Arts 1B:
Architecture Past and Present

Think of a building you know well such as your childhood home and describe it to your partner. What do you like about this building, what would you change if you could?

Architecture can be described as:
“shaping of space for human use”.

Make a list of all human needs you can think of – and the structures that can fulfill those needs (example – burial/tomb). Notice that certain structures are serving more than one need.

Can you think of future needs that will require new type of structures?

The Various Types of Architectural Drawings

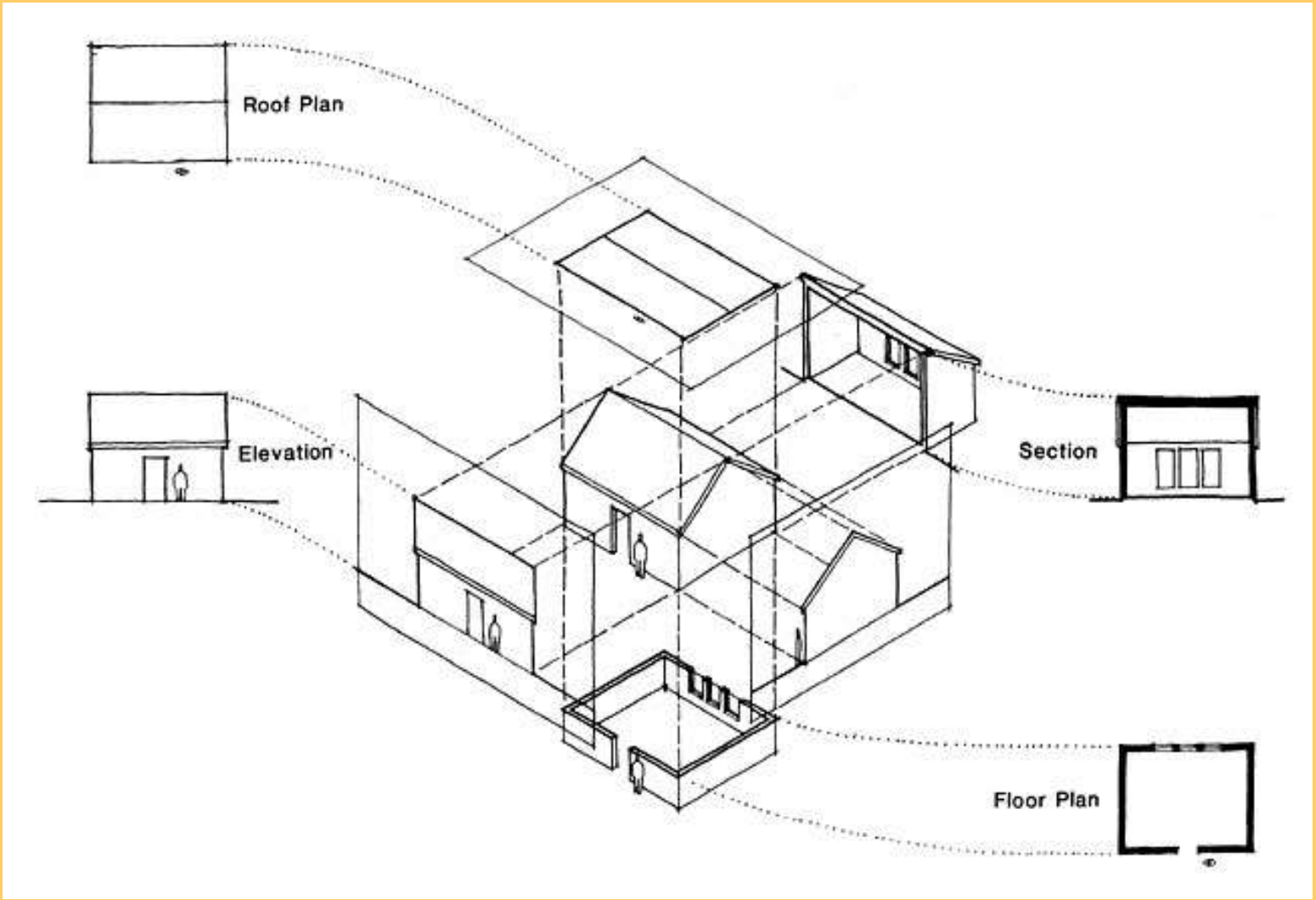
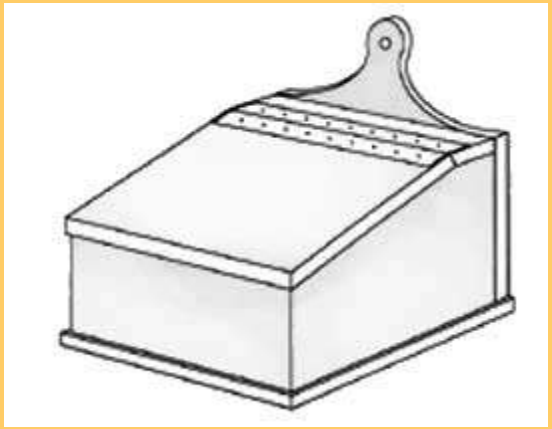


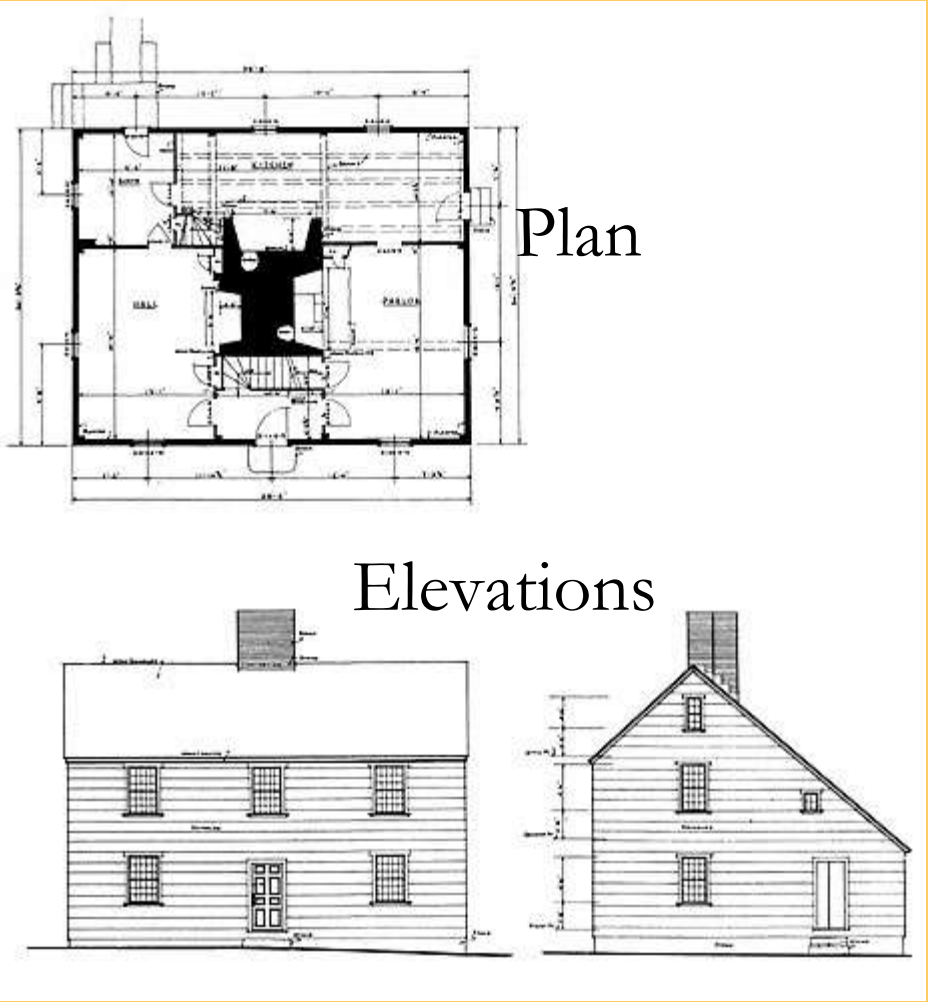
Diagram explaining the basis of orthographic projections of plans, elevations, and sections.

Saltbox Houses

Two saltbox houses from the colonial period in Connecticut.



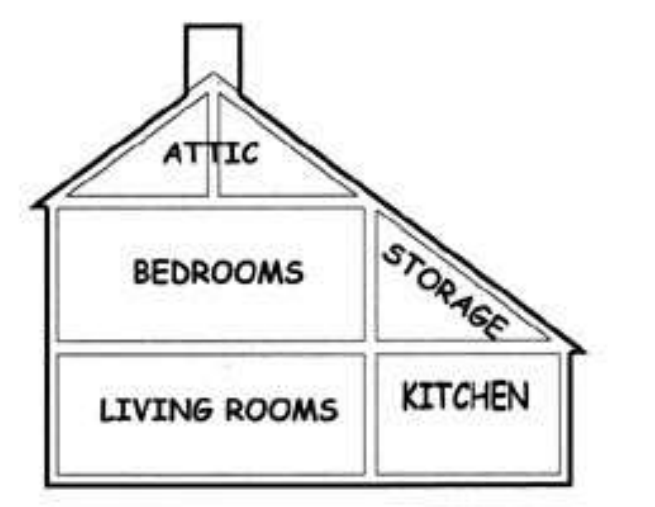
Drawing of a salt box



Plan and two elevations of a saltbox house.

Elevation: A scale drawing of the side, front, or rear of a building.

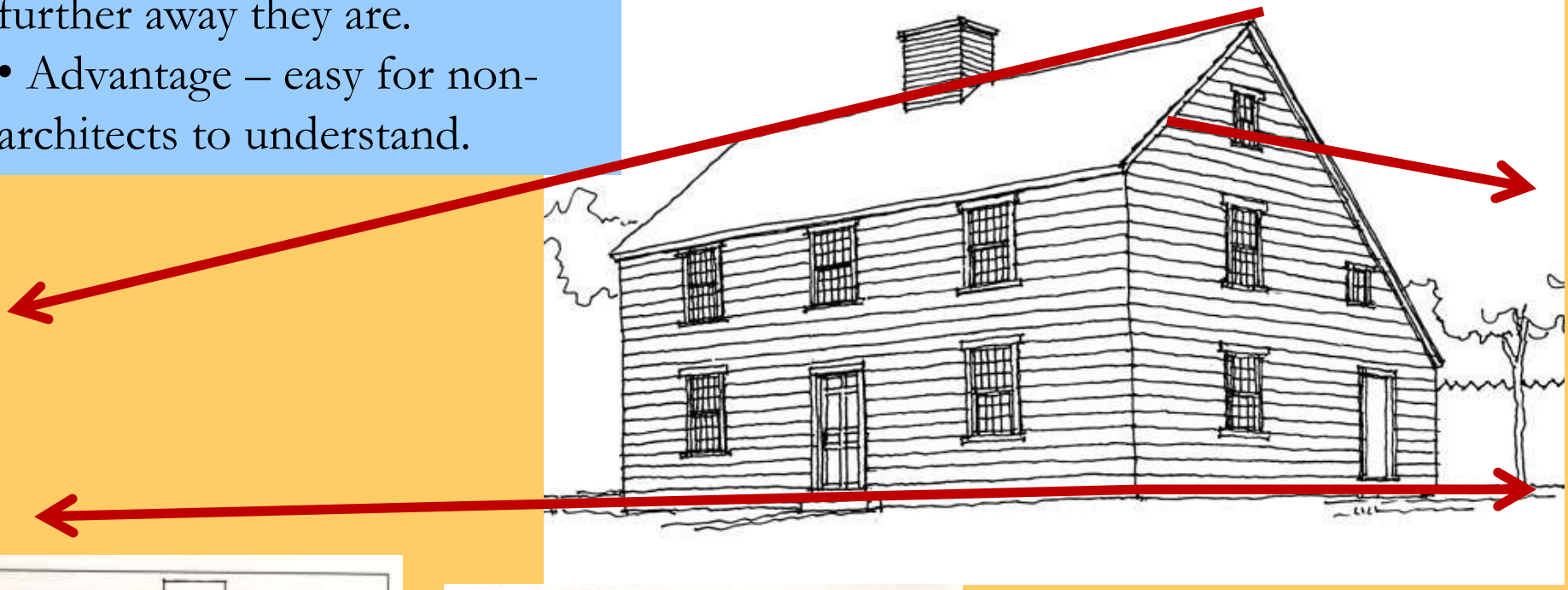
Cross Section (also called Section):
Surface or portion obtained by a cut made through a structure or any part of a structure to reveal its profile, and/or interior. In a section, as in a plan, the darkest lines represent the elements that have been cut.

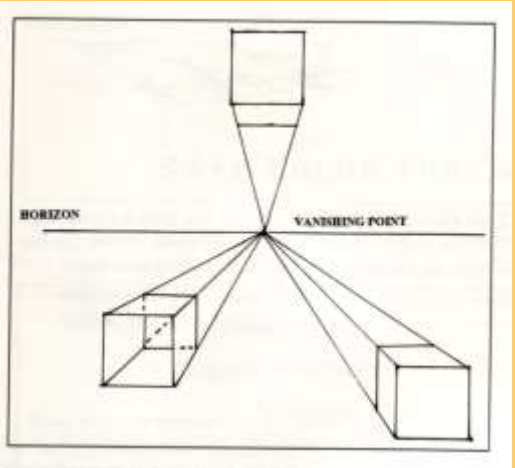


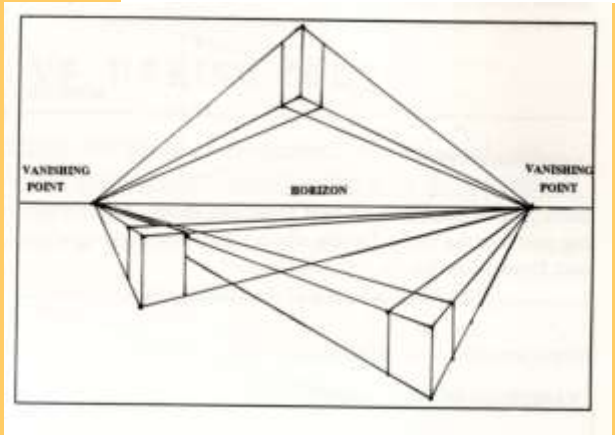
Perspective drawing is a system of representing the way that objects appear to get smaller and closer together, the further away they are.

- Advantage – easy for non-architects to understand.

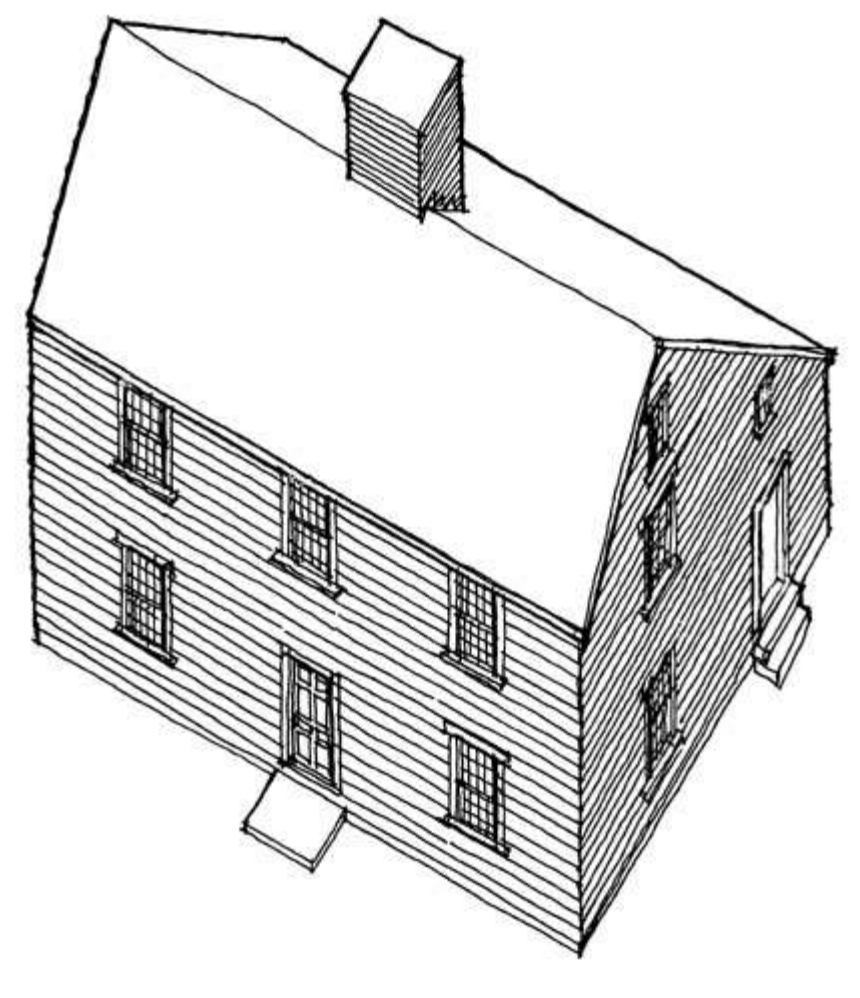
Perspective drawing of a saltbox house (in two point perspective)



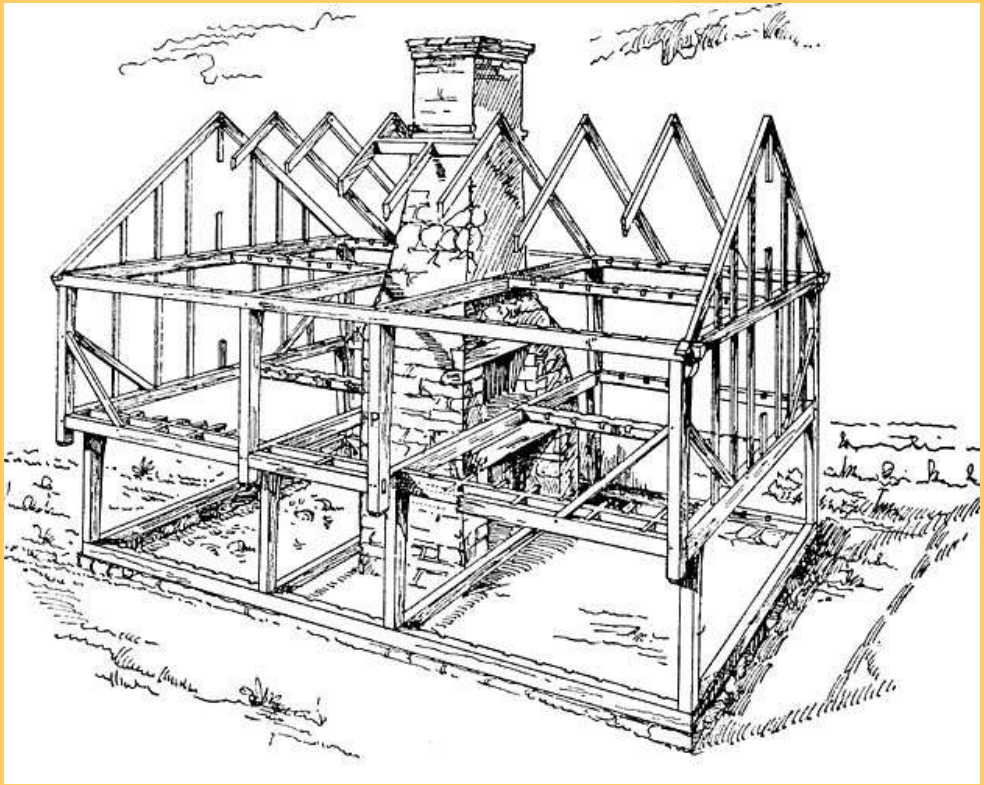




Axonometric drawing of a saltbox house



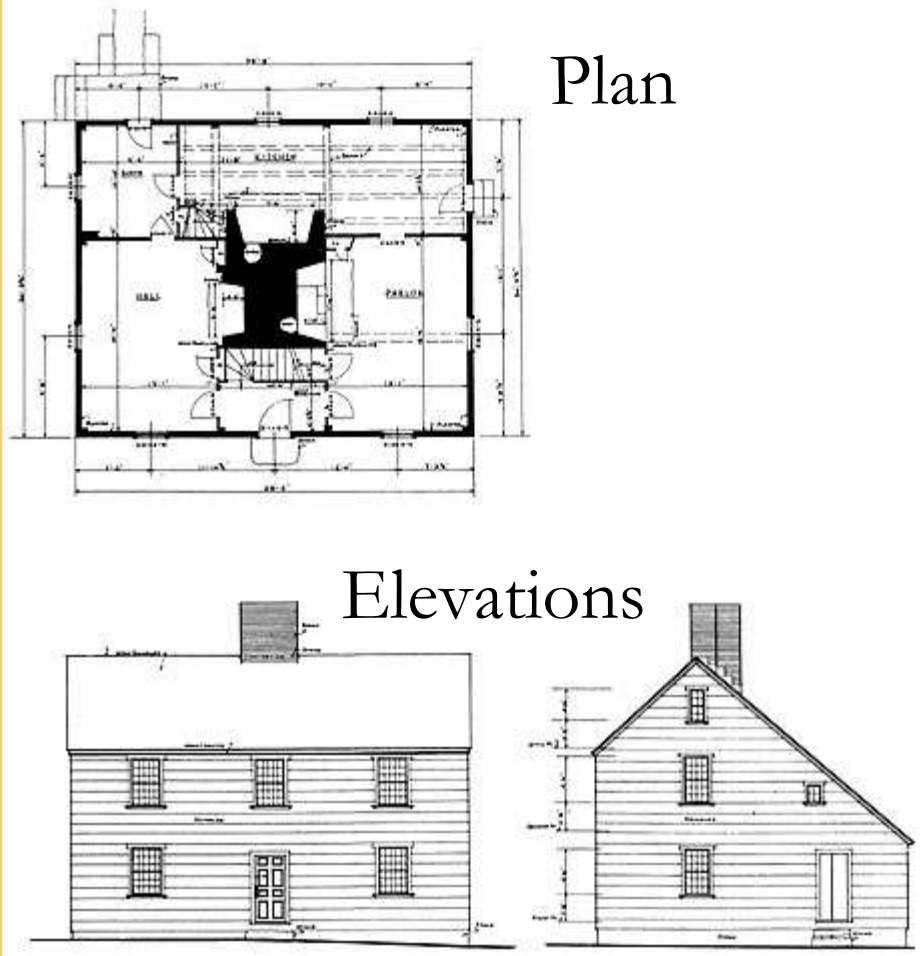
Axonometric projection is a type of parallel projection used to create a pictorial drawing of objects so that they appear inclined with three sides showing and with horizontal and vertical distances drawn to scale but diagonal and curved lines distorted.



Analytic perspective of a saltbox house.

With the exterior siding, doors, and windows removed, one can see the heavy timber frame and masonry chimney that distinguishes the structure of this building.

Saltbox Houses



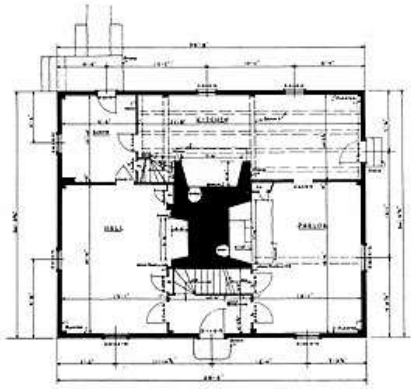
Plan and two elevations of a saltbox house.

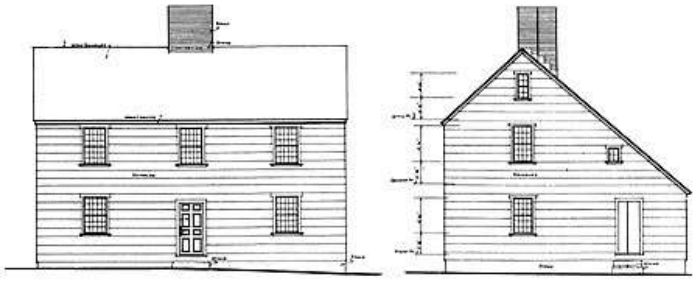
How to Read a Floor Plan Part I
https://youtu.be/YwqI7zyS-4A
Part II
https://youtu.be/Lh6HSkAxd8c

Floor Plan (also called "plan'): a drawing to scale, showing a view from above of a building once a horizontal cutting plane has been passed through it – usually above the height of the window sills.

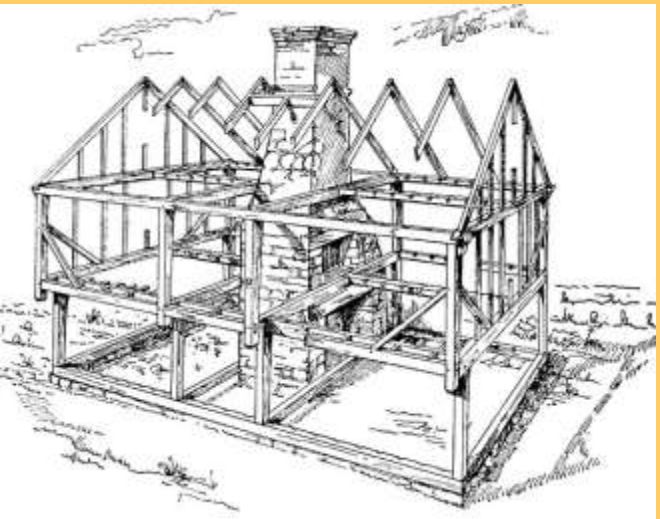
Dotted lines usually indicate ceiling elements above the cutting plane.

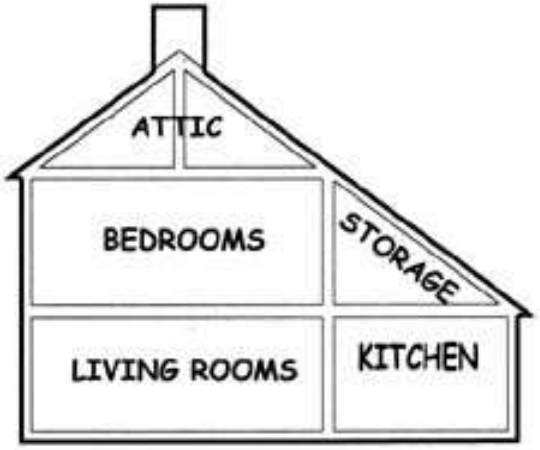
- **Look at the floor plan of the Arts and Crafts Home**
- Locate the office, the screened porch, the fire place, the covered front porch.
- How many windows can you count?
- How many doors?
- What do the three small black squares at the bottom of the plan represent?
- How many entrances to the house? Where is the front entrance located?
- How high is the ceiling?
- If you could re-design it – what would you do differently?

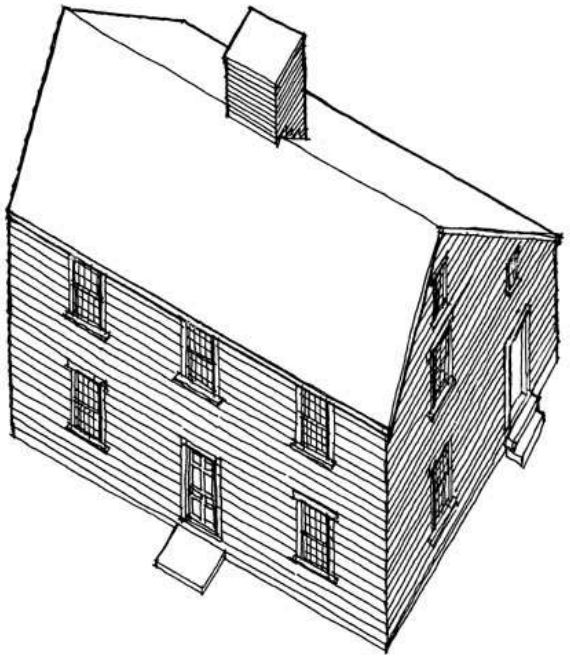




Name the different types of architectural drawings







The Stone Age

STONE AGE:

1. **PALEOLITHIC** **2,500,000 - 10,000 BCE**
   - 300,000-195,000 – Anatomically modern humans

3. NEOLITHIC **10,000-3300 BCE – Western Asia**
9500 BCE – 1200 BCE – East Asia
7,000-1700 BCE – Europe

Paleo = old (Greek)
Mesos = middle
Neo = new
Lithos = stone

Paleolithic Dwellings

- **The oldest examples of Paleolithic dwellings are shelters in caves, followed by houses of wood, straw, and rock.**
- Locations that could be defended against predators and rivals and shielded from stormy weather.
- Majority of campsites have been destroyed; our understanding of Paleolithic dwellings is therefore limited.

Temporary Wood Hut
An artist's rendering of a temporary wood house, based on evidence found at Terra Amata (in Nice, France). 380,000 BCE

“Bone Hut” sites have been found in the Czech Republic, Poland and Ukraine.

They were made of mammoth bones partially supported by a wooden frame. Hides lining the hut serve as insulation.

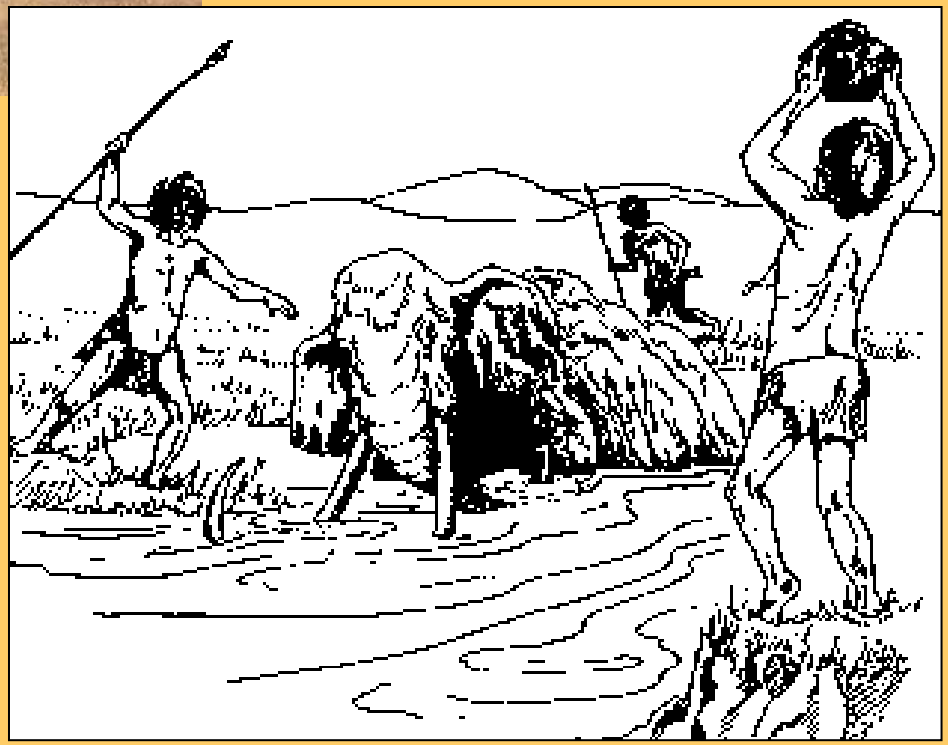
Within the interior is typically found a central hearth or several scattered hearths.

- **Hearth (pronounce “harth): Fire pit**

Display, Dolní Věstonice Museum

Paleolithic Dwelling. Reconstruction. Mezhirich. Ukraine
15,000 BCE. Mammoth bones

The last glacial period ended about 10,000 years ago



Woolly mammoths (along with other mammals such as saber-toothed cats), went extinct as warming weather reduced their food sources.

Neolithic Period (New Stone Age)

10,000-3000 BCE – Western Asia
9500 BCE – 1200 BCE – East Asia
7,000-1700 BCE – Europe

Map of Prehistoric Europe and Western Asia

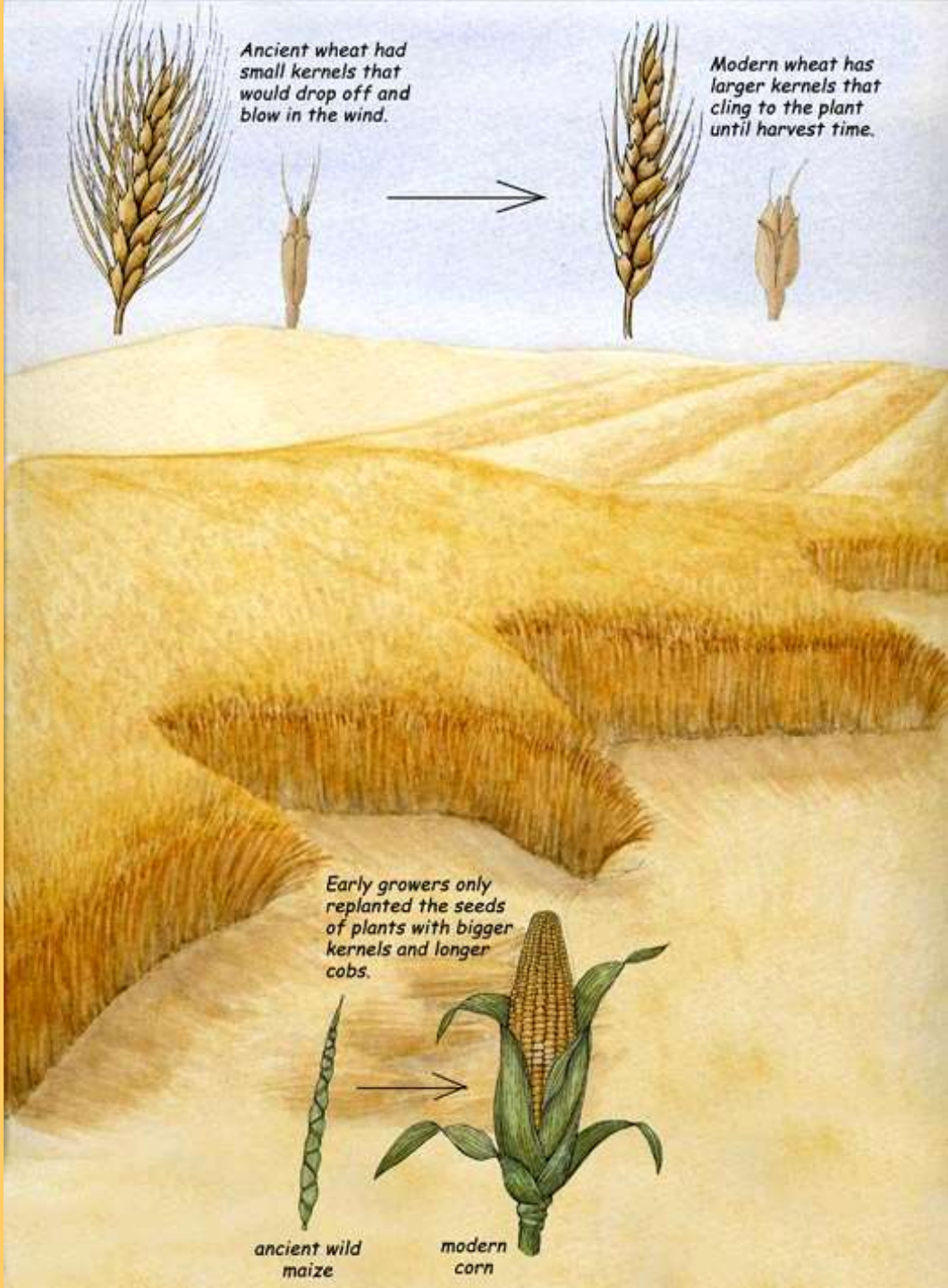
Neolithic: Western Asia

10,000-3000 BCE

Agriculture :

The Domestication of Plants (Wheat, barley, figs etc.)

Wild plants were domesticated



Neolithic Grinding Stone. France. Beauvais Museum

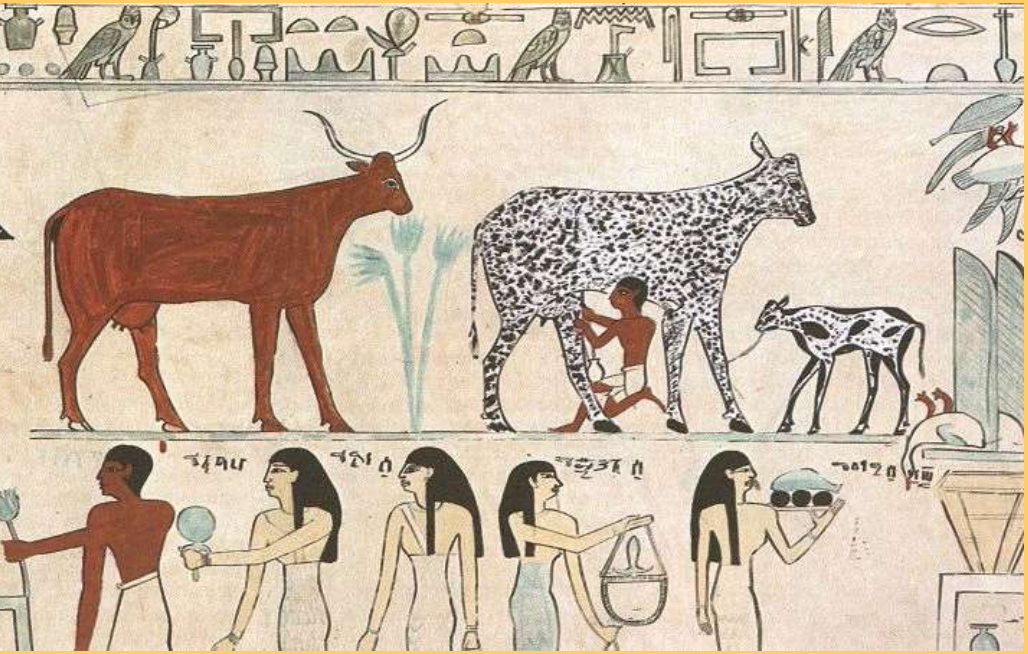
Göbekli Tepe. Turkey. Founded - 10th millennium BCE
Pre Pottery Neolithic.
https://youtu.be/ITEMLOag4bA

The world's oldest known megaliths

More than 200 pillars in about 20 circles are currently known through geophysical surveys. Each pillar has a height of up to 6 m (20 ft) and weighs up to 10 tons.

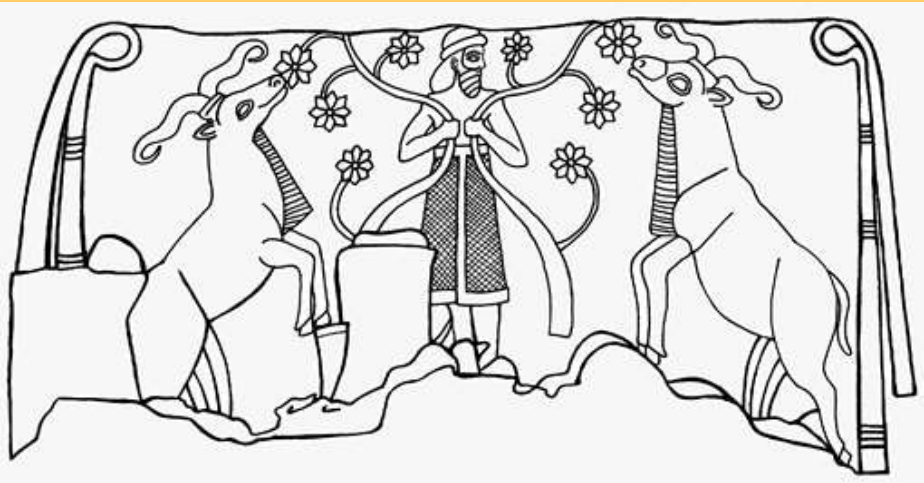
Megalith= Huge stone used in various types of Neolithic monuments.

Domestication of Animals



Egyptian mural showing caws being milked

Funerary Stela of Intef and Senettekh. Egypt, c. 2065–2000 B.C.



Dumuzi feeding sheep. Mesopotamian cylinder seal. Marble. c. 3200-3000 BCE.

List of domesticated animals

Dog - c. 15000 BC East Asia

Sheep 9-11000 BC Southwest Asia

Pig 9000 BC Near East, China

Goat c.8000 BC Iran

Cow c. 8000 BC India, Middle East, and Sub-Saharan Africa

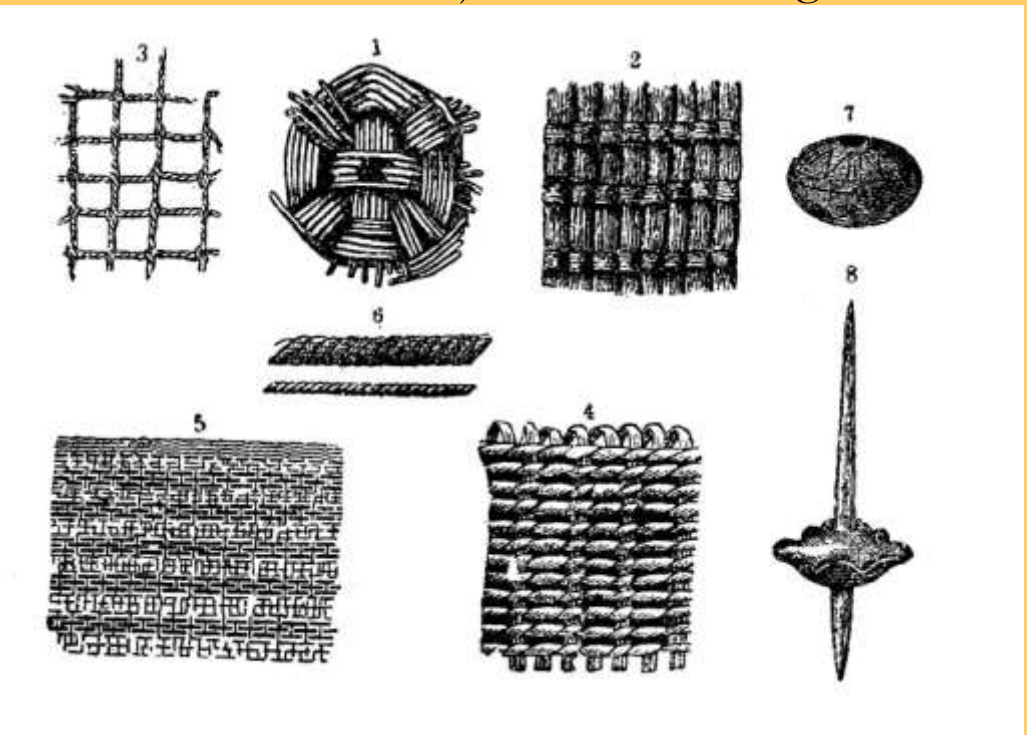
Donkey c. 5000 BC Egypt

Restored Pottery from Tell Sabi Abyad, Syria. c. 6600-6500 BCE

Weaving is the systematic interlacing of two or more sets of elements to form a coherent structure.

Ancient textiles were made mostly of linen, wool, cotton (india), and silk (China)

Prehistoric woven objects and weaving tools

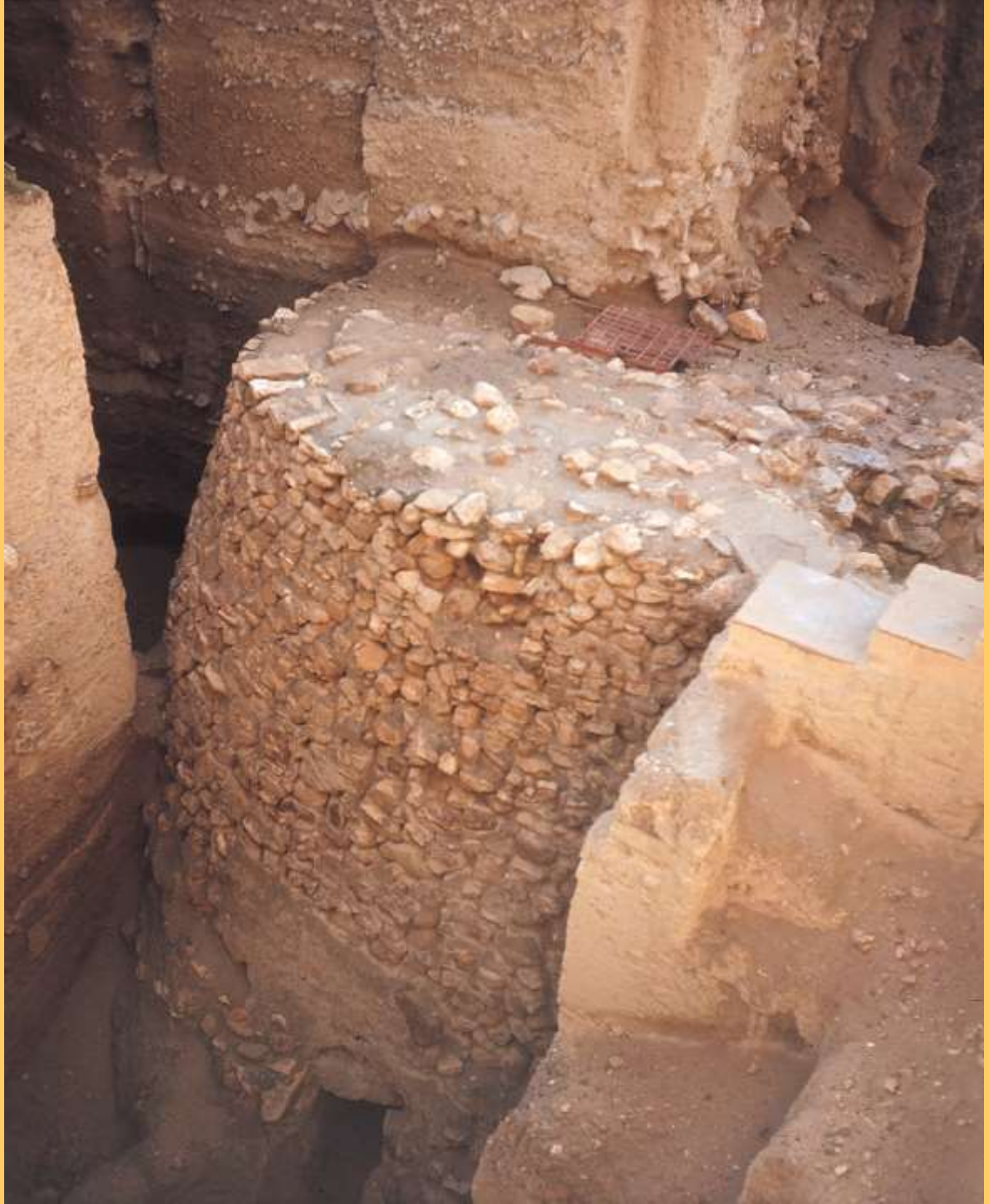


Weaving in Ancient Egypt

Fragments of earliest-known surviving textile. Maybe used fabrics used to wrap the dead. From Çatalhöyük; Turkey, 6th millennium BC; Museum of Anatolian Civilizations, Ankara, Turkey

Permanent Settlements:

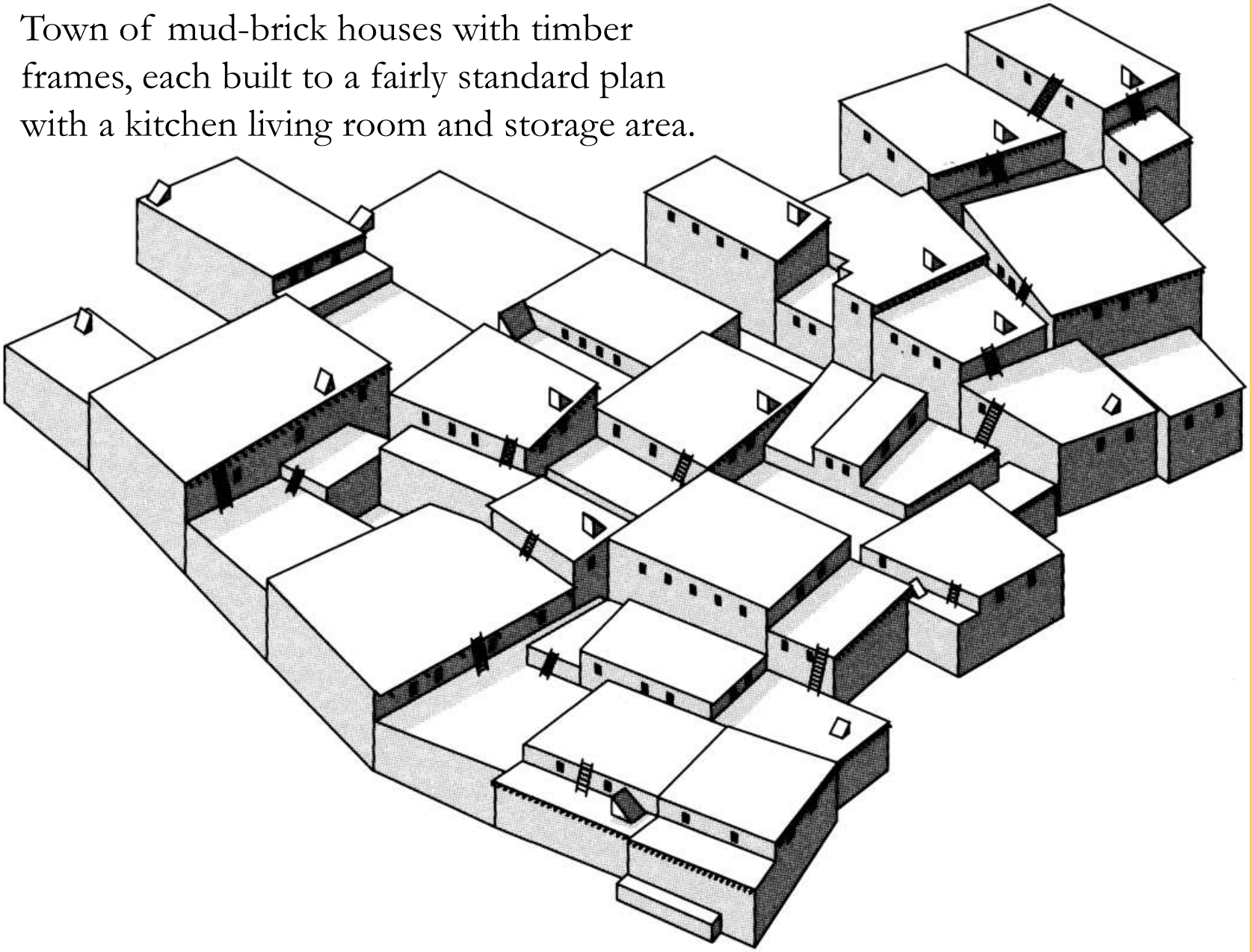
Their food supply assured, many groups changed from hunters to herders, to farmers and to townspeople.



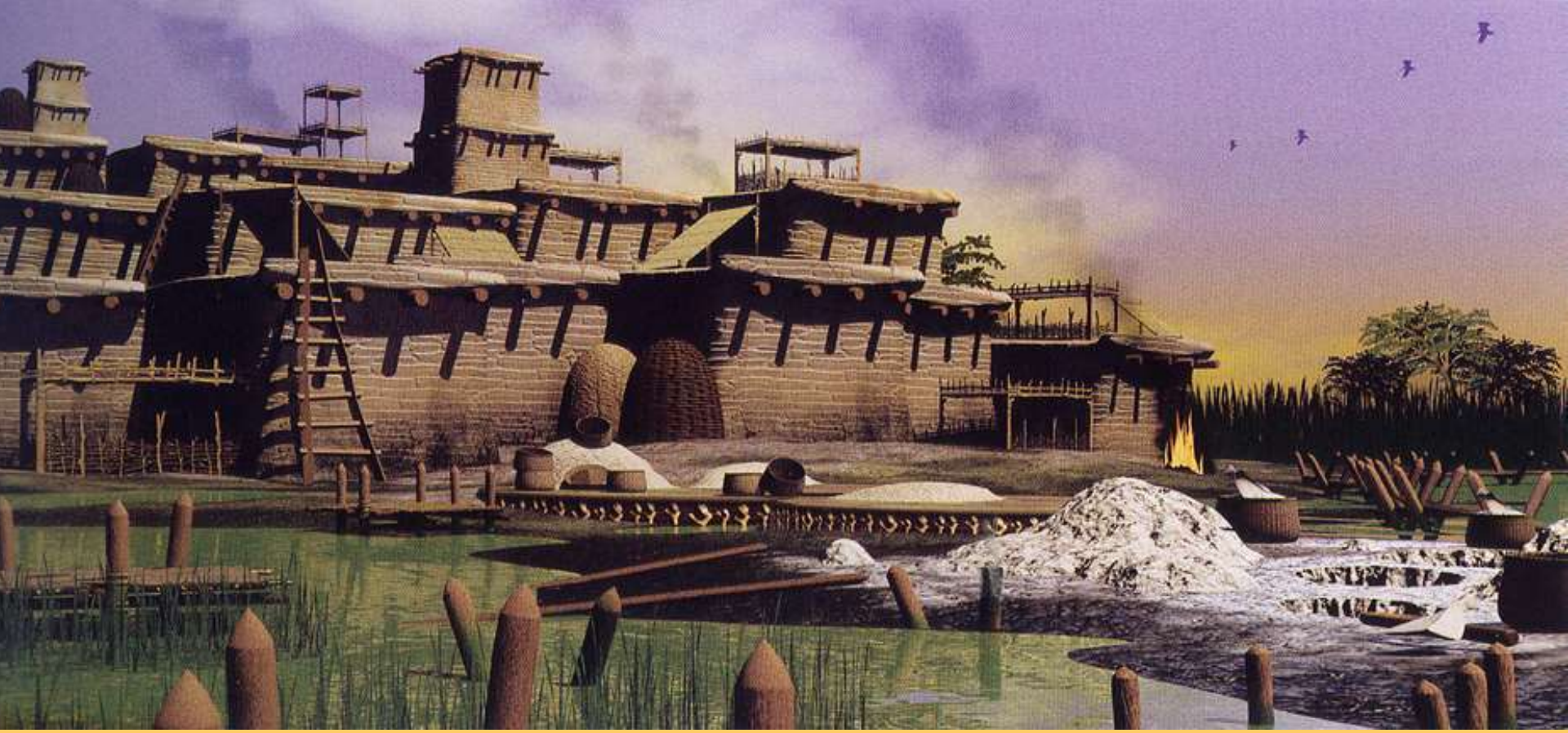
Great stone tower
Jericho, West Bank, Israel/P. A.
ca. 8000–7000 BCE.

* Jericho was a fortified settlement with stone wall up to 27 feet thick

Town of mud-brick houses with timber frames, each built to a fairly standard plan with a kitchen living room and storage area.

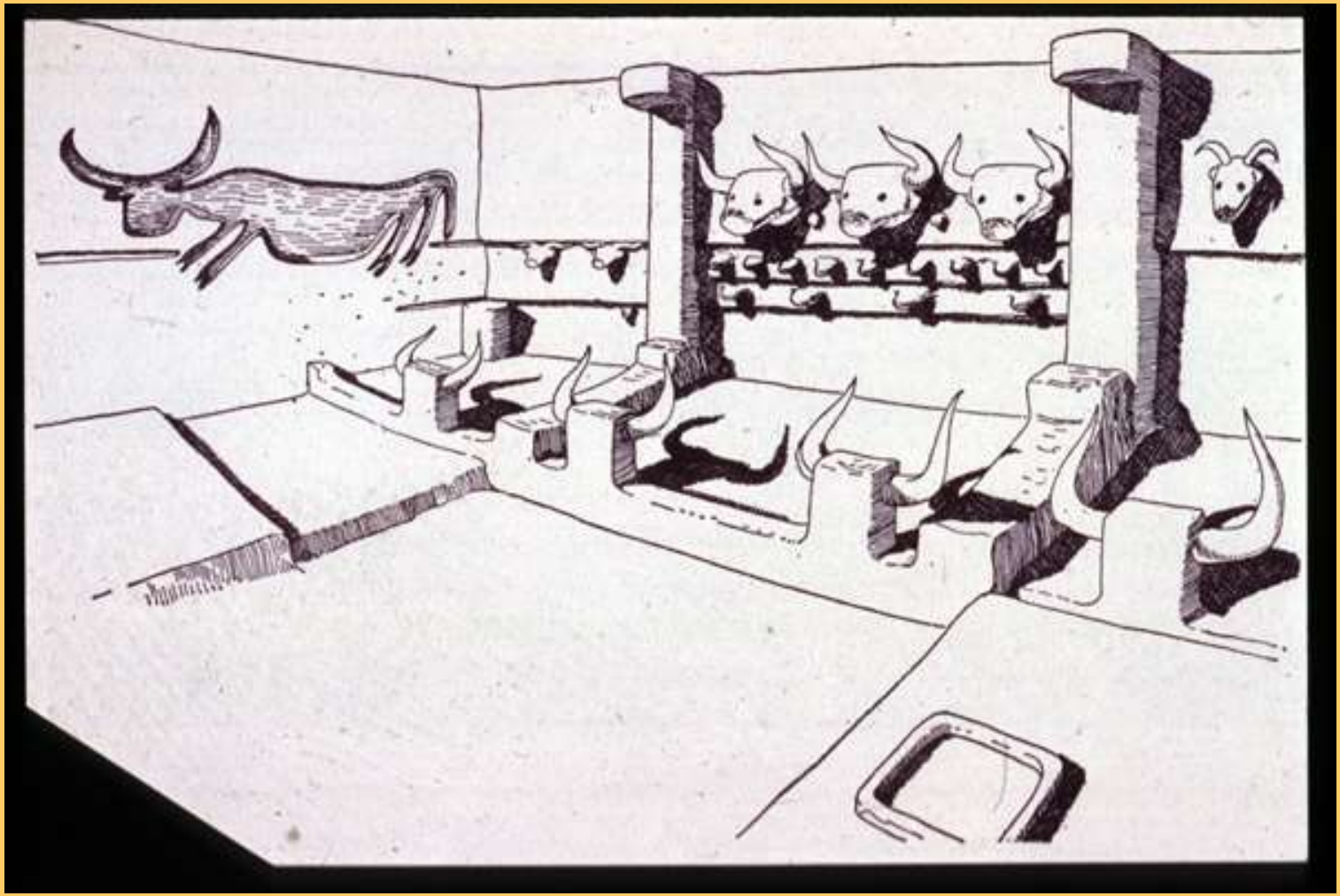


Schematic reconstruction drawing of Çatal Höyük, Turkey, ca. 6500-5700 BCE

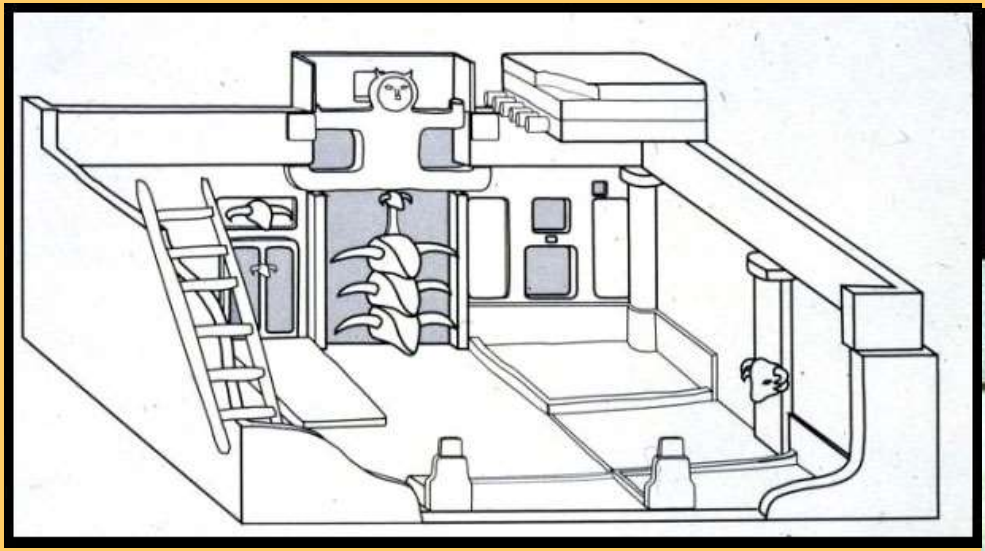


Restored view of a section of Level VI, **Çatal Höyük,** Turkey, ca. 6500-5700 BCE

The houses were made with mud brick and strengthened by wood logs



Reconstruction of shrine. Çatal Huyuk Level VI. Turkey. 6500-5700 BCE



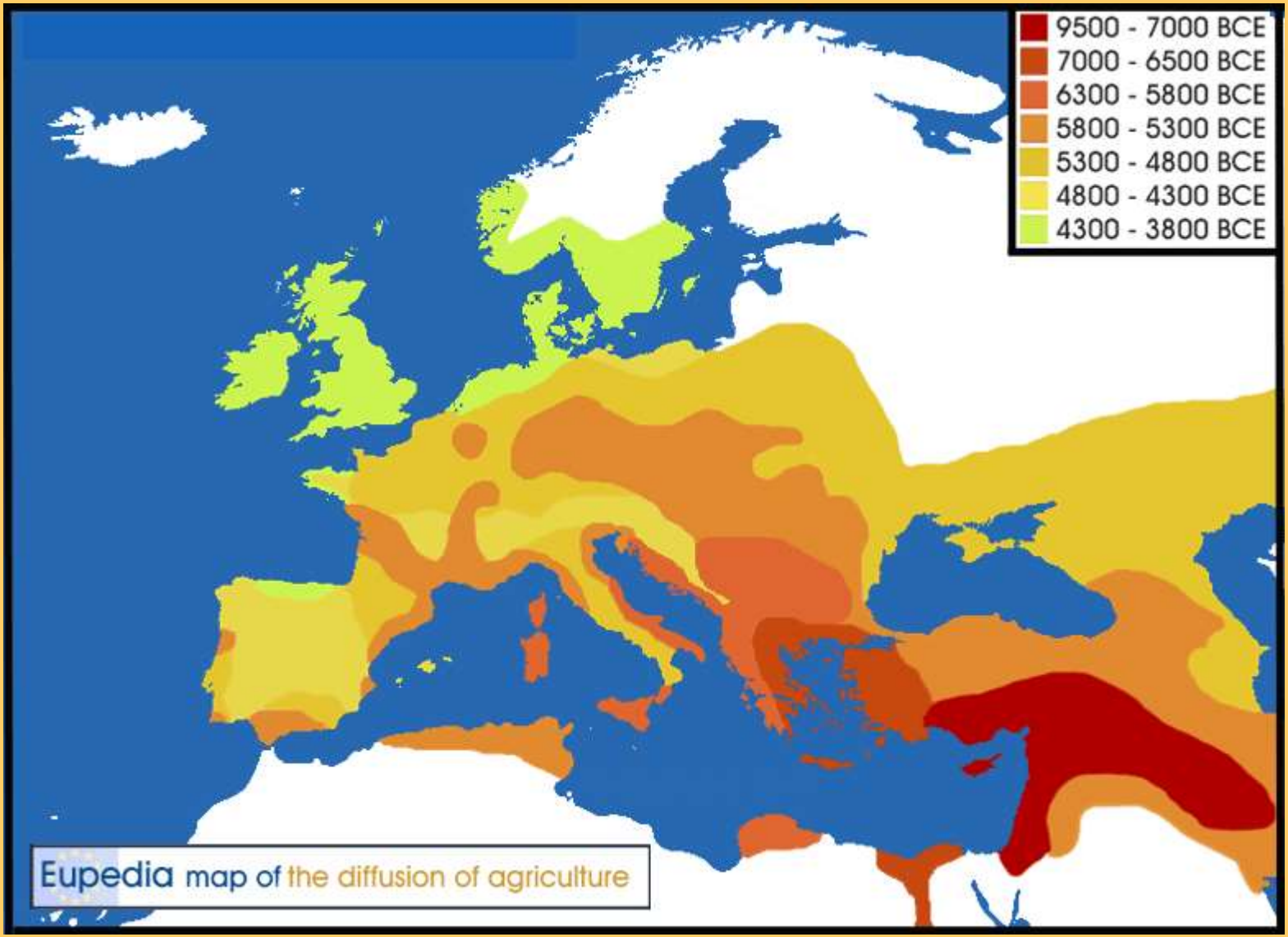
Reconstruction of shrine

Çatal Huyuk Level VI.
Turkey

6500-5700 BCE

Enthroned Birth Goddess

From Çatal Huyuk.c. Turkey.
6000 BCE. Baked clay



Expansion of agriculture from the Middle East to Europe (9500-3800 BCE)

Neolithic: Europe
7,000-1700 BCE

Megalithich Monuments

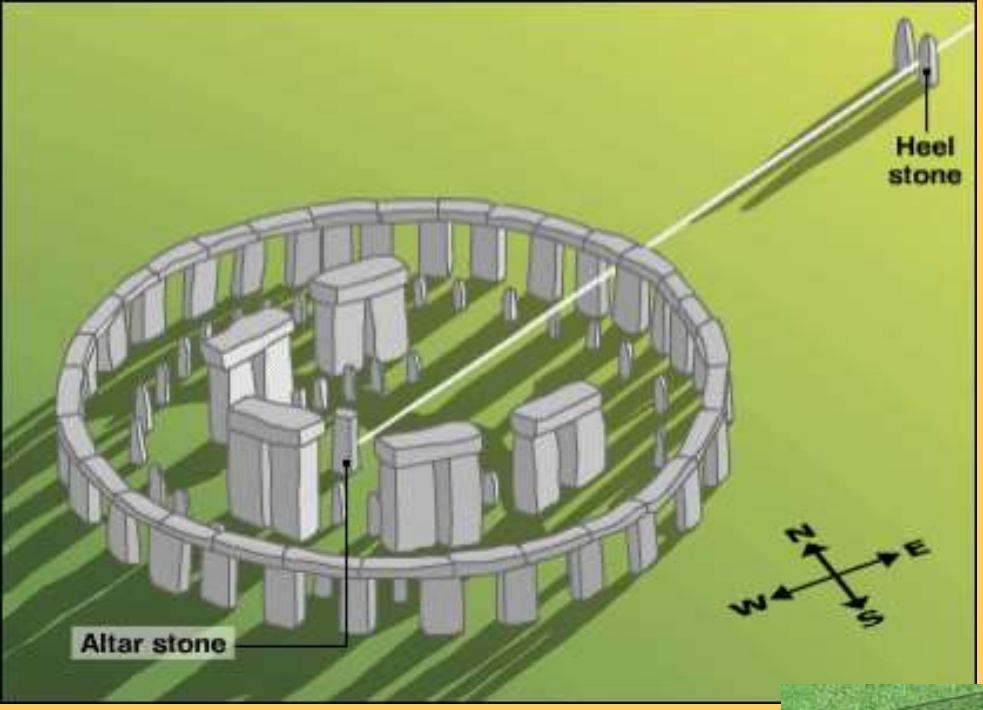
Many megalithic monuments were built for astronomical observatories or communal tombs for the privileged classes

Henge : a circular area, often containing a circle of stones or sometimes wooden posts, dating from the Neolithic and Bronze Ages.

Aerial view of Stonehenge, Salisbury Plain,Wiltshire, England, ca. 2550–1600 BCE. Circle is 97' in diameter; approx. 24' high.

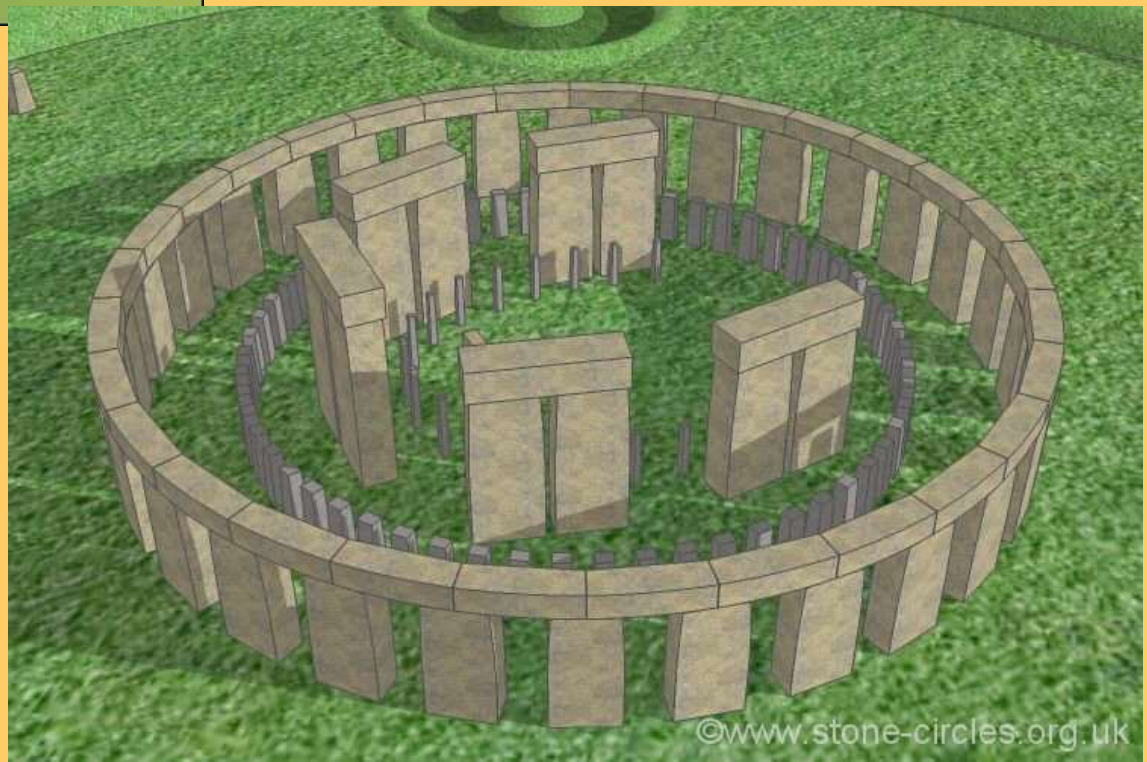
Astronomers have determined that the sun appeared to rise over the "heel stone" at the midsummer solstice when one stood in the center of the circle in front of the altar.

(The opposite side of Stonehenge faces the winter solstice sunset.)



Stonehenge. Reconstructive models

Sarsen (gray stone) and bluestones



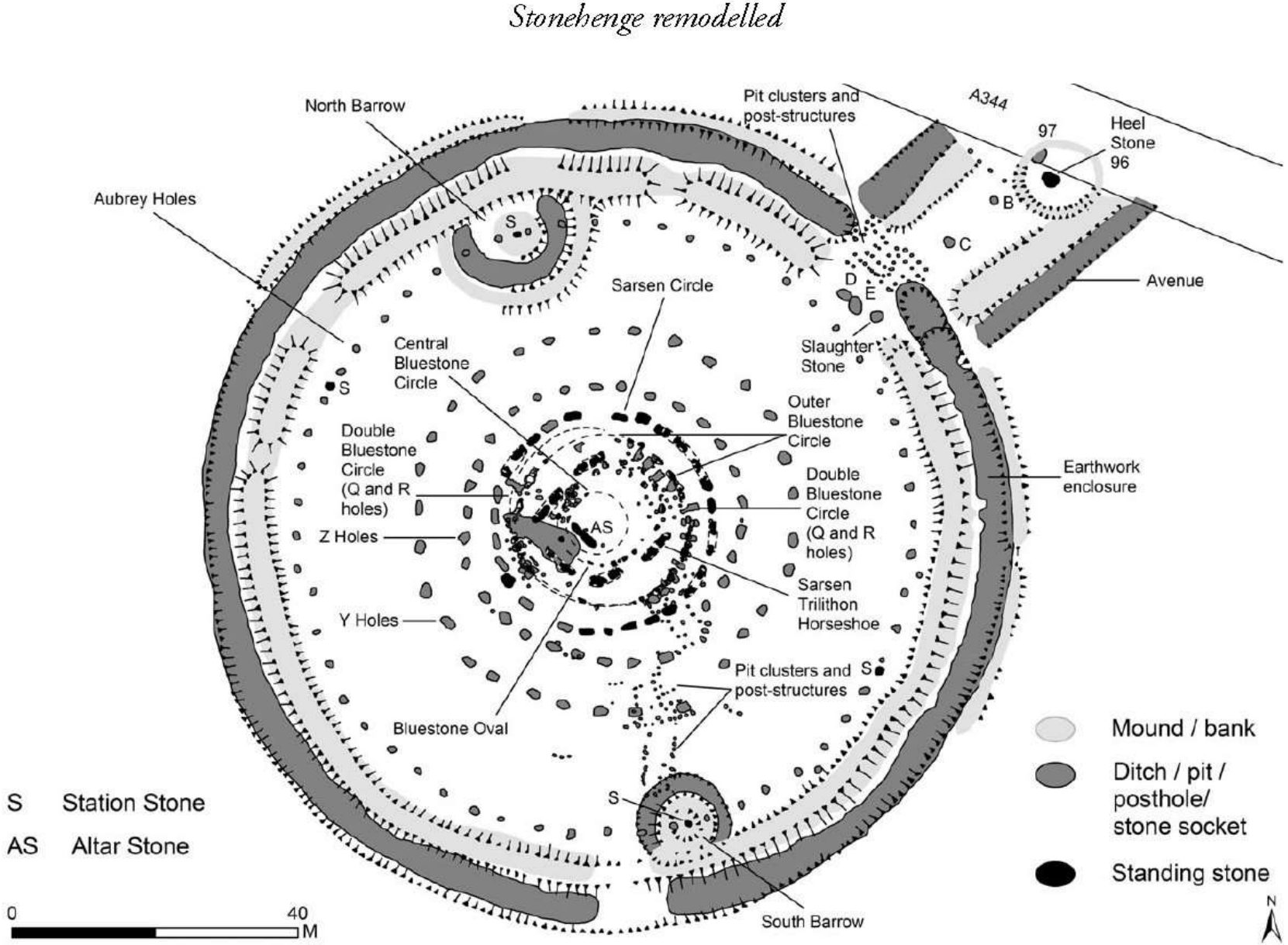
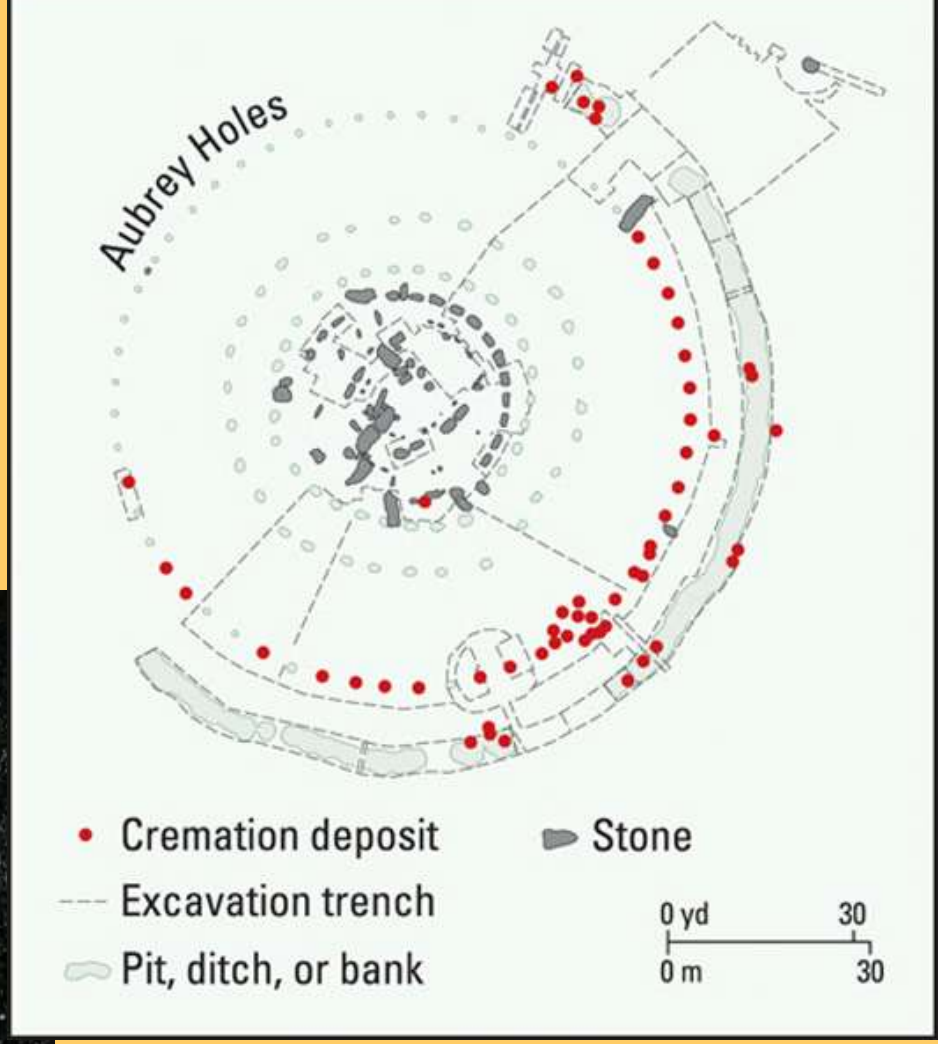
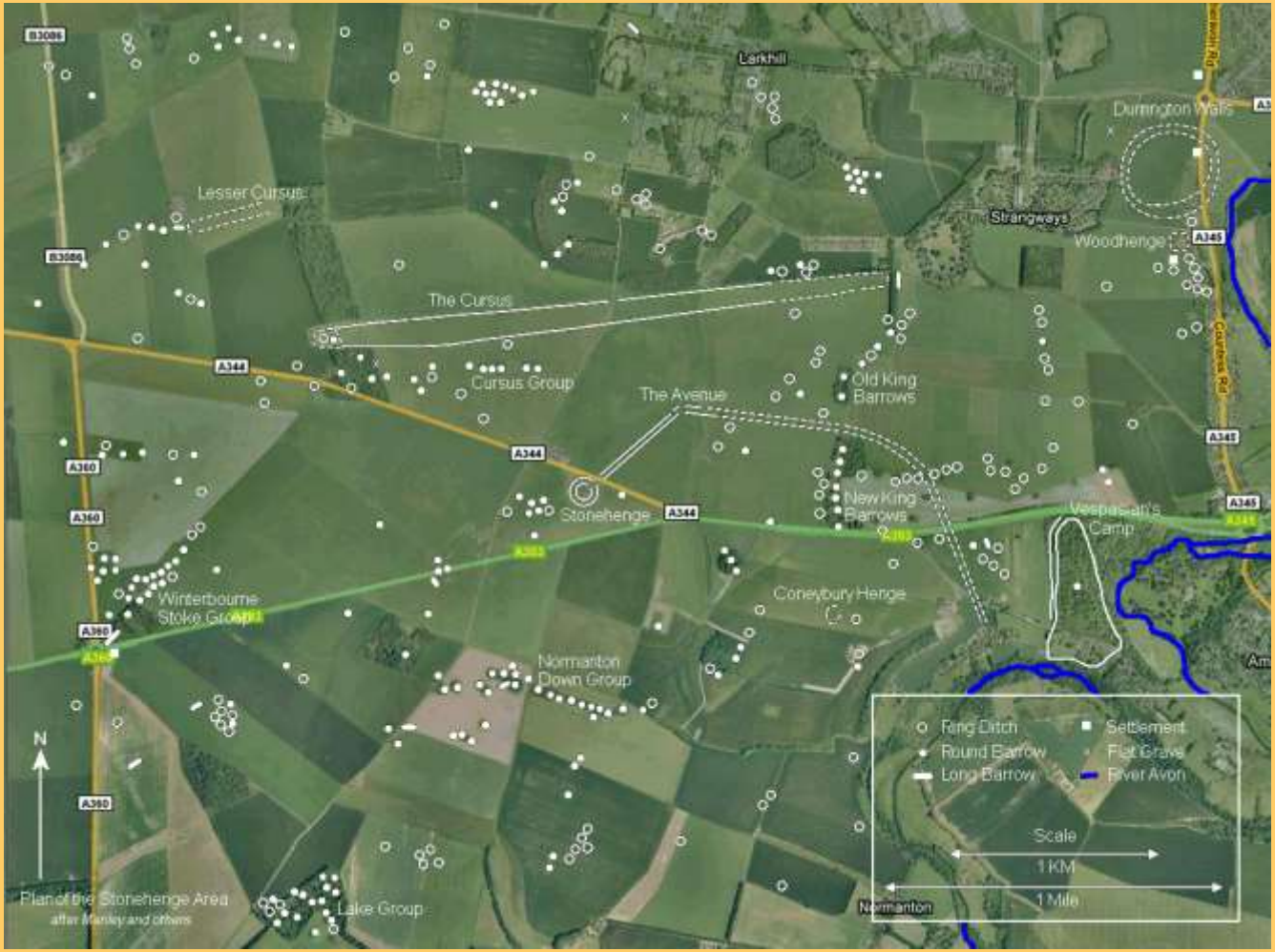


Figure 1. Plan of Stonehenge, showing the principal structural features (after Darvill 2006).

Bones from a burial site at Stonehenge. Radiocarbon dating indicates that they date back to the same time people started to erect the mysterious landmark. Other bones found there suggest people continued to use the area as a burial site until well after the stones went up around 2500 B.C.





Stonehenge's site may have been chosen because it was already significant to Stone-Age Britons. The natural land undulations at the site seem to form a line between the place where the sun rises on the summer solstice and where it sets in midwinter. This might explain why there are eight monuments in the Stonehenge area with solstitial alignments.

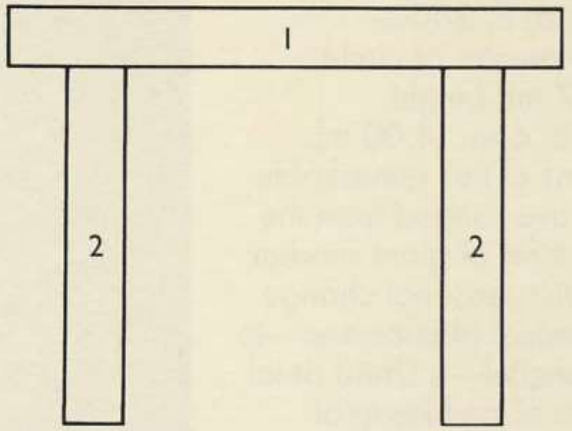
Reconstructed Neolithic houses at Stonehenge.

They are made from thin hazel rods woven around upright posts and covered, inside and out, with a mixture of crushed chalk, chopped straw and water.

Their roofs have been thatched with straw.

Post-and-Lintel Construction

In this system of construction, vertical uprights (posts) support a horizontal element (the lintel). Figure **1.24** is a diagram of the most basic single post-and-lintel form, called a **trilithon.** In later eras, this simple system was elaborated into highly complex structures.



1.24 Post-and-lintel construction.

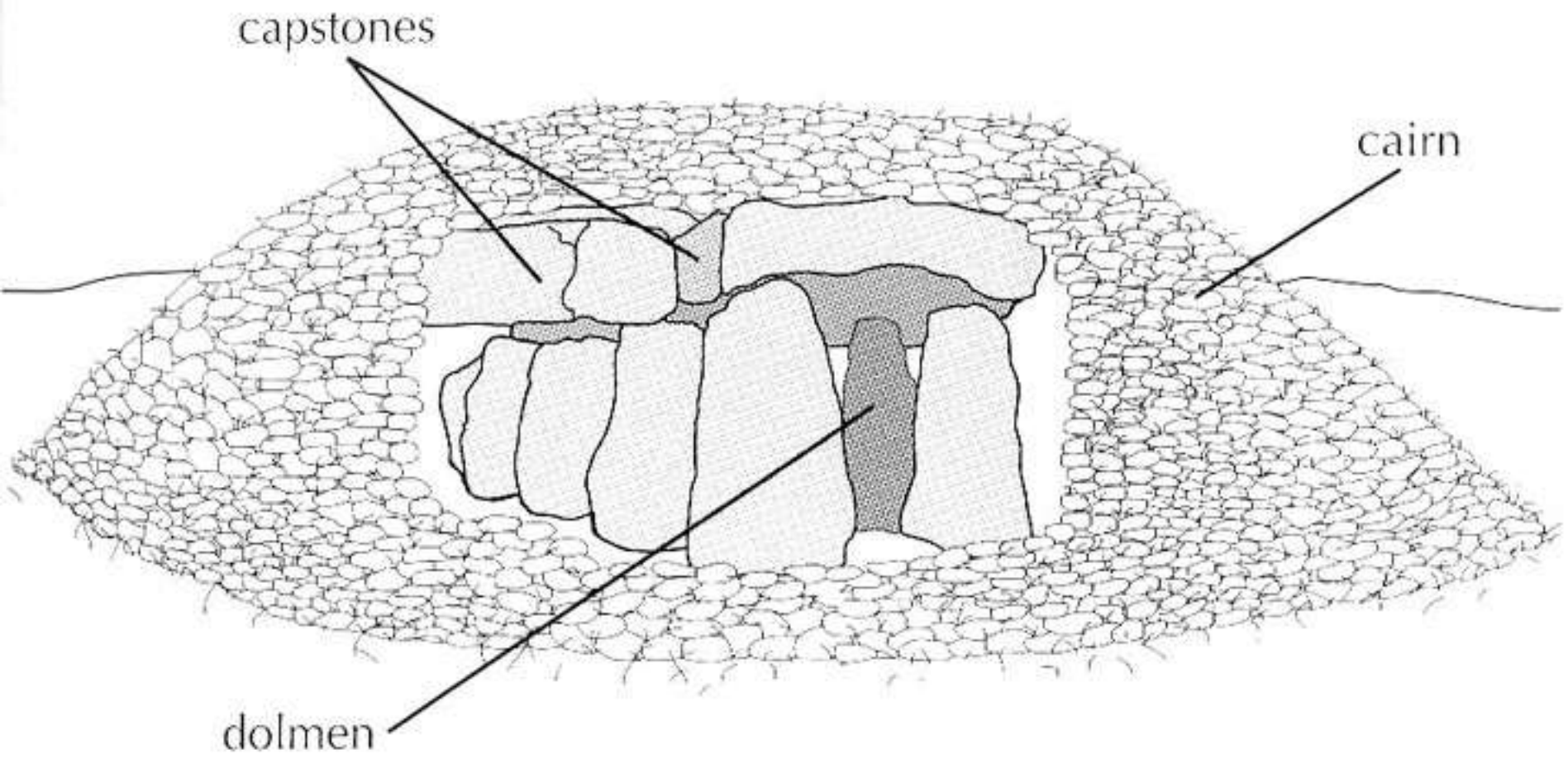
Major trilithon (three stones construction.) Stonehenge

Stone from the inner circle of Stonehenge.
Approximately 50 tons

At the top is a small protuberance called a “tenon” which was used to secure the upper lintel that connected this stone with its mate.

To build Stonehenge, the workers had to drag the larger stones (25 tons) some 20 miles over the countryside using logs as rollers and ropes.

The smaller stones (2-5 tons) were believed to be transported from Wales, some 150 miles away. It is believed that the ancient builders used a combination of land and sea to transport the stones.



dolmen

Dolmen ("stone table“ in Breton): Single-chamber megalithic monument usually consisting of several large stone slabs set upright to support a flat stone roof, all covered by a mound of earth that in most cases has weathered away. Frequently served as tomb.

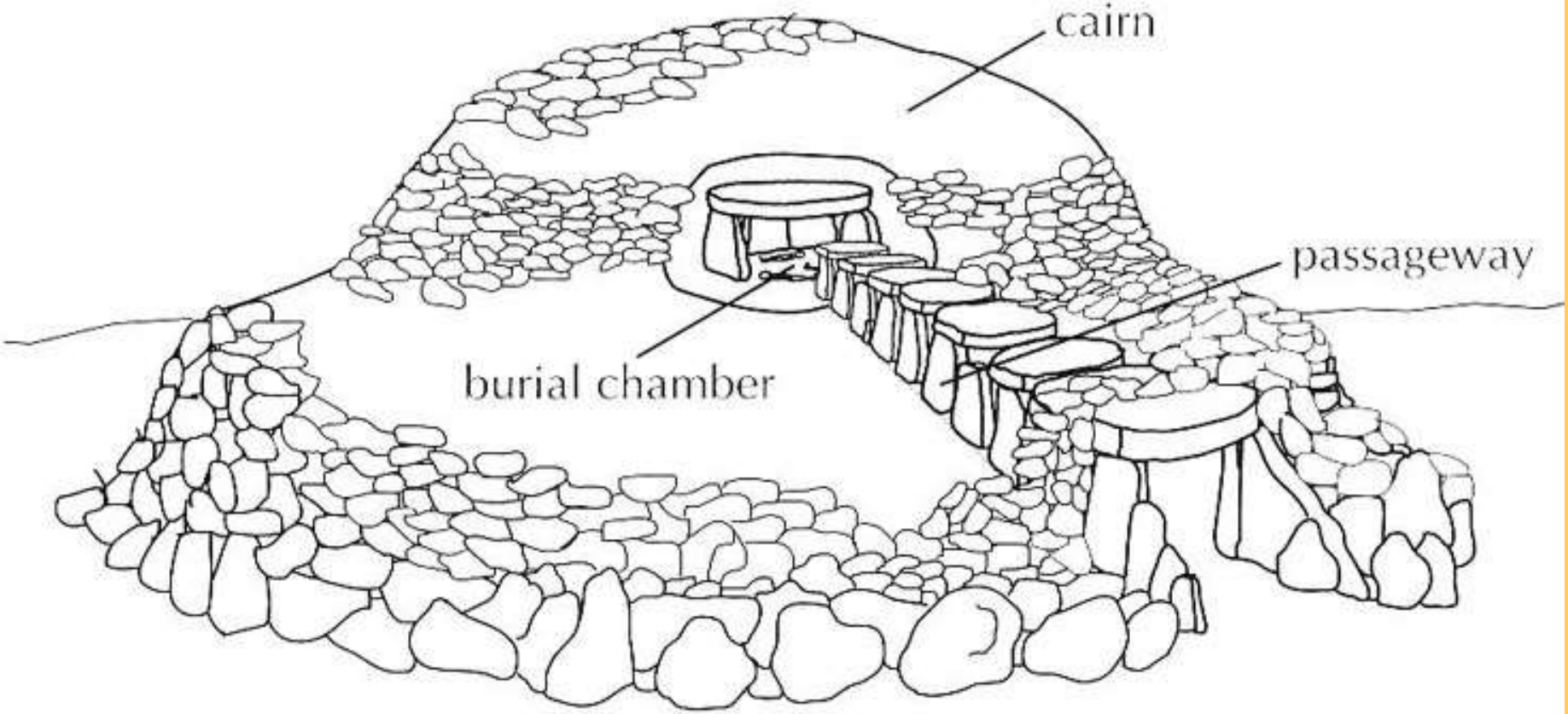
Poulnabrone Dolmen. Ireland. 3800 to 3200 BCE.

between 16 and 22 adults and 6 children were buried under the monument. Personal items buried with the dead included a polished stone axe, a bone pendant, quartz crystals, weapons and pottery.

Dolmen from Garde-Epee. Near Angouleme. France

A Dolmen on Ganghwa, Republic of Korea.
7th -3rd c. BCE (Neolithic and Bronze periods)

Boston Historic Graveyard



passage grave

Passage Grave: form of megalithic tomb in which a burial chamber set in the centre of a barrow is approached by means of a narrow passage. The barrow is usually round in plan, but other shapes are known.

Passage Grave. Loughcrew, Ireland. c. 3300 BCE

Tumulus/Barrow: a large mound of earth or stones over the remains of the dead

Autumn Equinox. Loughcrew, Ireland
The main cairn of Loughcrew is illuminated on the Spring and Fall Equinox

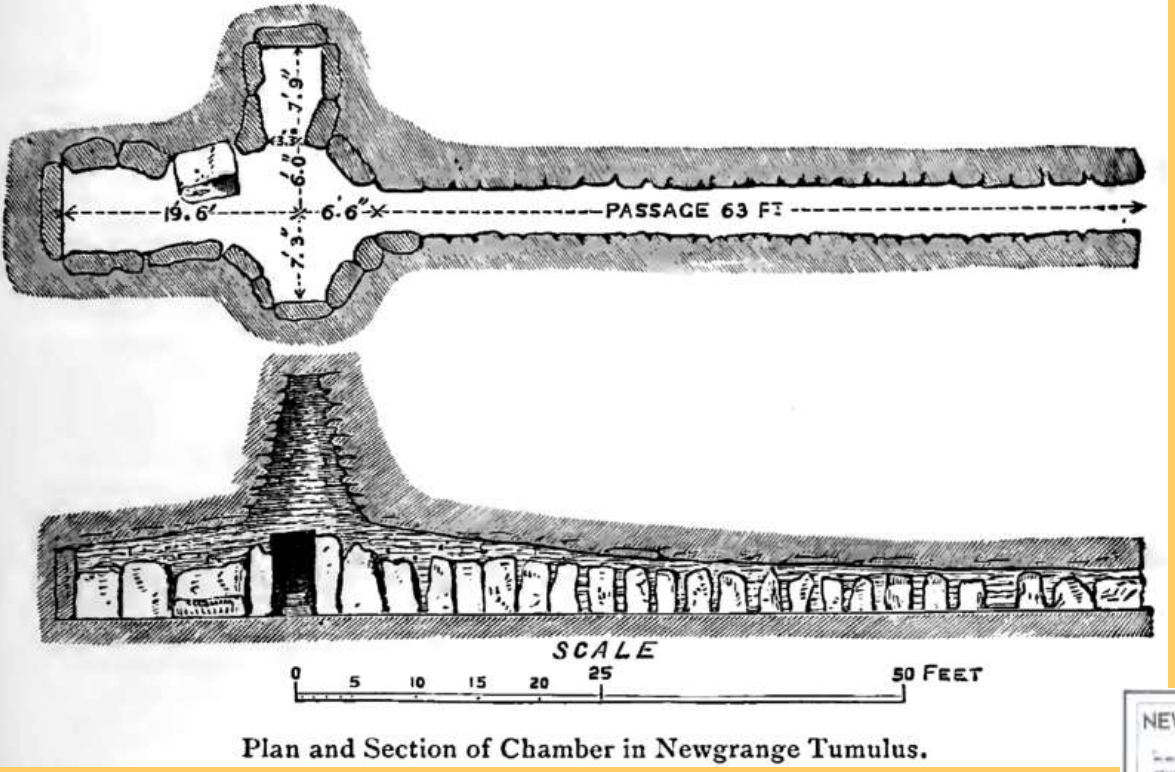
The back stone at the chamber of Loughcrew, Ireland. c. 3300 BCE

Passage grave at Newgrange, Ireland. c. 3100 BCE. 300 feet in diameter and 36 feet high. The white quartz is modern reconstruction based on excavations.
In the five days around the winter solstice, light from the rising sun enters through the doorway and the roofbox and illuminates the chamber for about 15 minutes.

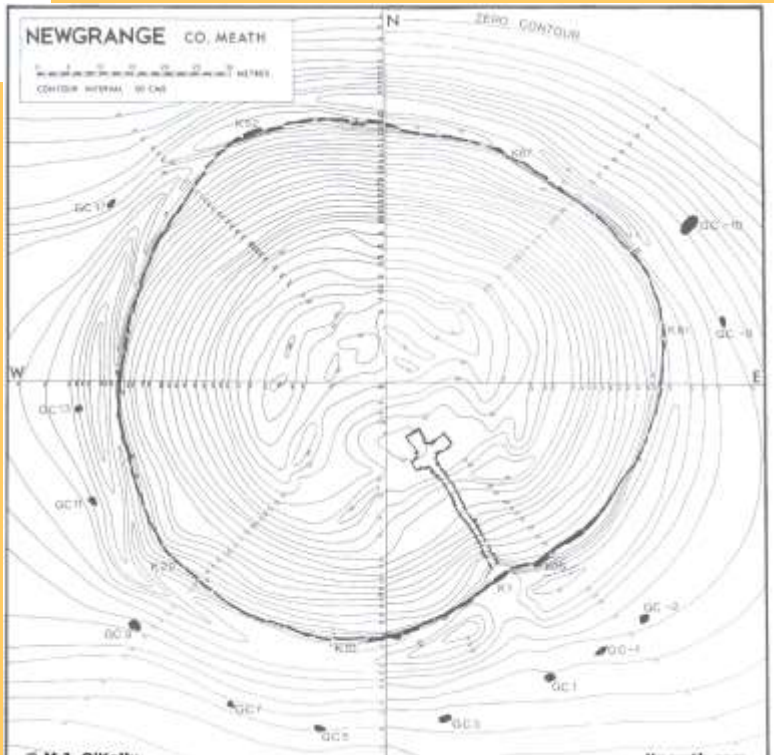
Passage grave at Newgrange, Ireland. c. 3100 BCE

The Roofbox over the entrance where the solstice sun is beamed to the chamber.

The corbelled roof from inside the main chamber of Newgrange



Plan and Section of Chamber in Newgrange Tumulus.



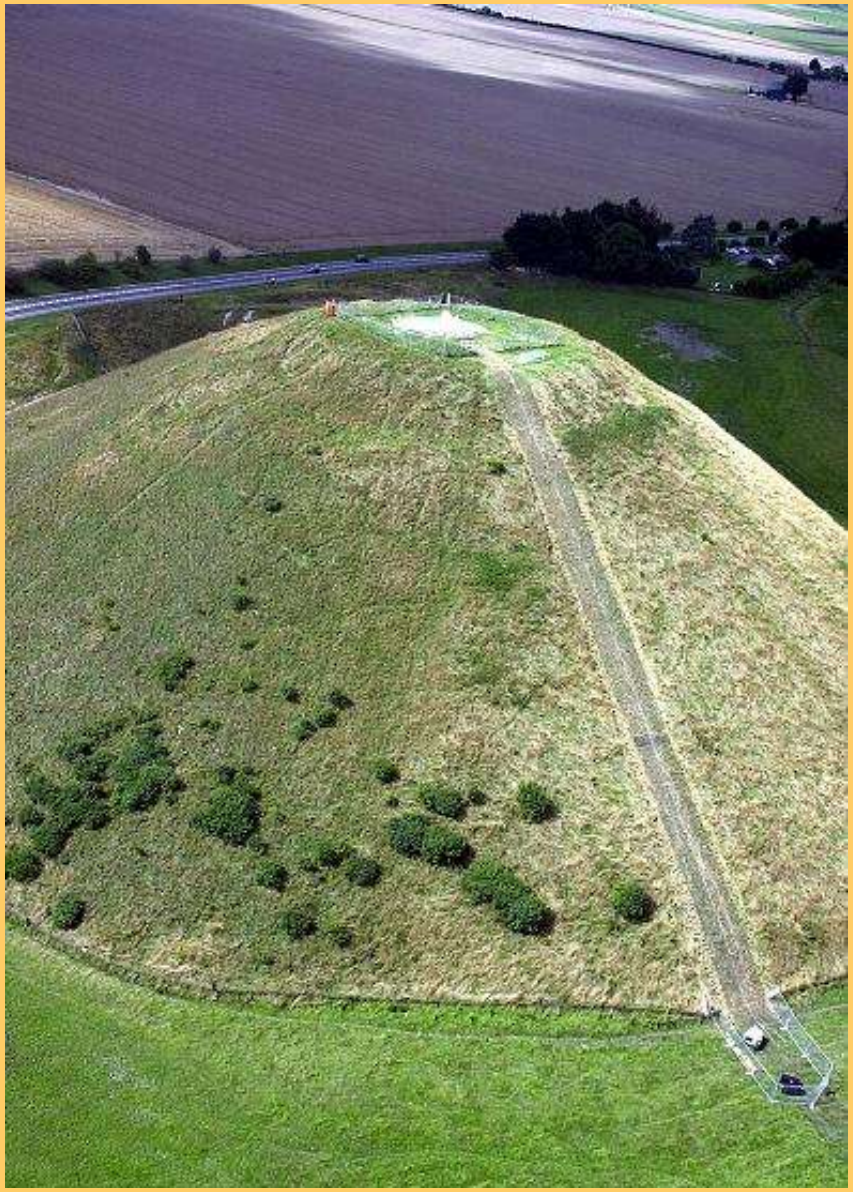
Entrance Stone from passage grave at Newgrange, Ireland
c. 3100 BCE

Stone Alignments . Carnac, France. c. 4250-3750 BCE. Over 3000 granite stones. 20-350 tons. Approximately 12 feet high. Each set begins at the west with the tallest stones and ends with shorter ones.

Stone Alignments. Carnac, Brittany, France. c. 4250-3750 BCE

Stone Alignments, Carnac, Brittany, France, c. 4250-3750 BCE

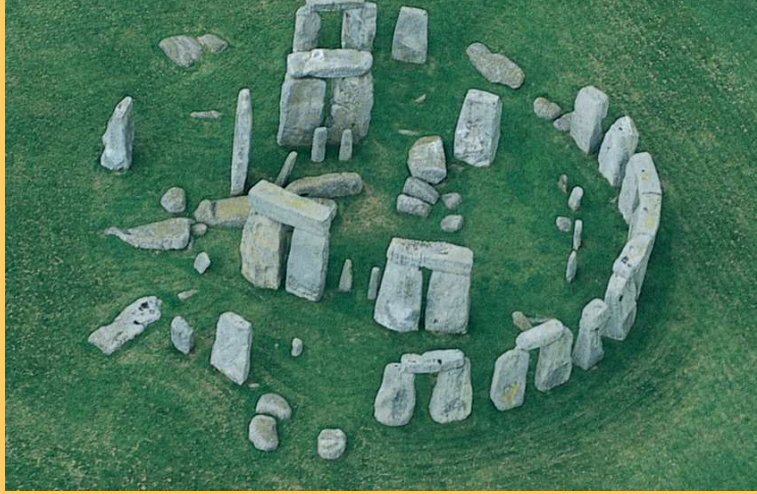
Silbury Hill. Wiltshire, England. 2700 BCE. 130 feet (40 m.) high. 5 acres.



Silbury Hill. Wiltshire, England. 2700 BCE 130 feet (40 m.) high. 5 acres.

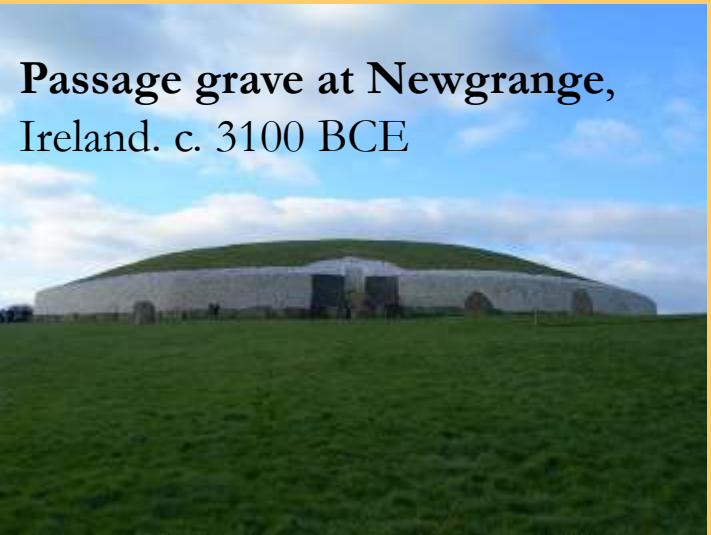
Göbekli Tepe. Turkey
10th millennium BCE

Poulnabrone Dolmen.
Ireland. 3800 to 3200 BCE.



Stonehenge, Salisbury Plain,Wiltshire, England, ca. 2550–1600 BCE

What is the meaning and purpose/s of megalithic monuments?
Write all possible explanations and bring specific examples.



Passage grave at Newgrange,
Ireland. c. 3100 BCE

Stone Alignments
. Carnac, France. c. 4250-3750 BCE.

The Ancient Near East

Bronze Age in Western Asia
3300-1000 BCE

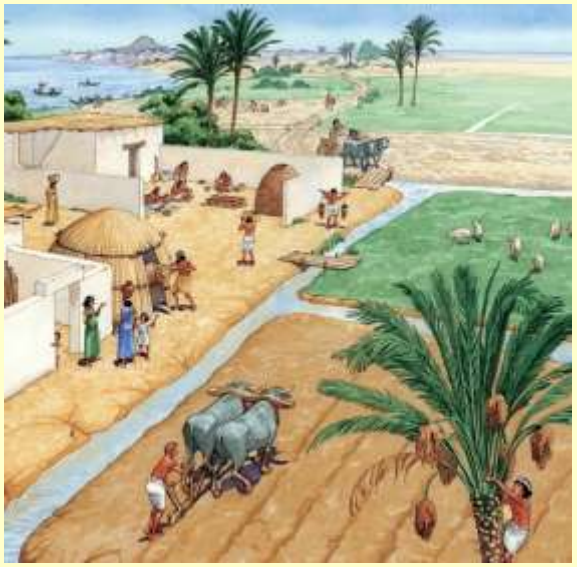
Iron Age in Western Asia
1000 BCE – 550 BCE


The Fertile Crescent
HITTITE EMPIRE
(HATTI)
LAKE VAN
ARARAT
(URARTU)
CASPIAN
SEA
HURRIANS
ANATOLIA
LAKE URMIA
Haran
MITANNI
SUBARTU
Nineveh
PADDAN-ARAM
Ashur
Ugarit
Ebla
CYPRUS
SYRIA
(ARAM)
MESOPOTAMIA
AKKAD
Mari
Tigris River
THE GREAT SEA
(MEDITERRANEAN SEA)
Euphrates River
Damascus
CANAAN
Babylon
Jerusalem
ELAM
GOSHEN
NEGEV
Ur
Memphis
ARABIA
SINAI
EGYPT
Nile River
LOWER SEA
(PERSIAN GULF)
RED SEA
Europe
Asia
Africa

The Ancient Near East

Mesopotamia: a Greek word meaning 'between the rivers'. An ancient region of southwest Asia between the Tigris and Euphrates rivers in modern-day Iraq.

The delta could only be made habitable by large-scale irrigation and flood control, which was managed first by a priestly class and then by godlike kings. Consequently the plentiful supply of food permitted the growth of large urban population.

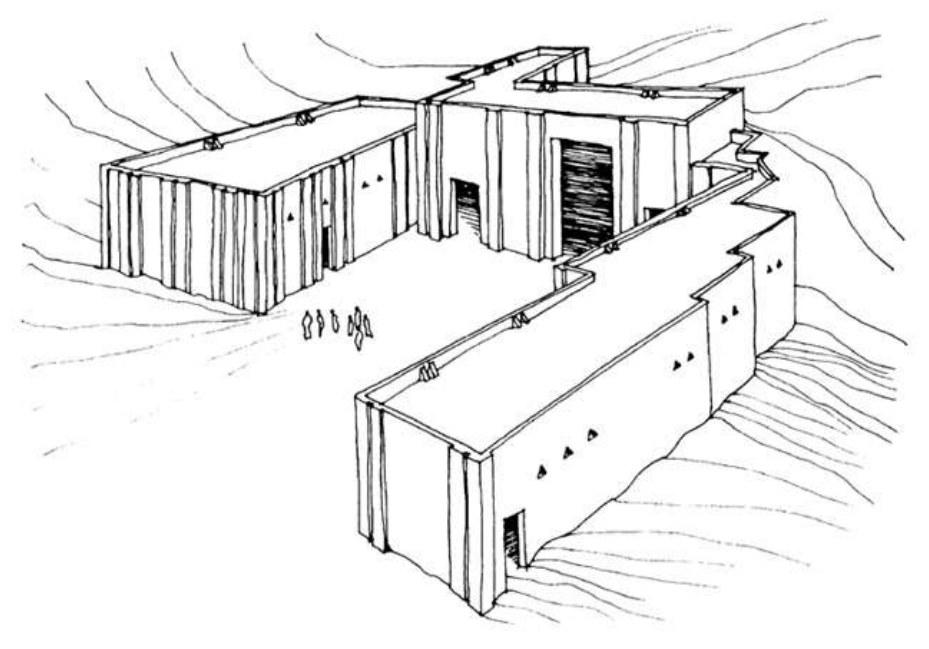


Irrigation in Ancient Mesopotamia
http://youtu.be/5RP2KfewiJA

Advances in the design of the plough boosted the productivity of the Sumerian peasant. By 3000 BC, the original wooden ploughshare, had given way in Sumer to a much sturdier bronze blade.

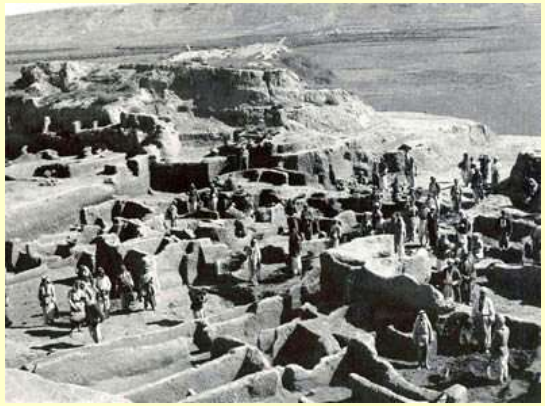
Cylinder Seal Showing God of Agriculture and Two Others Plowing

Buttress: Masonry reinforcement applied to a wall to provide additional strength



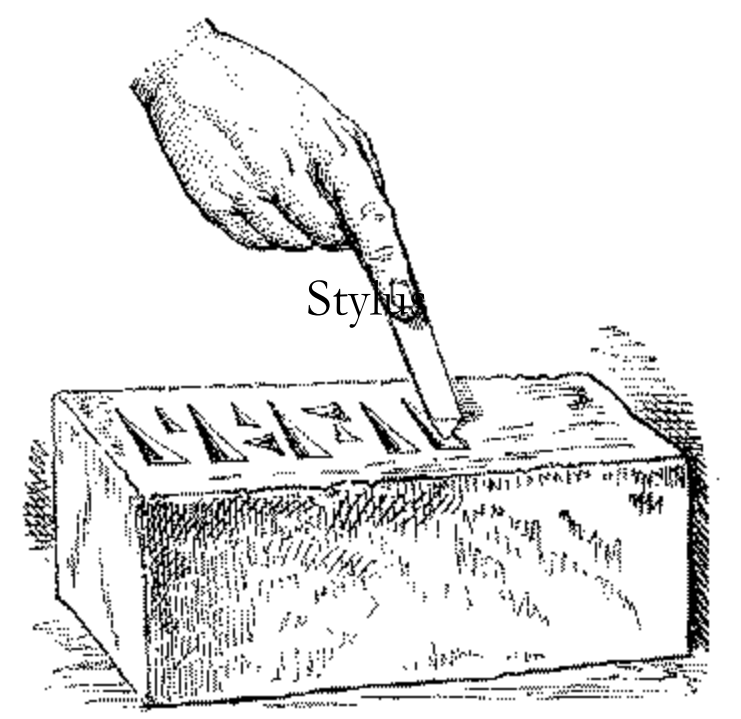
Reconstruction view of the Temple at Tepe Gawra, ca. 3800 B.C.E.
The site was occupied from approximately 5000 B.C. to 1500 B.C.

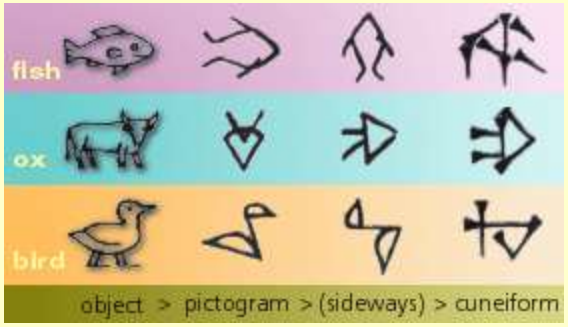
- Tepe Gawra illustrates the transition from farming villages to complex settlements with mud-brick houses, the first metal objects, and monumental architecture.
- The importance of its priestly class is indicated by the scale of the building erected on a high point in the city (acropolis).

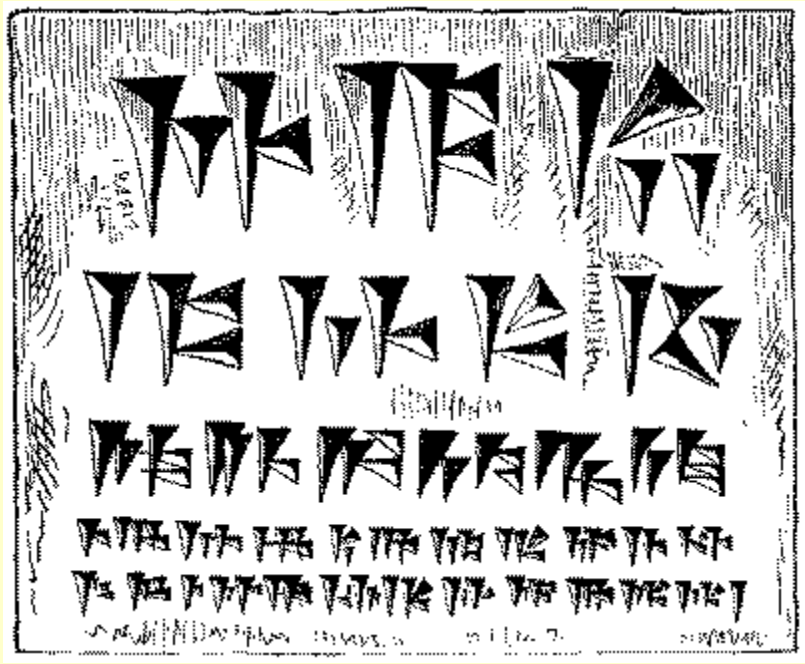


Sumerian and Neo Sumerian

3rd millennium BCE
(Bronze Age)







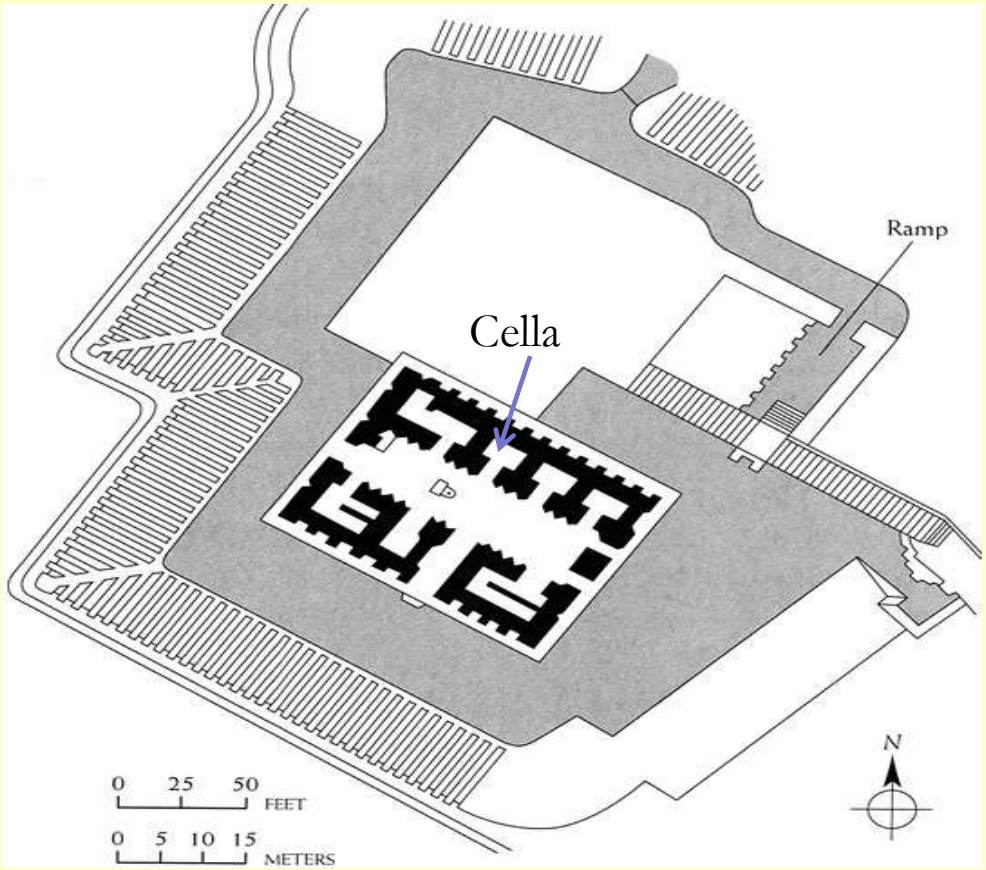
Cuneiform (Latin - "Wedge Shaped") Writing

Used by the Sumerians, Akkadians Assyrians Babylonians and Persians.

Tablet & Envelope with Cuneiform

***White Temple* (on top of raised platform)**, Uruk, Iraq, ca. 3200–3000 BCE. 40' high.
Its outside and inside walls were plastered and painted white.
It was dedicated to the sky god Anu

Cella: (Also called "Holy of Holies") the inner room of the temple, in which the statue of the god was situated

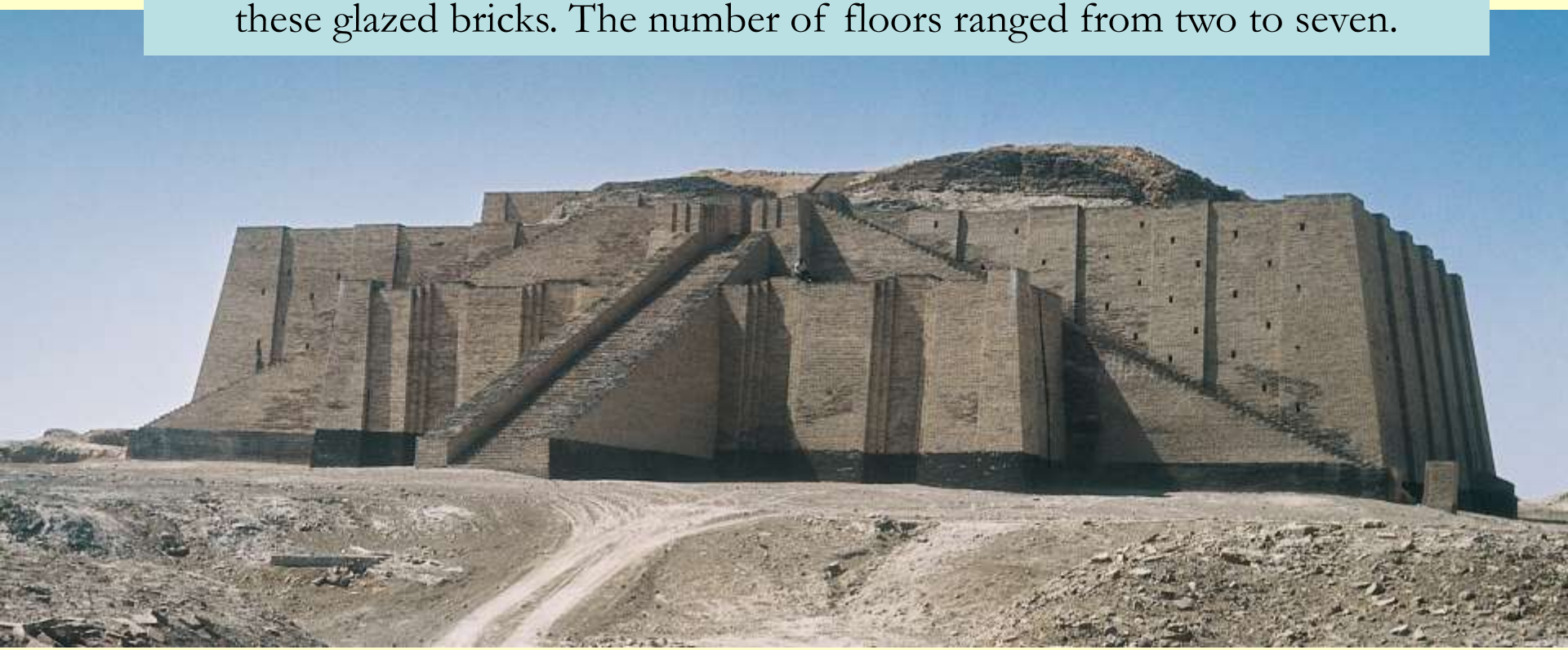


Plan of the White Temple, Uruk, Iraq, ca. 3200–3000 BCE. 40' high.

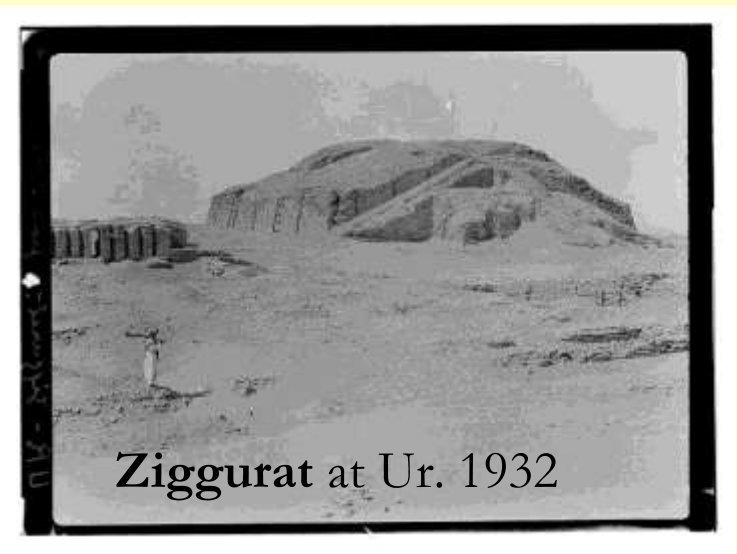
Female head (Inanna?), from Uruk, Iraq, ca. 3200–3000 BCE. Marble, approx. 8" high.
Iraq Museum, Baghdad

Ziggurat: (*Akkadian* ziqqurat, "to build on a raised area")

A monumental platform for a temple. The ziggurat was a pyramidal structure, built in receding tiers upon a rectangular or square platform, with a shrine at the summit. The facings were often glazed in different colors and may have had astrological significance. Kings sometimes had their names engraved on these glazed bricks. The number of floors ranged from two to seven.



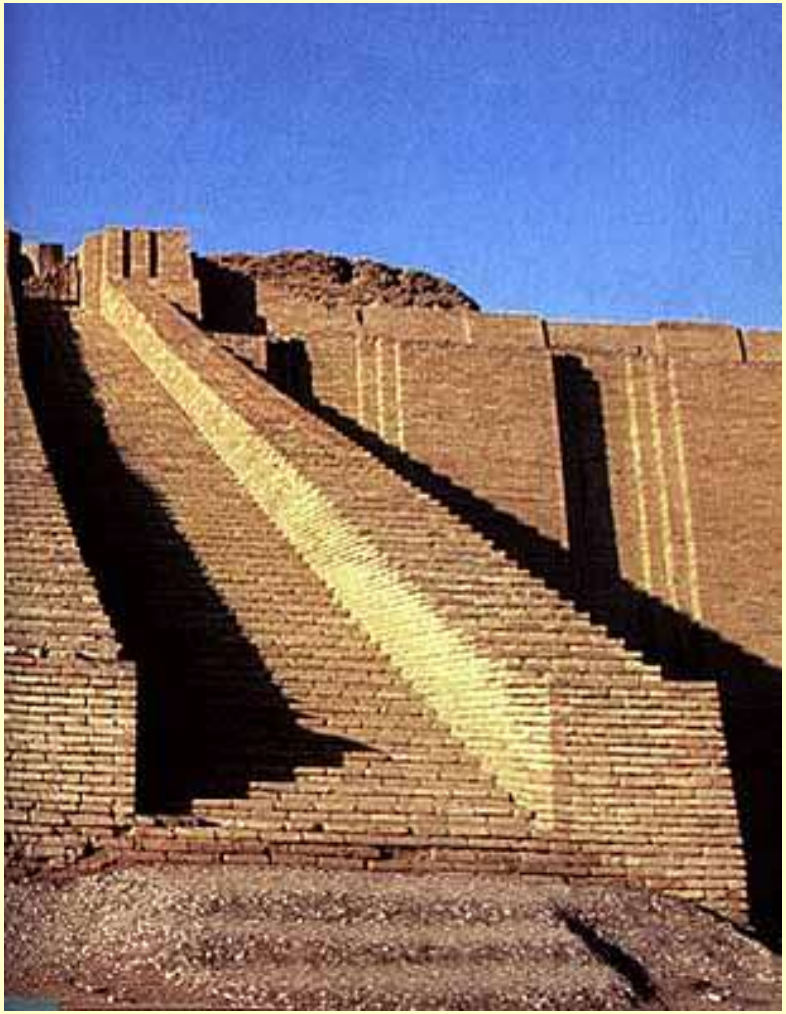
Nanna (the moon god) **Ziggurat**, Ur Iraq, ca. 2100 BCE. Mud bricks. 50' high. (Restored by the Neo-Babylonians, 6th BCE and under Saddam Hussein in the 1980s)
https://youtu.be/sIGOFlFoCLc



Ziggurat at Ur. 1932

Aerial view of the ziggurat

Model of the Ziggurat at Ur.

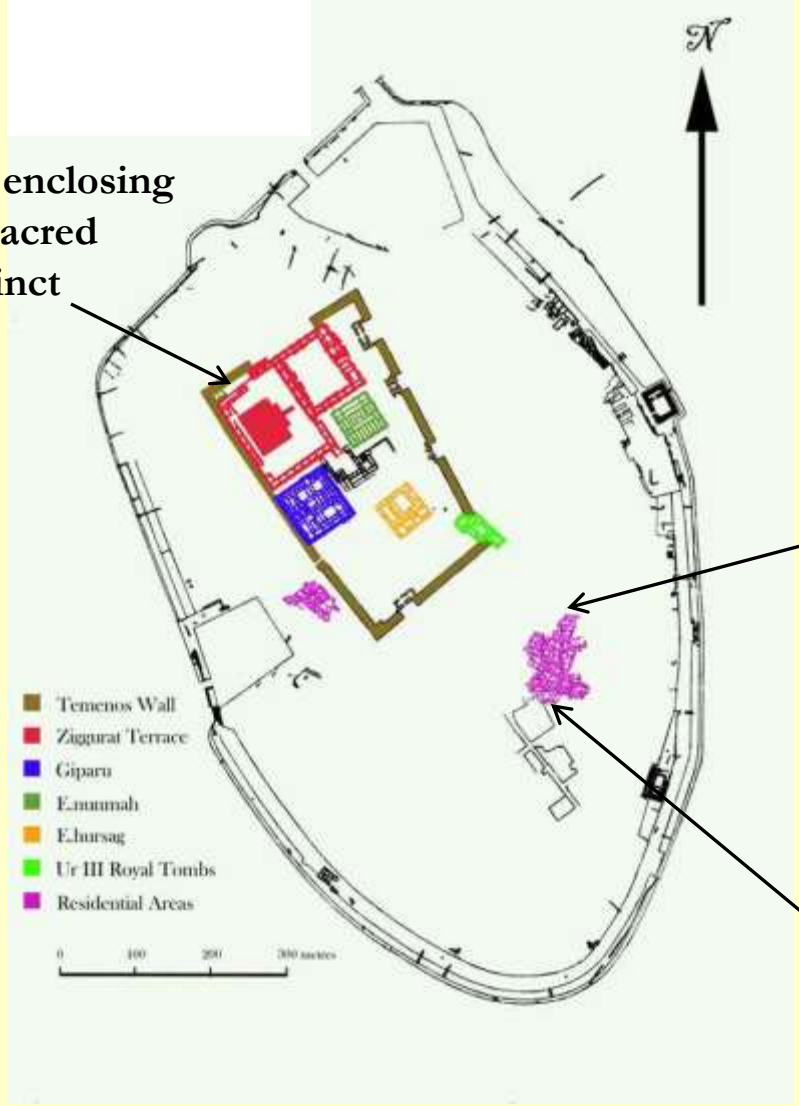


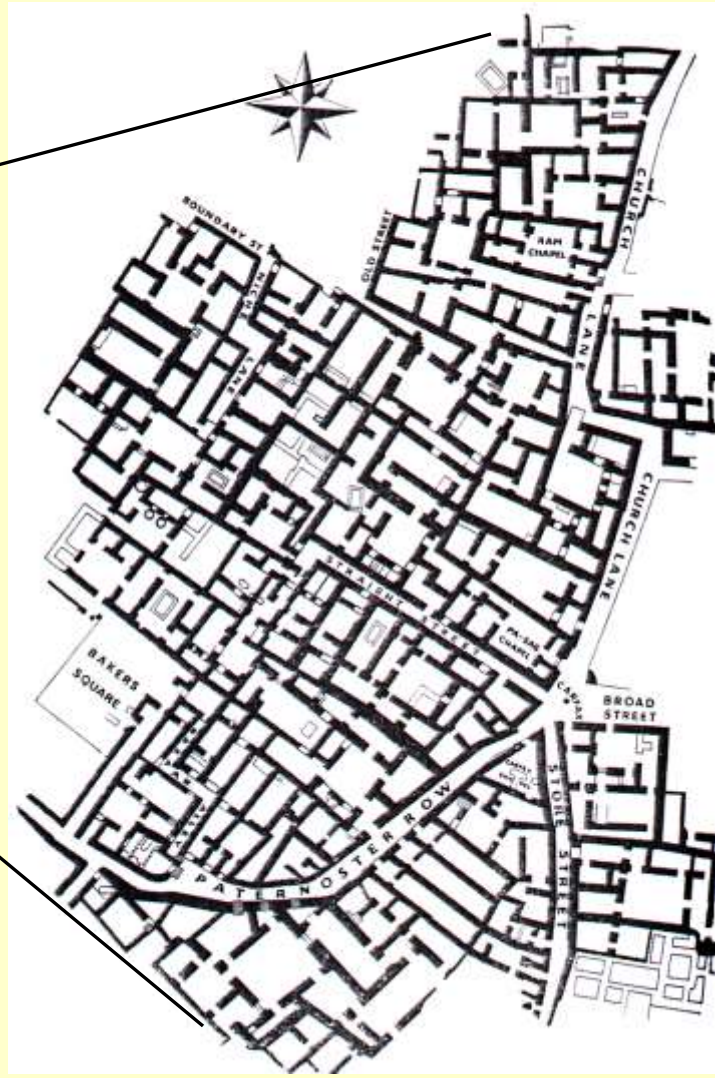
U.S Soldiers climbing the Ziggurat

• The ziggurat was damaged in the First Gulf War in 1991 by small arms fire and the structure was shaken by explosions. Four bomb craters can be seen nearby and the walls of the ziggurat are marred by over 400 bullet holes.

Houses laid out on right angled plans with living spaces organized around courtyards. It created urban density but also air and privacy.

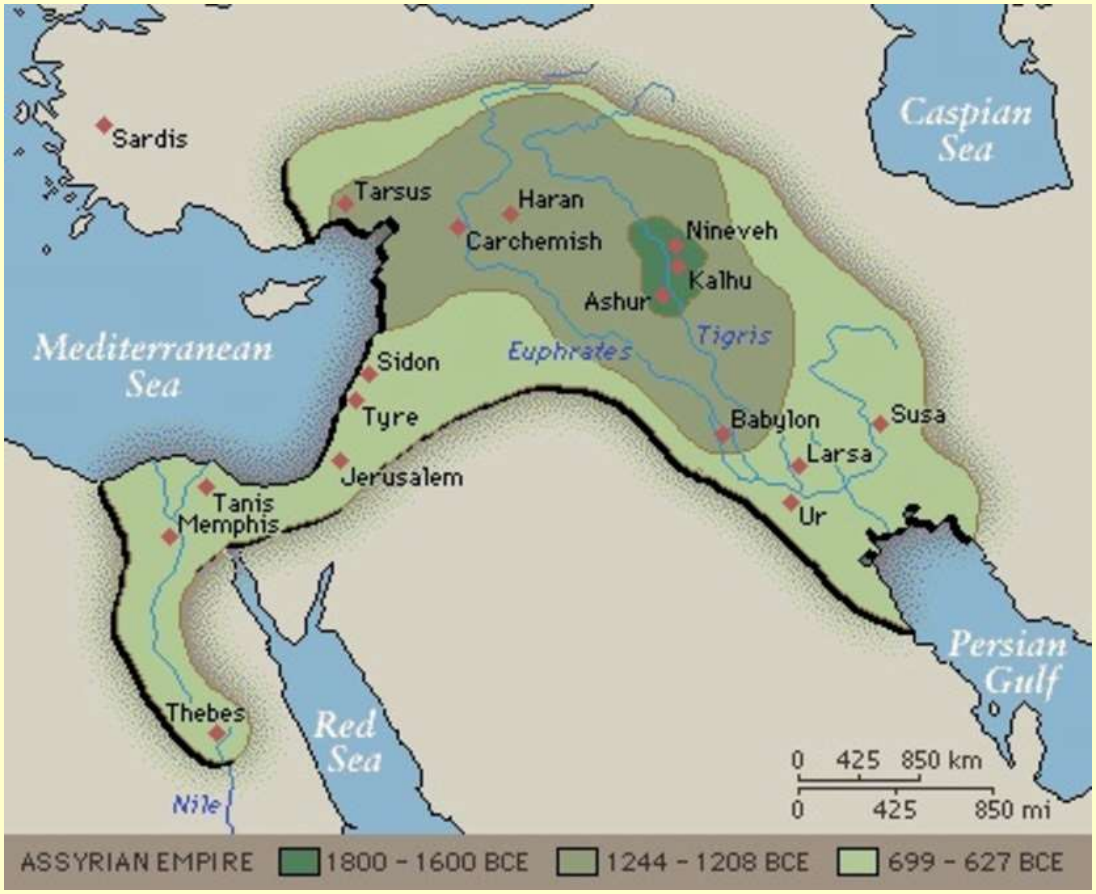
Wall enclosing the sacred precinct





The City of Ur (left) ***and the Residential Quarter*** (right). Ca 2100 BCE

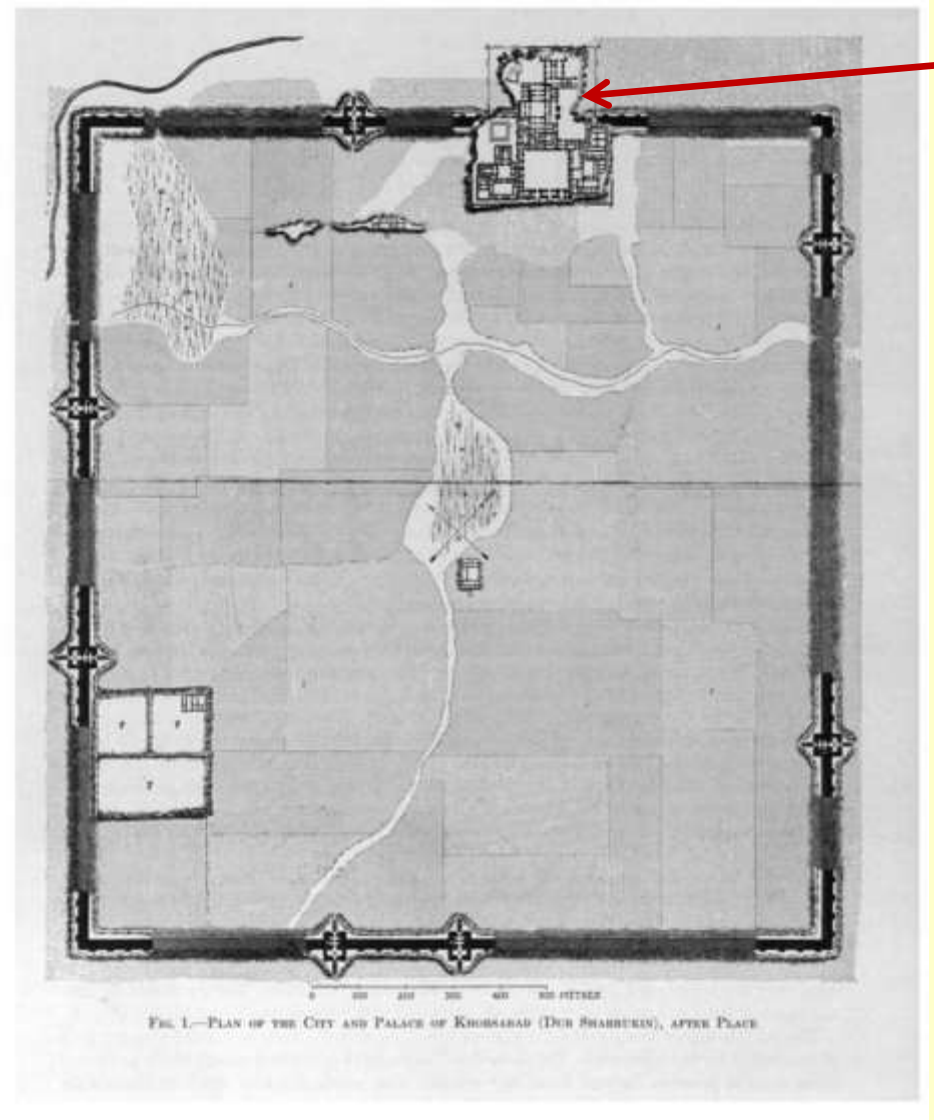
Assyrians: 9-7th c. BCE (Iron Age)



- **The city's fortification walls form an almost perfect square, covering a surface of about 3 sq km**

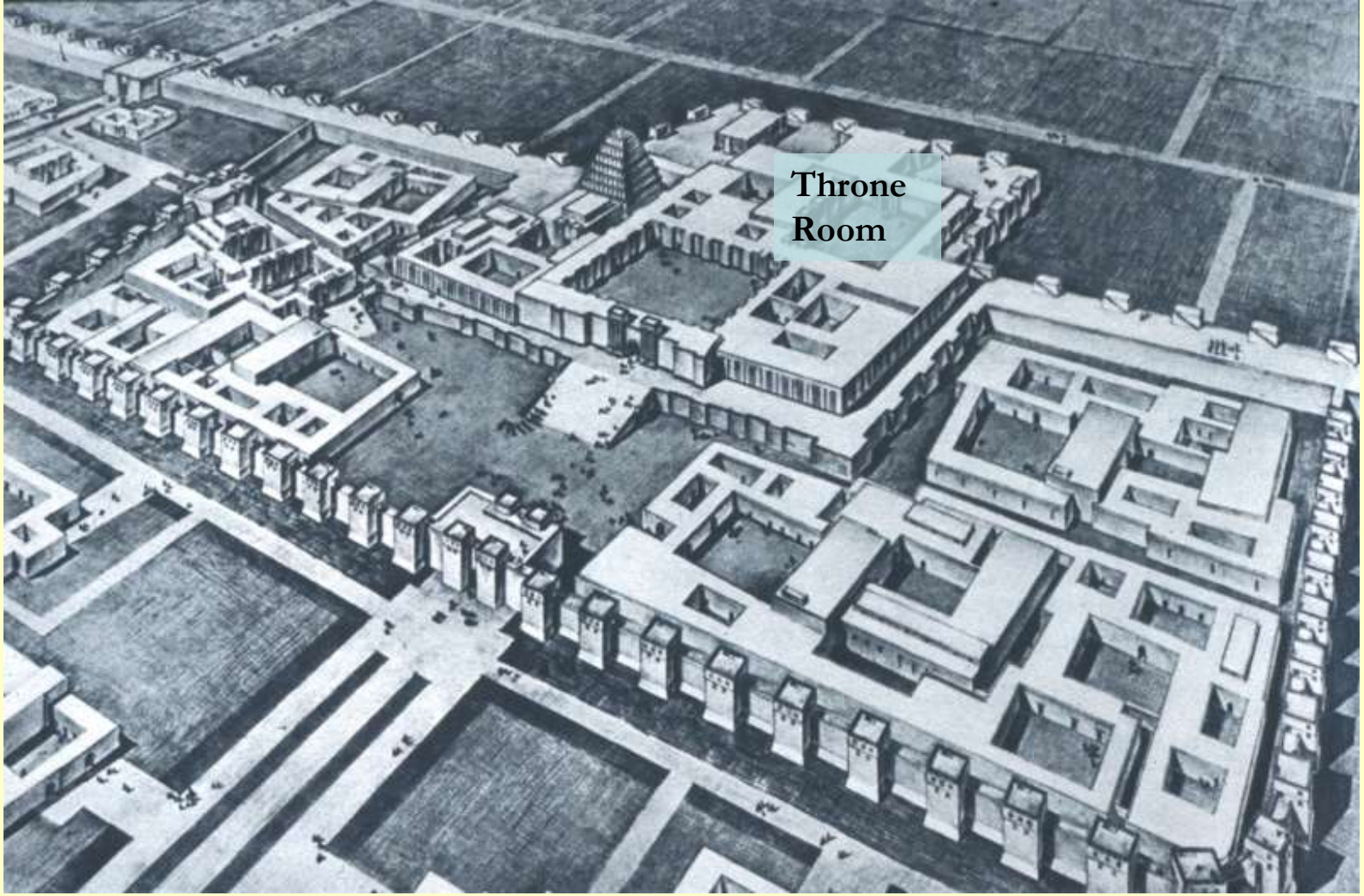
- **The citadel with palaces and temples towers above the lower town on an artificially erected platform.**

- **The length of the walls was 16280 Assyrian units, which corresponded to the numerical value of Sargon's name.**



Plan of Dur-Sharruken (present day Khorsabad**)** by the French excavator Victor Place

"Sargon, King of the World, has built a city, Dur Sharukin (citadel of Sargon) he had named it…"



Reconstruction drawing of the citadel of Sargon II

Khorsabad, Iraq, ca. 720–705 BCE. 25 acres; more than 200 courtyards and rooms.

- **Fortified walls enclose this complex, access to which came by a twisting path through a sequence of courtyards and smaller chambers.**
- **The seven stage ziggurat representing the cosmic order of the seven planets**

Lamassu (winged, human-headed bull), from the citadel of Sargon II, Khorsabad, Iraq, ca. 720–705 BCE. Limestone, approx. 13’ 10” high. Louvre, Paris.

Traces of black, white, red, and blue paint were visible when the reliefs were first uncovered.

Reconstruction of Ashurnasirpal's throne room at Nimrud published by Layard

Plaster fragment found in debris of the Throne Room of the Northwest Palace.

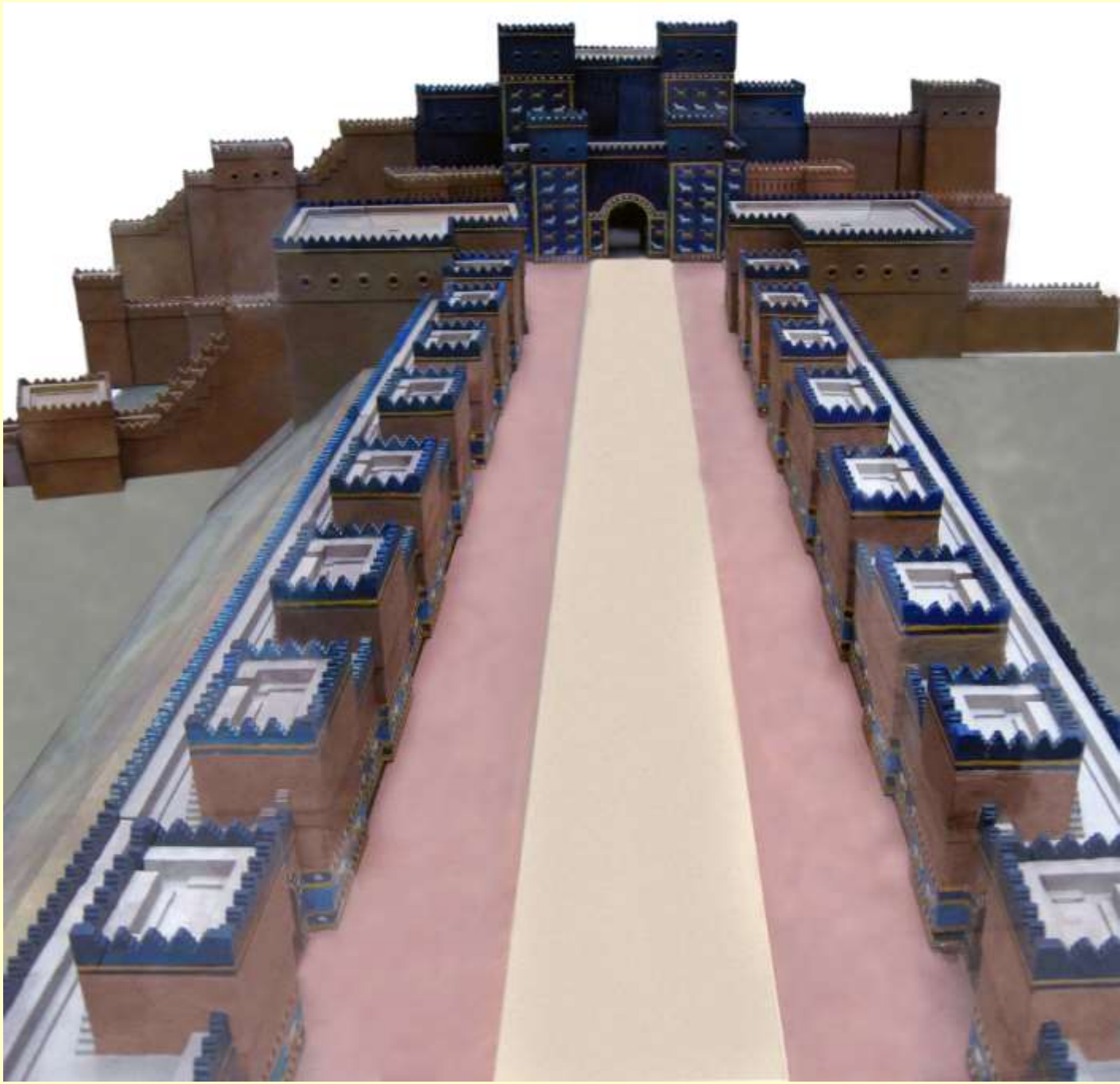
Neo-Babylonian: 7-6th c. BCE (Iron Age)

Crenellation: a parapet (short wall) with open spaces that surmounts a wall and is used for defense or decoration.

Model of Ishtar Gate (575 BCE). Staatliche Museen, Berlin.

Model of Ishtar Gate & Processional Way (also called – "May the Enemy not Have Victory.")

Once per year, they were used for a New Year's procession, celebrating the beginning of the agricultural year. The New Year's celebrations started at the time of the Spring equinox.



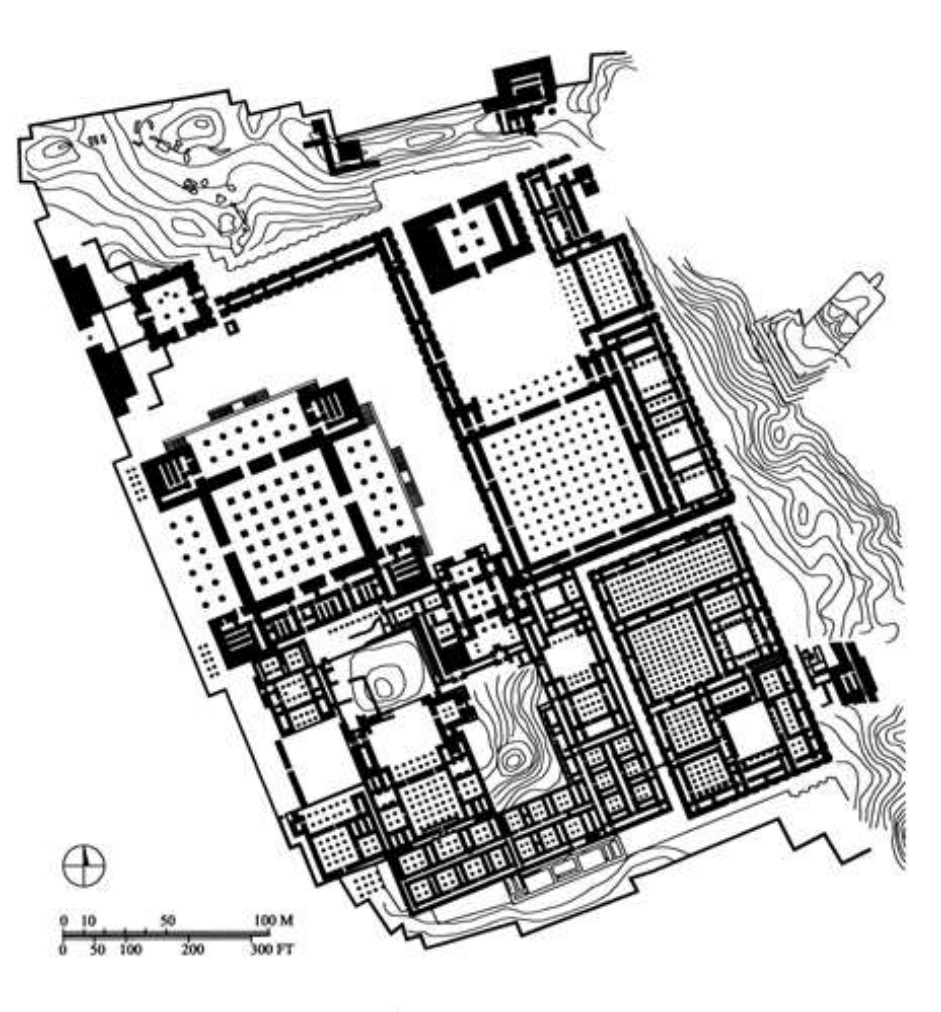
https://youtu.be/U2iZ83oIZH0

Ishtar Gate (restored), Babylon, Iraq, ca. 575 BCE. Glazed brick. 47' high 32' wide Staatliche Museen, Berlin.

Persian: Achaemenid Period
6-4th c. BCE (Iron Age)

The Persians are an Iranian people who speak the Persian language and share a common culture and history.

Persepolis (royal audience hall – Apadana- in the background), Iran, ca. 521–465 BCE. It was founded by Darius as a ceremonial capital



Plan of the palace at Persepolis, begun ca. 518 B.C.E.

- **This great complex was created by at least three Persian monarchs as one of the capitals of the Persian empire.**
- **Its ruins reveal architectural influences from other cultures in Mesopotamia, notably the Hittites and Assyrians, as well as the Egyptians.**

• **The Apadana had seventy-two columns, each is 19 m high. They carried the weight of the vast and heavy ceiling.**

• **The capitals were made from animal sculptures such as two headed bulls, lions and eagles. The columns were joined to each other with the help of oak and cedar beams, which were brought from Lebanon.**

Capital: Decorative element at the upper part of a column or pier.

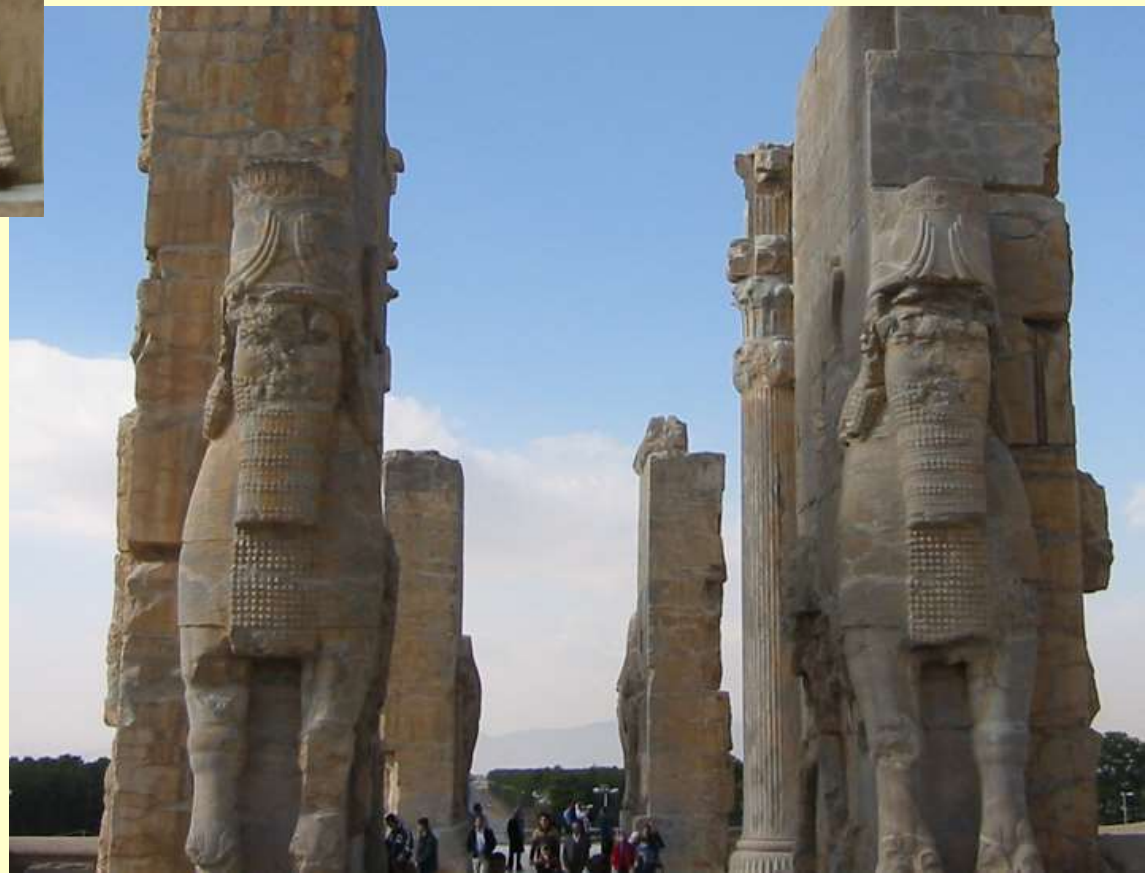
Capital of a column of the Audience hall (Apadana) at Louvre, Paris

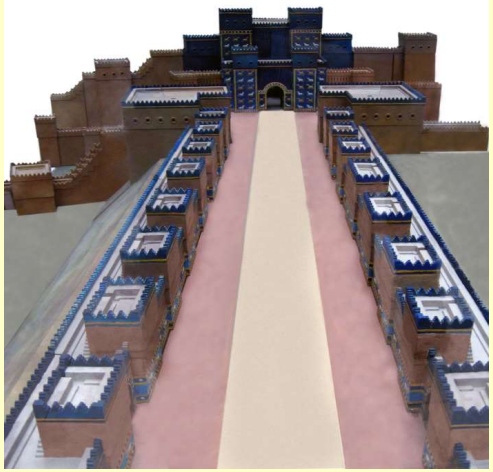
Double griffin (lion and eagle together)

Comparison:

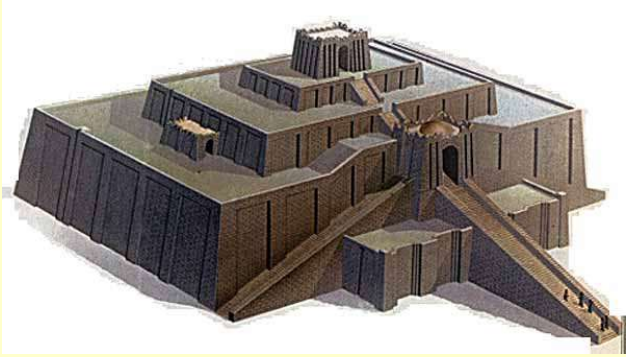
Lamassu (winged, human-headed bull), from the citadel of Sargon II, Khorsabad, Iraq, ca. 720–705 BCE. Limestone, approx. 13' 10" high. Louvre, Paris.

The Gate of All Nations. Persepolis





Neo Babylonian: Ishtar Gate and Processional Way. Babylon.

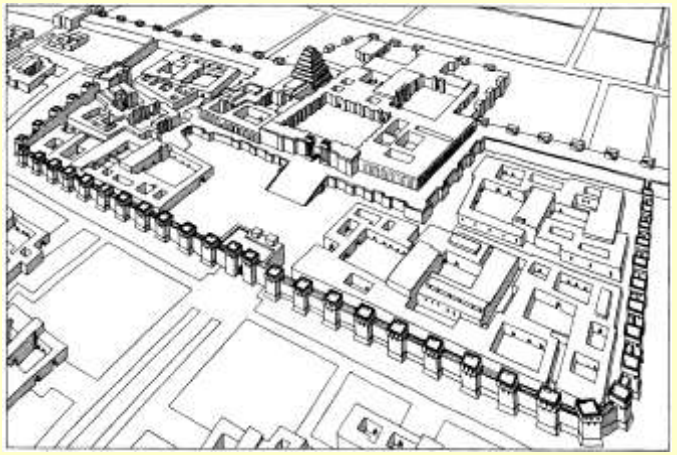


Sumerian: Model of the Ziggurat at Ur.

How did the buildings/structures that were built in the ancient Near East suit their religious and social purpose as well as military defense purpose? (Think about who built them, how they were used, and the propaganda they served).

The citadel of Sargon II
Khorsabad, Iraq, ca. 720–705 BCE.

The Gate of All Nations. Persepolis



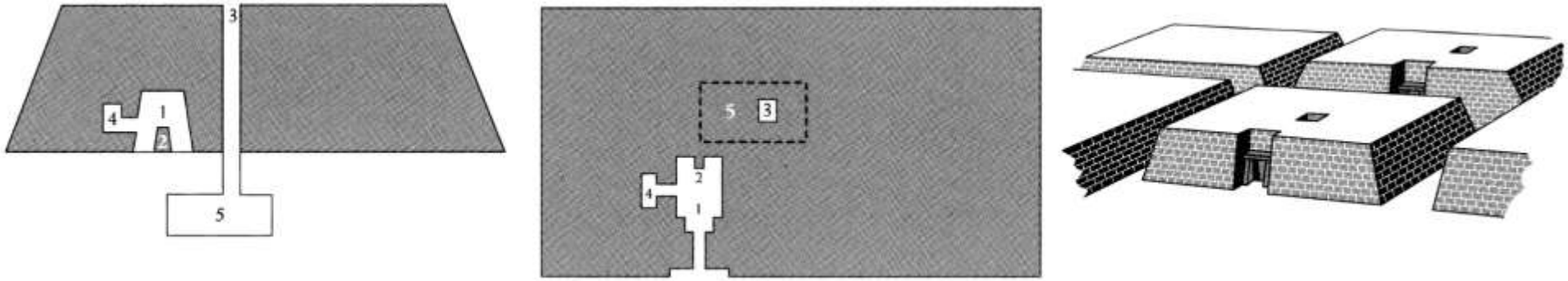
Ancient Egypt

Ka: An individual's vital force, the total of the hereditary qualities received from one's ancestors. the ka was sustained through food and drink. though it was the kau of the food that was consumed, not the physical aspect.

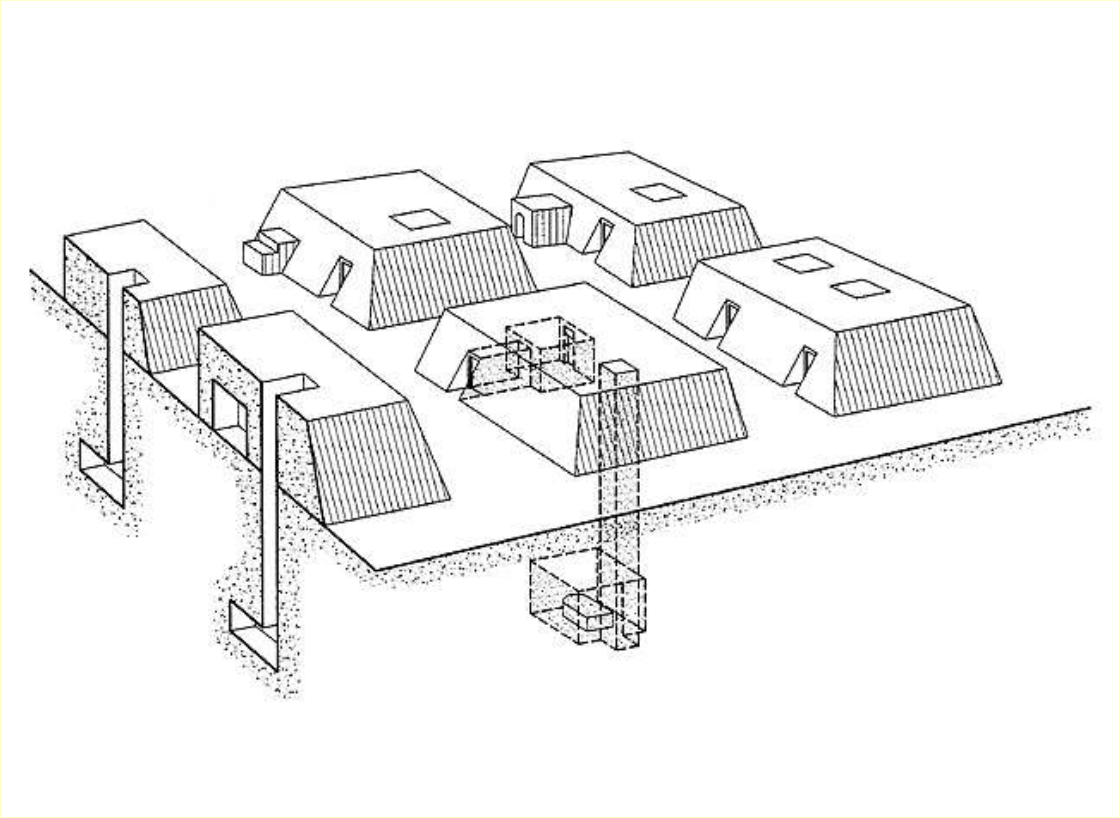
False door (or Ka door) of Shery from his Saqqara Mastaba. Fourth dynasty

Mastaba: A tomb with a rectangular base, sloping sides, and a flat roof.

Mastaba tombs. Section (left), plan (center), and restored view (right).



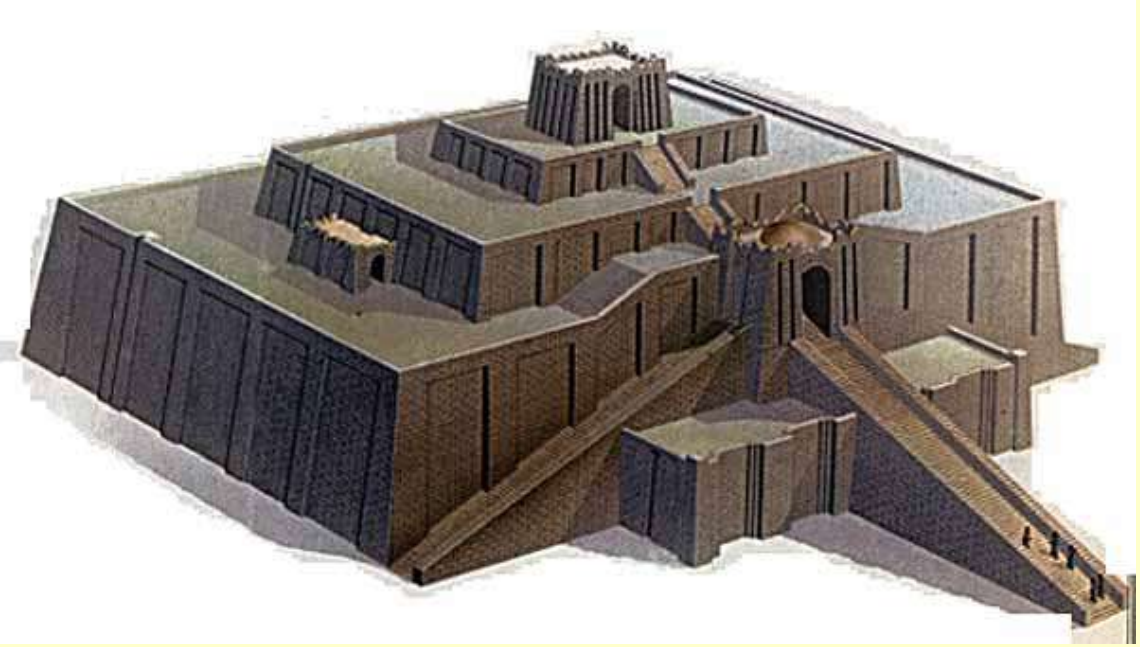
1. Chapel 2. False door 3. Shaft into burial chamber 4. Serdab (chamber for statue of deceased) 5. Burial chamber



Drawing of mastaba tombs, showing the burial chamber beneath the structure and the small chambers provided at ground level for offerings to the spirit of the deceased.

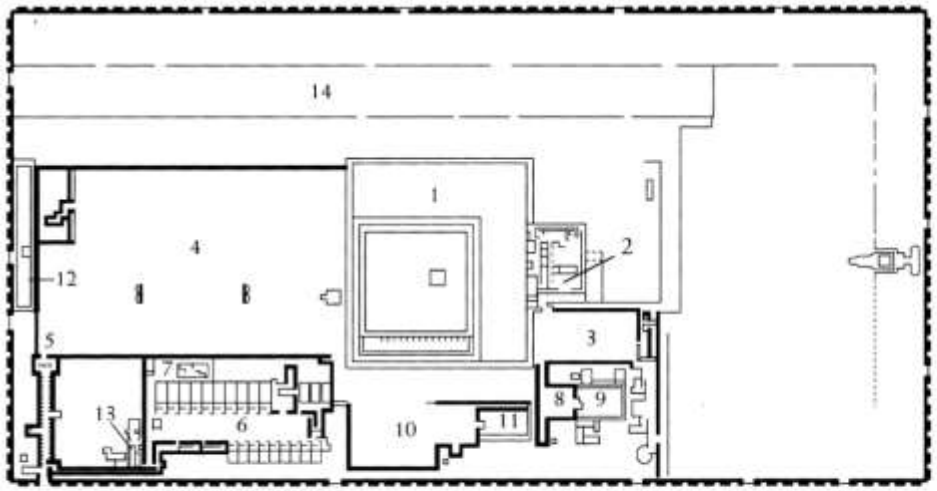
It is thought that these tombs, constructed of sun-dried brick or stone, were based on the designs of actual dwellings constructed in less durable materials.

IMHOTEP, **Stepped Pyramid and mortuary precinct of Djoser**, Saqqara, Egypt, Dynasty III, ca. 2630–2611 BCE.

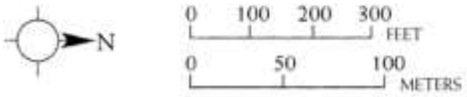


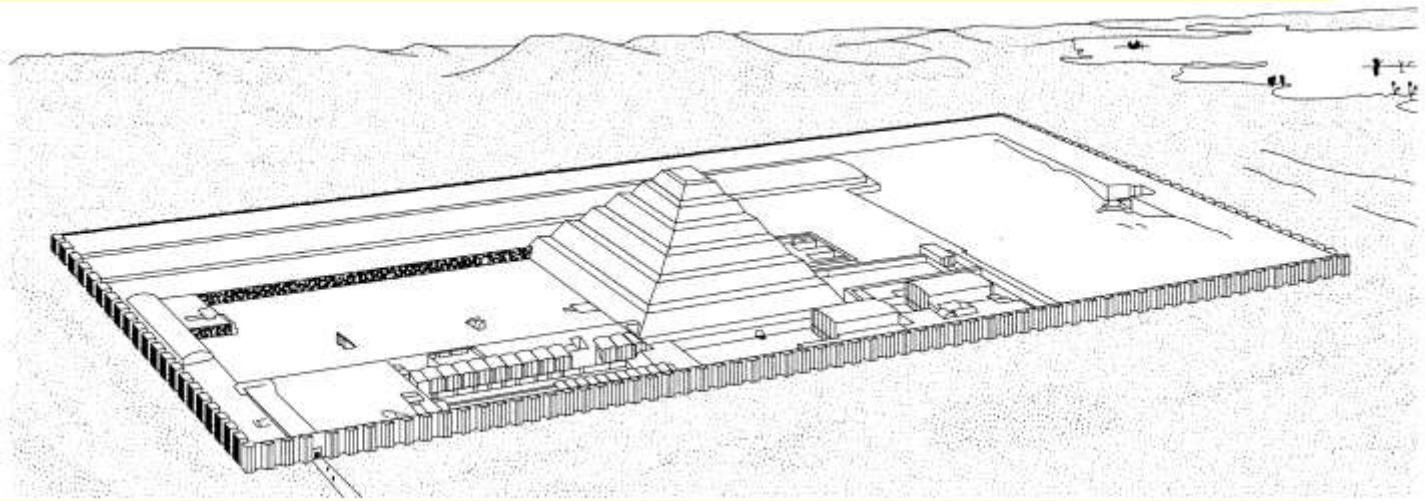
Comparison: Ziggurat, Ur
Iraq, ca. 2100 BCE. Mud
bricks. 50' high.

IMHOTEP, **Stepped Pyramid and mortuary precinct of Djoser**, Saqqara, Egypt, Dynasty III, ca. 2630–2611 BCE.

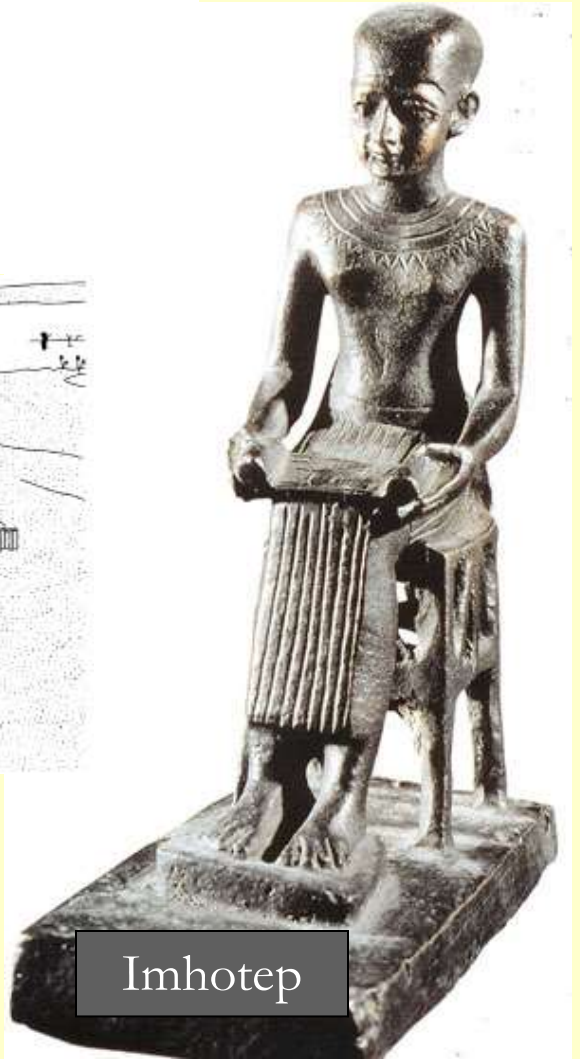


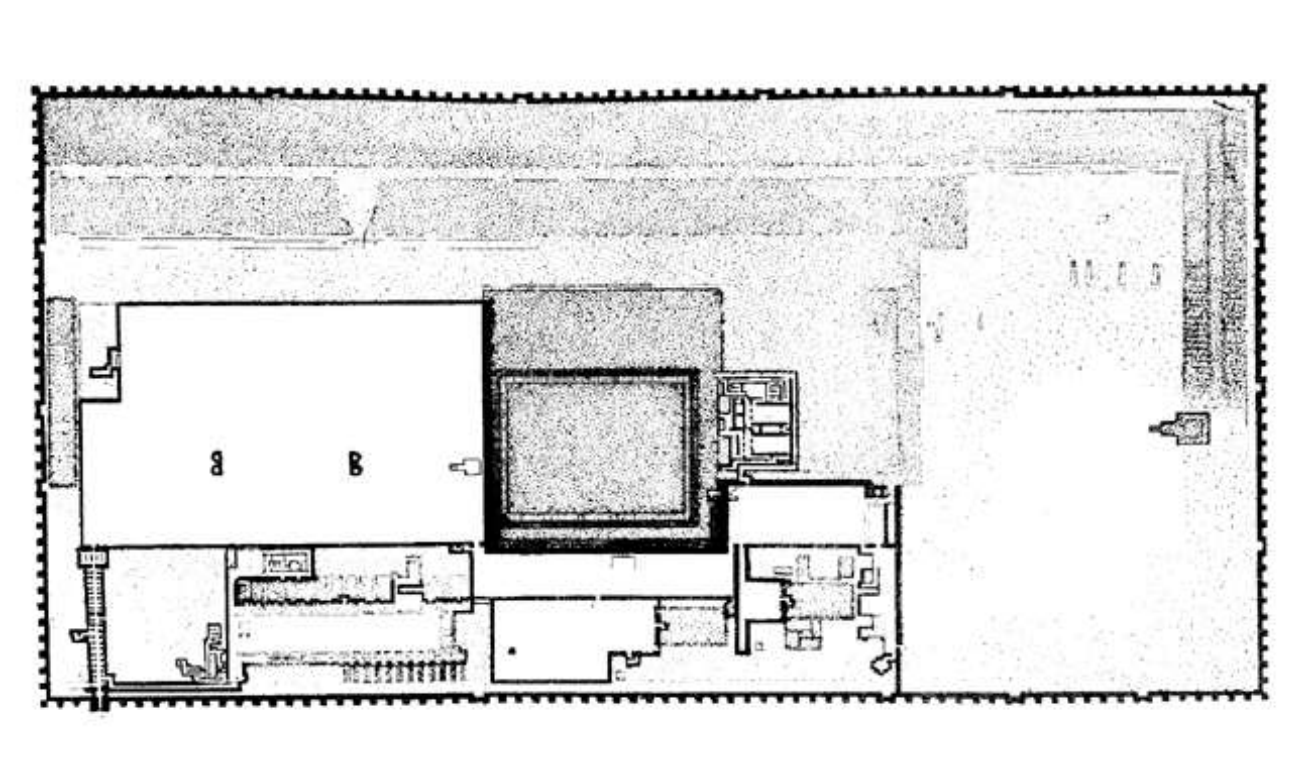
1. Stepped pyramid derived from square-plan mastaba
2. Funerary temple of Djoser
3. Court with serdab
4. Large court with altar and two B-shaped stones
5. Entrance portico
6. Heb-Sed court flanked by sham chapels
7. Small temple
8. Court before North Palace
9. North Palace
10. Court before South Palace
11. South Palace
12. South tomb
13. Royal Pavilion
14. Magazines





Mortuary precinct of Djoser
Restored plan (top) and view (bottom).
Saqqara, Egypt, Dynasty III, ca. 2630–2611 BCE.





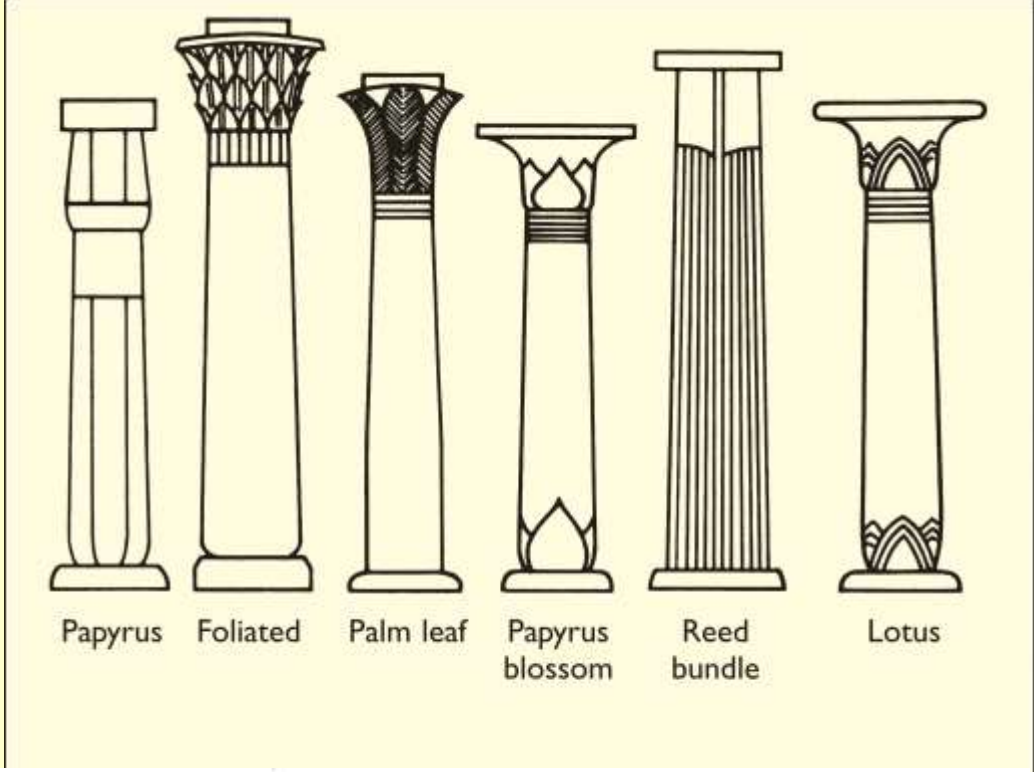
Plan of Djoser's funerary complex at Saqqara, ca. 2700 B.C.E. The step pyramid is the rectangular element in the center, dominating a great court accessed through the narrow corridor passage at the lower left. Smaller courtyards to the south were formed by buildings thought to resemble the actual palace in which Djoser lived. A mile-long perimeter wall enclosed all the buildings.

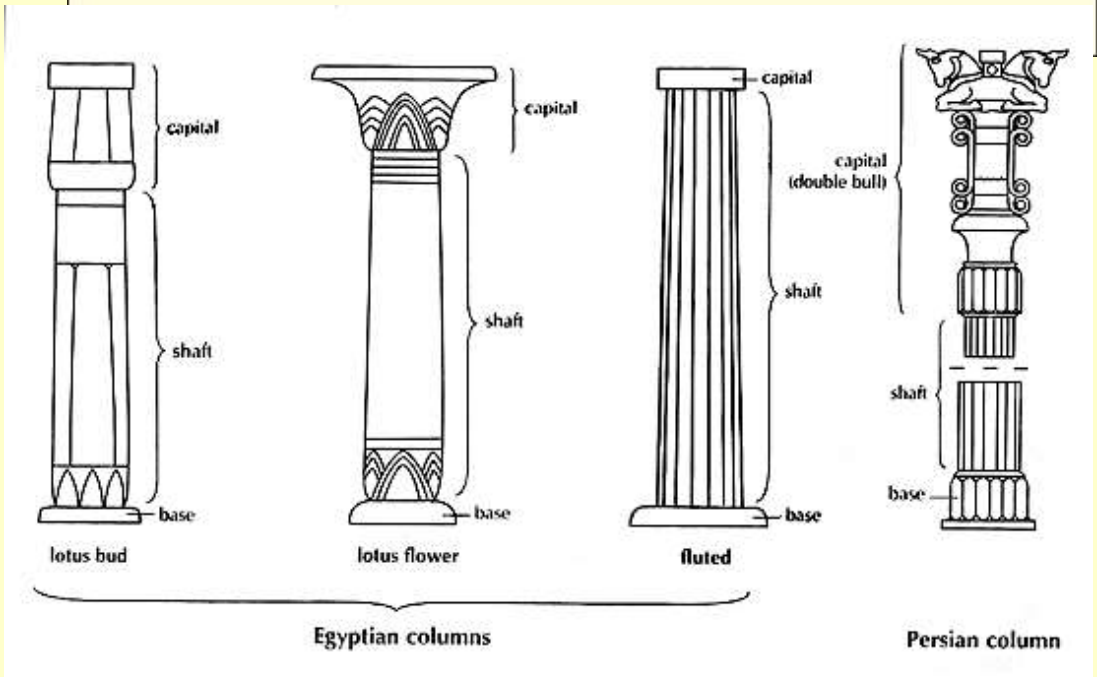
Columnar entrance corridor to the mortuary precinct of Djoser

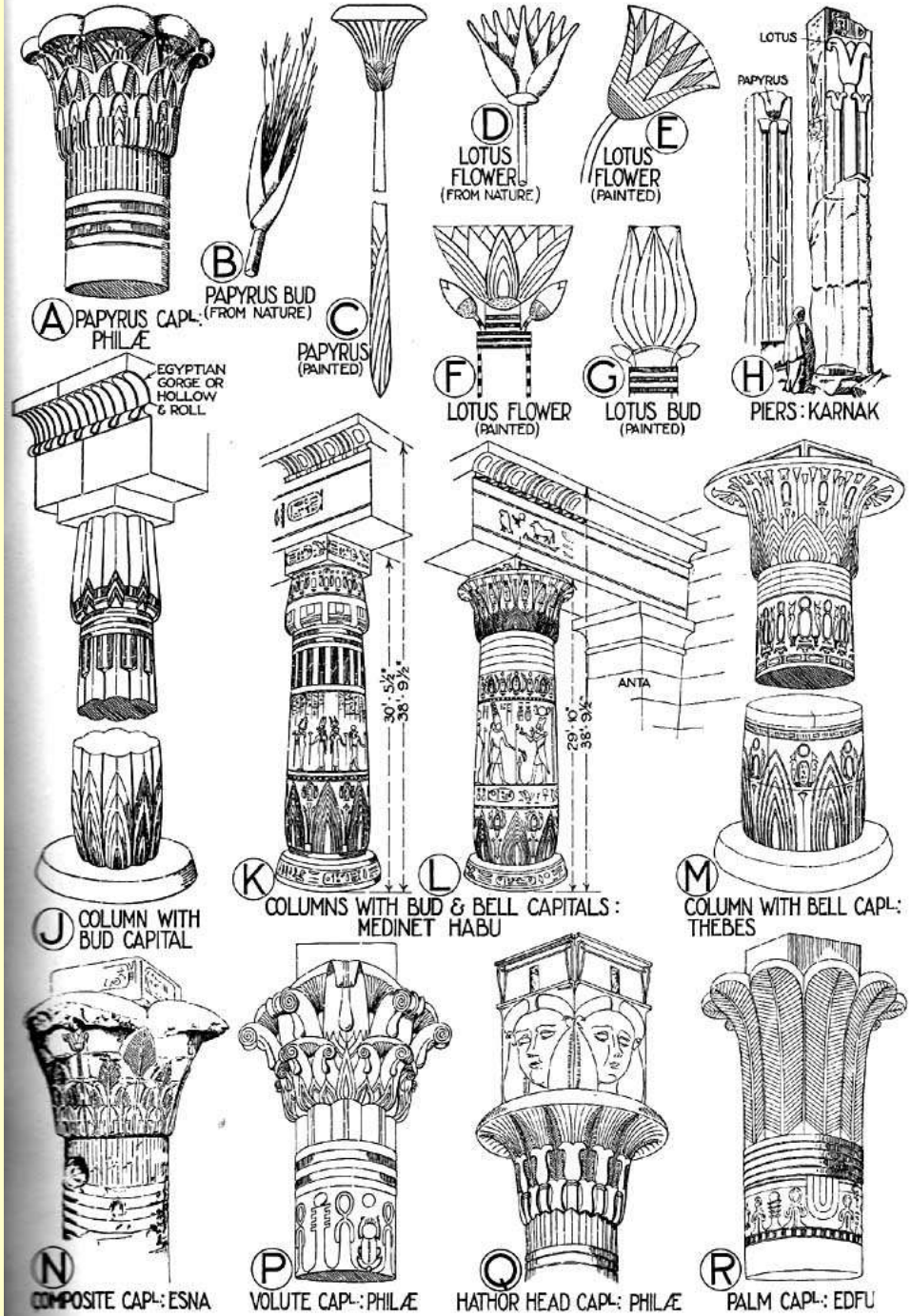
Saqqara, Egypt, Dynasty III, ca. 2630–2611 BCE.

Facade of the North Palace of the mortuary precinct of Djoser, Saqqara, Egypt, Dynasty III, ca. 2630–2611 BCE.

Pharaoh Seti I presenting papyrus (left) and lotus flowers (right) to Geb and Nut From Seti I Temple at Abydos.






A PAPYRUS CAPL.: PHILÆ
B PAPYRUS BUD (FROM NATURE)
C PAPYRUS (PAINTED)
D LOTUS FLOWER (FROM NATURE)
E LOTUS FLOWER (PAINTED)
F LOTUS FLOWER (PAINTED)
G LOTUS BUD (PAINTED)
LOTUS
PAPYRUS
H PIERS: KARNAK
EGYPTIAN GORGE OR HOLLOW & ROLL
J COLUMN WITH BUD CAPITAL
30'-5½"
38'-9½"
K
29'-10"
38'-9¾"
ANTA
L
COLUMNS WITH BUD & BELL CAPITALS: MEDINET HABU
M COLUMN WITH BELL CAPL.: THEBES
N COMPOSITE CAPL.: ESNA
P VOLUTE CAPL.: PHILÆ
Q HATHOR HEAD CAPL.: PHILÆ
R PALM CAPL.: EDFU

The Old Kingdom
Dyn. IV-VIII

26^{th} – 22^{nd} c. BCE
(Bronze Age)

Pyramid of Khufu:

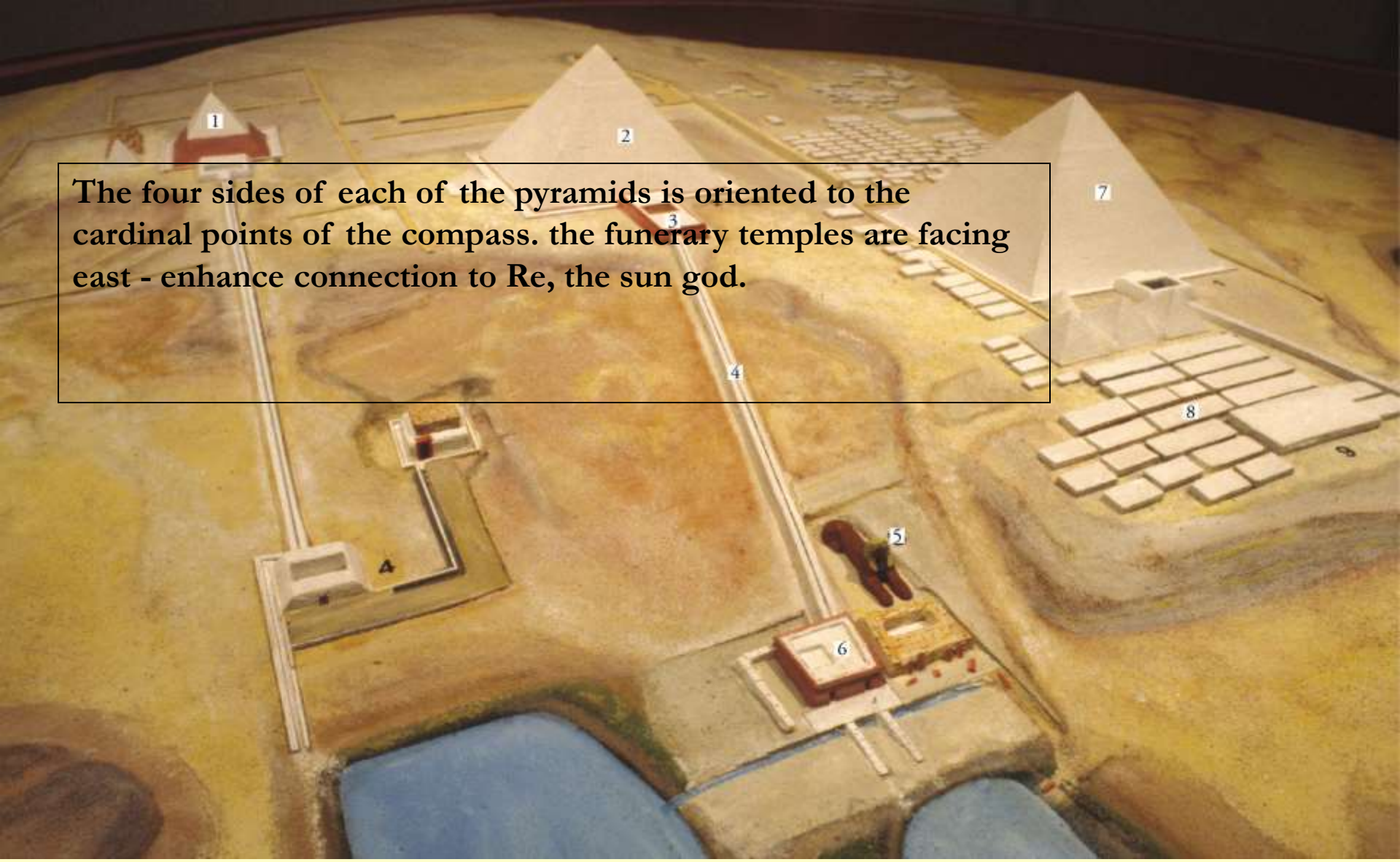
Length of one side - 775 feet.

Area - 13 acres

height - 450' (originally 480')

2.3 million blocks of stone, each 2.5 tons

Great Pyramids, Gizeh, Egypt, Dynasty IV. From left: Pyramids of Menkaure, ca. 2490–2472 BCE; Khafre, ca. 2520–2494 BCE; and Khufu, ca. 2551–2528 BCE.



Model of the pyramid complex, Gizeh, Egypt. Harvard University Semitic Museum. 1. Pyramid of Menkaure, 2. Pyramid of Khafre, 3. Mortuary temple of Khafre, 4. Causeway, 5. Great Sphinx 6. Valley temple of Khafre, 7. Pyramid of Khufu, 8. Pyramids of the royal family and mastabas of nobles.

Great Pyramids, General view from NW: Khufu, Khafre, Menkaure

Pyramid of Khafre,

(with white limestone cap.)

Gizeh, Egypt, Dynasty IV ca. 2520–2494 BCE

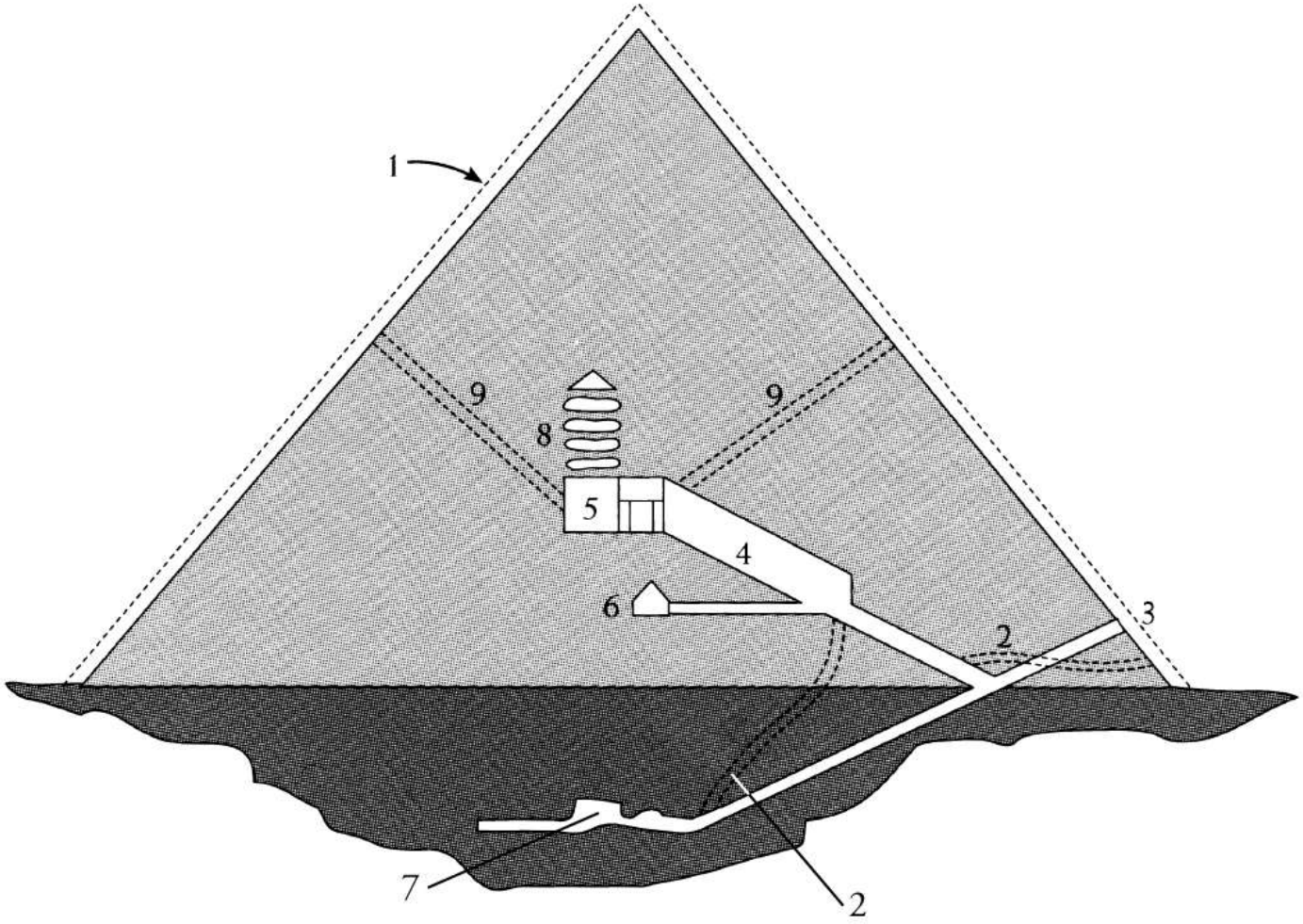
Section of the Pyramid of Khufu, ca. 2551–2528 BCE

Length of one side - 775 feet.

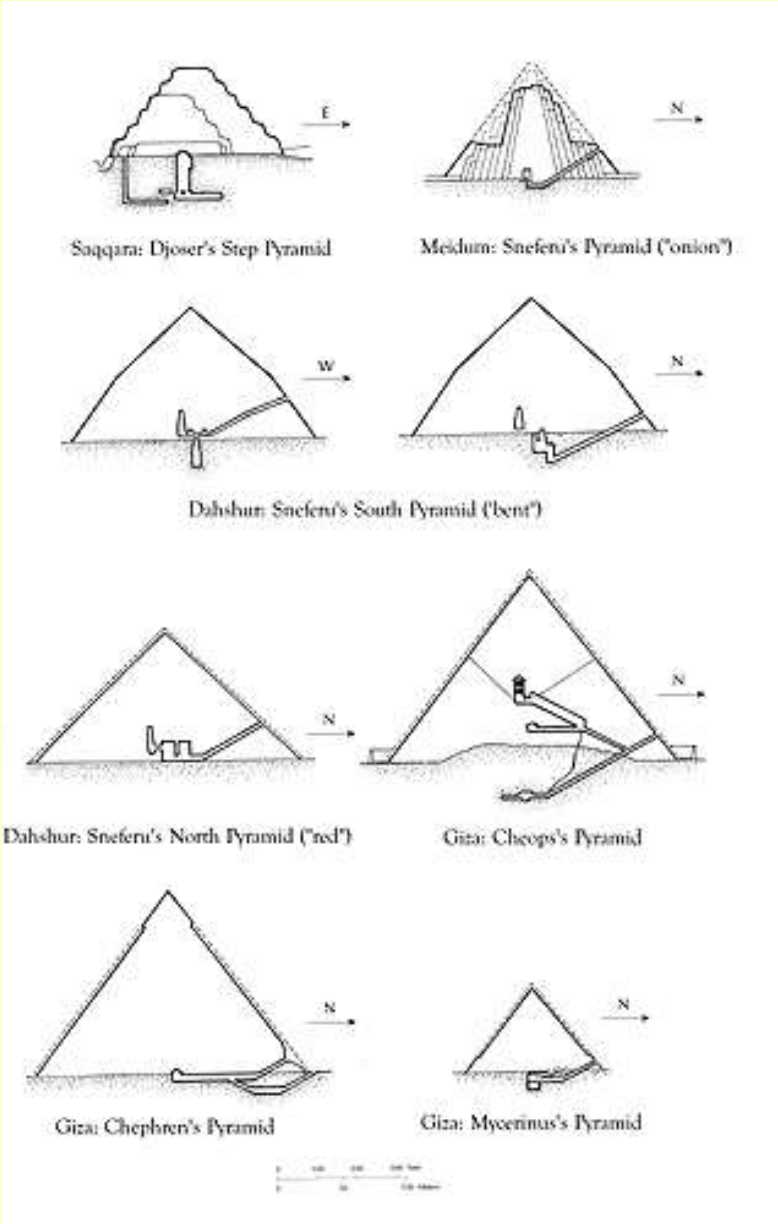
Area - 13 acres

height - 450’

2.3 million blocks of stone, each 2.5 tons

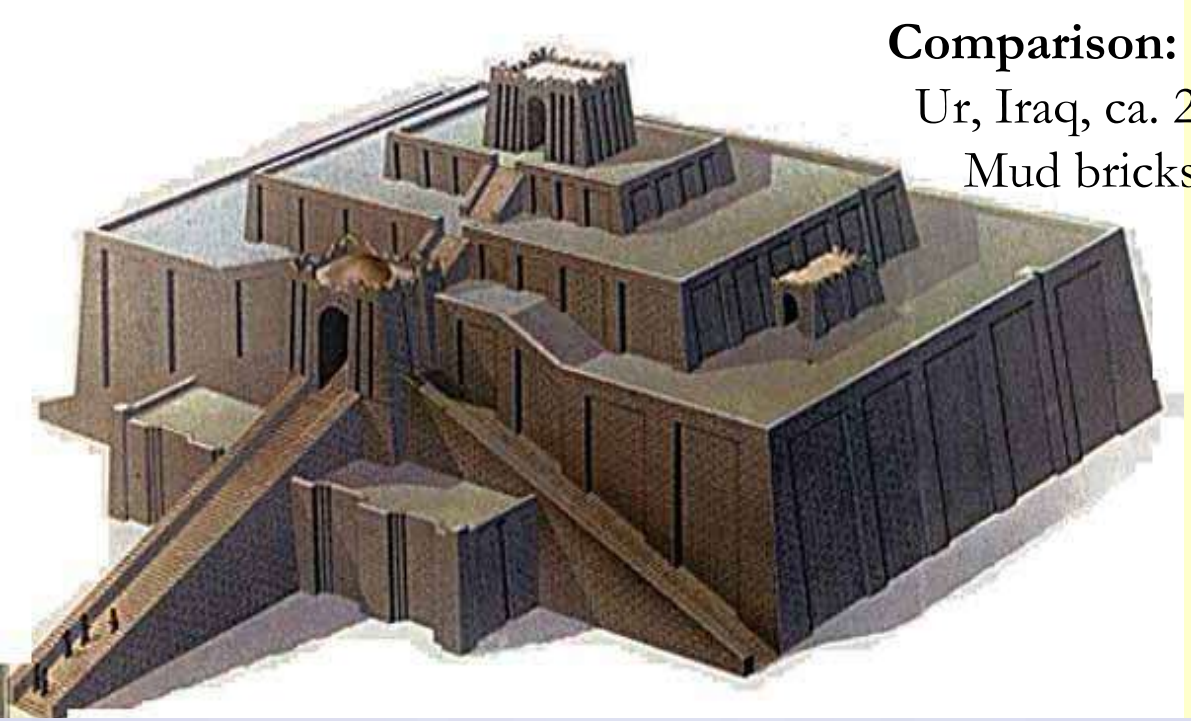


1. Silhouette with original facing stone
2. Thieves’ tunnels
3. Entrance
4. Grand gallery
5. King’s chamber
6. So-called Queen’s chamber
7. False tomb chamber
8. Relieving blocks
9. Airshafts(?)



Scaled sketches of the Pyramids at Dashur and Giza. These drawings indicate the relative sizes of the major pyramids from the Fourth Dynasty.

That of Cheops (Khufu) remains the largest pile of stones ever assembled.



Comparison: Ziggurat
Ur, Iraq, ca. 2100 BCE
Mud bricks. 50' high

Pyramid of Khufu:

Length of one side - 775 feet.

Area - 13 acres

height - 450' (originally 480')

2.3 million blocks of stone, each 2.5 tons

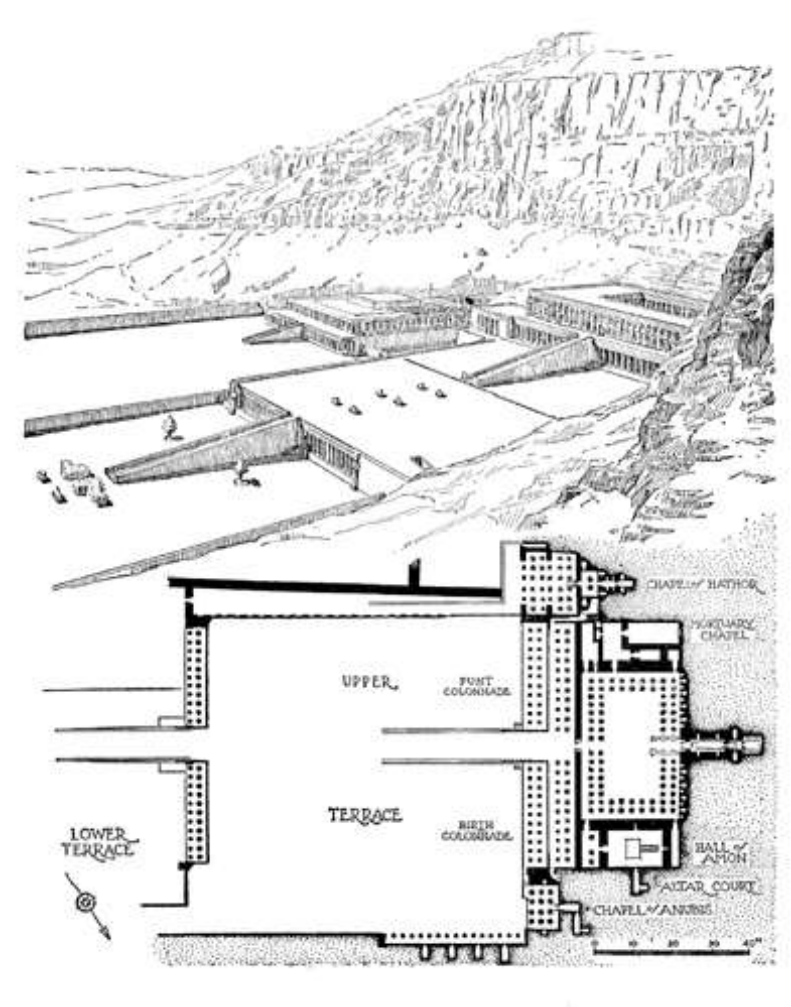
Great Pyramids, Gizeh, Egypt, Dynasty IV. From left: Pyramids of Menkaure, ca. 2490–2472 BCE; Khafre, ca. 2520–2494 BCE; and Khufu, ca. 2551–2528 BCE.

The New Kingdom
Dyn. XVII-XX

16th-11th c. BCE
(Bronze Age)

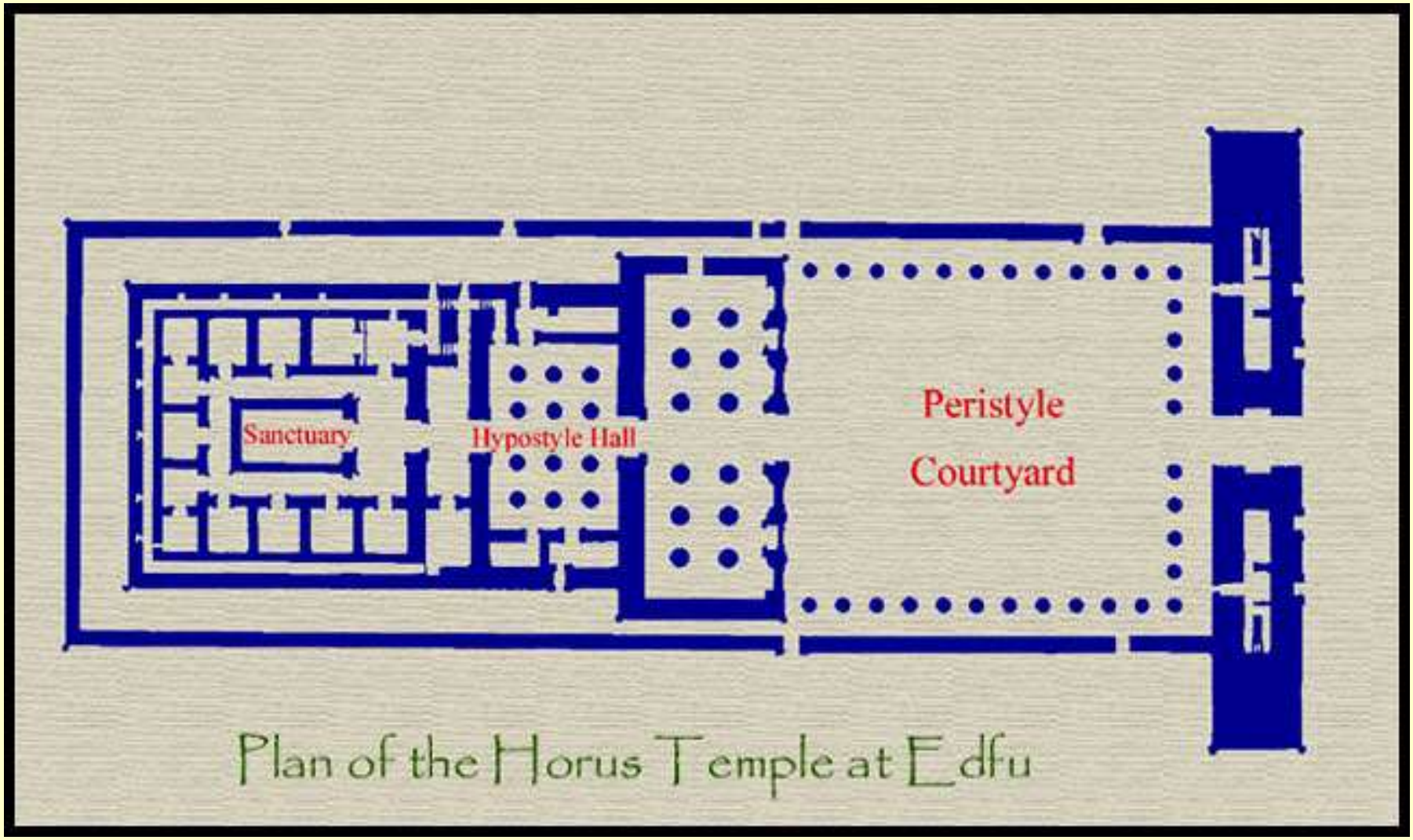
Hatshepsut with offering jars
ca. 1473–1458 BCE.
Red granite, approx. 8’ 6” high.

Mortuary temple of Hatshepsut (with the mortuary temple of Mentuhotep II at left), Deir el-Bahri, Egypt, Dynasty XVIII, ca. 1473–1458 BCE.



View and plan of Hatshepsut's Mortuary Temple at Deir-al-Bahari.

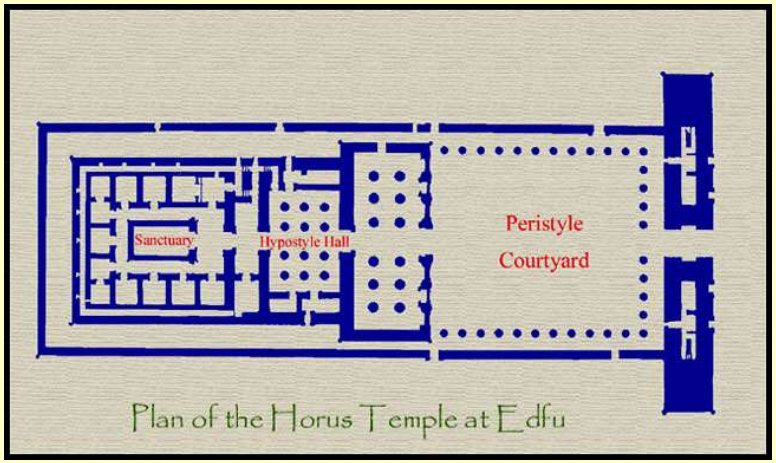
To thwart thieves, New Kingdom pharaohs arranged for their bodies to be buried in concealed tombs in the Valley of the Kings (behind these cliffs) where priests guarded against robbers.

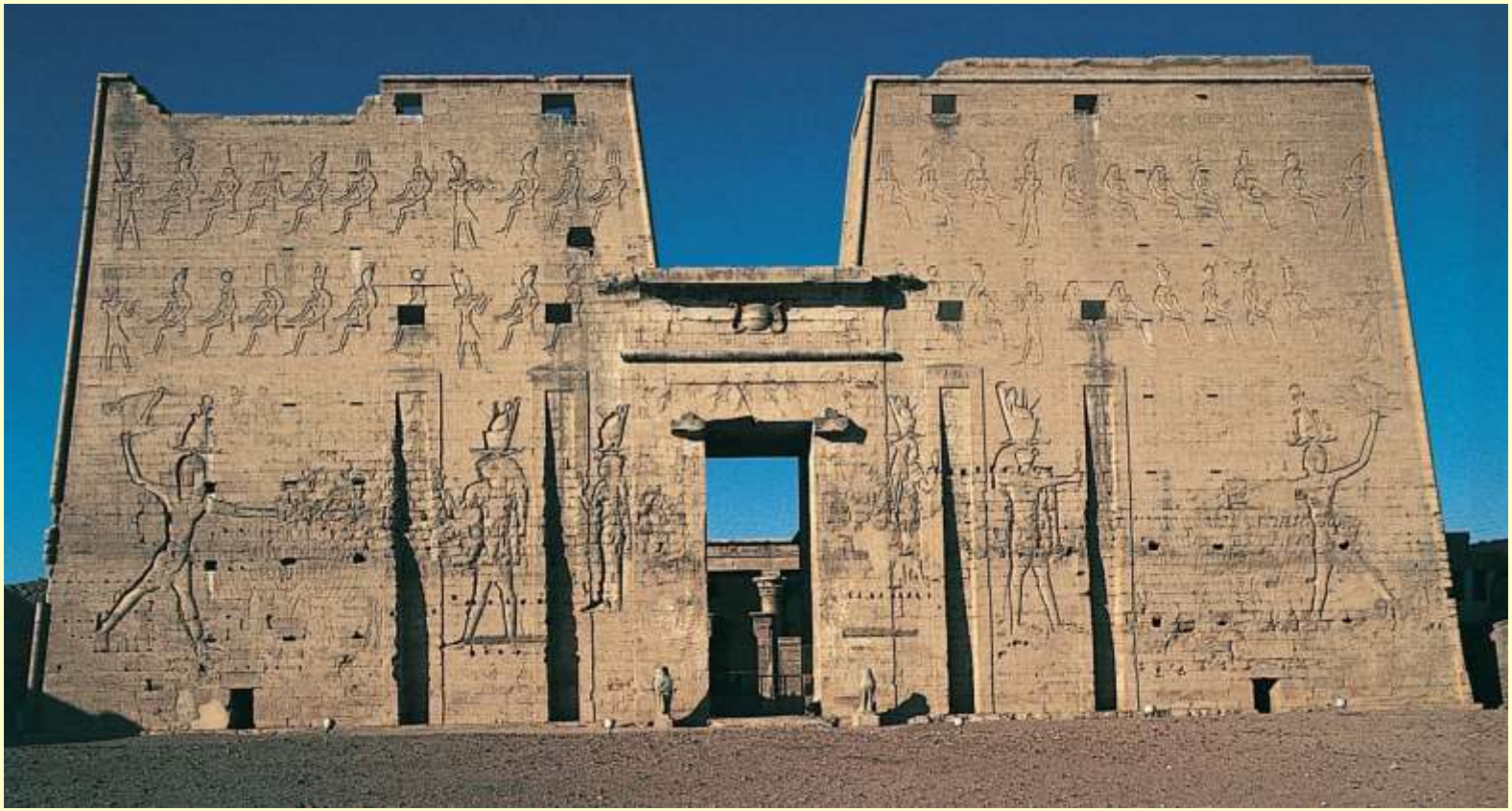


Hypostyle Hall: A hall with a roof supported by columns.

Peristyle Courtyard: Courtyard surrounded by columns.

Pylon: Monumental gateway to an Egyptian temple, consisting of a pair of tower structures with slanting walls flanking the entrance portal.





Temple of Horus, Edfu, Egypt, ca. 237–47 BCE.

Model of Hypostyle Hall. Temple of Amen-Ra. Karnak.
c. 1290-1224. Metropolitan Museum of Art. NY

Hypostyle hall, temple of Amen-Re,
Karnak, Egypt, Dynasty XIX,
ca. 1290–1224 BCE.

Hypostyle hall, temple of Amen-Re
(closed & open papyrus capitals and clerestory window.)

Entrance Pylon & Obelisk of Ramses II.
Luxor. c. 1290 BCE-1224 BCE
Limestone

Obelisk:

A four-sided tapering pillar of stone with a triangular top. Obelisks were based on the shape of the benben, the sacred stone of the sun god in the city of Heliopolis

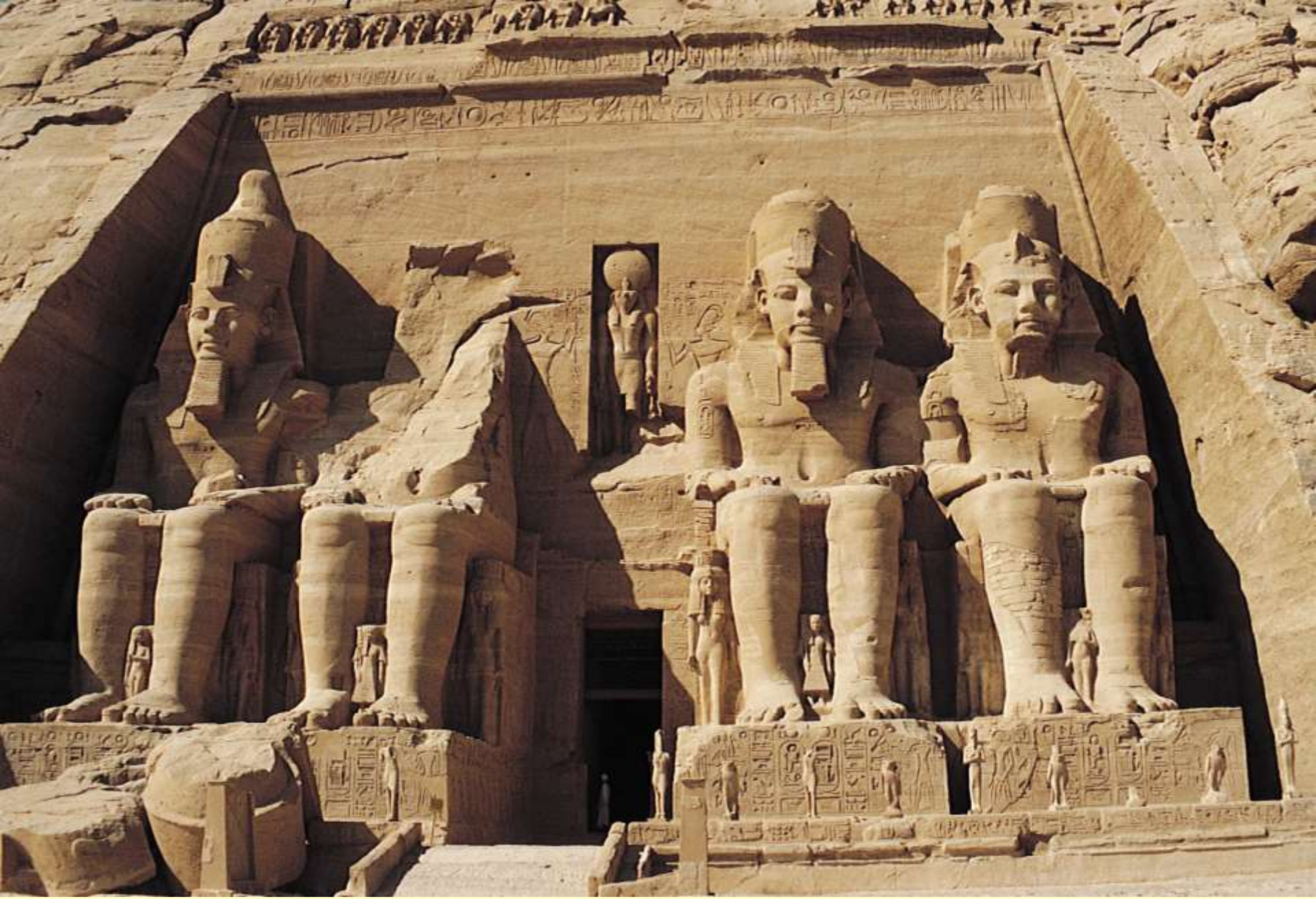
Ramses II, Abu Simbel.
1290–1224 BCE.

Ramesses II (also known as **Ramesses the Great**) reigned for 67 years. During his long reign, eight women held the title Great Royal Wife (often simultaneously).

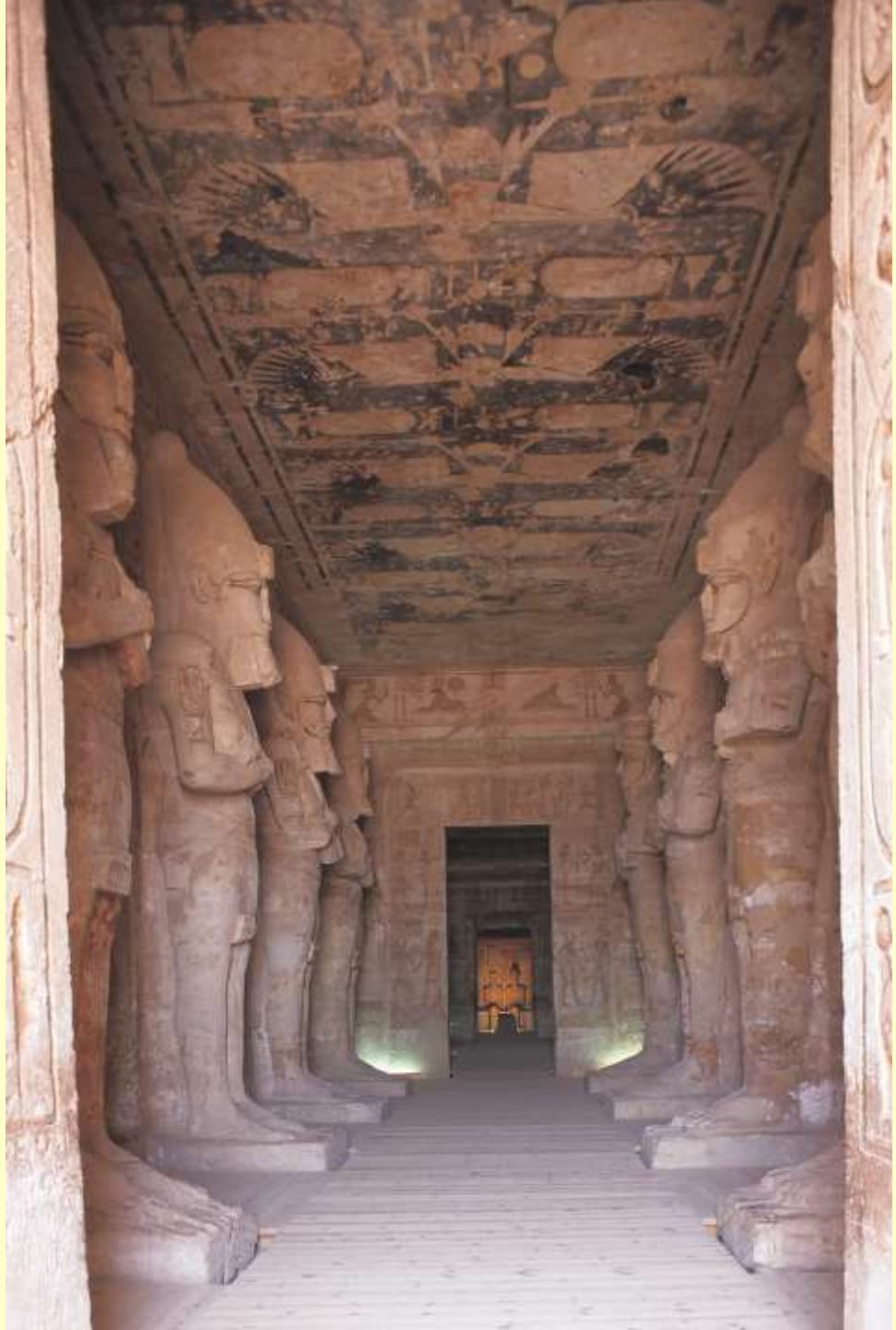
He had around 110 children .

Under him Egypt acquired unprecedented splendor. Ramses left monuments throughout Egypt.

Temple of Ramses II, Abu Simbel, Egypt, Dynasty XIX, ca. 1290–1224 BCE.
View of rock-cut façade fr SE (moved to higher ground in 1960s)



Temple of Ramses II, Abu Simbel, Egypt, Dynasty XIX, ca. 1290–1224 BCE.
Sandstone, colossi approx. 65’ high.



Interior of the temple of Ramses II, Abu Simbel (now relocated), Egypt, Dynasty XIX, ca. 1290–1224 BCE. Sandstone, pillar statues approx. 32' high.