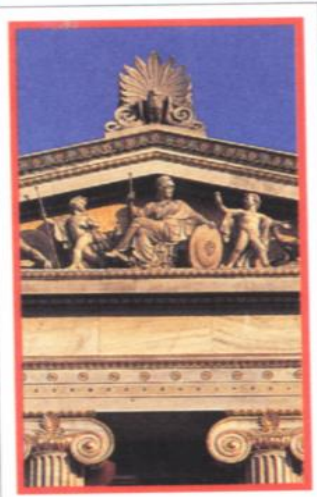




The Central Lands of the Greek World



Peninsula – West – Asia Minor-
Main Peninsula- dotted islands
Terrain – hilly – clans- Rivalry.
Climate – Mild winter – warm sunny summer
Moderate rainfall- sudden showers – dust proof atmosphere – blue skies- mediterranean blue seas



- **Geological–
Limestone –stucco – marble powder**
- **Marble- Fine grained – exactness of line, detail**
- **Mountain of Hymerrus,**
- **Athens - Pentelicus**
- **Islands – Paros, Naxos**
- **Timber – roofing**
- **Sundried bricks**

Religion

Natural forces – Gods – Goddesses

Sacrificial Altars – open air

Ritual Dances

Sacred Games

Each town –local heroes, traditions, ceremonies

No regular priesthood

Gods- affected - human desires - failings

GREEK (The twelve Olympians)		ROMAN
Zeus	The supreme god, and ruler of the sky	Jupiter (Jove)
Hera	Wife of Zeus, and goddess of marriage	Juno
Apollo	God of law and reason, art, music and poetry; founder of cities	Apollo
Athena	Goddess of wisdom and learning	Minerva
Poseidon	The sea god	Neptune
Dionysos	God of wine, feasting and revelry	Bacchus
Demeter	Goddess of earth and agriculture	Ceres
Artemis	Goddess of the chase	Diana
Hermes	Messenger of the gods. God of commerce	Mercury
Aphrodite	Goddess of love and beauty	Venus
Hephaestus	God of fire, flame and forge. God of handicrafts	Vulcan
Ares	God of war	Mars

Also: Hestia (Vesta), goddess of the hearth (sacred fire); Helios (Sol), the sun god; Selene (Luna), the moon goddess; Pan (Pan), god of the flocks. Two mortals who became gods were Heracles (Hercules), god of strength and labour, and Asclepius (Aesculapius), god of healing.

Historical

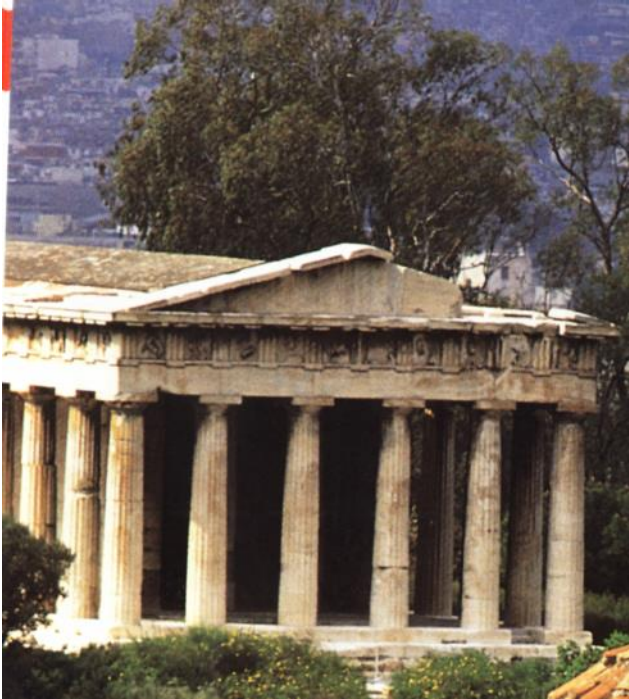
- **Minoan (Crete) –Early, Middle Bronze –**
- **King Minos of Knoss**
- **Mycenae (Helladic Greece) 1400 -1100 B.C.**
- **Late Bronze Age 2000-1580B.C.**
- **Geometric Age (Dorians) 900-725B.C.**
- **Archaic Period 7th – 6thB.C.**
- **Hellenic or Classical Age 480 – 330 B.C.**
- **Hellenistic Period 330 – 150B.C.**
- **Roman Greece**

- **The City Council- rich people,important citizens.**
- **Assembly – elections- Democracy**
- **Stand on a block. – Voting for election – against the person eliminated.**
- **Individual Identity,**
- **City State – Polis**

- **Women –own property, run business, singers, poets.**

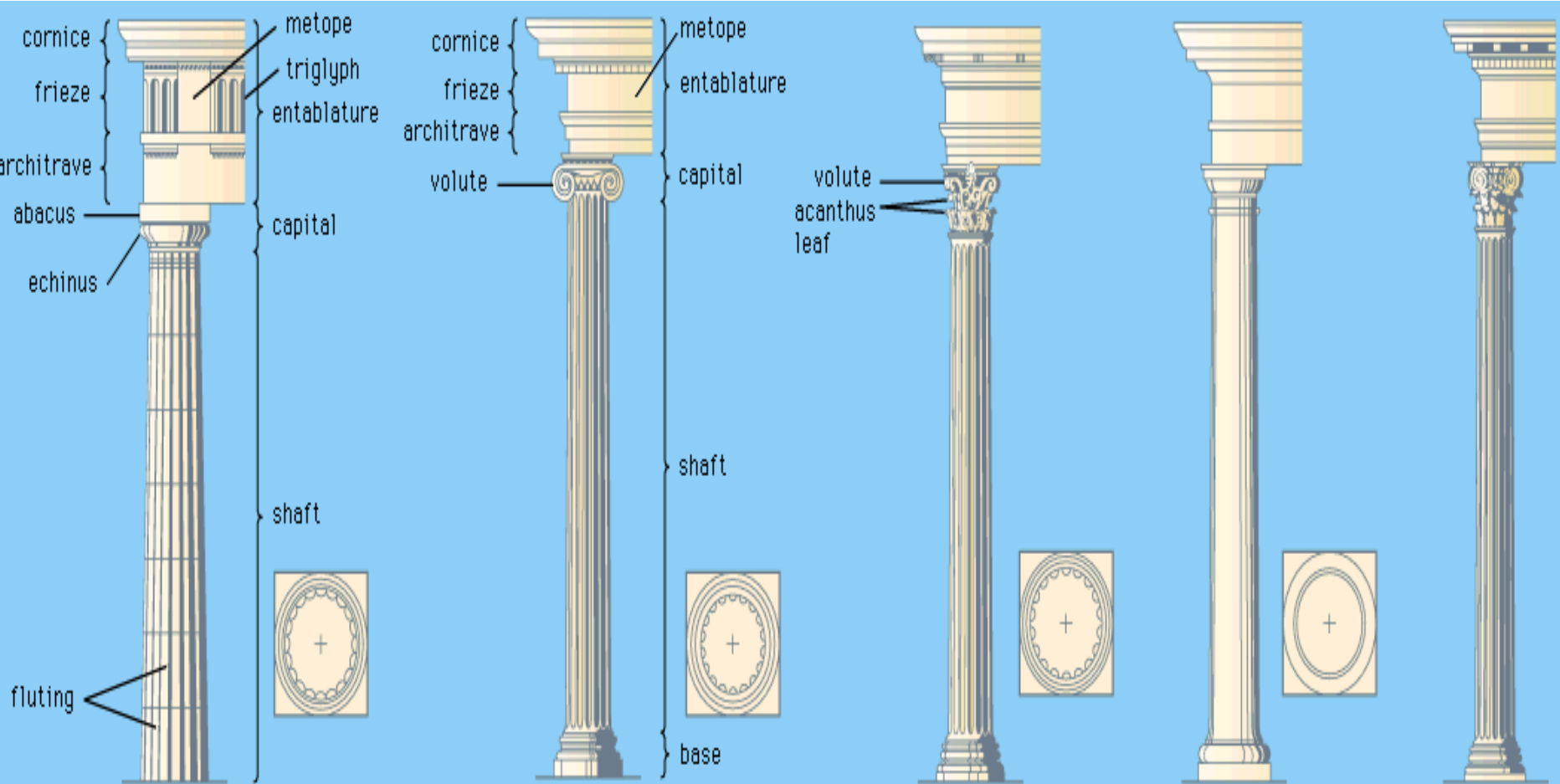
- **Philosophers –discussion – politics, religion. – Socrates, Plato –Academia, 1st University in Athens**
- **Sciences – Pythagoras, Aristotle**
- **Homer – Illiad,Odyssey –Hercules,Ulysses**
- **Alpha, Beta, Gama**
- **Theatres – comedy, tragedy**
- **Orators – Demosthenes**
- **Herodotus – history of Persian Wars.**
- **Law makers**
- **Town Planners**

- Sports – Physical training- Gyms,
- Olympic Games – Zeus temple at Olympia
- Prize – olive wreath – gifts of gold, food.
- Runners, wrestlers, boxers.
- Marathon



- **Traebated Architecture – columns – Beams – Marble**
- **Walls stone – rubble with ashlar, without mortar**
- **Roof Pitch – low-angle of pediment**
- **Ceilings – flat - coffered**

ORDERS - grouped number of parts. Each order consisted of an upright column, base, capital at the head – horizontal member Each order – specific proportions between parts, specific mouldings, distinguishing features.



Doric

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Ionic

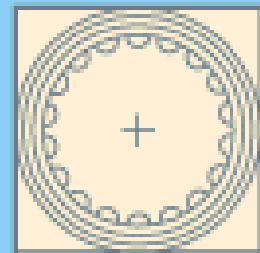
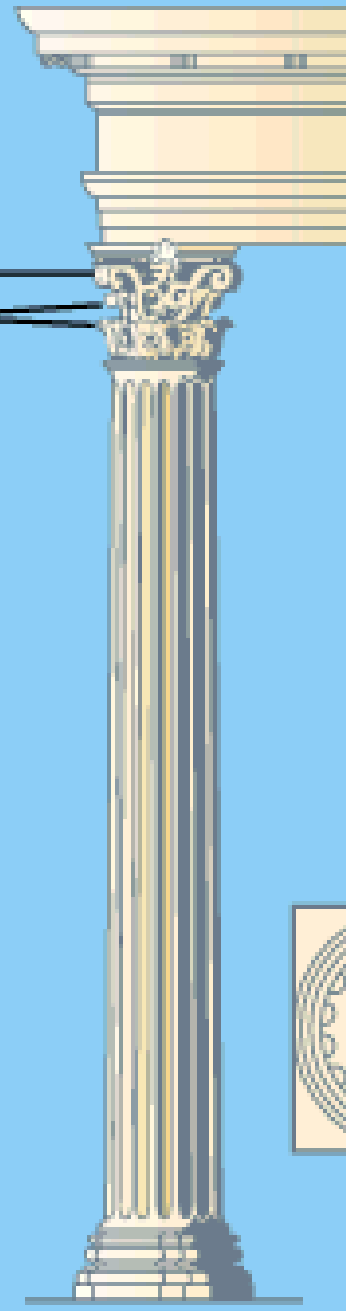
Corinthian

Tuscan

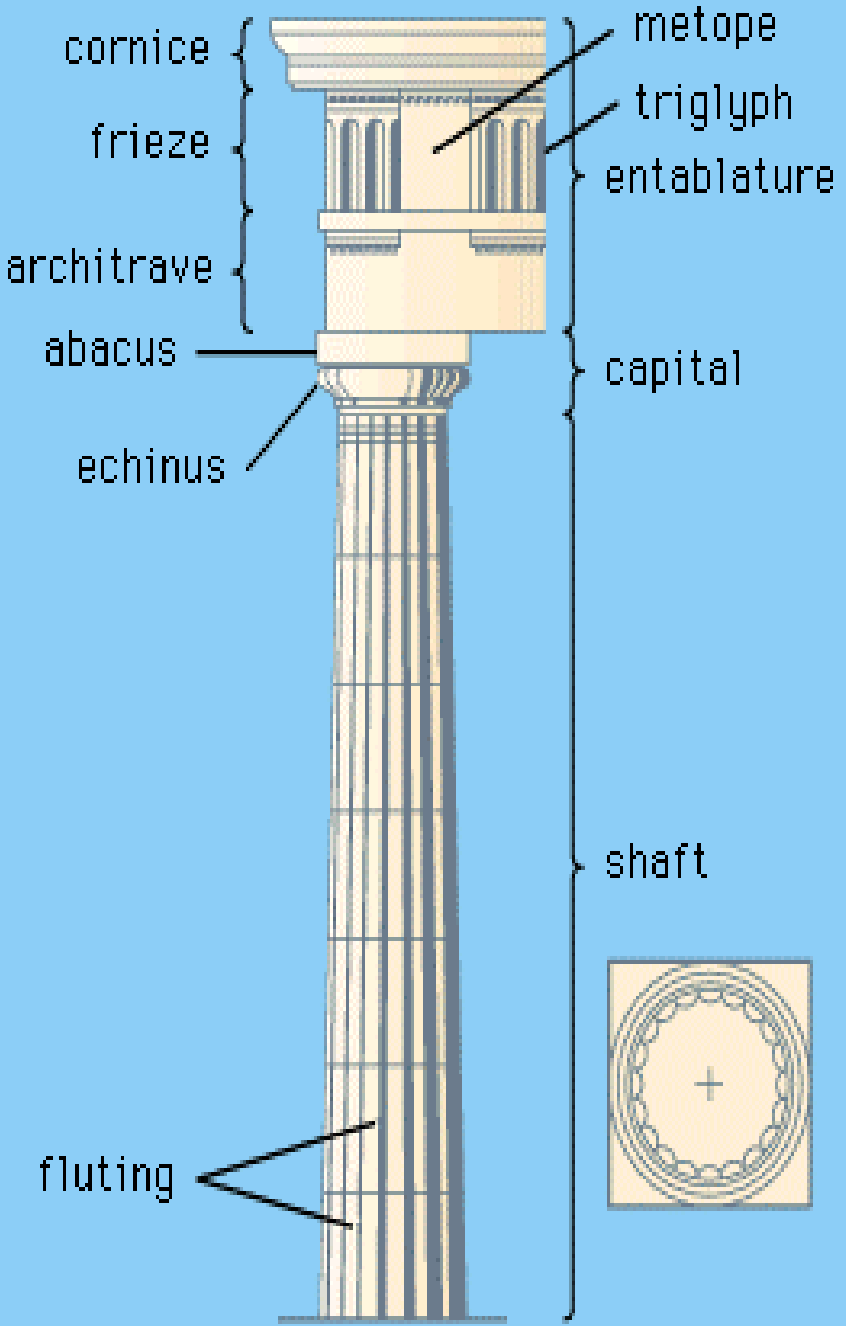
Composite

re corinthian column

volute
acanthus
leaf



Corinthian



Doric

Doric order – crepidoma – on 3 steps, no base.

Height – 4-6 times the Dia

Shaft diminishes – $\frac{3}{4}$ - $\frac{2}{3}$ rd of dia.

20 –shallow flutes – sharp arrises.

Capital –abacus- square block

Echinus- circular base

Necking transition -3 raised rings

Doric architecture – linear, geometrical.

Play of light and shadow

Acroteria – large sculptural pieces
Above –centre, corners -pediment

Doric temples were surrounded by sturdy columns with plain capitals and no bases. As the earliest style of stone buildings, they recall wooden prototypes.

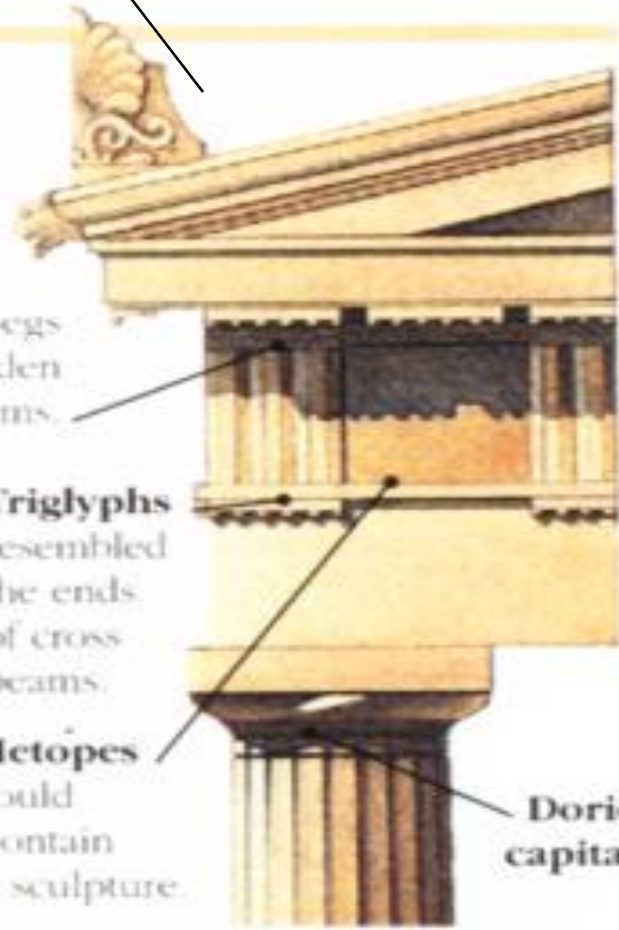
Triangular pediment filled with sculpture

Guttae imitated the pegs for fastening the wooden roof beams.

Triglyphs resembled the ends of cross beams.

Metopes could contain sculpture.

Doric capital



Ionic temples differed from Doric in their

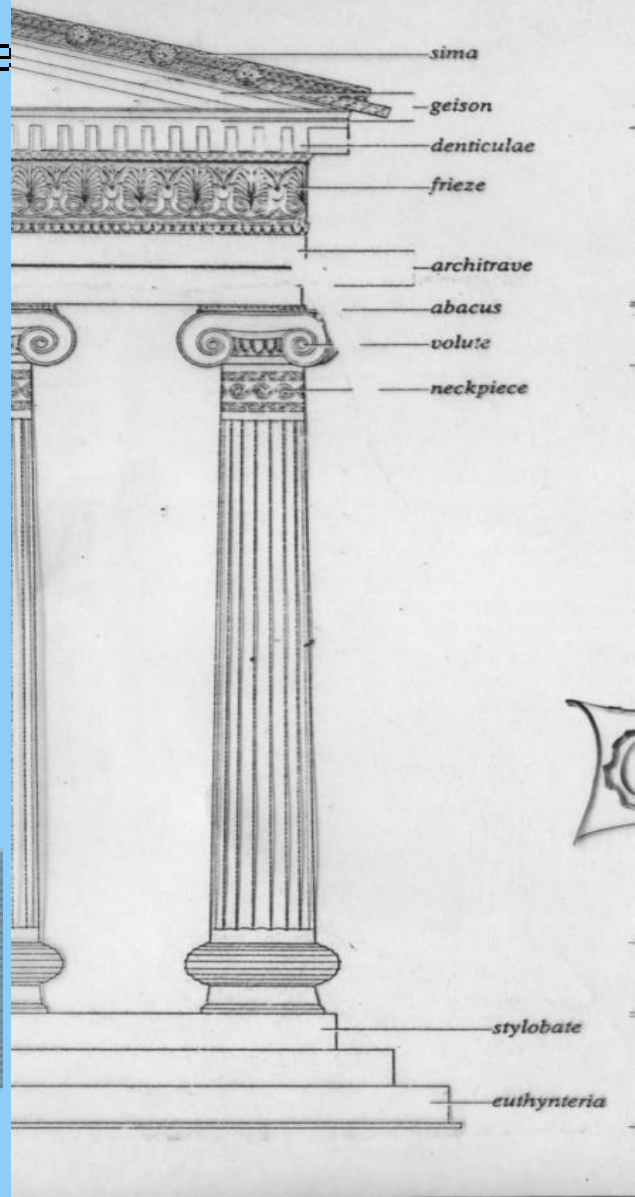
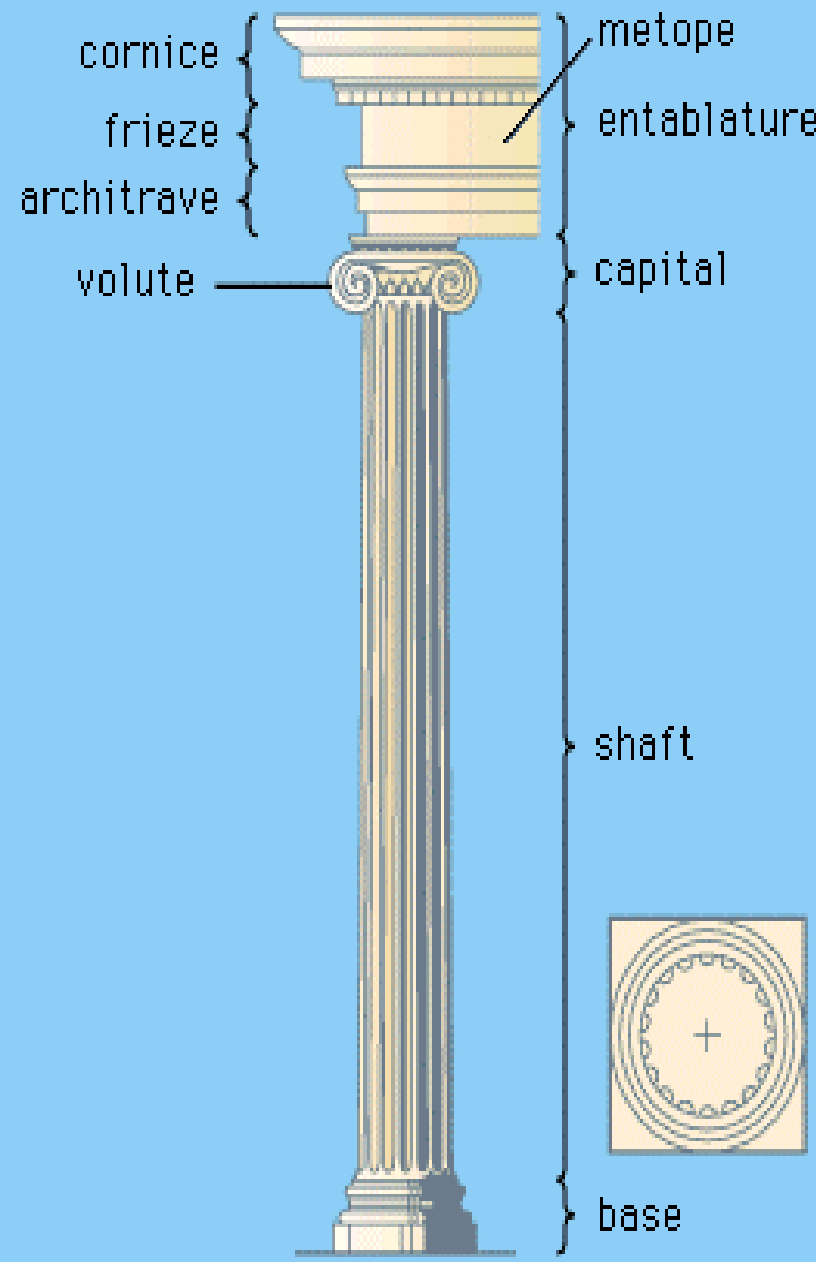
Akroteria, at the roof



The SW corner of the cornice of the Parthenon.

Cornice – horizontal corona – all round
Primary function clear line along the upper perimeter of bldg.
Architrave – principal beam

from those of the shaft; the neckpiece is decorated with geometric mouldings separate the different zones of the entablature only two fasciae instead of the usual three; the frieze is decorated with a motif of palm leaves and lotus flowers; the denticulae at the ends of the wooden beams of the framework.



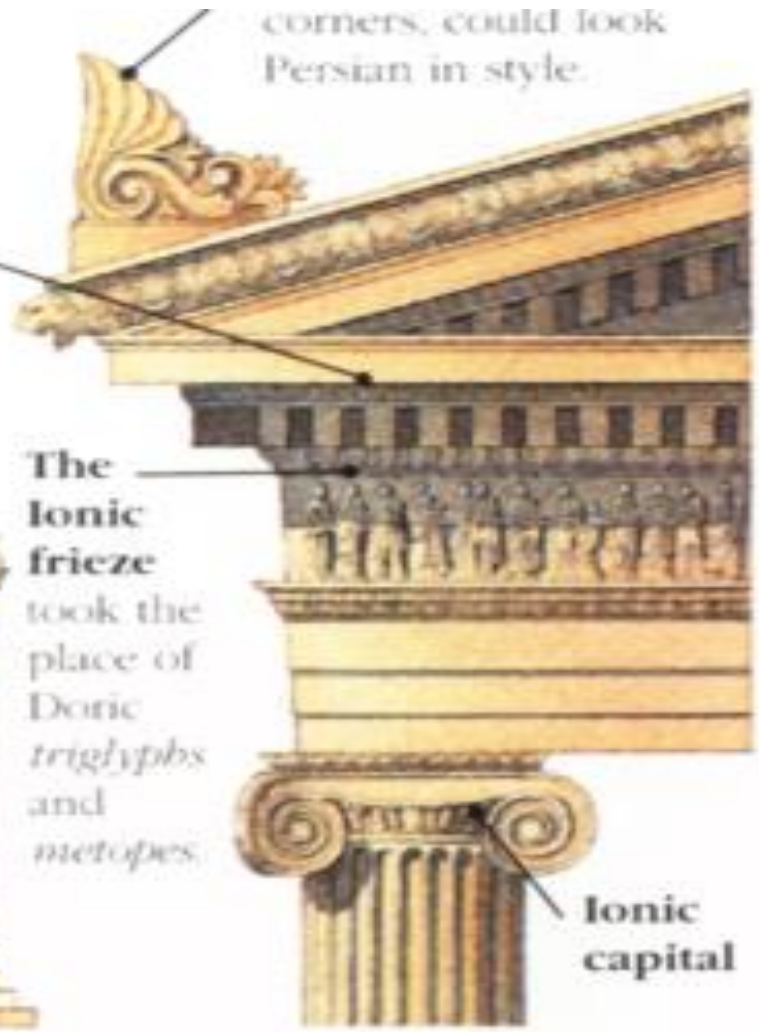
Capital & base
 – 9 times
 lower Dia.
24 flutes, fillets
Capital –
 volutes, rests
 on echinus –
 circular in plan
 2 1/2 times the
 dia.
Entablature –
 1 1/4 the ht. of
 column
Frieze –
 continuous
 band -
 sculpture

Ionic

tendency to have more columns, of a different form. The capital has a pair of volutes, like rams' horns, front and back.

The frieze was a continuous band of decoration.

The Ionic architrave was subdivided into projecting bands.



corners, could look Persian in style.

The Ionic frieze took the place of Doric triglyphs and metopes.

Ionic capital

Corinthian order – slender, decorative, 10 times the dia. Capital – natural - acanthus

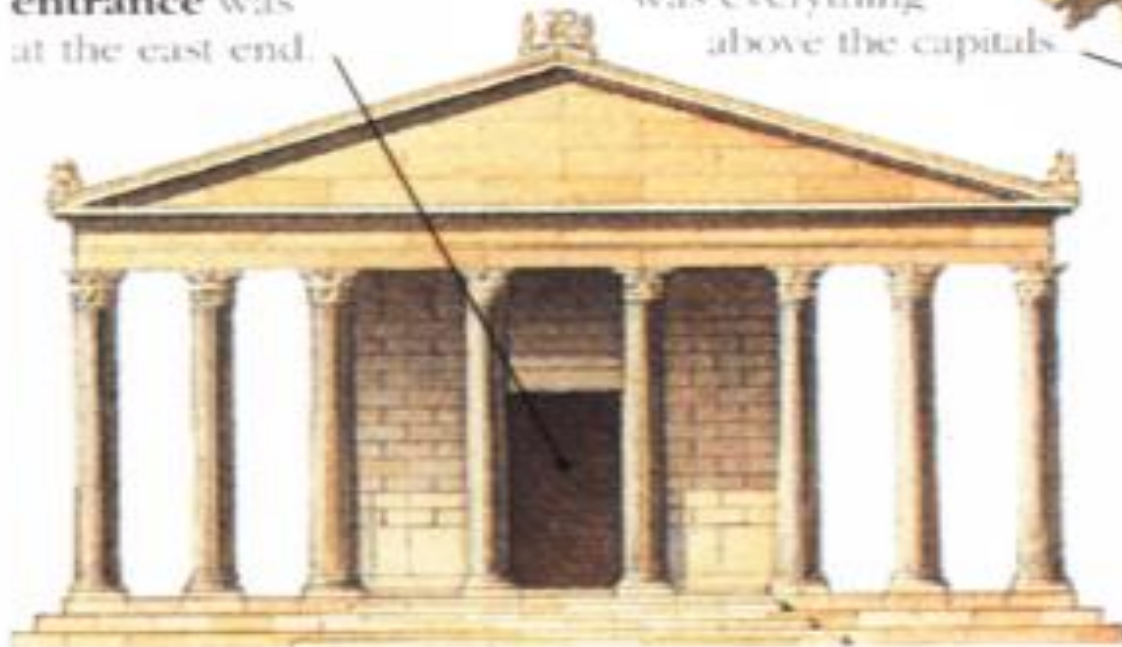
the Romans and only in Athens. They feature columns with slender shafts and elaborate capitals decorated with acanthus leaves.

Akroterion in the shape of a griffin

The cella entrance was at the east end.

The entablature was everything above the capitals.

was decorated with a variety of mouldings.



Acanthus leaf capital



**Corinthian Columns –
used externally.
Commemorate the
victories –annual –choral,
dramatic
Monument Of Lyscriates
Choregos –name of
sponsor of winning team.**

**Top bronze trophy finial
of acanthus**

*The monument of Lysikrates, named after the
choregos of the winning team of actors*



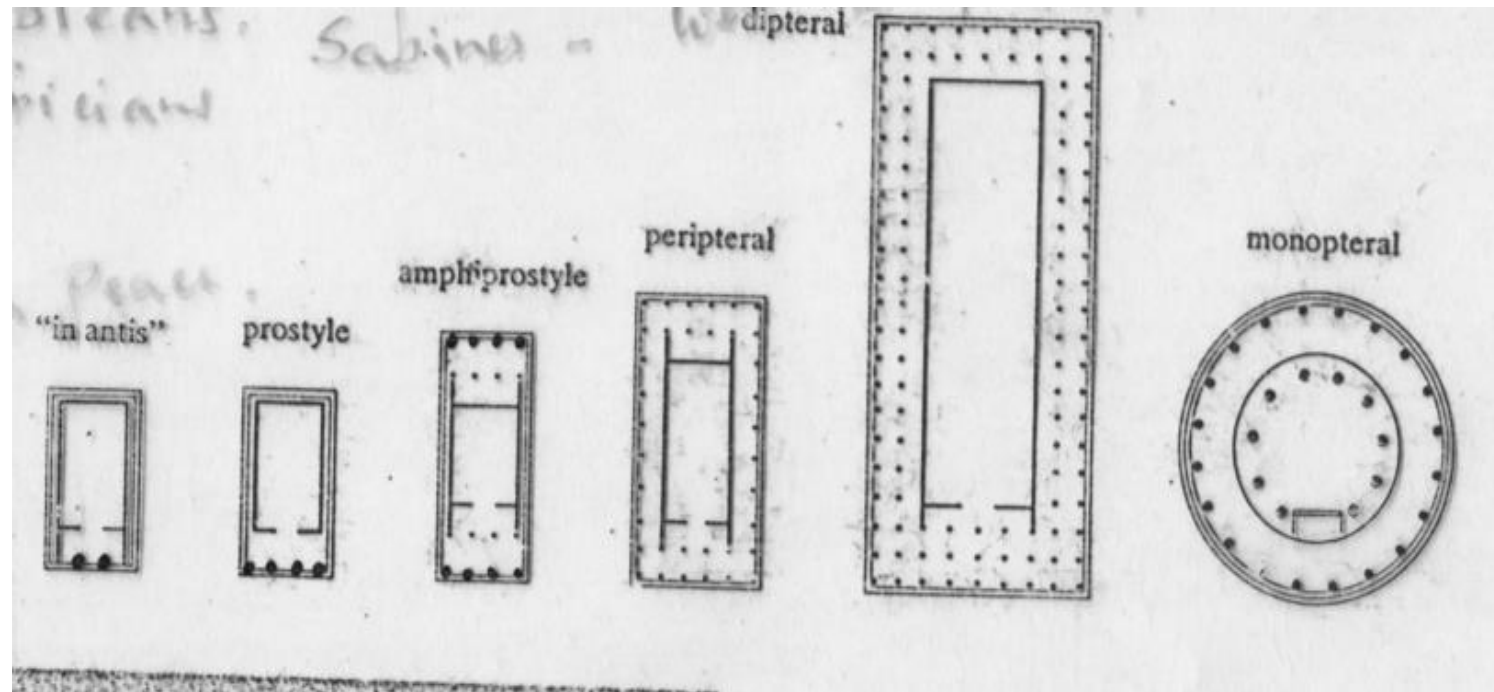
**Caryatids –
statues of
draped**

**women –
instead of
columns**

**Priestesses
from Caryae**



Temples- rectangular temples described- no. of columns – entrance or exterior columns.



In antis – columns in line with wall

Prostyle – front only

Amphi prostyle – front/back

Peripteral - allround

Henostyle – one column

Distyle – 2 tetrastyle - 4

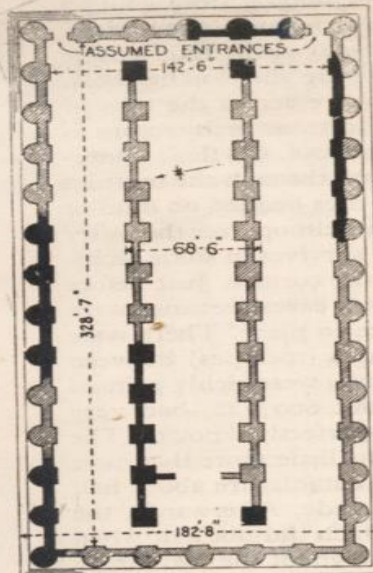
Tristyle -3 Pentastyle -5

Hexastyle -6 Heptastyle -7

- **Parts of a temple –**
- **Ent porch – pronaos**
- **Main cella – Naos**
- **Rear chamber/treasury – Epinaos/ opisthodomos**
- **Stood on crepidoma – 3steps**
- **Altar stood outside opposite the East Front**

- **Not for internal worship**
- **Outward effect**
- **Large door – East**
- **Windows –rare**
- **Sloped roof – timber truss, tiles**
- **Sculpture - pediments**

COMPARATIVE PLANS OF GREEK TEMPLES



A TEMPLE OF NEMESIS: RHAMNUS
DISTYLE IN ANTIS (DORIC)

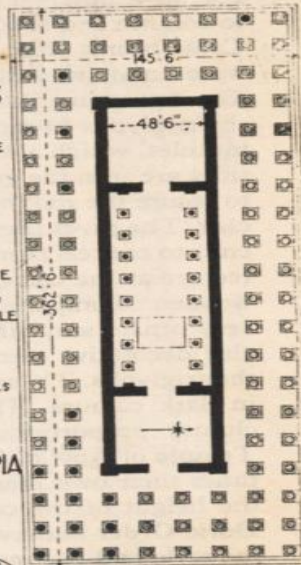
B NO EXAMPLES SURVIVING
AMPHI-ANTIS DISTYLE

C TEMPLE 'B': SELINUS
PROSTYLE TETRASTYLE (DORIC)

D TEMPLE ON THE ILISSUS: ATHENS
AMPHI-PROSTYLE TETRASTYLE (IONIC)

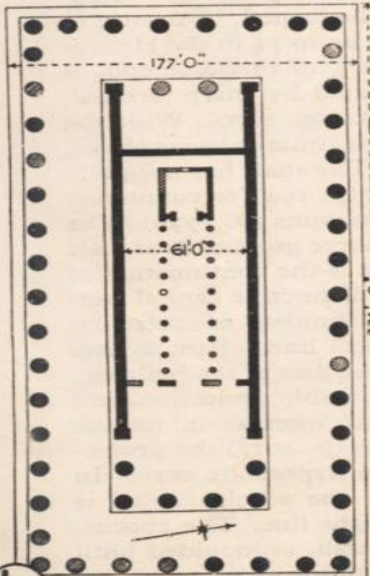
E THOLOS OF POLYCLEITOS: EPIDAUROS
CORINTH. COLS
DORIC COLS

F PHILIPPEION: OLYMPIA
IONIC COLS



H THE OLYMPIEION: ATHENS
DIPTERAL OCTASTYLE (CORINTHIAN)

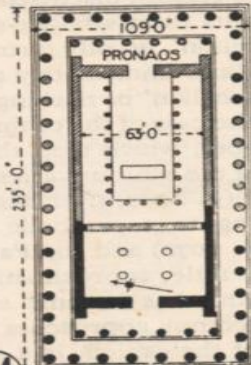
G TEMPLE OF ZEUS OLYMPIUS AGRIGENTUM
PSEUDO-PERIPTERAL HEPTASTYLE (DORIC)



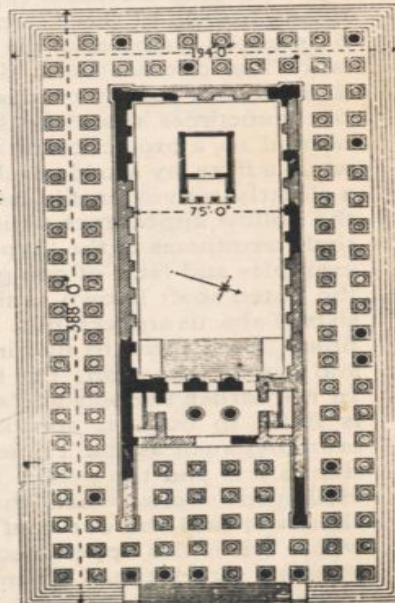
L TEMPLE G.T.: SELINUS
PSEUDODIPTERAL OCTASTYLE (DORIC)

J THESEION: ATHENS
PERIPTERAL HEXASTYLE (DORIC)

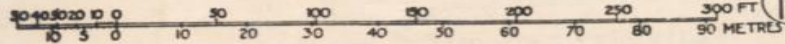
K BASILICA: PESTUM
PERIPTERAL ENNEASTYLE (DORIC)



M THE PARTHENON: ATHENS
PERIPTERAL OCTASTYLE (DORIC)

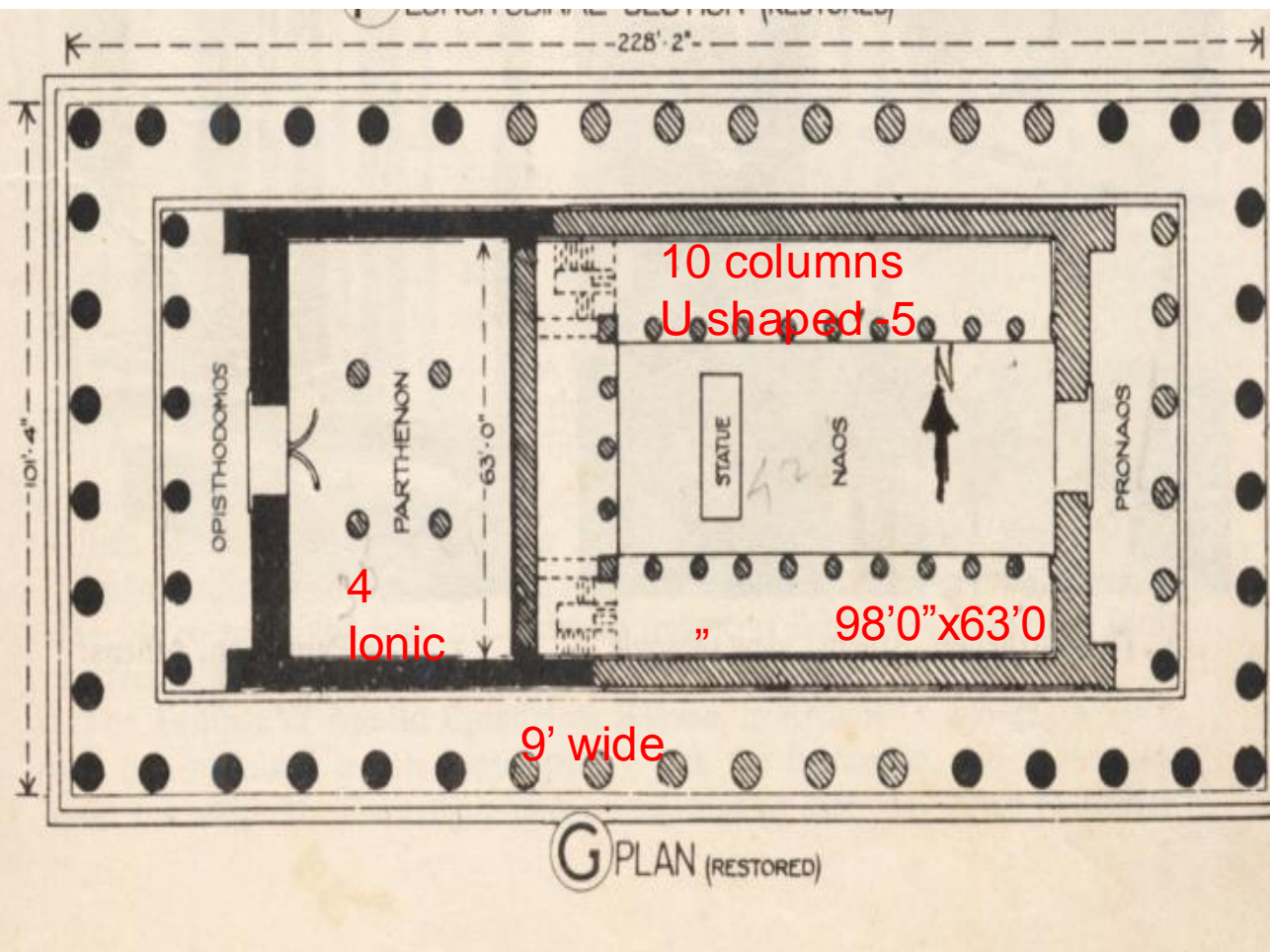


N TEMPLE OF APOLLO: DIDYMA
DIPTERAL DECASTYLE (IONIC)



Parthenon, Athens

443 -432B.C. Ictinus, Calicrates – architects.- Pheidias - sculptor



Octastyle,
peripteral

Steps 3nos.
2'4"wide,

Pronaos -60' x14'

228'0" x 101'0"

Naos –
98'0" x 63'0'

buildings from the 6th century BC onwards.

TEMPLE CONSTRUCTION

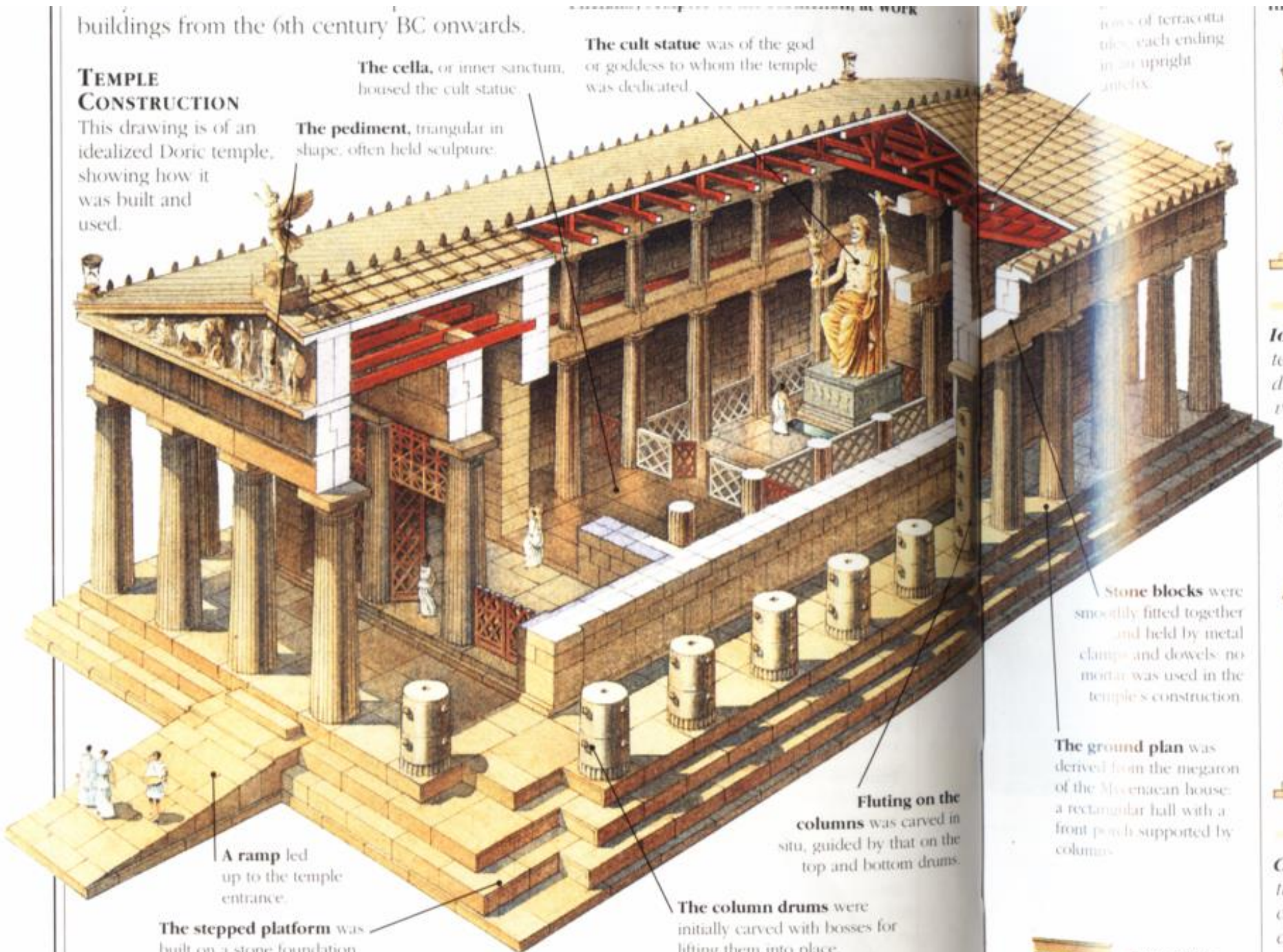
This drawing is of an idealized Doric temple, showing how it was built and used.

The cella, or inner sanctum, housed the cult statue.

The pediment, triangular in shape, often held sculpture.

The cult statue was of the god or goddess to whom the temple was dedicated.

Rows of terracotta tiles, each ending in an upright acroter.



A ramp led up to the temple entrance.

The stepped platform was built on a stone foundation.

The column drums were initially carved with bosses for lifting them into place.

Fluting on the columns was carved in situ, guided by that on the top and bottom drums.

Stone blocks were smoothly fitted together and held by metal clamps and dowels: no mortar was used in the temple's construction.

The ground plan was derived from the megaron of the Mycenaean house: a rectangular hall with a front porch supported by columns.

Ionian
tendrils
different
volutes

The
cornice
decorated

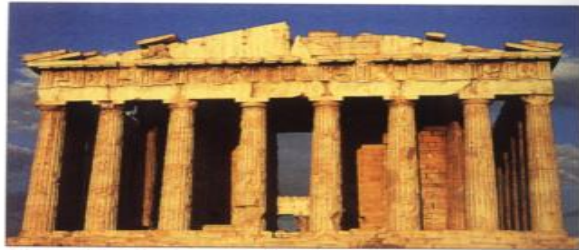


Corinthian
the capital
columns
capitals



Caryatids

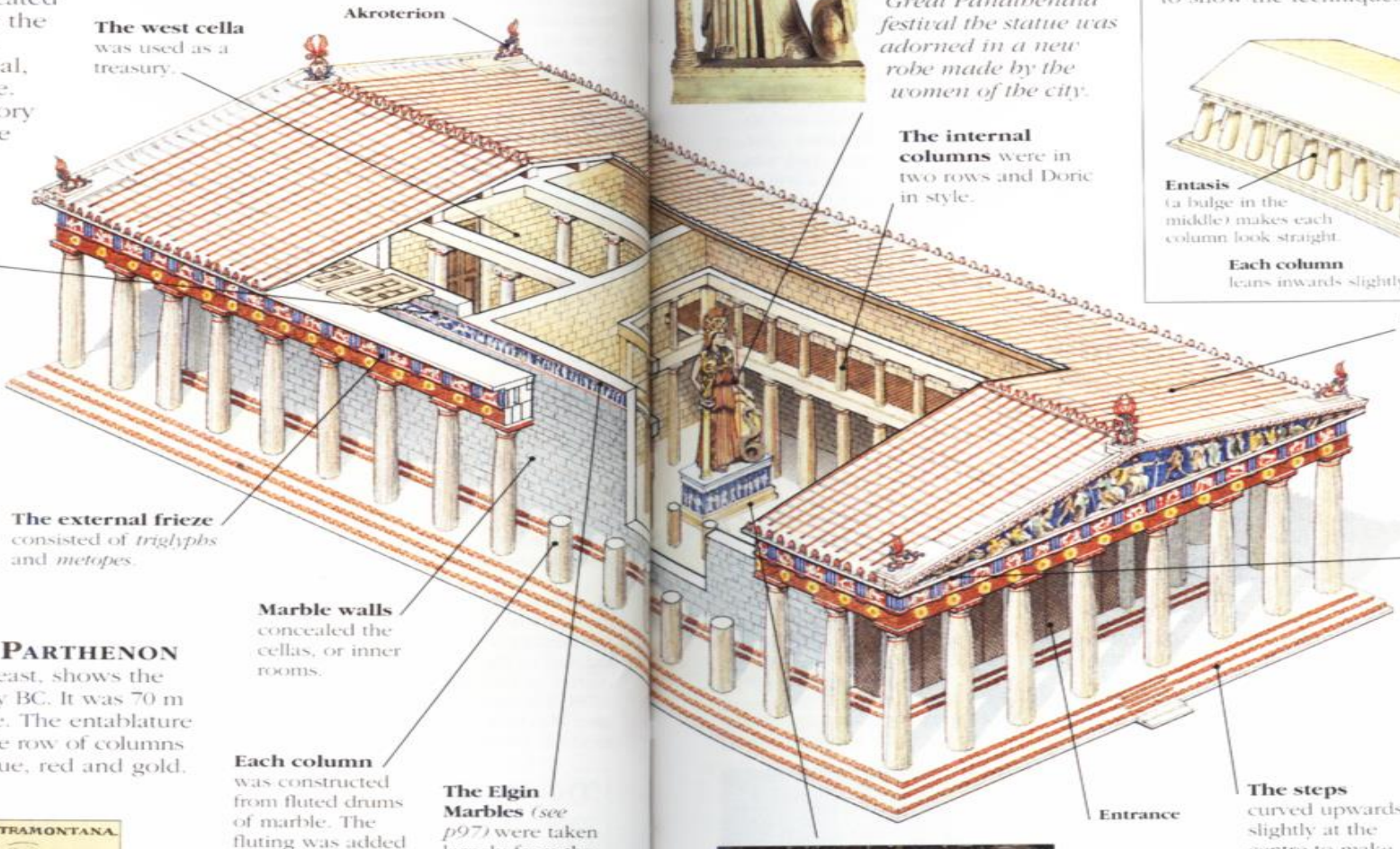
nous
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er the
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nal,
ge,
glory
the



View of the Parthenon today, from the west

The west cella
was used as a
treasury.

Akroterion



The external frieze
consisted of *triglyphs*
and *metopes*.

Marble walls
concealed the
cellas, or inner
rooms.

Each column
was constructed
from fluted drums
of marble. The
fluting was added

**The Elgin
Marbles** (see
p97) were taken
brusely from the



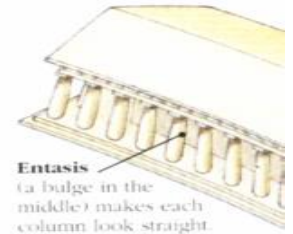
Statue of Athena

The huge chryselephantine (ivory and gold) statue of Athena, patron goddess of Athens, was the focus of the Parthenon. This Roman copy is in the National Archaeological Museum (see pp68–71). During the Great Panathenaia festival the statue was adorned in a new robe made by the women of the city.

The internal columns were in two rows and Doric in style.

THE ILLUSION OF

Every aspect of the Parth was built on a 9:4 ratio to make the temple completely symmetrical. The sculptors also used visual trickery to counteract the laws of perspective. The illustration shows the techniques



Entasis
(a bulge in the middle) makes each column look straight.

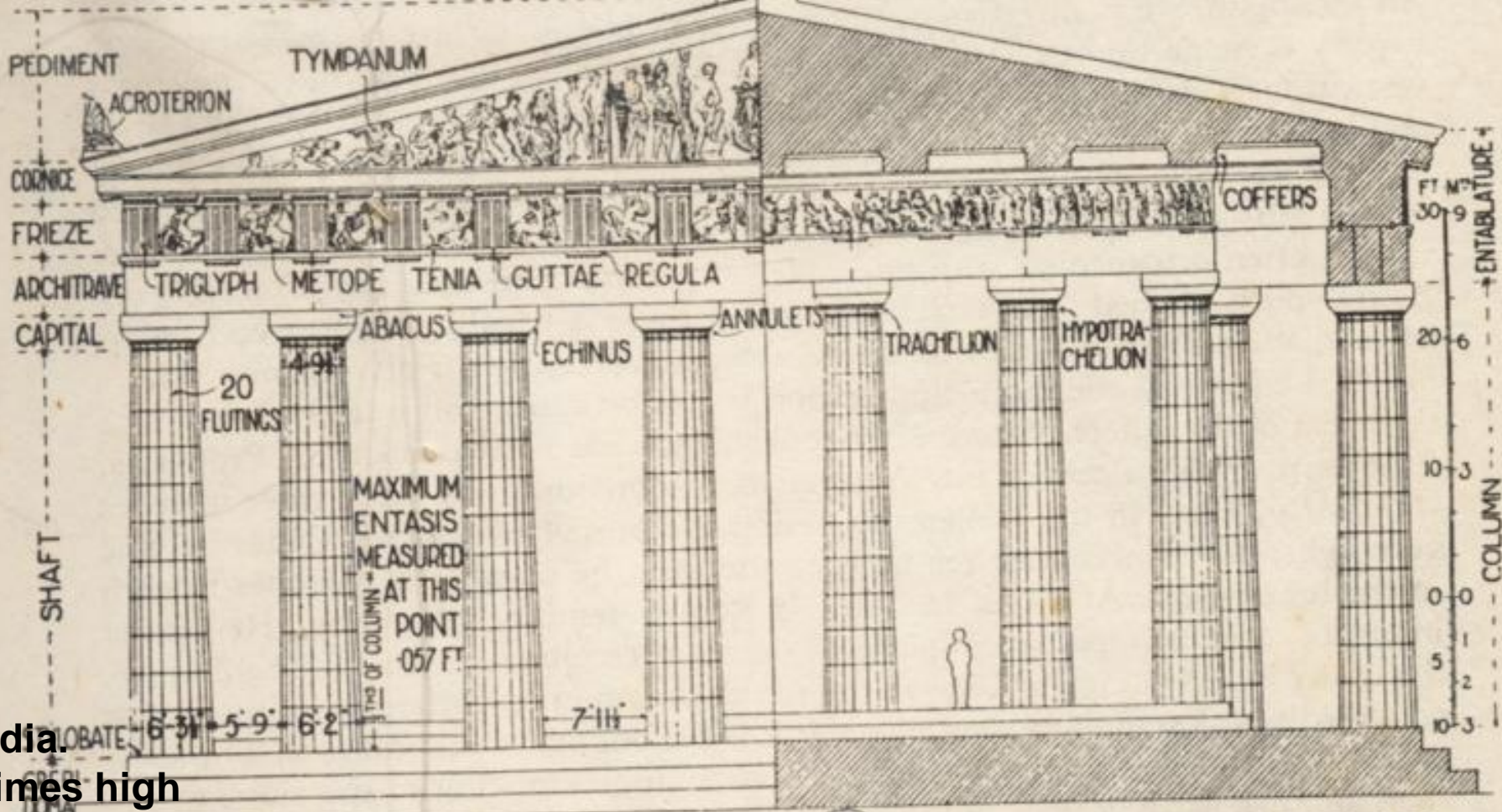
Each column
leans inwards slightly

Entrance

The steps
curved upwards slightly from the centre to make

THE PARTHENON
the east, shows the
ury BC. It was 70 m
ide. The entablature
ngle row of columns
blue, red and gold.

EVOLUTION OF DORIC ORDER



6'2" dia.
5.5 times high

(A) HALF ELEVATION OF PARTHENON

(B) HALF SECTION THRO' PORTICO



The Parthenon from the northeast.





Metopes -92 almost square.

4'5"sq

**– 14 on each front –
32 on each side**

**Each – depict 2
figures in combat –
high relief.**



**Ionic frieze – 3'6" Ht,
524 Rft.**

**Figures represent –
gods, priests, elders
Sacrifices,
bearers, soldiers,
Maidens, nobles.**

**Low relief –
beautifully composed**



East Pediment – Birth of Athena

West – quarrel – Posidon, Athena

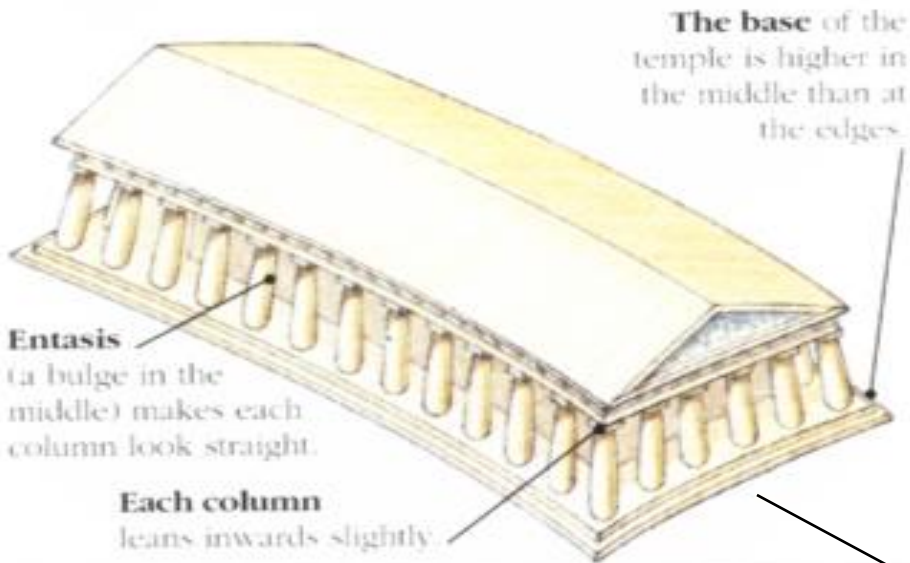
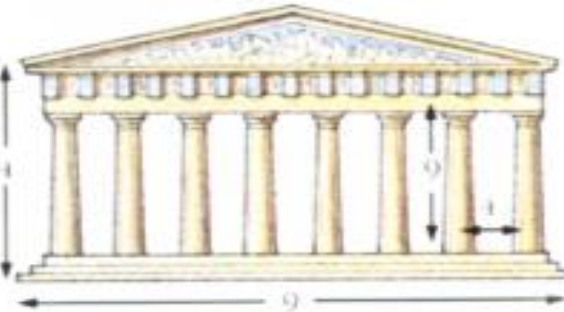


▲ Restoration of the west pediment of the Parthenon, depicting the quarrel between Athena and Poseidon as to who would be patron deity of Athens.

Restoration of the east pediment of the Parthenon, depicting the birth of Athena. In the centre Zeus enthroned and opposite him panoplied Athena. Left and right, the other gods of Olympus observe the goddess' birth in

Optical Illusions - Entasis

Every aspect of the Parthenon was built on a 9:4 ratio to make the temple completely symmetrical. The sculptors also used visual trickery to counteract the laws of perspective. The illustration below is exaggerated to show the techniques they employed.



OPTICAL CORRECTIONS IN ARCHITECTURE

193

B B
A A
Σ Σ
E E
Λ Λ
O O

VISUAL RAYS

A B

COLOUR EFFECT ON PROPORTIONS
 x THE METOPES & NAOS WALL BEING BLACK THE COLUMNS APPEAR STURDIER & THE ARCHITRAVE, TRIGLYPHS & CORNICE HAVE IMPORTANCE.
 y WITH REVERSED COLOURING THE COLUMNS APPEAR THINNER & HIGHER & THE ENTABLATURE LOSES IN IMPORTANCE.

CORRECTION OF APPARENT PROPORTIONS FROM AN INSCRIPTION ON THE FACES OF THE ANTE OF A TEMPLE AT PRIENE

3
2
1

CENTRE LINE

D

THE PARTHENON ATHENS: EAST FRONT

E

F

G

H

J

THE METHOD FOR ENTASIS
 a, b, c, d ARE BOTTOM & TOP DIAMETERS RESPECTIVELY. DESCRIBE SEMICIRCLES ON THESE. AT c ERRECT PERPENDICULAR CUTTING LARGER ONE IN 3. DIVIDE SEGMENT a 3 & HEIGHT OF COLUMN INTO ANY NUMBER OF EQUAL PARTS - SAY 3 - & NUMBER BOTH 1, 2, 3 FROM a. THRO POINTS 1, 2, 3 IN SEGMENT ERRECT PERPENDICULARS CUTTING CORRESPONDING DIVISIONS OF THE HEIGHT. THRO THE POINTS THUS OBTAINED DRAW CURVE

INCLINATION OF 2° 45'

2° 41' RISE

2° 6' RISE

THE TEMPLE FRONT AS IT APPEARS IN EXECUTION WITH CURVED HORIZONTAL LINES AND INCLINED VERTICAL FEATURES AS AT G.

THE TEMPLE FRONT AS IT WOULD APPEAR IF BUILT AS AT E WITHOUT OPTICAL CORRECTIONS.

THE TEMPLE FRONT ARRANGED WITH VERTICAL AXES INCLINING & WITH CONVEX STYLOBATE, ARCHITRAVE, ENTABLATURE & PEDIMENT PRODUCING RESULTS AS AT E.

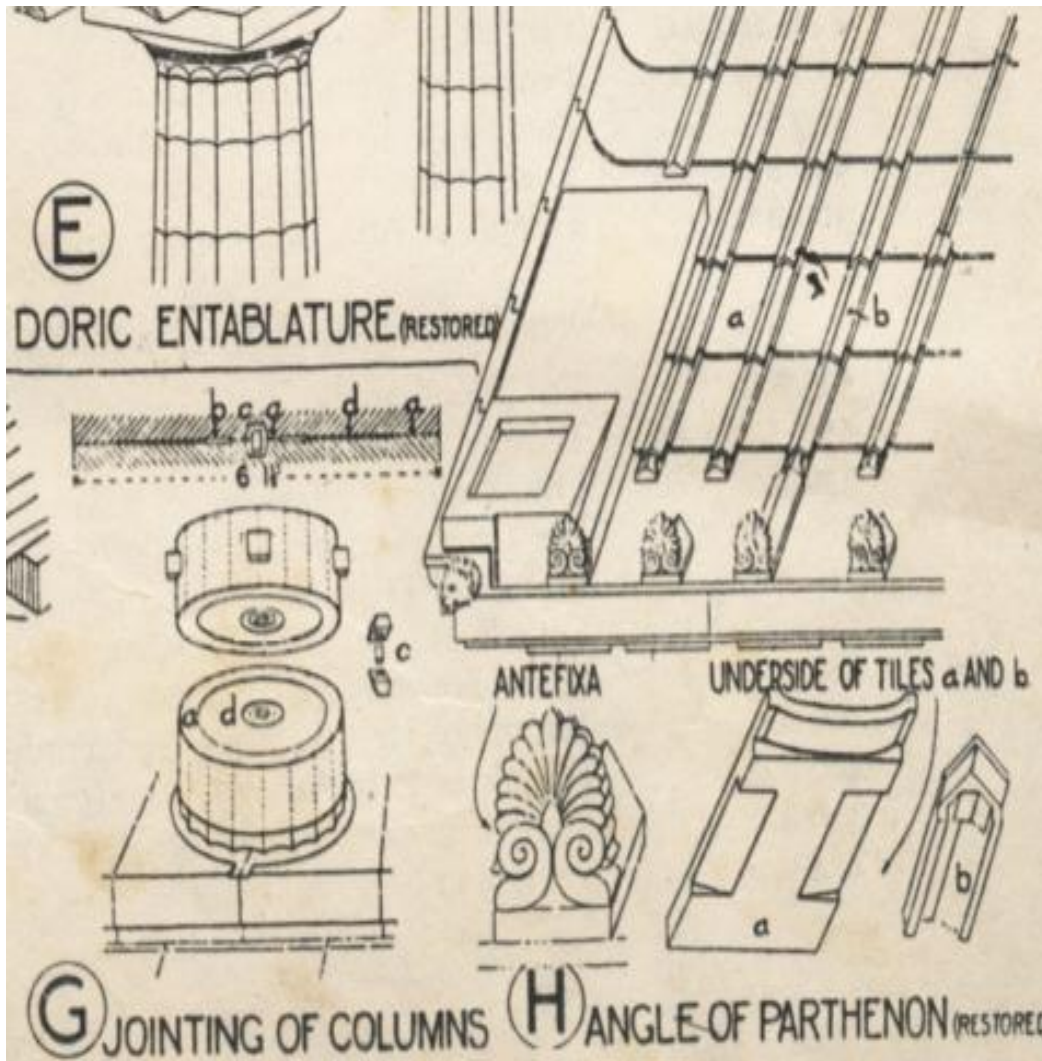
PARALLEL STRAIGHT LINES HAVING CONVEX CURVES ON EITHER SIDE APPEAR WIDER APART IN THE CENTRE.

PARALLEL STRAIGHT LINES HAVING CONCAVE CURVES ON EITHER SIDE APPEAR CLOSER TOGETHER IN THE CENTRE.

A SIMILAR EFFECT PRODUCED BY INCLINED LINES AS INDICATED IN H & J BY DOTTED LINES

Parabolic curve

Entasis



Anathyrosis – Smooth contact between two blocks – centre – rough-fitted iron, bronze clamps.

Column drums – metal dowels

Parthenon — Virgin Athena



Athena – Pallas Athena-Goddess of War- goddess of Wisdom.

Wears – Helmet, carries – spear, shield

Aegis – goatskin breastplate, fringed with snakes.

Athena – shown – olive branch symbol – peace and plenty

Ivory and Gold statue – 40'0” high

Chryselephantine

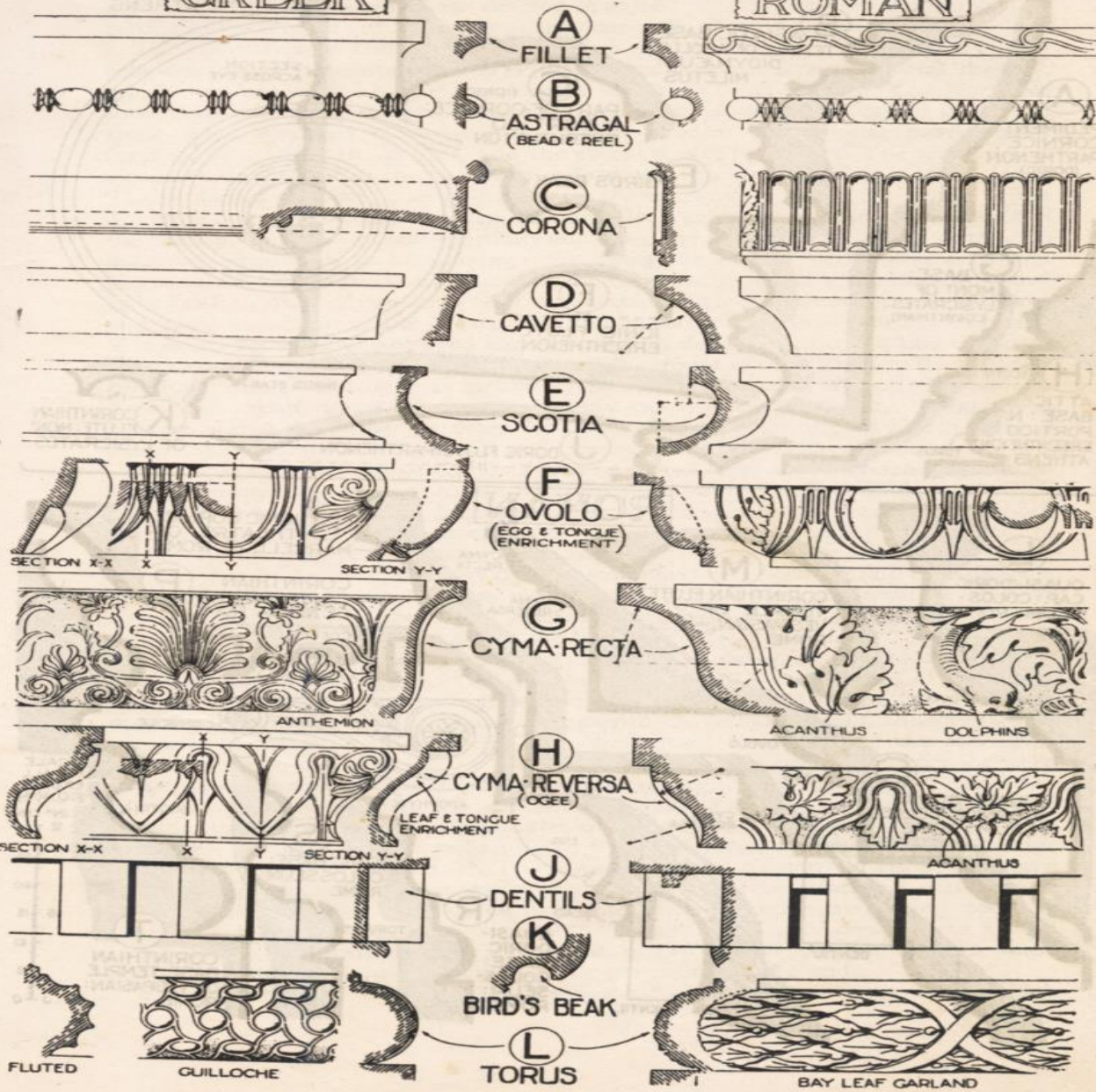
Panthenaea – birthday – 4years



- Propylea
- Western edge
- 5 gates, doric
- Middle gate –
sacrificial
animals, unpaved,
other 2- paved-
people

GREEK

ROMAN



Greek Mouldings



**Temple of Athena Nike
Right of Propylea –
Tetrastyled ,amphi-pro
Style,Ionic –
unwinged victory**

Town Planning – Hippodomas -

divided city – 3 zones –

1. Public bldgs

2. Sacred use – citadel -acropolis – temple

3. Private homes – outside the fortified walls

4. Public Buildings – 2 types

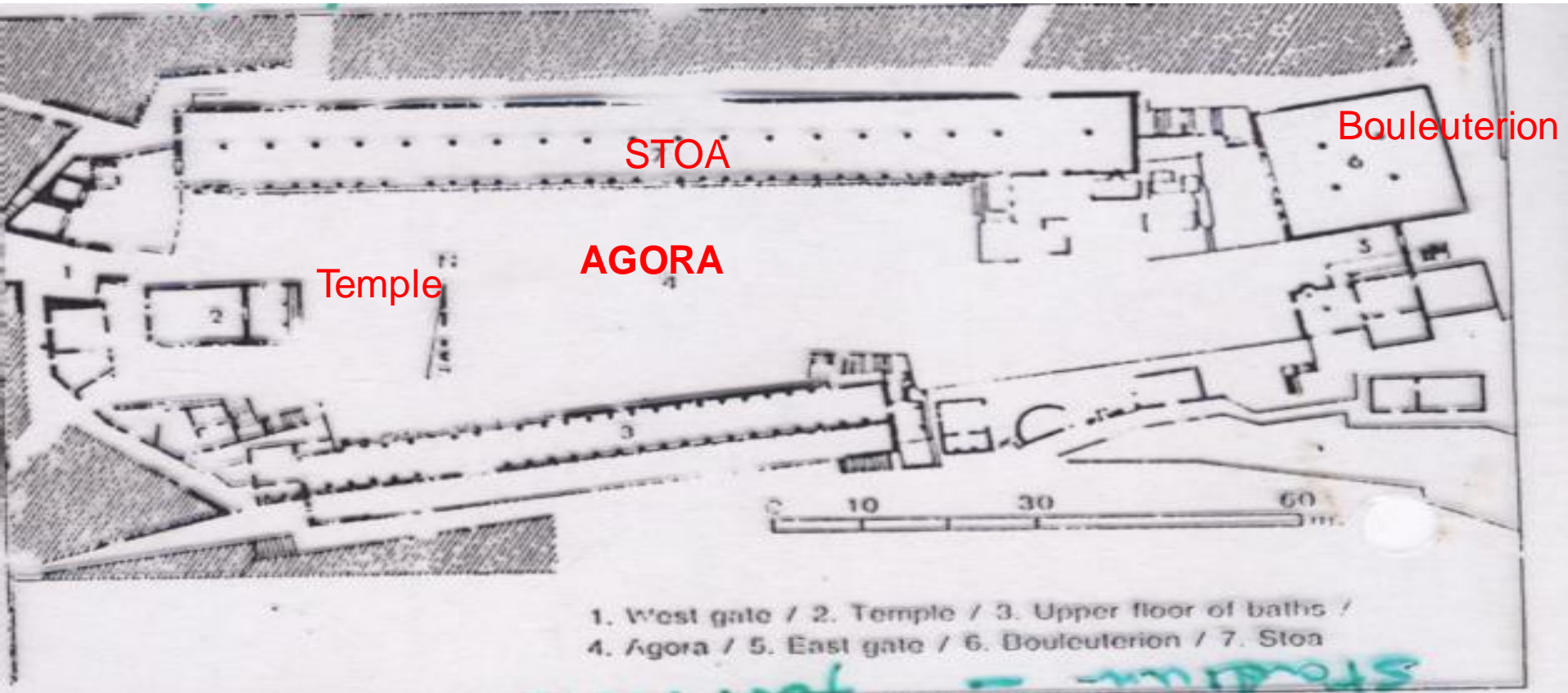
5. 1 Portico or Stoa – hall open – one side. By a colonade

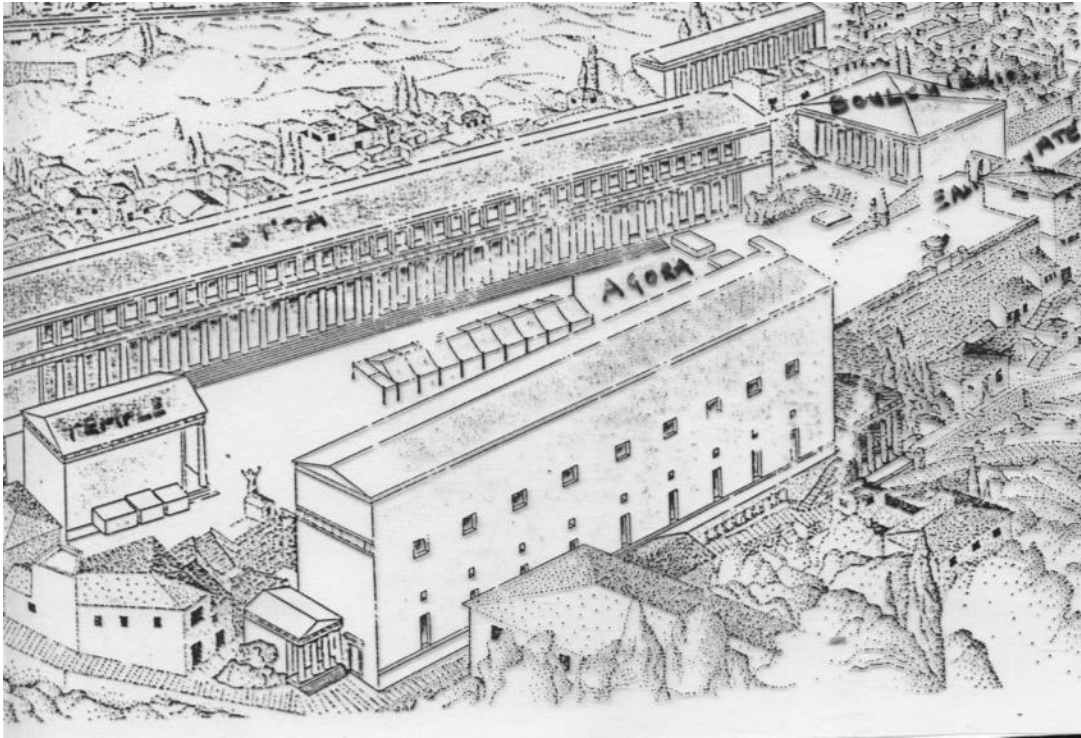
6. 2. Covered room or Hypostyle- internal columns

Civic Architecture – Prytaneum, Bouleuterion, Assembly Hall,

Agora – town square- centre – political, business, social life
-open air public space

Stoa – roofed promenade, monumental appearance – 150M
length





Prytaneum – inner council – Banqueting hall

Bouleuterion – Advisory committee

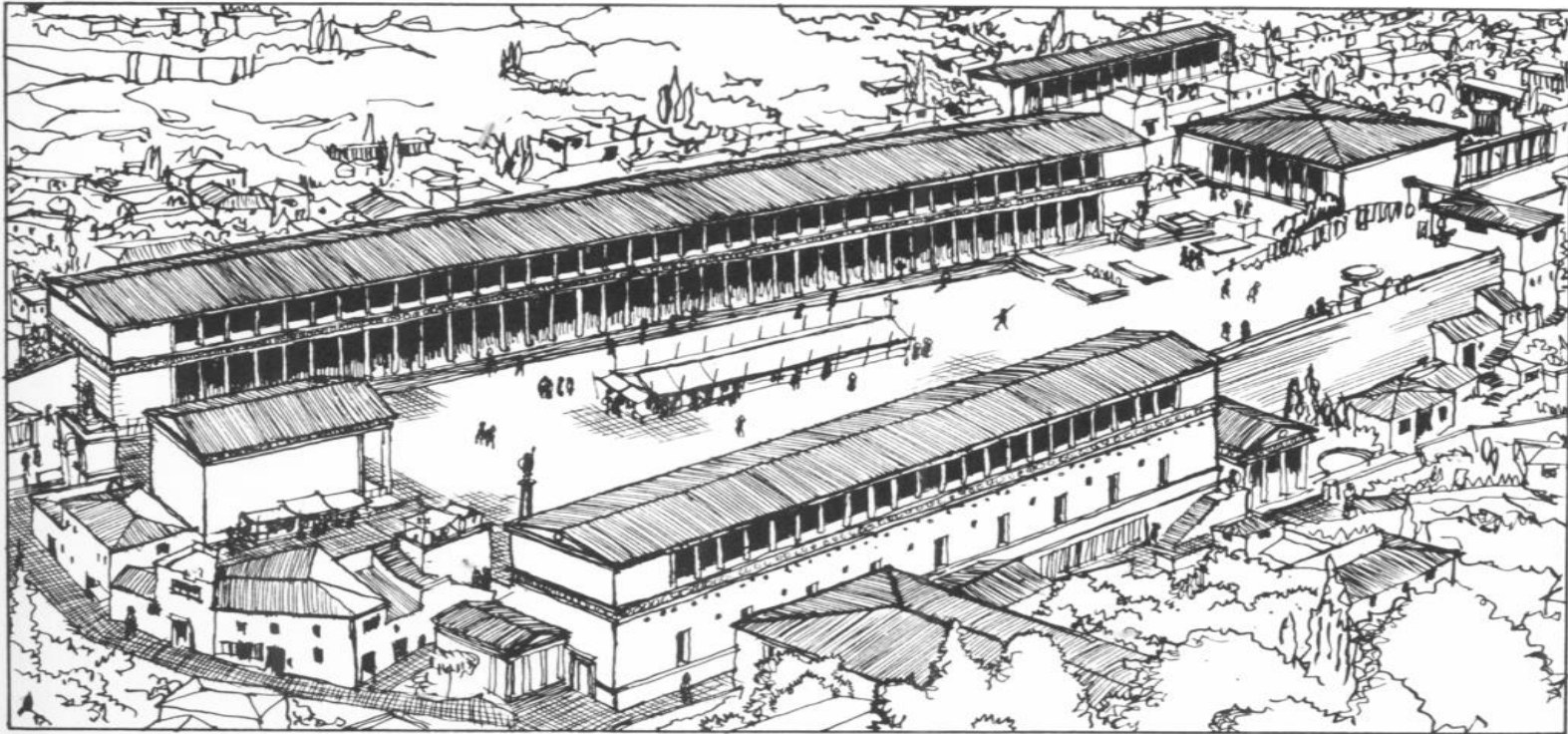
Assembly Hall – general use

Odeion – Musicals

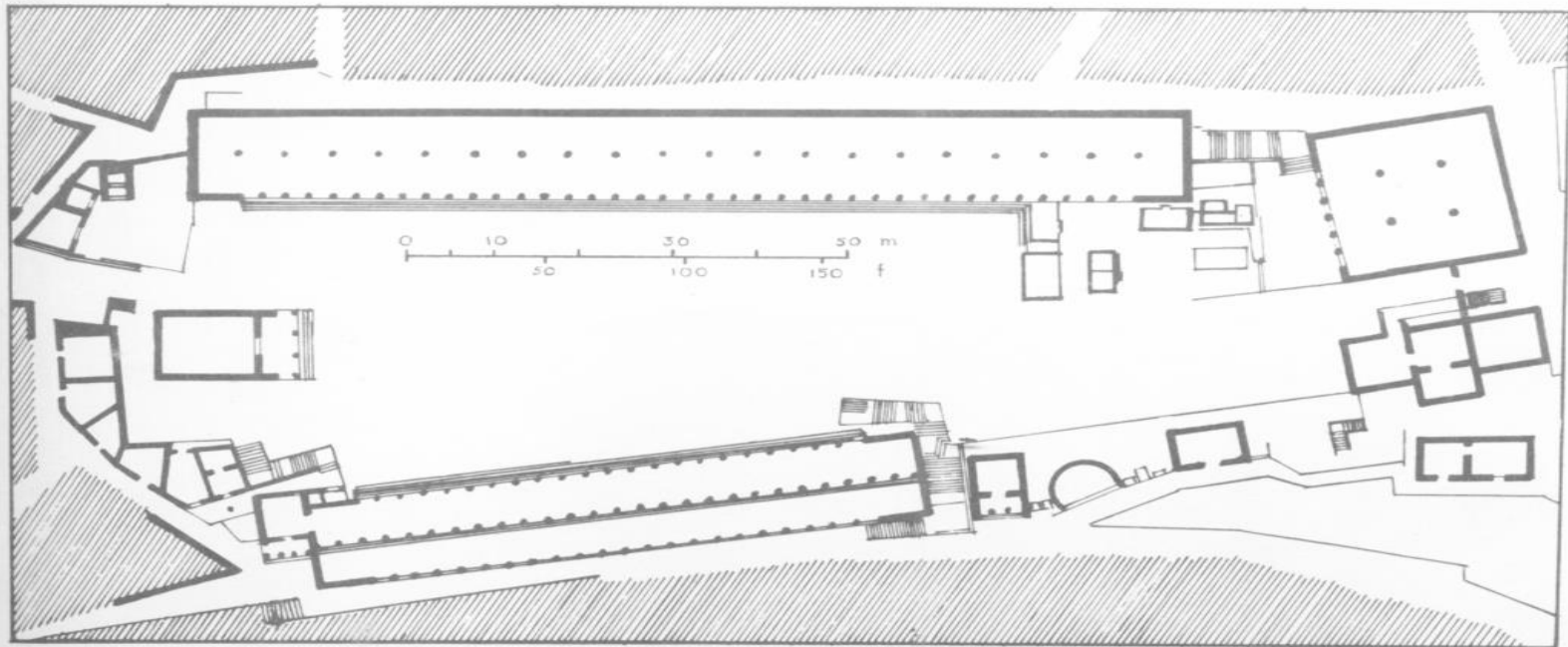
**Stadium – foot race-
Olympia – 50,000 spectators**

Hippodrome – Horse, chariot racing

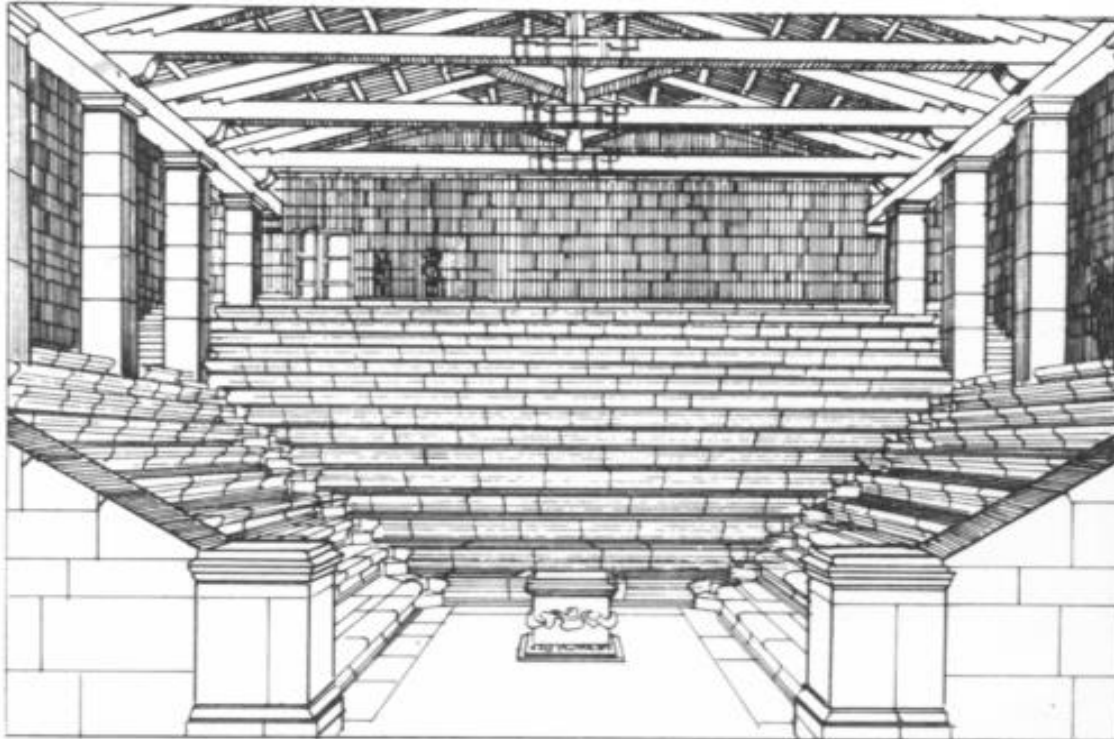
Telesterion – hall of mysteries, magic



124



125



**Bouleuterion –
council house –
Rectangular
bldgs, banked
seatings facing
inwards on 3
sides, arranged in
semicircle.**

Seat -1200


**House of
Commons -
London**

Theatre – built on the slopes of hill

Four parts –

- 1. a segmental arrangement of tiered seats – Auditorium – cavea – broad concentric belts – diazomata.**
- 2. Circular orchestra –used by chorus –10-12’ below-enclosed by portico, balustraded terrace.**
- 3. Proscenium in front of**
- 4. The skene –tangential to the orchestra –a backing –simple stage décor (dressing – actors, waiting area.**

to the stage: each had a monumental gateway whose pillars have

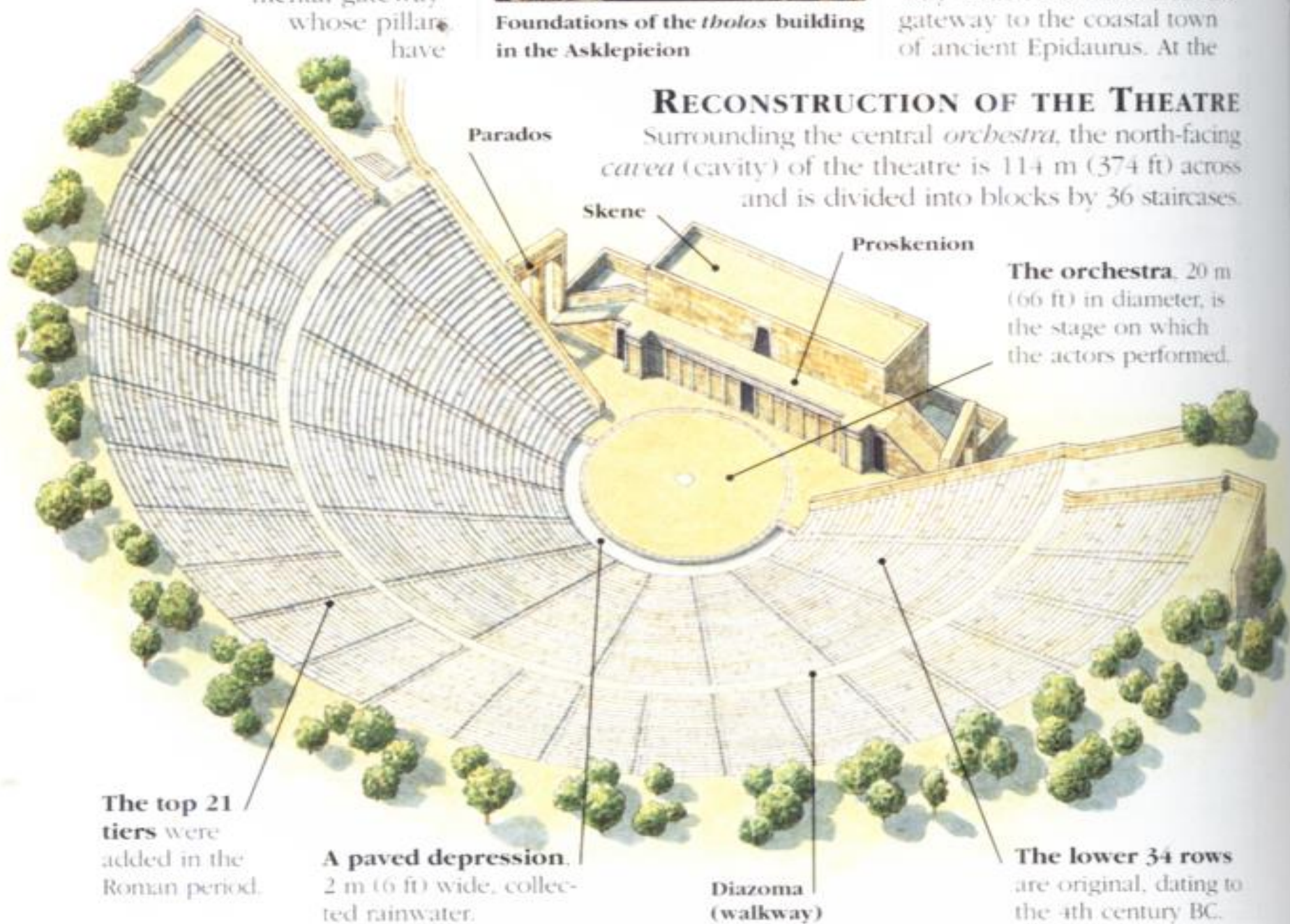


Foundations of the *tholos* building in the Asklepieion

pavement from the Sacred Way which led north from the gateway to the coastal town of ancient Epidaurus. At the

RECONSTRUCTION OF THE THEATRE

Surrounding the central *orchestra*, the north-facing *cavea* (cavity) of the theatre is 114 m (374 ft) across and is divided into blocks by 36 staircases.



Parados

Skene

Proskenion

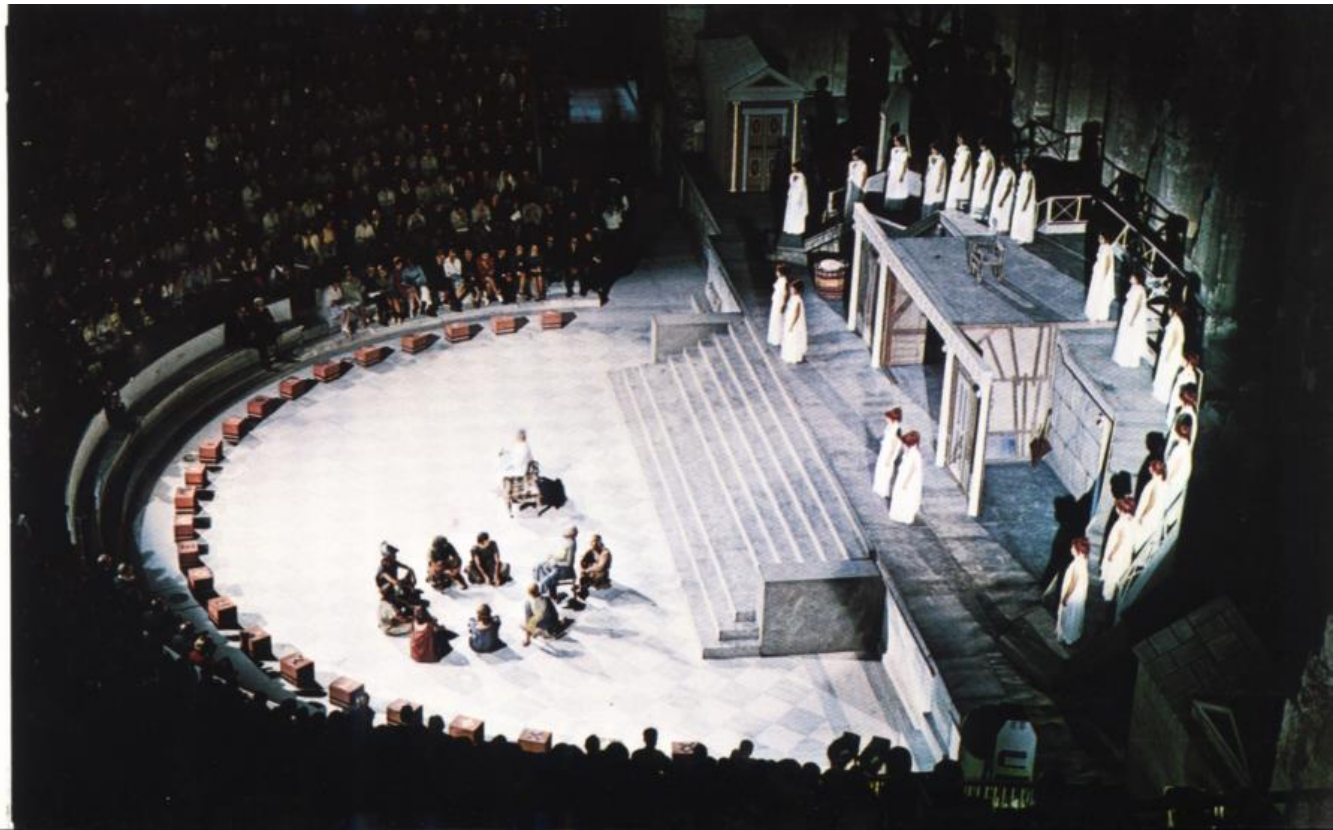
The orchestra, 20 m (66 ft) in diameter, is the stage on which the actors performed.

The top 21 tiers were added in the Roman period.

A paved depression, 2 m (6 ft) wide, collected rainwater.

Diazoma (walkway)

The lower 34 rows are original, dating to the 4th century BC.





ory (loosening her sandals) front

ting

ise painting break from ies. The main Athens, which the early 6th 2 its high-quality es to every part thenian potters' still be visited of art in their own sest we can get to ancient Greeks ls of their houses, ould break during which they were number still sur- ssembled pieces.

naked woman holding a *kylix* bubbly a flute-girl or prostitute.

thos was tury BC rare ve usually eral scenes, be Achilles oman a grave.

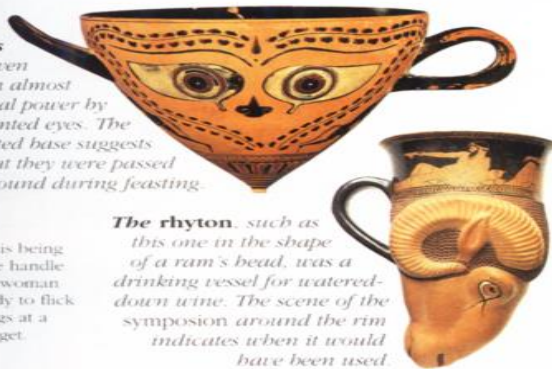
ION of mostly ad drink- ccasions for e of e exterior ury BC ions of men eady to flick a target.



This 6th-century BC black-figure vase shows pots being used in an everyday situation. The vases depicted are *hydria*. It was the women's task to fill them with water from springs or public fountains.



Eye cups were given an almost magical power by the painted eyes. The pointed base suggests that they were passed around during feasting.



The rhyton, such as this one in the shape of a ram's head, was a drinking vessel for watered-down wine. The scene of the symposium around the rim indicates when it would have been used.

This kylix is being held by one hand by another woman feaster, ready to flick out the dregs at a *kottabos* target.

This drinker holds aloft a branch of a vine, symbolic of Dionysos's presence at the party.

Striped cushions made reclining more comfortable.

The drinking horn shape was copied in the pottery *rhyton*.

body of the dead is carried on a by mourners

The geometric design is a proto-type of the later "Greek-key" pattern.

Chariots and warriors form the funeral procession.

ie to s in This vase as depicts l man.



Black-figure style was first used in Athens around 630 BC. The figures were painted in black liquid clay onto the iron-rich clay of the vase which turned orange when fired. This vase is signed by the potter and painter Exekias.

Red-figure style was introduced in c. 530 BC. The figures were left in the colour of the clay, silhouetted against a black glaze. Here a woman pours from an oinochoe (wine-jug).



VASE SHAPES

Almost all Greek vases were made to be used; their shapes are closely related to their intended uses. Athenian potters had about 20 different forms to choose from. Below are some of the most commonly made shapes and their uses.



The amphora was a two-handled vessel used to store wine, olive oil and foods preserved in liquid such as olives. It also held dried foods.

This krater with curled handles or "volutes" is a wide-mouthed vase in which the Greeks mixed water with their wine before drinking it.



The hydria was used to carry water from the fountain. Of the three handles, one was vertical for holding and pouring, two horizontal for lifting.

The lekythos could vary in height from 3 cm (1 in) to nearly 1 m (39 in). It was used to hold oil both in the home and as a funerary gift to the dead.



The oinochoe, the standard wine jug, had a round or trefoil mouth for pouring, and just one handle.

The kylix, a two-handled drinking cup, was one shape that could take interior decoration.

