep, to add to the already complex list of kings.

The reference on page 27 to two small reliefs in the Metropolitan Museum as "among the best specimens of sculpture" from the reign of Zoser (Dynasty III) is no longer valid, for these unusual pieces are now believed to be archaizing work of late date. In any case the reliefs in Turin from Heliopolis of the reign of Zoser are far finer. It is a pity that the romantic idea of the Libyan origin of one of Cheops' chief queens (page 125) must be adversely criticized. A splendid representation of her with blue eyes and blond hair led the great Reisner to develop the theory of a Libyan strain in the royal family from which much could be inferred. That imaginative piece of scholarship has been thoroughly eradicated by W. Stevenson Smith some years since, to his and our regret. One must also hesitate to agree (page 237) that in Cush (Sudan) during the New Kingdom "local industries had reached a high level." The paintings in the tomb of Huy quoted as proof of this actually show very clearly that Cush was expected to supply the raw materials only; the finished objects depicted are clearly of Theban manufacture. Indeed, despite long colonization by the Egyptians and considerable aping of their culture, the land of Cush remained remarkably provincial and produced almost nothing to rival the great craftsmanship of the Egyptians.

It is curious that on page 242 the learned author restates an error of identification from the early days of Egyptology. Far to the south in Cush near the Fourth Cataract are the similar sites of Zuma and Tangasi, each with a considerable number of earth mounds

varying greatly in size and height and interspersed with circular pancake-like burials. The early travelers described them, as does Fakhry, as pyramids and even Lepsius went along with this description. And from a distance these mounds do give the impression of ruined pyramids, not unlike the remains of brick pyramids of the Middle Kingdom. Even a cursory inspection explodes the pyramid theory, for the mounds are of earth, artificially constructed, with a surface scattering of local stones of natural shape placed there to reduce surface erosion. Excavations at similar sites, mainly in northern Cush, during the past three decades give ample basis for dating these mounds to the X-group people. Excavations at Tangasi by the Sudan Antiquities Service in 1953, while disappointing so far as finds were concerned, did show conclusively that these structures had no connection with pyramids.

Several broader criticisms can be made of this work. A more comprehensive treatment of the royal tombs of Dynasties I and II would be useful. It is true that these structures were never pyramidal, but they were the predecessors of the pyramid, and the account of them in this work is hardly adequate. The discovery in recent years of a series of vast mastabas at Saqqara North is barely mentioned, and the controversy over their identity is passed by. The distinguished excavator of these mighty structures, Walter Emery, believes them to be the tombs of the earliest kings. His arguments are strong, and many scholars agree with his ideas; other scholars are not convinced and, in any case, the excavations have not been finished. In a very few cases the description of the interior of a pyramid is inadequate; that of Sesostri III at Dahshur is an example. The references (page 221) to the monuments of this king at Abydos seem inaccurate, for they mention a "small pyramid and temple." A temple of Sesostri III does indeed exist at this site, apparently in relation to the mysterious rock-cut structure, perhaps a cenotaph, which is of great interest as a variant form of royal tomb. The pyramid presumably is that usually, if uncertainly, ascribed to early Dynasty XVIII, and here it would have been instructive to quote the text of Ahmose, which seems to refer to this pyramid. Much more of interest could have been recorded of the pyramid fields of Cush and of the splendid finds that have come from

them. These exotic constructions were excavated by Reisner and have been splendidly published by Dunham. With these great publications at hand it would seem that one could dispense with the adventurous works of Budge.

One defect, obviously no fault of the author's, is that the text has been so extensively edited, presumably in a mistaken ideal of grammatical accuracy, that Fakhry's vivid personality is not evident. He is an ebullient, witty, and vivacious individual, and one wishes that the editors had allowed more of his style to prevail, grammar notwithstanding.

Tursiops-side-down World

Porpoise and Sonar. Winthrop N. Kellogg. University of Chicago Press, Chicago, Ill., 1961. 177 pp. Illus. \$4.50.

Man and Dolphin. John C. Lilly. Doubleday, Garden City, N.Y., 1961. 312 pp. Illus. \$4.95.

The authors of these two books have one common purpose, which they display with undisguised enthusiasm. It is to convey the fascination, privilege, mystery, and sense of high adventure of their own apparently quite unrelated and separately conducted researches during the past decade on *Tursiops truncatus*, the shallow-water or bottle-nose dolphin. But how differently they do it.

Both books are white-hot from the furnace of experience. Both authors are concerned to emphasize (quite justifiably) the importance to defense projects of their remarkable demonstrations that these dolphins emit underwater sonic impulses at frequencies up to 200 kilocycles per second and that at the least they use some part of these sounds as echo-ranging signals for navigation and orientation. Kellogg writes selflessly with apposite tables, diagrams, figures, experimental detail, careful index, and references, in the best style of a descriptive scientific text intended for the non-specialist reader. Lilly's book is as revealing about man—not any man, but one man, John C. Lilly—as about dolphin. It is undoubtedly one of the frankest and most egotistical accounts of a research project ever placed before a sensation-loving public. Many of his numerous photographs seem more suited to the family album than to an