The Pyramids of Giza
FIGURE 5  Map of Egypt, showing locations of pyramid towns (numbers refer to Table 2).
The Pyramid of Chephren
The Step-Pyramid of Djoser
The Step-Pyramid
Map of the Early Dynastic monuments of Saqqara.
Architect’s Model of the Step-Pyramid
The Step-Pyramid
Diagram of a Mastaba Tomb

1. burial shaft
2. burial chamber with sarcophagus
3. chapel where false door stele and offering table are located
4. serdab for statue of tomb-owner
**TOMBS AT SAQQARA**

<table>
<thead>
<tr>
<th>Name</th>
<th>Sizes of Mastabas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narmer</td>
<td>(No tomb)</td>
</tr>
<tr>
<td>Aha</td>
<td>48.2 × 22m</td>
</tr>
<tr>
<td>Djer</td>
<td>41.3 × 15.15m</td>
</tr>
<tr>
<td>Merneith</td>
<td>42.6 × 16m</td>
</tr>
<tr>
<td>Djet</td>
<td>56.45 × 25.45m</td>
</tr>
<tr>
<td>Den</td>
<td>Three tombs, largest: 57.3 × 26m</td>
</tr>
<tr>
<td>Adjib</td>
<td>37 × 13.85m</td>
</tr>
<tr>
<td>Semerkhe</td>
<td>(No tomb)</td>
</tr>
<tr>
<td>Qa’a</td>
<td>Two tombs, largest: 65 × 37m</td>
</tr>
</tbody>
</table>

The inside of the mastaba was subdivided into numerous store chambers, whose walls were undecorated. Many were found intact. The roof structure, especially over the burial chamber, was inherently unstable and in every case collapsed. It may have been barrel-vaulted.

The underground burial shafts of the Saqqara mastabas were robbed but clearly once contained interments. As such, they could not have been cenotaphs, but since the names of officials were found, these shafts could have been used for Egypt’s earliest administrators.

Low mud-brick mounds covered each subsidiary burial around the main mastaba tomb. In these, were found the bodies of courtiers, placed in a fetal position and carefully arranged.
Plan of the underground galleries south of the funerary complex of King Djoser at Saqqara. The galleries probably date from the Second Dynasty, about 2890–2686 BC.
Interior of a mastaba tomb
Plate 4. Stepped mound in a 1st Dynasty brick mastaba. Saqqara
The Step-Pyramid: with temple complex in the foreground
The original mastaba with its central burial chamber was enlarged gradually several times, eventually to form the Step Pyramid as it is seen today.

The burial chamber once would have been approached from the roof of the mastaba. As the pyramid grew, so a descending corridor was added from the north face.
Temple near Step-Pyramid
design features he would have employed with the old medium. Alternatively, it is possible that Imhotep's purpose in copying wooden funerary complex, although they too may represent part of the ceremonies by which the king retook control of the Two Lands.

The southern tomb is approached by a steeply sloping shaft to a series of small, finely decorated chambers, now in fragile condition. Its significance is not clear, but it could have been a cenotaph.

The Sed court, used for the jubilee festivals of the king, is faced by a series of barrel-vaulted dummy dressing rooms.

The area to the north of the Step Pyramid still awaits clearing. It is apparent that many more rooms lie under rubble and accumulated sand. They may contain more information about the architect, Imhotep, and the significance of the whole complex.

The House of the North and the House of the South are two major buildings within the complex whose purpose is totally unknown. It has been suggested that they symbolized the king's rule over Upper and Lower Egypt.
Figure 59. Sketch-plan of the saddle-back roof of a building in the Step Pyramid enclosure
Reconstruction of Step-Pyramid and its surrounding buildings
FIGURE 5  Map of Egypt, showing locations of pyramid towns (numbers refer to Table 2).
Plate 17. Pyramid of Meidum. View from the east
Snefru’s Pyramid at Meidum
A Stele Issued by Snefru
The core of the Meidum pyramid is made up of layers that slope gently inwards. Each layer was covered with fine white Tura limestone, but only the section that could be seen above the succeeding layers could be smoothed to a fine polish.

The entrance on the north face of the pyramid slopes downwards at an angle of almost 45°. The walls of the passage were never smoothed. At the foot, a short horizontal corridor leads to a small upward shaft and the unfinished burial chamber.
Slagheap at the base of the Pyramid at Meidum
The Bent Pyramid at Dahshur
Figure 19. The Bent Pyramid, section looking east
The Bent Pyramid
with remains of lower temple in foreground
Figure 21. The Bent Pyramid, plan
THE PYRAMIDS OF ABUŠİR

Reconstruction by L. Borchardt. In the distance a sun-temple.
The Lower Temple of the Bent Pyramid (at the end of the causeway)
Model of a smooth-sided Pyramid
The Pyramids of Giza
The Pyramids of Giza
View up the Great Pyramid at Giza

Where’s Waldo?
Construction of the Great Pyramid
Construction of the Great Pyramid
Construction of the Great Pyramid
Construction of the Great Pyramid
Sledges
Construction of the Great Pyramid

[Image of the construction of the Great Pyramid with workers and equipment]

- A massive ramp of sun-baked bricks and rubble, teams haul heavy blocks to the rising pyramid. Some laborers carry water to cool the hot surfaces; others carry timbers to brace the wooden framework before they slip back when harvesters pause. Stonecutters fit blocks in a staging area below. Then robots position them above, sliding into courses by a brick corridor that eases the structure inward, a ramp and cistern that rise together. A gilded pyramidion sits atop the pyramid, an artful cairn to smooth the dust and rear the stones. As they work upward, ramps and catwalks are returned brick by brick to the Nile.
Construction of the Great Pyramid

The monument is finished and the king is laid to rest. Now the priests take up their duties. Boats begin to produce grain, cattle, bequests by the king to his mortuary priests for his own maintenance and the maintenance of the pyramid. At a colonnaded temple, offerings arrive which the dead king will consume in spirit and the priests will devour in fact.

Stone slabs now form the causeway, a ceiling that admits light and allows painted reliefs on the walls to be seen. A mortuary temple lies between causeway and pyramid. Outside an enclosure wall, courtiers who served the king in life remain in attendance in their mausoleums of stone. Inside the wall, his queen lies in a subsidiary pyramid, a replica in miniature of the gleaming monument that shelters the sanctuary of the king and its lavish funerary equipment. Time has run out for a monarch of ancient Egypt. But for his tomb, it has only begun.
Workers hewing a stone
Copper Tools

like those used on the Great Pyramid
Quarry

View of the Gebel el-Silsila sandstone quarries.
shows the Khufu pyramid nearing completion. Quarry, construction ramp,
cross section, pyramid of Pharaoh Osmosis

- air channels
- king's chamber
- master bath
- sauna
- laundry/utility
- screening room
- guest chamber
- rumpus room/bar
- bowling alley
- kitchenette/breakfast nook
- garage
- redwood deck
- entrance
The Pyramids of Giza
Aerial view of the Giza Plateau, taken in the 1930s or 1940s, shows pyramids and mastaba tombs to the north (upper part of photograph) and Old Kingdom industrial buildings and workers’ cemetery to the south. Low-lying ground east of the valley temples that may reflect location of harbors and waterways is outlined in white. Recently discovered traces of wall are in red.
Laborers, artisans, and overseers were buried in these modest tombs south of the pyramids.
In this tomb relief, sculptors finish a statue with hammer and chisel. Sculptors were among the most richly rewarded of Egyptian artisans because their works conferred immortality by providing an eternal refuge for the \textit{ka}, or life force, of the person represented.
General Plan of the Pyramids and Temple Complexes at Giza
Menkaura

Builder of the Third Pyramid at Giza. The pyramid is much smaller than the first two at Giza, but it was covered in a casing of granite and decorated within, both features implying high costs in skilled labour. Statues from the pyramid temples for the royal cult came to be used to provide stone for model vessels for private burials later in the Old Kingdom, but several fine triads of king Menkaura survived.

Shepseskaf

This king built not at Giza but south of Saqqara, and chose for his tomb not a pyramid but a cuboid like a sarcophagus, reminiscent of princely tombs at Saqqara in the First Dynasty. His relation to the kings before and after him is not known, but he left a decree exempting the temple of his predecessor Menkaura from various state dues.
The Sphinx
The Sphinx
The Sphinx
Diorite Statue of Chephren (with Horus Falcon)
The Great Pyramid of Khufu (Cheops)

The vaulted grove known as the Grand Gallery (left) ascends eerily to the innermost sanctuary of the Great Pyramid of Khufu. Large stone blocks close in on intruders as the 155-foot passage climbs at a 26-degree angle, ever closer to the burial chamber. The drawings of the Great Pyramid and its funerary complex (right) reveal the architectural secrets within the stone.

Khufu’s Eternal Home

1. The Great Pyramid
2. King's Chamber (contains sarcophagus, with stress-relieving spaces in stonework overhead)
3. Queen’s Chamber (misnomer)
4. Unfinished chamber
5. Descending passageway (abandoned when burial site was shifted to core)
6. Ascending passageway
7. Grand Gallery
8. "Air" shafts (possibly to link king’s spirit to the stars)
9. Mortuary Temple
10. Causeway
11. Valley Temple
12. Eastern boat pits (found empty)
13. Mastaba
14. Enclosure wall
15. Satellite pyramids

The Great Pyramid of Khufu (Cheops)
Sun-Boat

reconstructed
in museum
Egyptian relief: boats on the Nile

Even as they learned to harness the Nile’s floodwaters, the Egyptians were taking to the river in sailing craft. This relief, which was carved around 2400 B.C., shows a pair of vessels with the distinctive two-legged mast devised by Egyptian shipwrights to distribute the weight of mast and sail over the hull of the boat. When the wind failed and rowing became necessary, the boat’s crew unstepped the mast with the aid of ropes that the sailors had carried aboard around their necks (center) or looped over one of the large steering paddles (left).

E2-69
Drawing of Sun-Boats as they would have looked at the time of Cheops’ burial
Relief showing the wealth of Egypt
Village along the banks of the Nile