

History of Architecture I

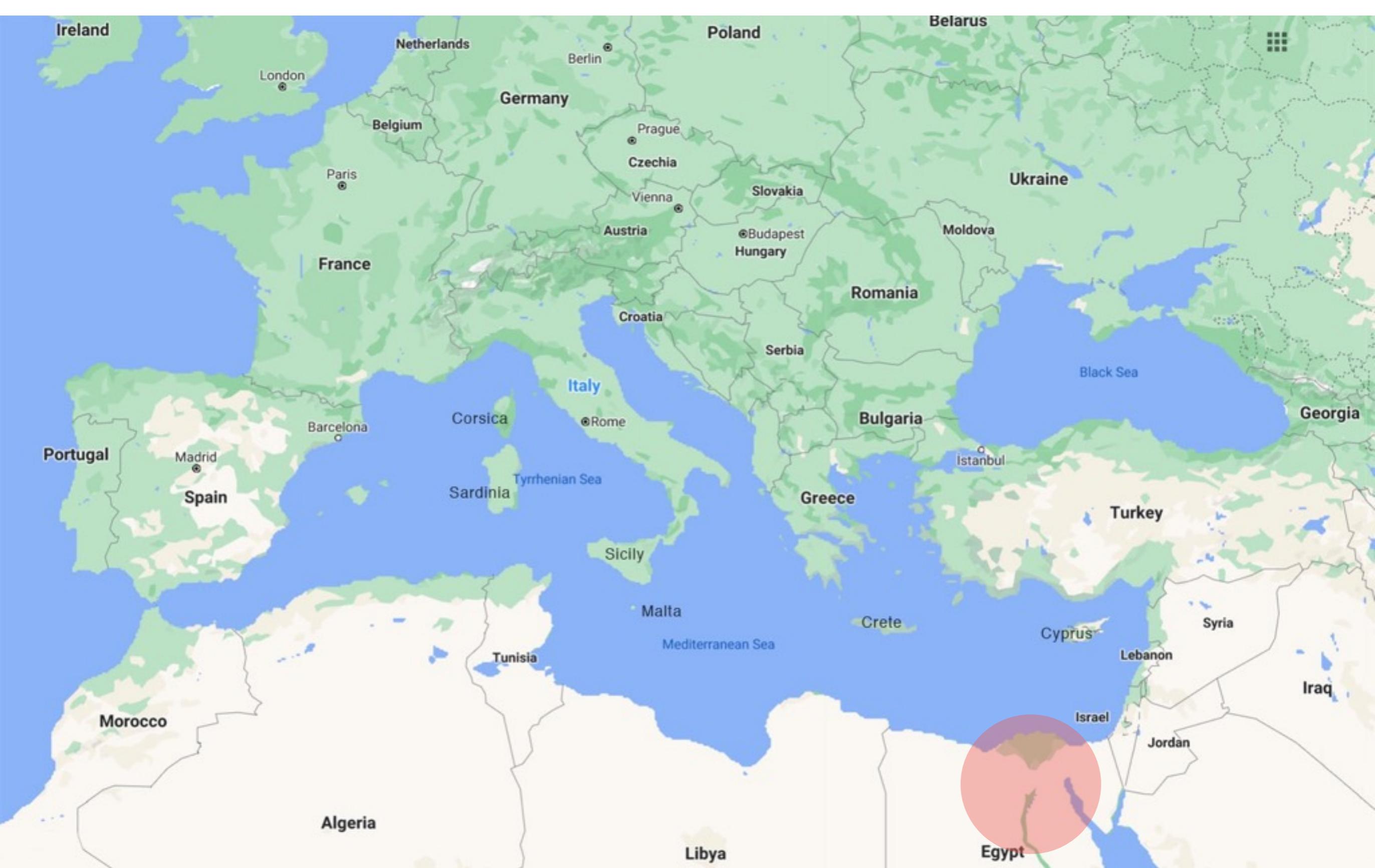
ARC 2313 - Spring 2022

Lecture-05

28 January 2022

For Monday 31 January:

Ingersoll pages 48-60 and 86-97



General map of the Med

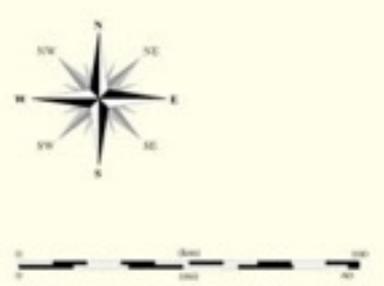


Nile Valley



Nile flows north
(in general)

Mediterranean Sea



- Alexandria
- Rosetta
- Buto
- Sais
- Naukratis
- Busiris
- Tanis
- Avaris
- Pelusium
- Damietta
- Gaza
- Rafah
- Jerusalem
- Wadi Natrun
- Merimda
- Bubastis
- Heliopolis
- Cairo
- Giza
- Memphis
- Helwan
- Saqqara
- Dahshur
- Faiyum
- Meydum
- Lahun
- Herakleopolis
- Lower Egypt
- Sinai
- Timna
- Serabit al-Khadim
- Bahariya Oasis
- Beni Hasan
- Hermopolis
- Amarna

LOWER EGYPT



UPPER EGYPT



-  Main roads
-  International Airports
-  Pyramids
-  Monasteries
-  Temples
-  Mastaba
-  Beaches
-  Oases

Old Kingdom Egypt

About 2686 - 2181 BCE

After 3000 BCE, Old Kingdom Egypt united as a centralized state under a deified monarch - a **king** - later known by the Greek word **pharaoh**, meaning "great house"

Pharaoh became known as son of ***Ra***
and worshipped as a *God...*

Ra the Egyptian Sun God

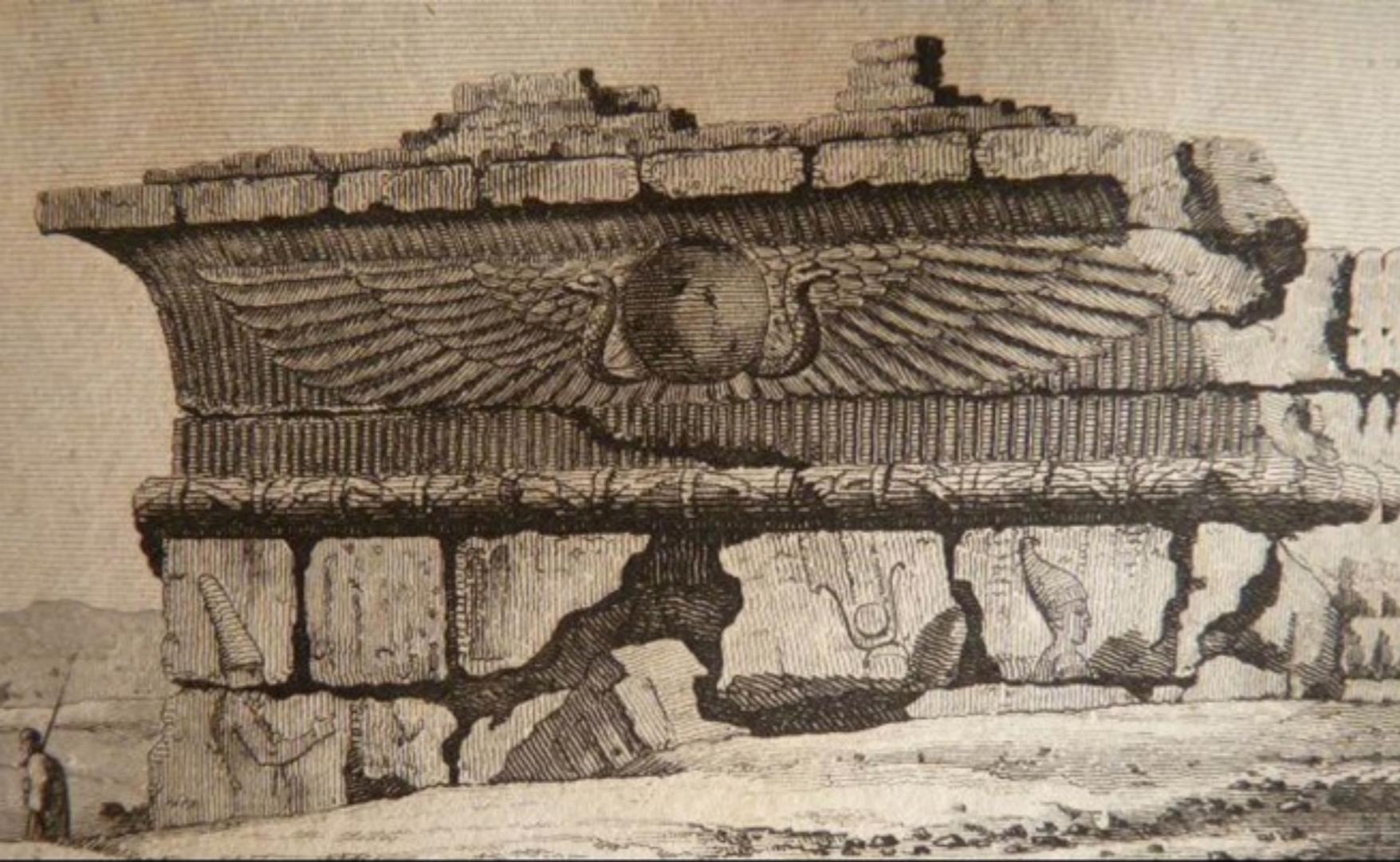
(***Anu*** the Sumerian Sun God)

(***Helios*** the Greek Sun God)



Ra





Ra as depicted in an Egyptian temple



American Eagle as depicted in the U.S. Capitol

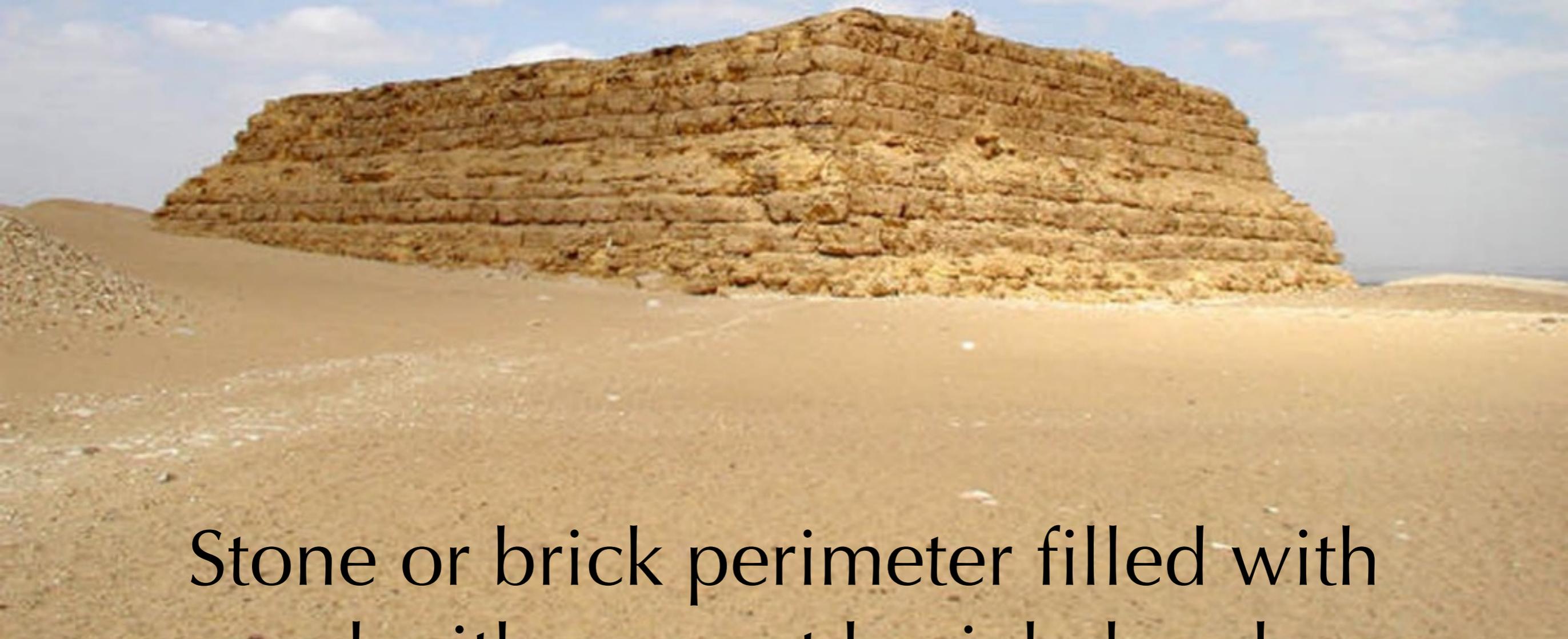
Egyptian Architecture

Mortuary architecture and permanent public structures of stone, built with great geometrical accuracy.

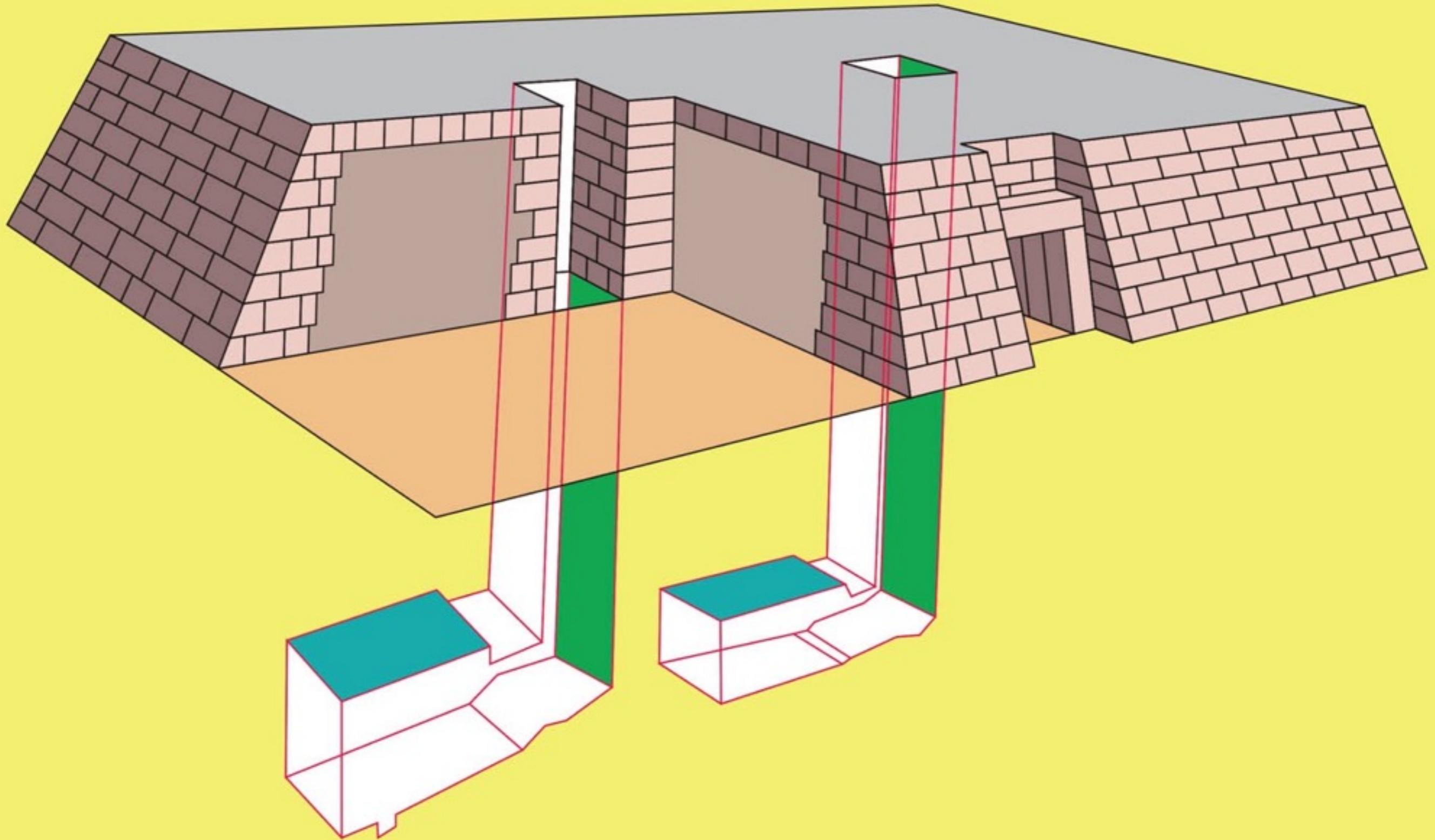
Palace architecture in the north borrowed from Mesopotamia - pleated mud walls

Domestic architecture non-permanent: bundled reeds, matted papyrus, etc

The *mastaba* (**tumulus**) or burial mound
(Arabic for *bench*)



Stone or brick perimeter filled with
sand with a secret burial chamber



Secret burial vaults of the *mastaba*

The ***afterlife*** of the king was very important, as he was united with ***Ra*** and continued with his duties....

The tombs, beginning with a ***mastaba*** and evolving into a ***pyramid***, represented a remaking of the palace (of sorts) - but now solidified - to house the spirit of the king called the ***ka***....

ka is difficult to define. You can think of it as the connection between the body and the soul

The ***serdab*** was a sealed chamber containing a statue of the dead

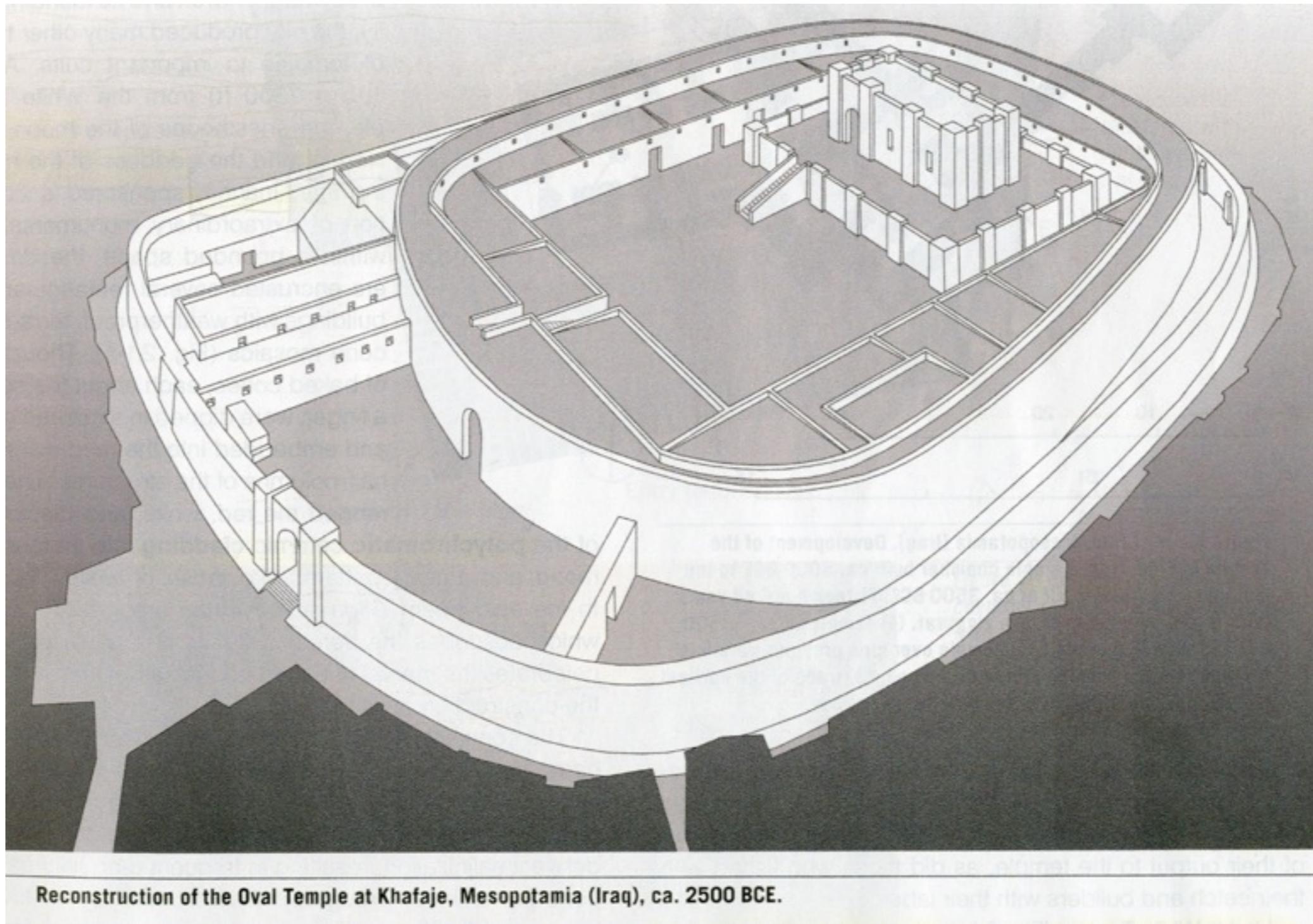
First Pyramid at Saqqara

(sa-KAR-ah)

Zoser - ruled 2691 - 2625

(ZO-zer)

(Also spelled Djoser)



Reconstruction of the Oval Temple at Khafaje, Mesopotamia (Iraq), ca. 2500 BCE.

Oval Temple at Khafaje created at same time (2600 BCE)
as Zoser's Pyramid at Saqqara 1800 miles away



Zoser's statue
from the ***serdab***

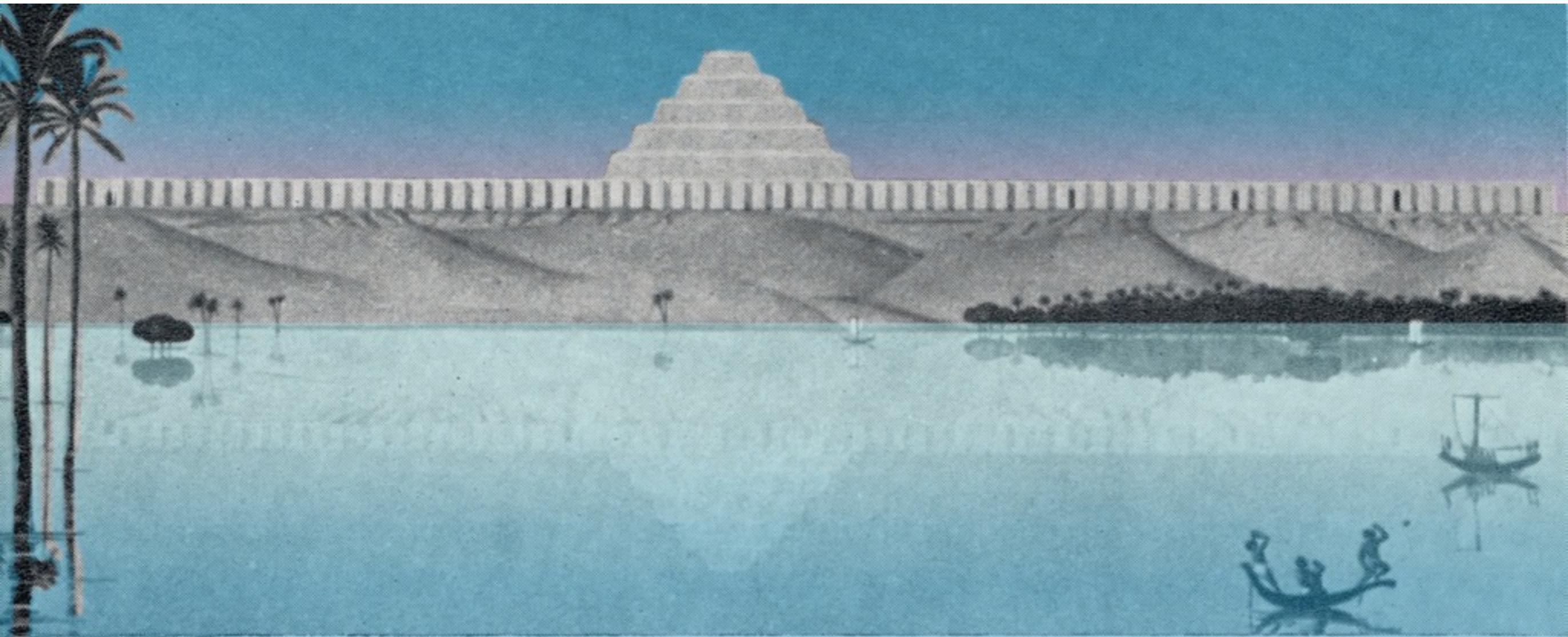
Egyptian Museum
in Cairo



**Imhotep - Zoser's
architect**

(eem-OH-tep)

**History's first
documented
architect
c 2600 BCE**



A. Restored view of the pyramid and enclosure from the flooded Nile valley

Zoser's Pyramid - The First Pyramid

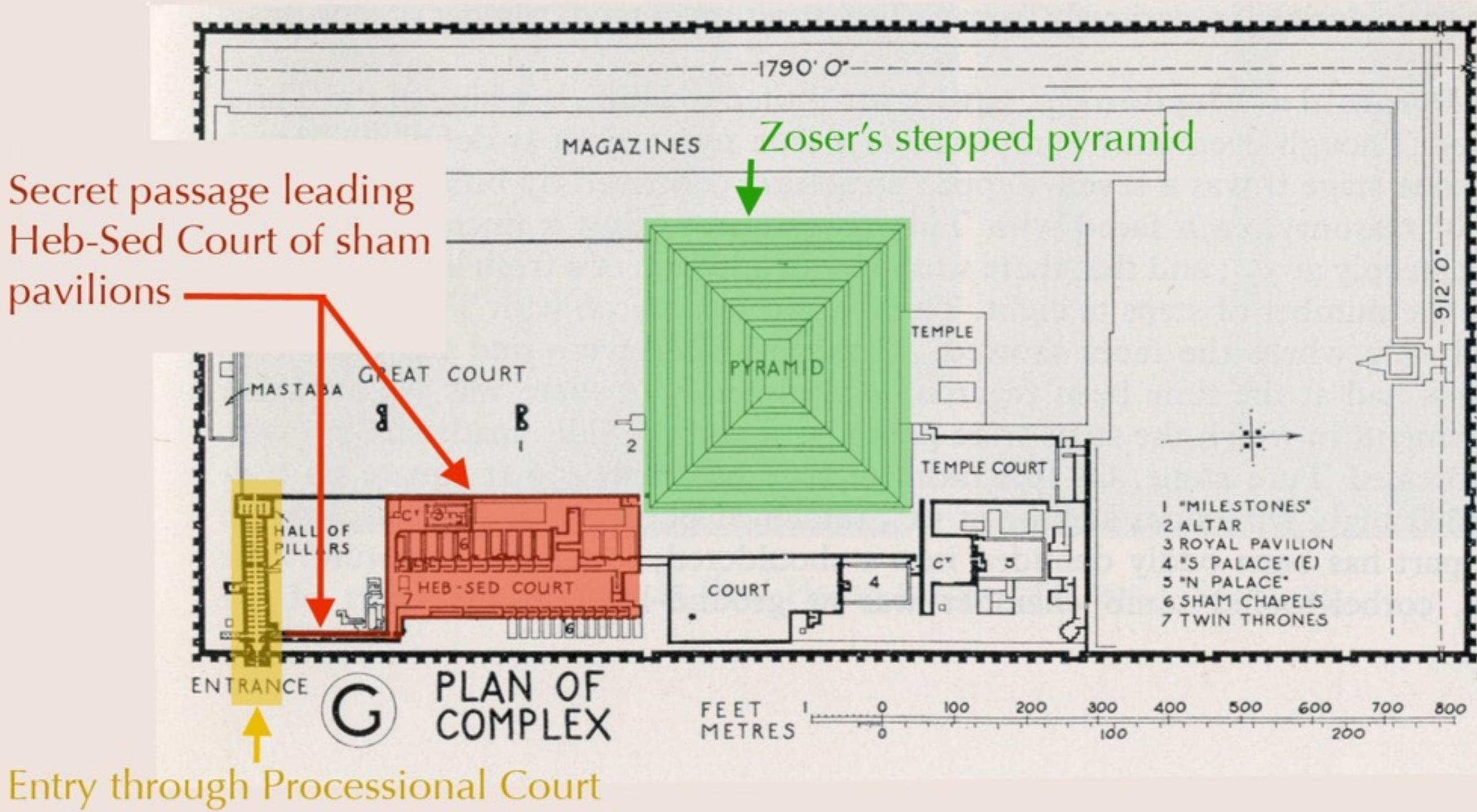


Zoser's tomb at Saqqara - Entry at Processional Hall

A secret passage led to this *Heb-Sed* courtyard with 22 altars used during a festival in which ruler had to prove his ability to rule

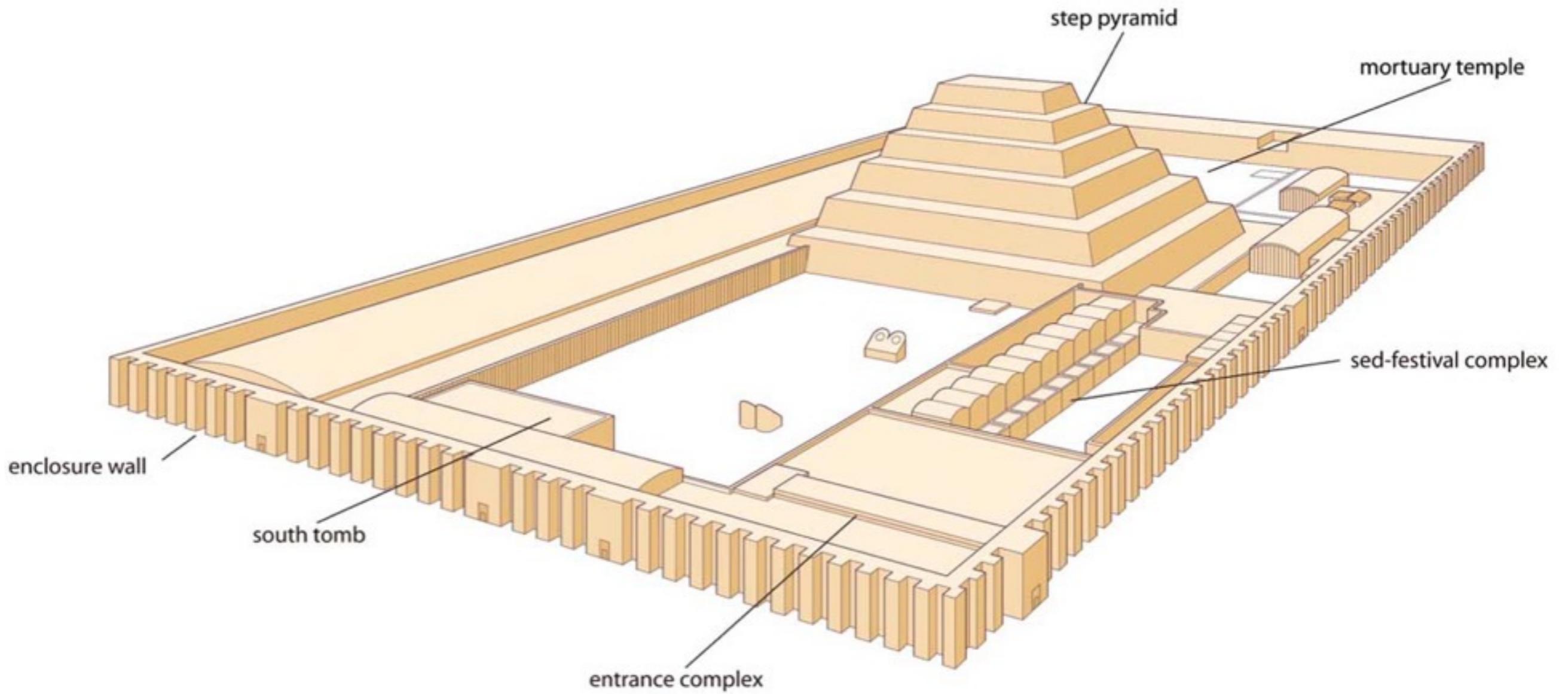


Zoser's Tomb - First Pyramid at Saqqara - c 2650 BCE



Plan of:

Zoser's Tomb - First Pyramid at Saqqara - c 2650 BCE



Zoser's Tomb Complex in a restored condition

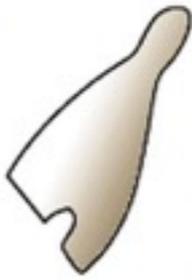
Again, the tomb was replete with false doors, false pavilions, mere stone replications of a life (all of this would be used in the afterlife)

Almost like a ghost town...

Smaller courts symbolized the **red and white palaces** of the districts of Egypt...

White crown

The White Crown symbolised the pharaoh's control over Upper Egypt, and was worn on occasions involving Upper Egypt only.



Red crown

The Red Crown symbolised the pharaoh's control over Lower Egypt, and was worn on occasions involving Lower Egypt only.



Double crown

The Double Crown was a combination of the Red Crown of Lower Egypt and the White Crown of Upper Egypt. It symbolised the joining of the two lands, and the pharaoh's control over the two lands.



Blue crown

The Blue Crown (the Khepresh) was a blue cloth or leather headdress decorated with bronze or gold discs. The Blue Crown was worn in battles, as well as on ceremonial occasions.



Atef crown

The Atef Crown was a white headdress decorated with ostrich feathers. It was worn during some religious rituals.



Nemes Headdress

The Nemes Headdress was a blue and gold striped head cloth.



Upper Egypt: white cone crown - the lotus

Lower Egypt: red cap crown - the papyrus

Final height of Zoser's tomb:
six levels and 200 feet high

The *pyramidion*

The gilded capstone of a pyramid
(this one has lost its gilding)

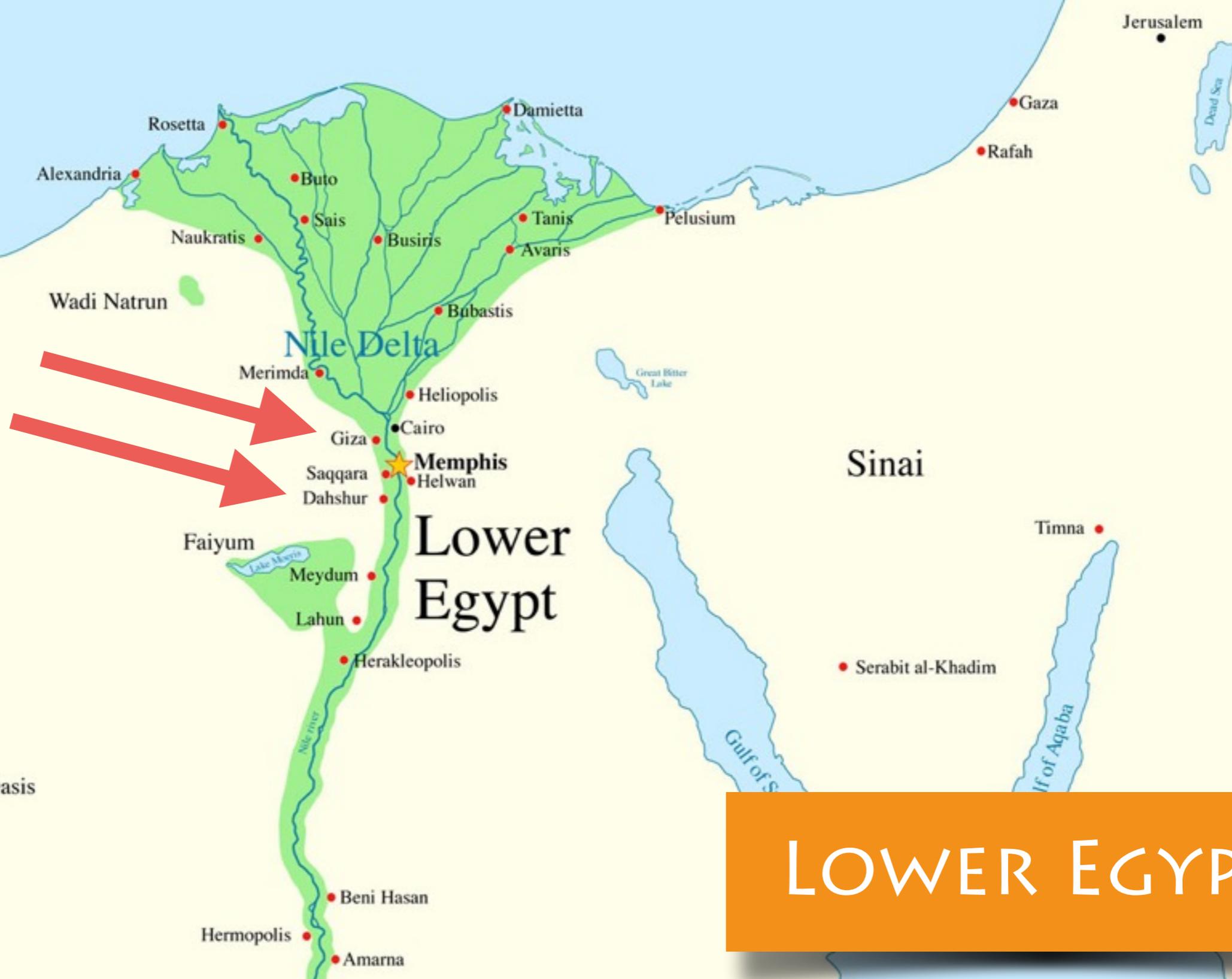
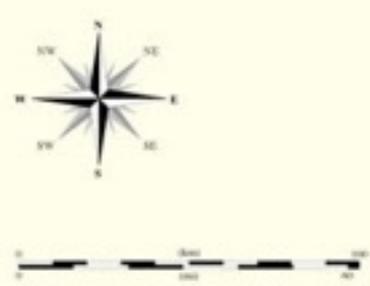


Sneferu — 2613 - 2589

Father of Khufu (Cheops)

- 1) Meidum (collapsed)
- 2) **Bent Pyramid at Dashur**
- 3) **Red Pyramid** he may be buried here

Mediterranean Sea



Sinai

Lower Egypt

LOWER EGYPT



Bent Pyramid at Dashur - Sneferu



Bent Pyramid at Dashur - Sneferu



Red Pyramid at Dashur - Sneferu



Red Pyramid at Dashur - Sneferu

Khufu or Cheops — 2589 - 2566

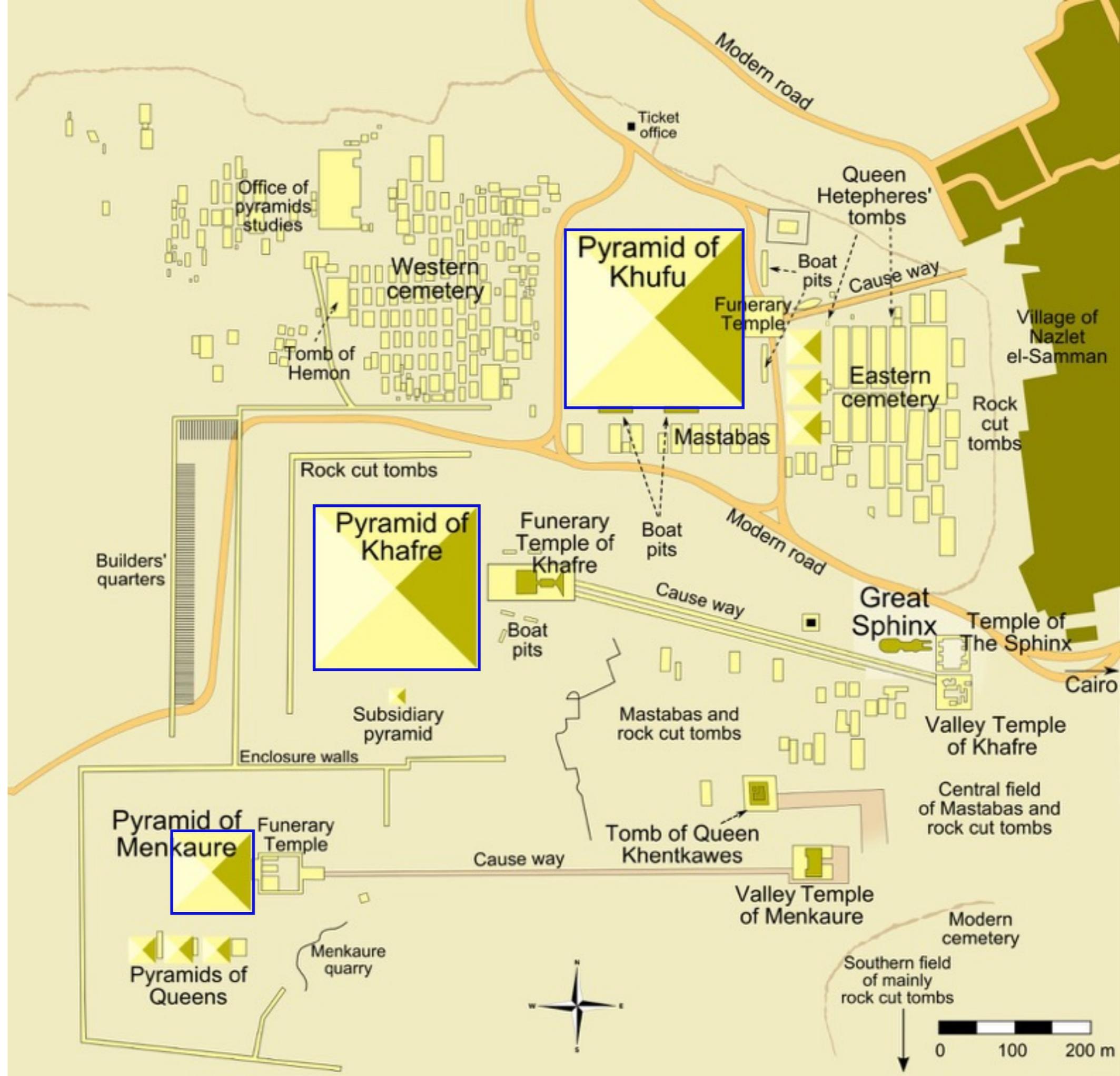
(Son of **Sneferu**)

Great Pyramid at Giza

479 feet tall

755 foot square at the base

51.5° angle



The complex included two smaller pyramids
of **Khufu's** successors:

Khafre (son of Khufu - only slightly smaller)

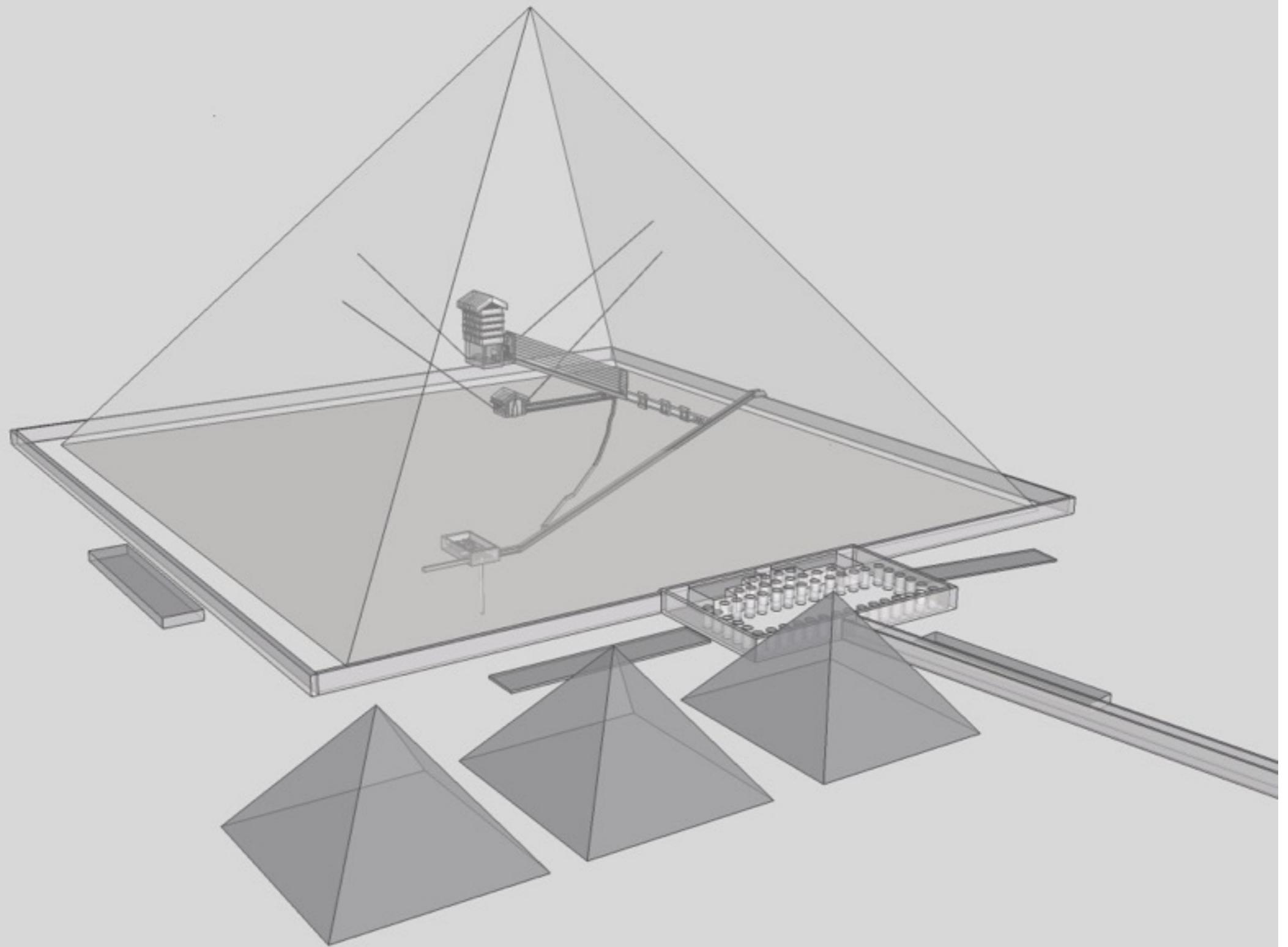
Menkaure (son of Khafre - half size)

As well as dozens more mastabas
and small pyramids for wives and
courtiers

EACH PYRAMID HAD A VALLEY TEMPLE

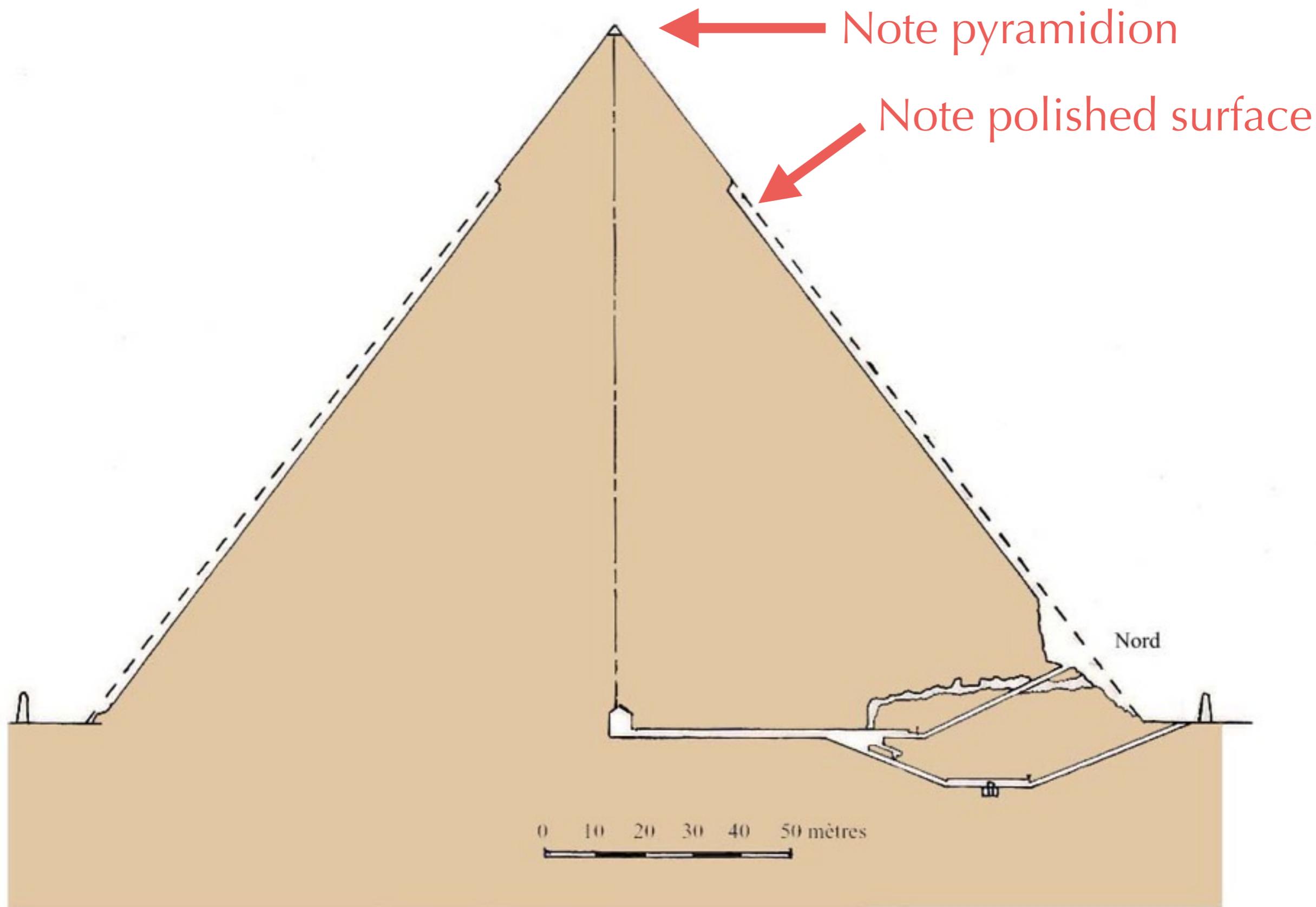
The Valley Temple of Khafre

- >> Discovered in better condition
- >> Staging area where King was prepared for interment



©Robin Morgan MMSI

Khufu - 2589-2566 BCE



Khafre - 2558-2532 BCE



Menkaure in distance

Sphinx guards Khafre - 2532 BCE

Pyramid of Khafre



Menkaure in foreground



Pyramid actually *stepped* of giant red sandstone
then sheathed in polished white limestone



Polished white limestones sheathing pyramid

Pyramids of Giza





1870

N. 148. Les sphinxes Aménemhat

M. Becharat

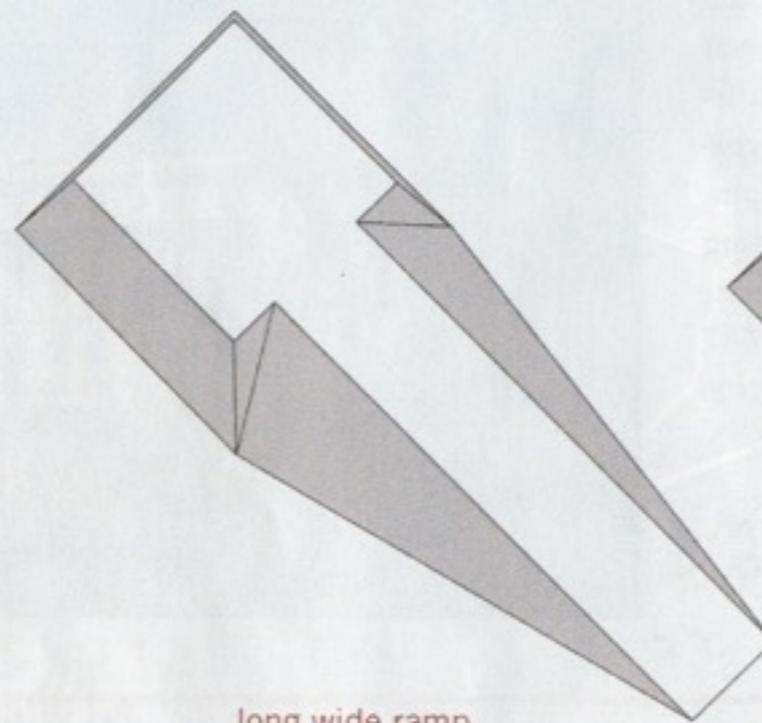


1878



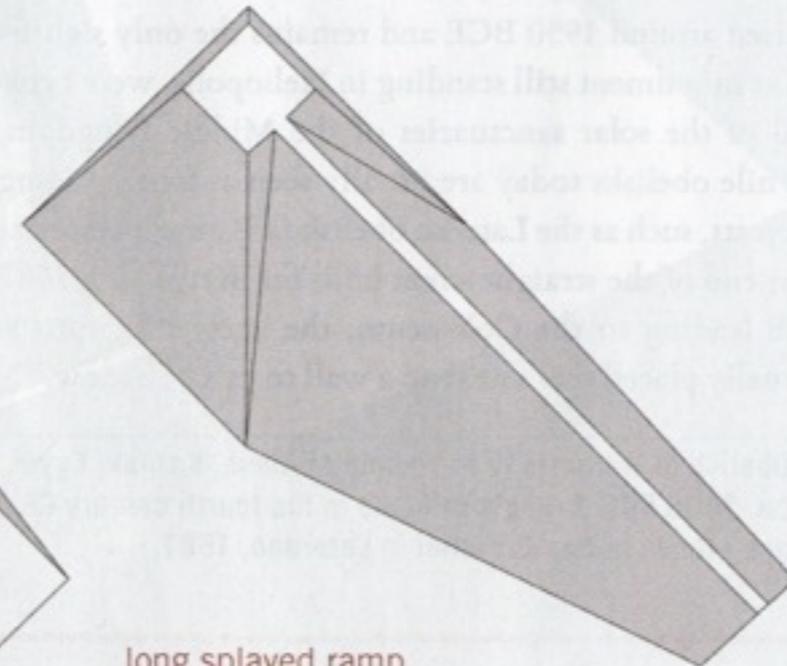
Theories of how pyramids were built using ramps of sand:

- (a) long wide ramp;
- (b) long splayed ramp;
- (c) spiral ramp;
- (d) zig-zag ramp;
- (e) narrow axial ramp;
- (f) splayed axial ramp.



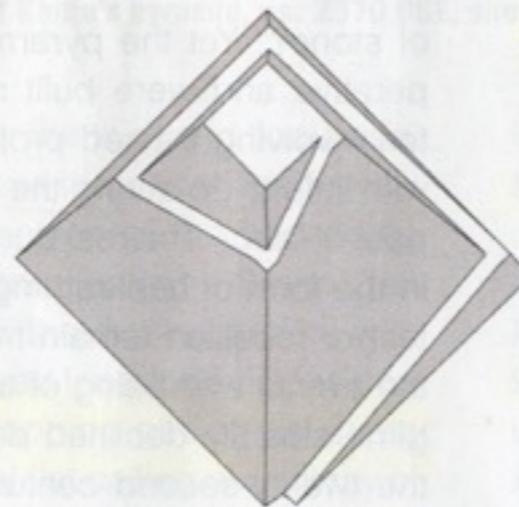
long wide ramp

a



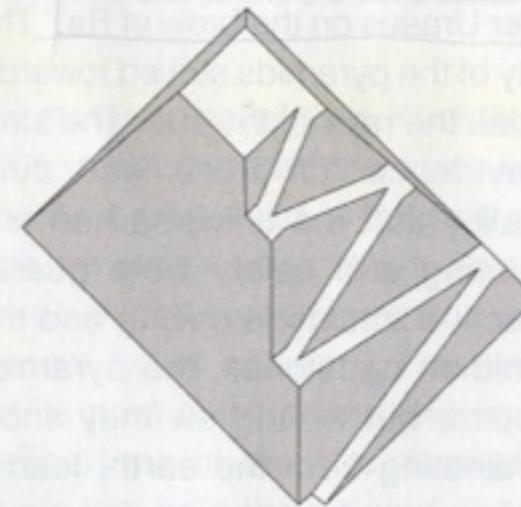
long splayed ramp

b



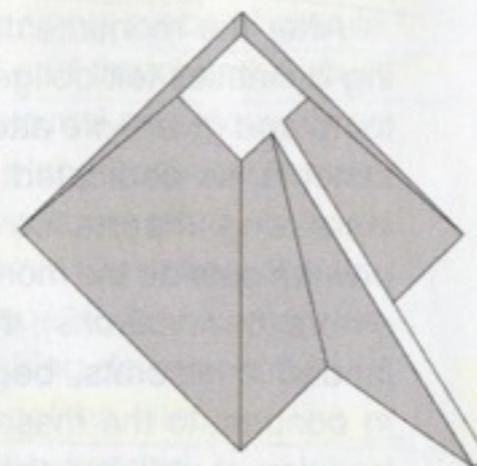
spiral ramp

c



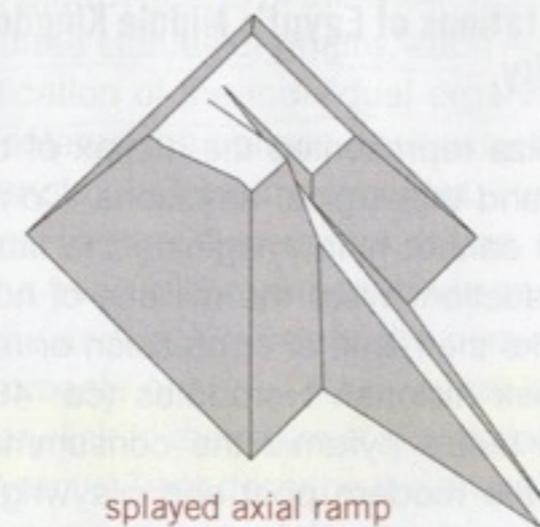
zig-zag ramp

d



narrow axial ramp

e



splayed axial ramp

f

Old Kingdom steadily declined after this period... due to the exhaustion of wealth and slavery for such extravagance

Greek historian Herodotus (484-425 BCE) wrote that Khufu's pyramid was the ultimate act of *tyranny*...

Mentuhotep — 2161-2040 BCE

(hiatus of 350 years)

**Middle Kingdom - reunited Egypt
2150-1750 BCE**

Relocated capital to Thebes in Upper Egypt

A new type of mortuary architecture
terraced, cut from live rock as well as
assembled from rock brought to site,
colonnades... *a human scale* for tombs

MENTUHOTEP'S MORTUARY TOMB

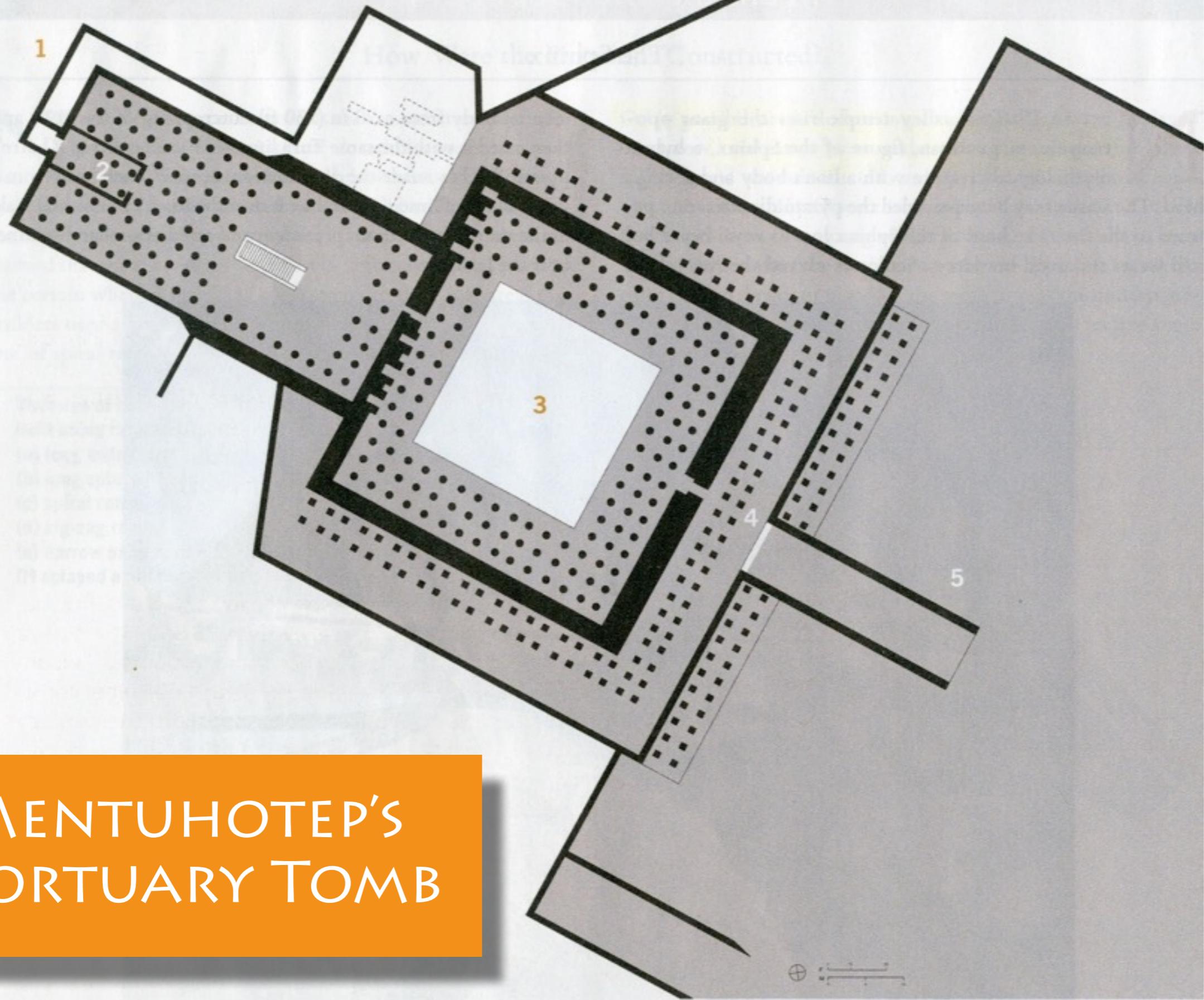
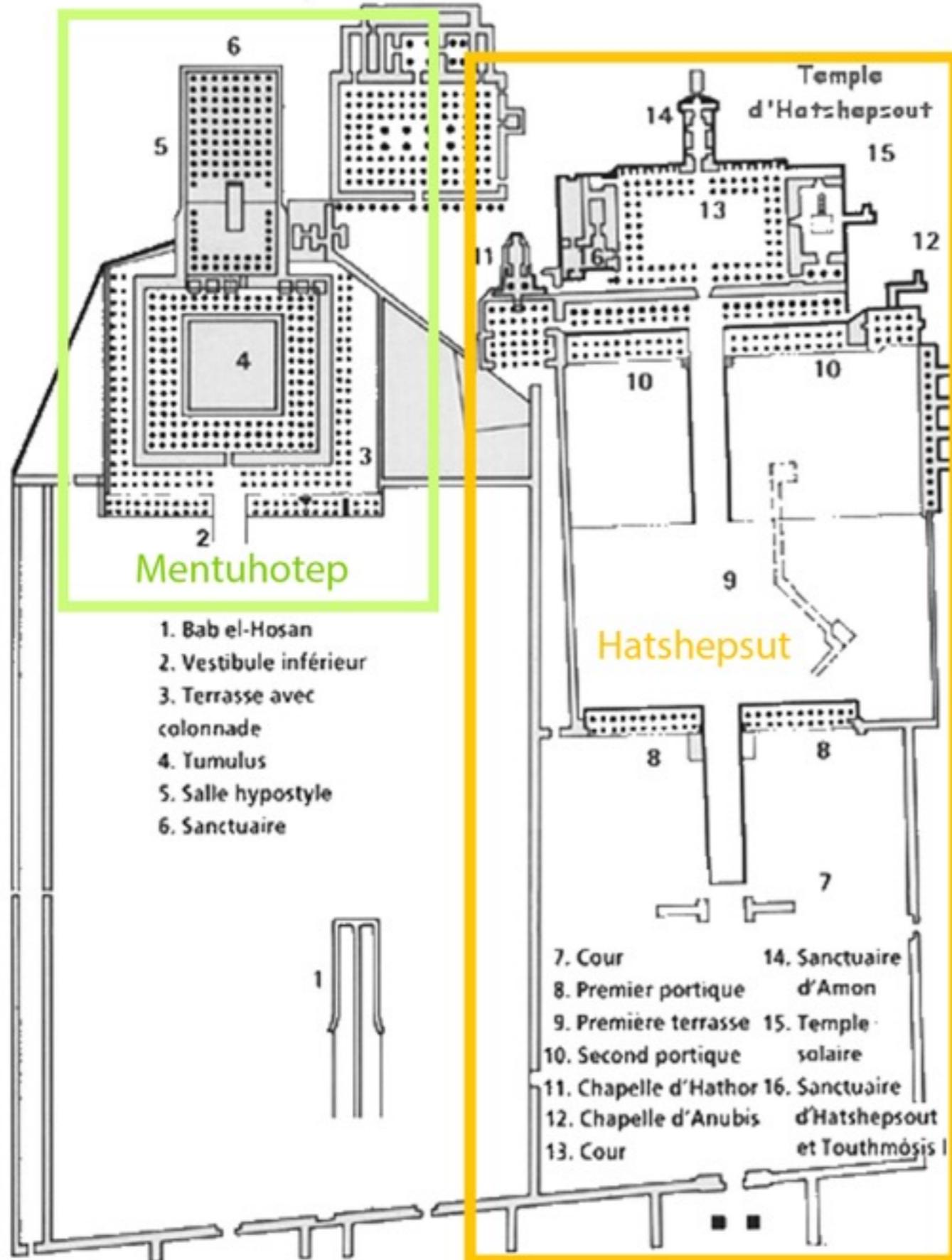


Figure 2.2-8 Deir el-Bahri, Egypt. Plan of the funeral complex of Mentuhotep I, ca. 2010 BCE. The progression moves west from planted forecourt to colonnaded terrace to rock-cut mortuary temple: (1) Mentuhotep I's tomb set in a tunnel within the cliff; (2) shrine to the god Montu-Ra; (3) square platform surrounded by colonnades; (4) porticoes with false tomb; (5) entry garden planted with Tamarisk trees.

Temple de Thoutmôsis III



Mentuhotep vs.
Hatshepsut

Mortuary
Architecture



Mentuhotep
Hatshepsut
Thutmose III (stepson)

Tombs of Mentuhotep and Hatshepsut - at Deir-el-Bahri

end