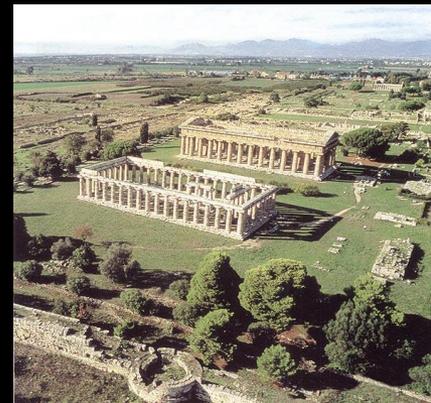
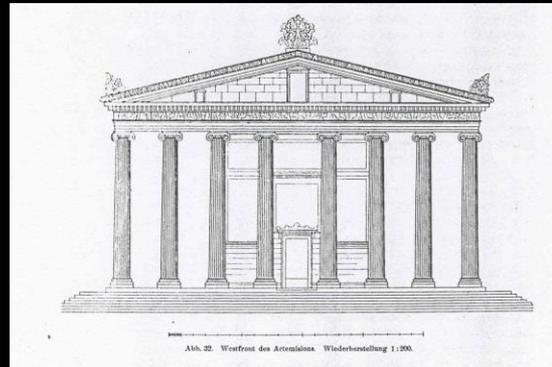
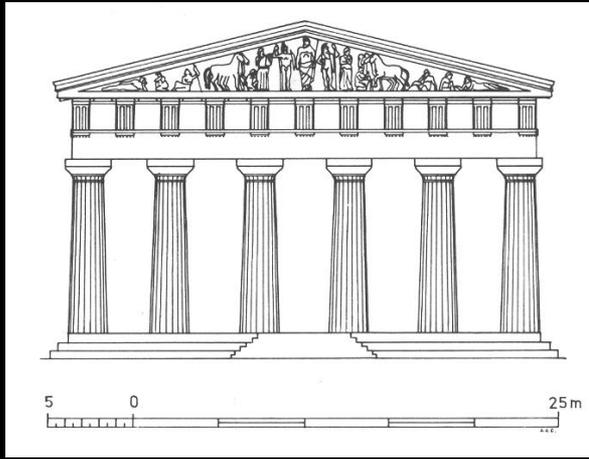


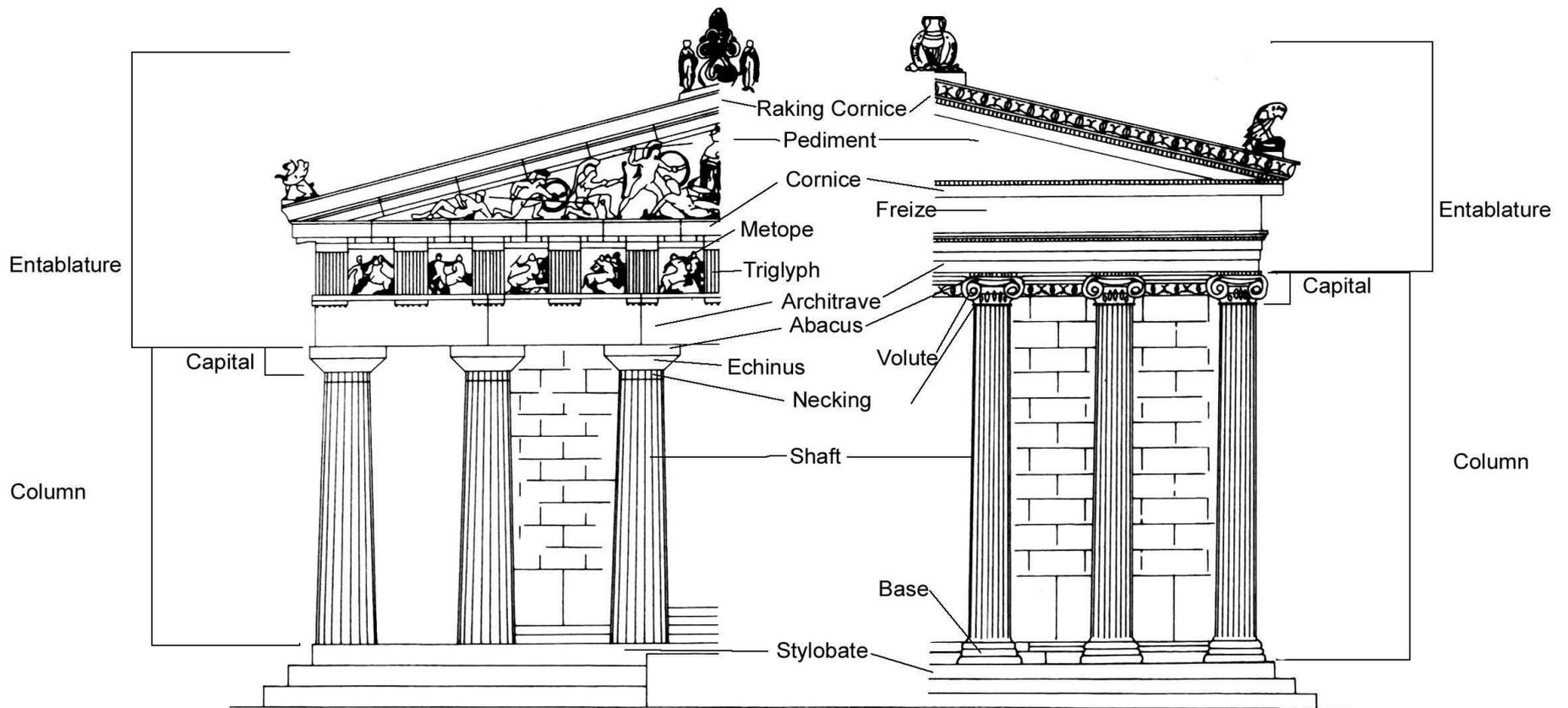
Greek Architecture

An Introduction

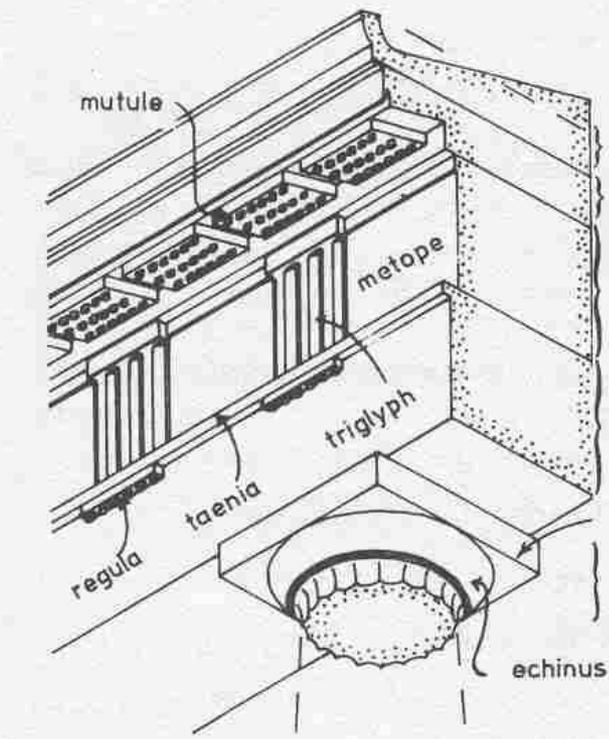
The Temple: the main Greek monumental building type



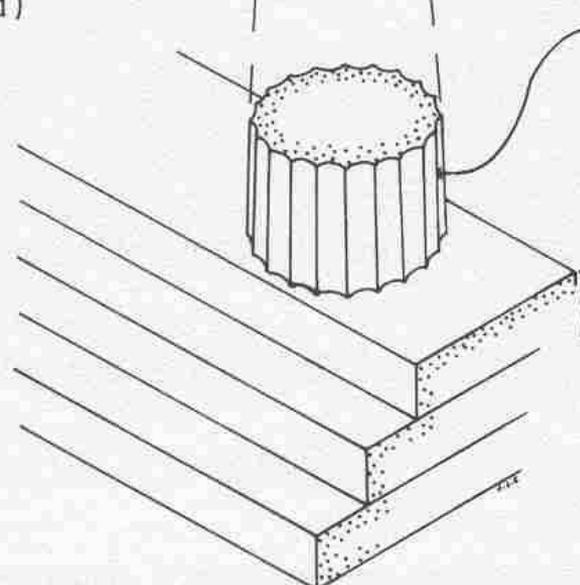
Main parts of a Greek Temple



Doric

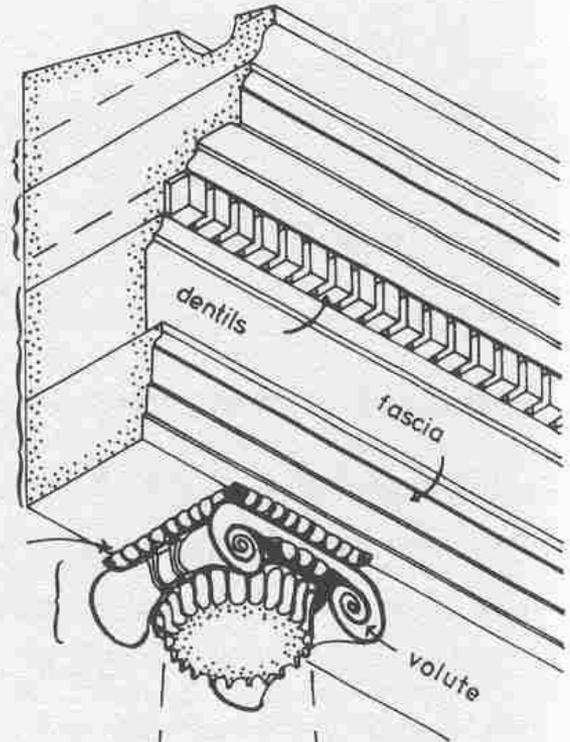


(a)

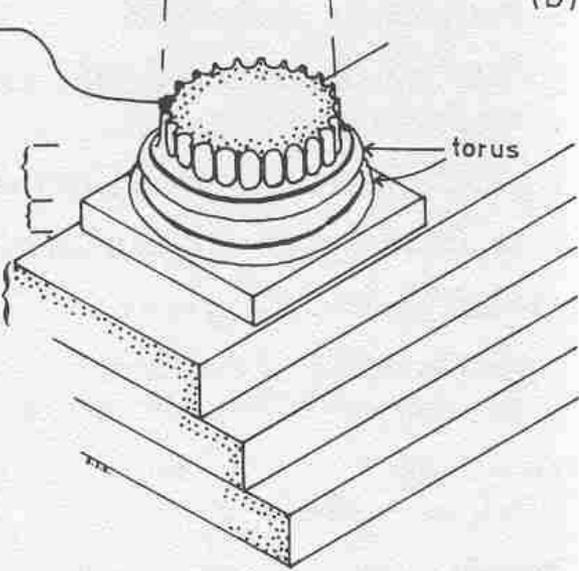


sima
cornice
frieze
architrave
abacus
capital

Ionic



(b)

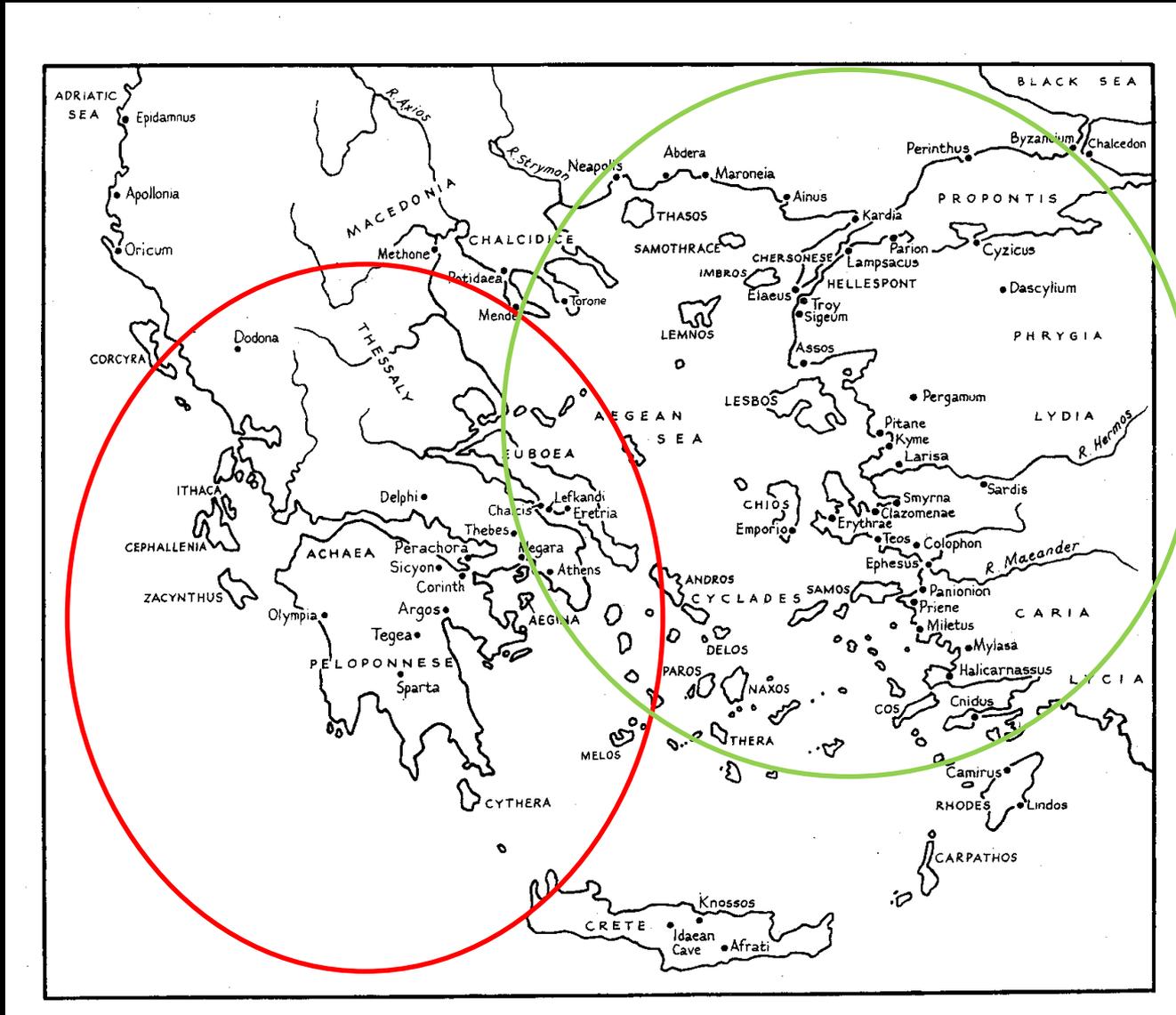


fluting
base
plinth
stylobate
torus

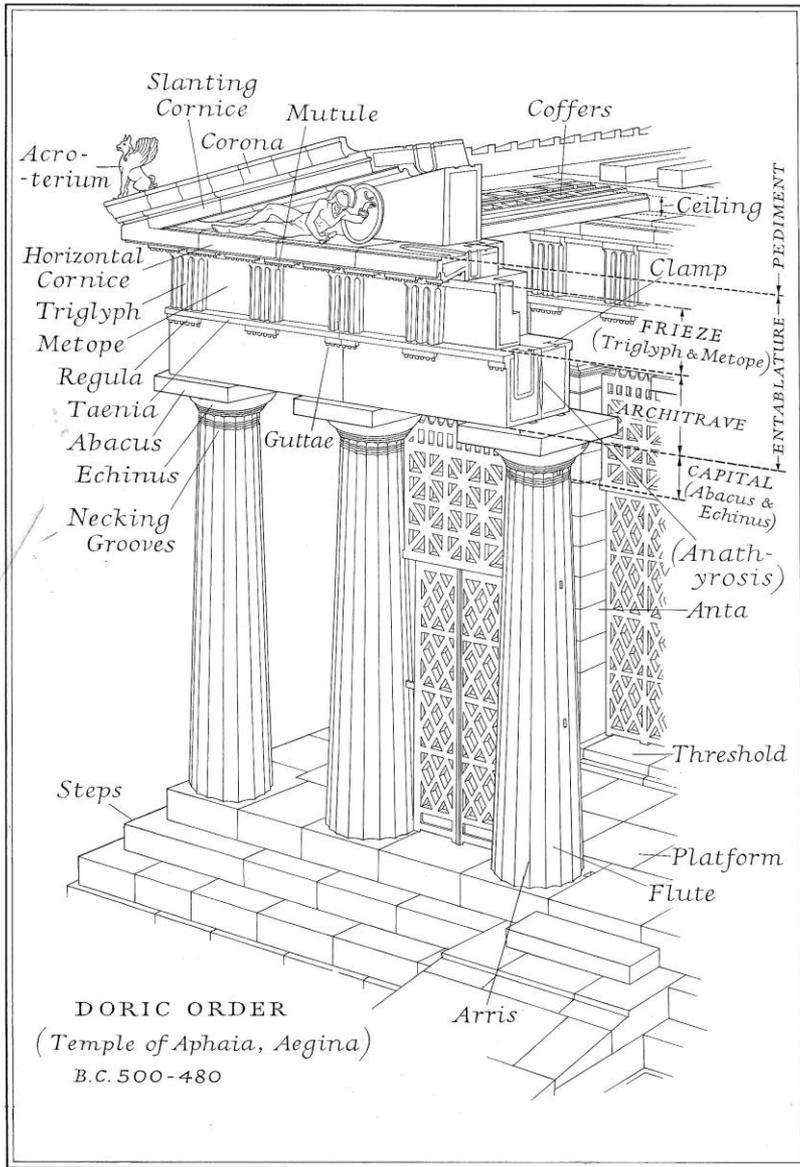
«Doric» and «Ionic» orders are not respondant to ethnic identities but to geographical areas.

Even if there is some overlapping the following distinction works.

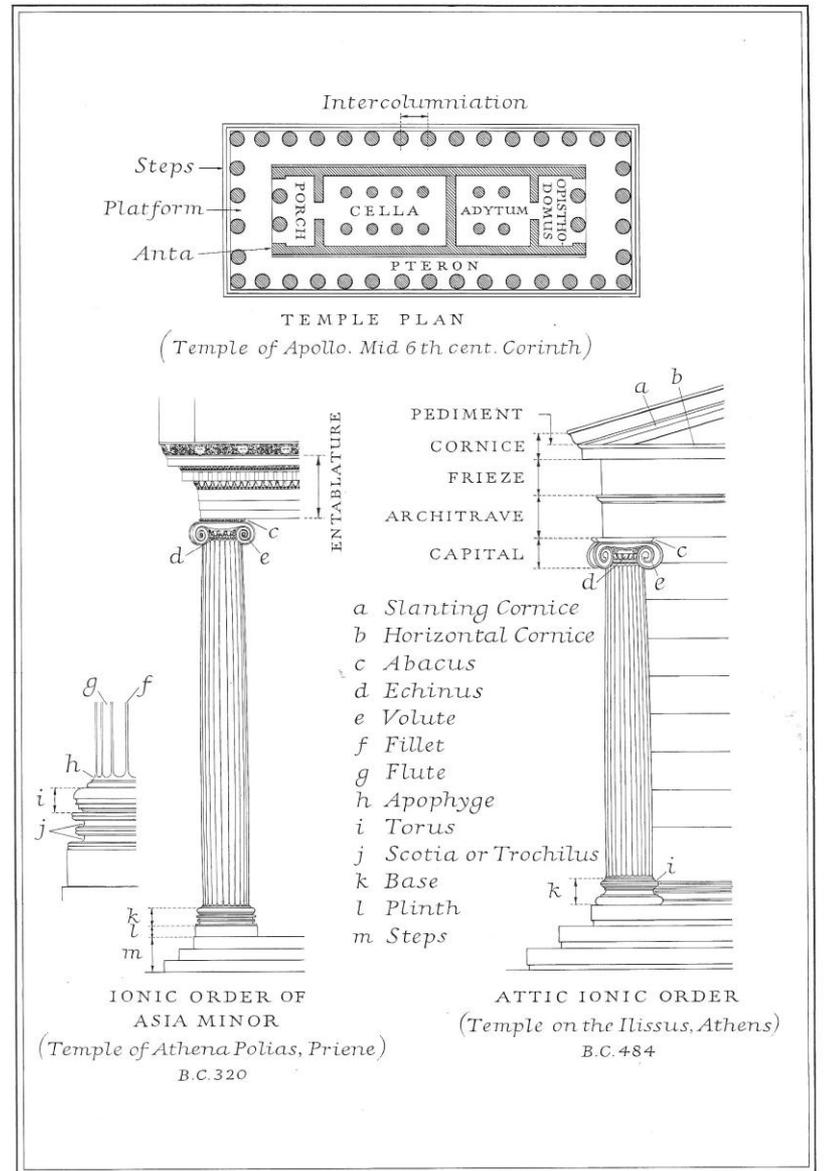
- «Doric» is the order of mainland, not just of the Peloponnese, but also (for example) of the Ionians of Attica.
- «Ionic» is the order of Ionia and of the Cyclades, including ethnically Doric places like the Dodecannese



Doric



Plan Details



Ionic

Corinthian

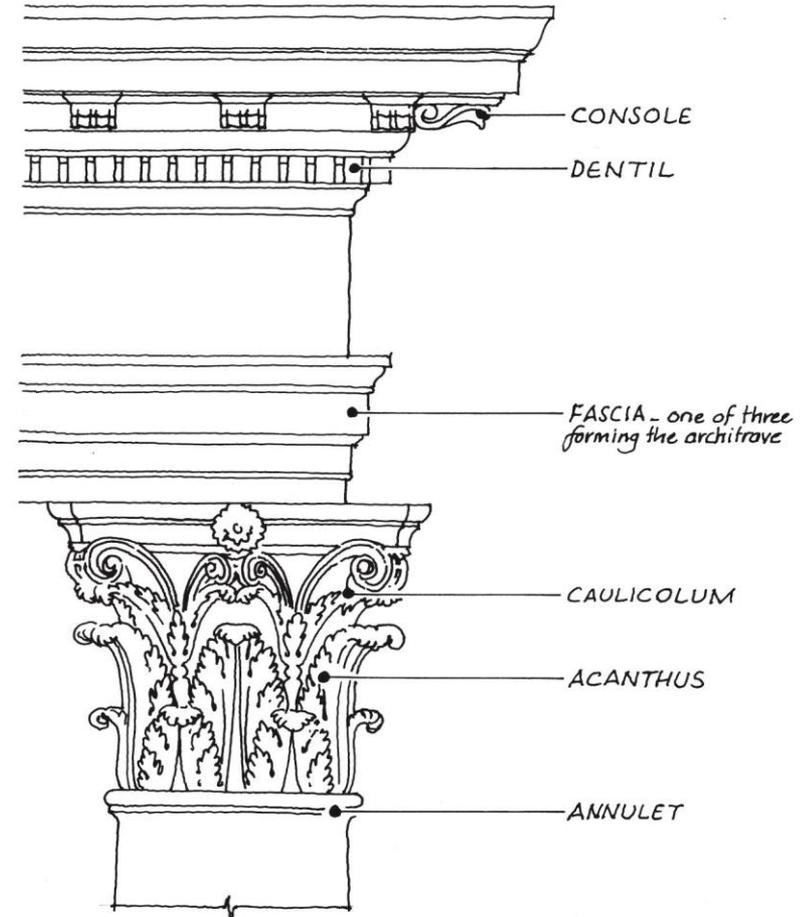
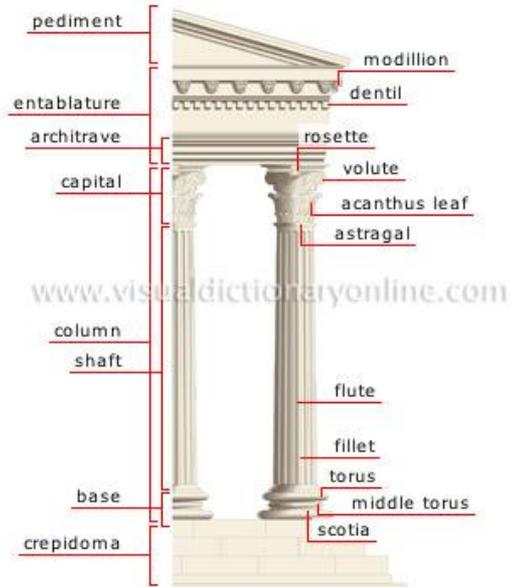
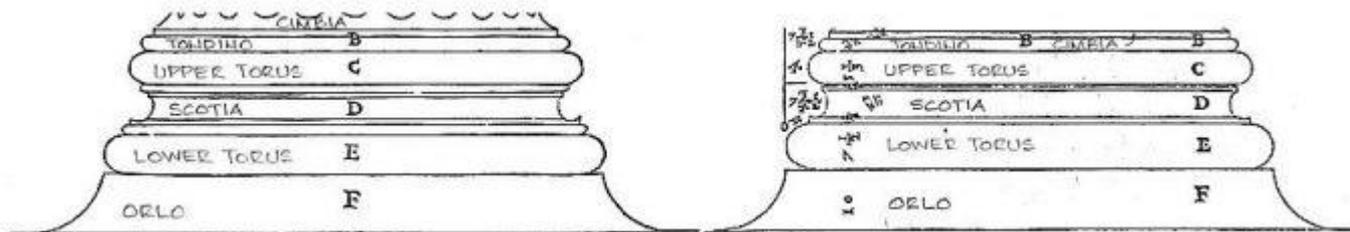
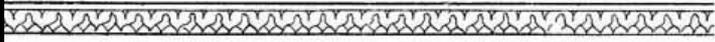


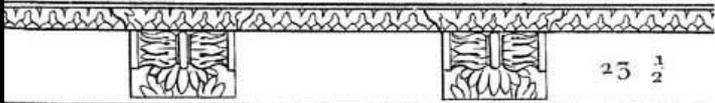
FIGURE 11 The Corinthian order



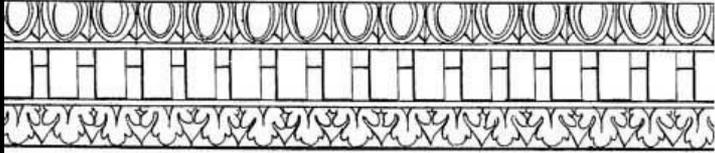
Decorations & Motifs



Leaf-and-dart



Modillions



Egg-and-dart



Water leaf

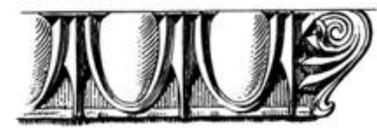


Bead-and-reel

Acanthus



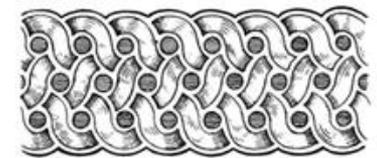
Egg & Dart



Bead & Fillet

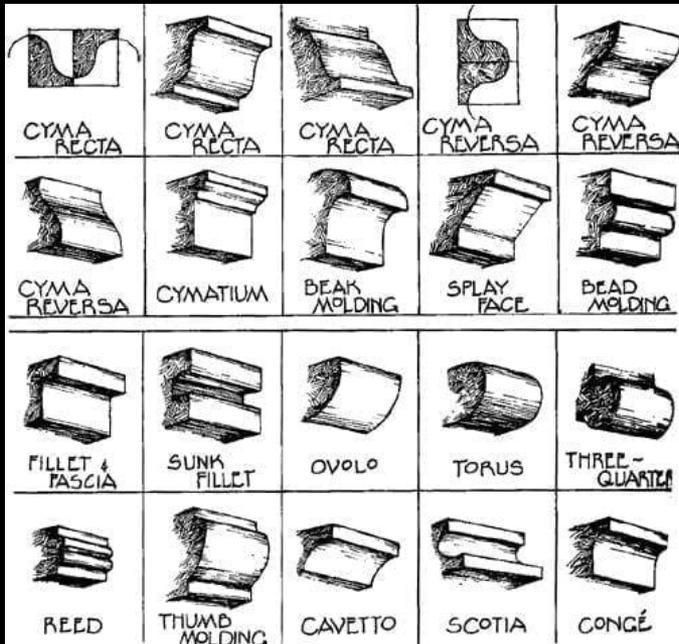
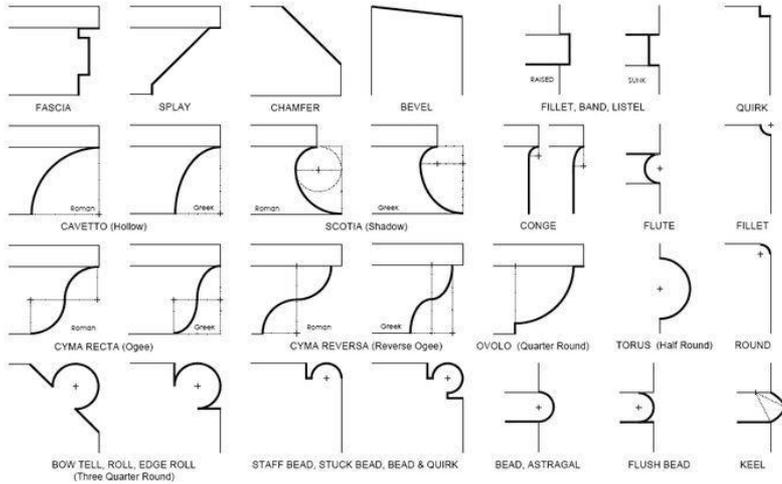


Guilloche

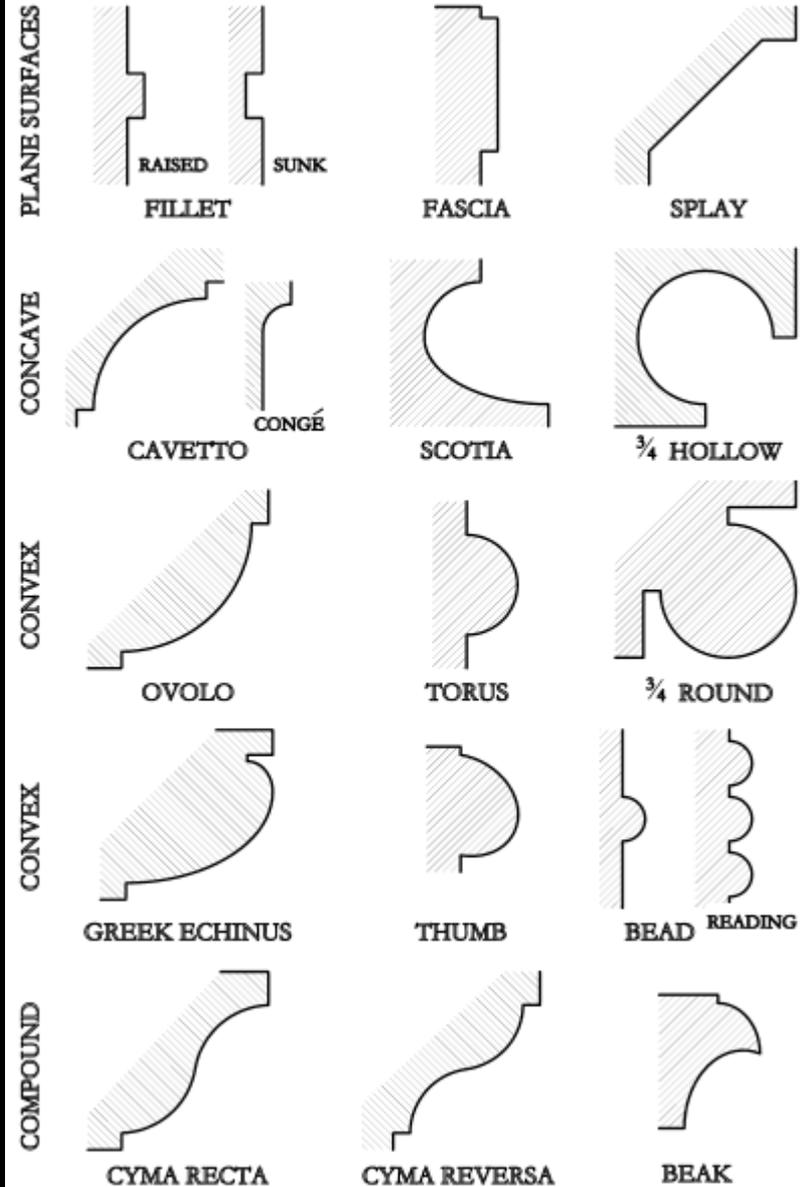


Mouldings

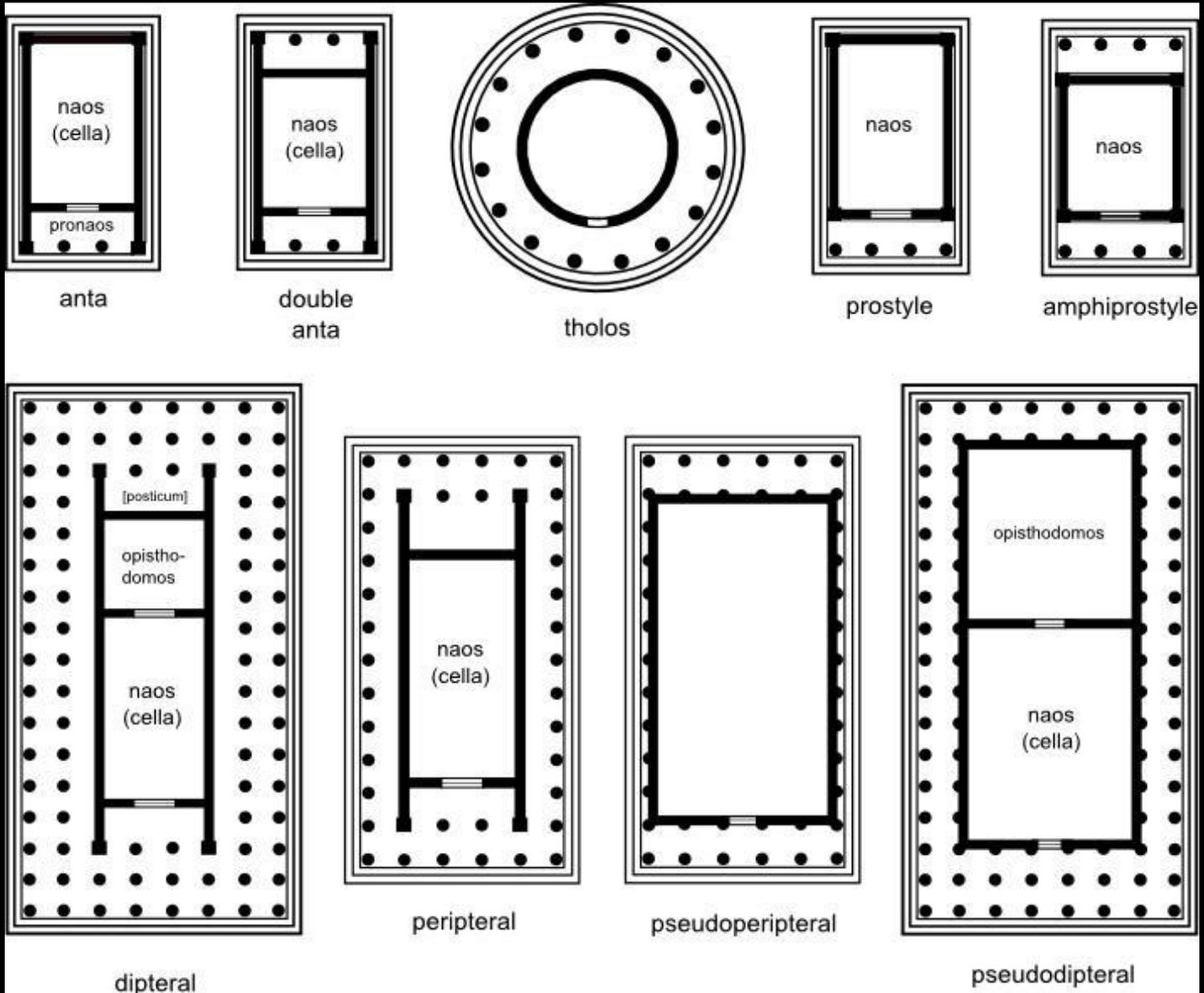
Classical Mouldings



MOULDING PROFILES

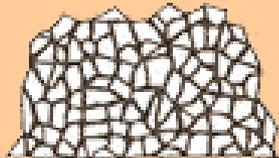


Temple plan types

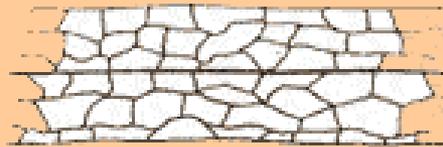


Stone masonry types

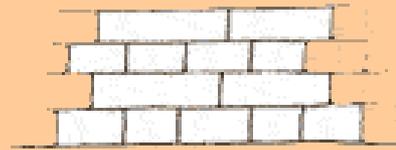
Something You dont See Every Day Types of Ancient Greek Walls



Uncoursed Polygonal
(Nibble)



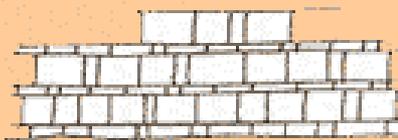
Archaic 'Lesbian'



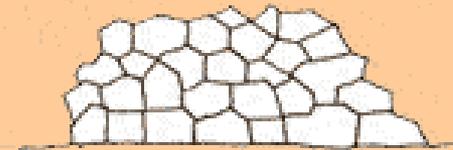
Ashlar Isodomic
(Classical)



Coursed trapezoidal

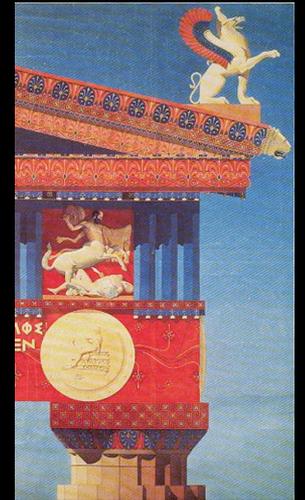


Pseudo-Isodomic



'Lesbian' Polygonal
(Hellenistic)

Colours



Greek Architecture

The origins

The Greek «Dark Ages»

(Rough) Chronological limits (broader view):

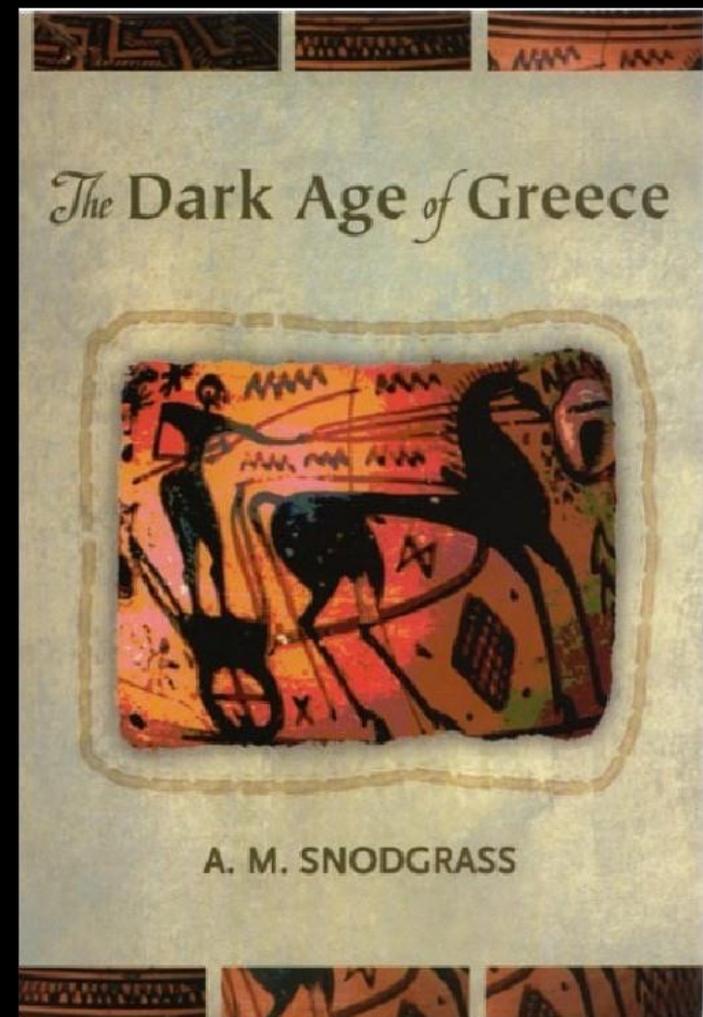
- Late 13th century BC: Twilight of the Mycenaean palatial culture
- Circa 800 BC: beginning of the «Geometric» period.

Sub-periodization

- Circa 1200 BC – 1000 BC: Sub-Mycenaean
 - The long twilight of the Mycenaean civilization.
 - Collapse of the old power structures
 - Smaller communities.
 - Archeology cannot detect many signs of trade with the wider Mediterranean world. Trade links are definitively diminished since the Bronze Age
- Circa 1000 BC – 900 BC: Protogeometric
 - Iron-smithing technology becomes more widespread, firstly in Anatolia and then in mainland Greece.
 - A new world slowly starts to rise
 - New communities appear
 - First Signs of more elaborate buildings (Lefkandi, Nichoria, etc.).
 - Increasing signs of trade with the wider Mediterranean world.

Main issues regarding monumental architecture:

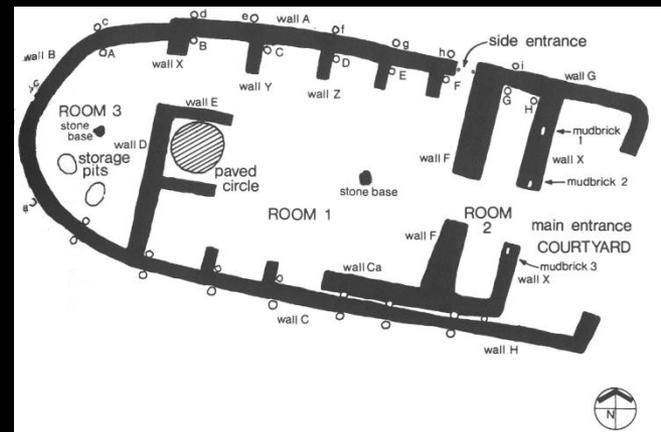
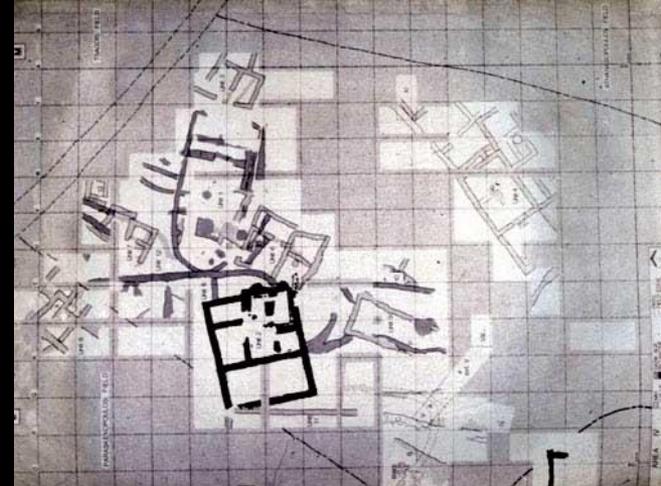
- There are very few signs of early monumental buildings.
- At the beginning it looks like the main buildings (megaron-type) were dedicated to rulers and chieftains. Proper temples do not appear before the Protogeometric/Geometric periods.
- With time one can see an evolution of communities' interests in spending common resources: from «Rulers' Dwellings» to «Houses of the Gods» (Mazarakis-Ainian hypothesis).





NICHORIA

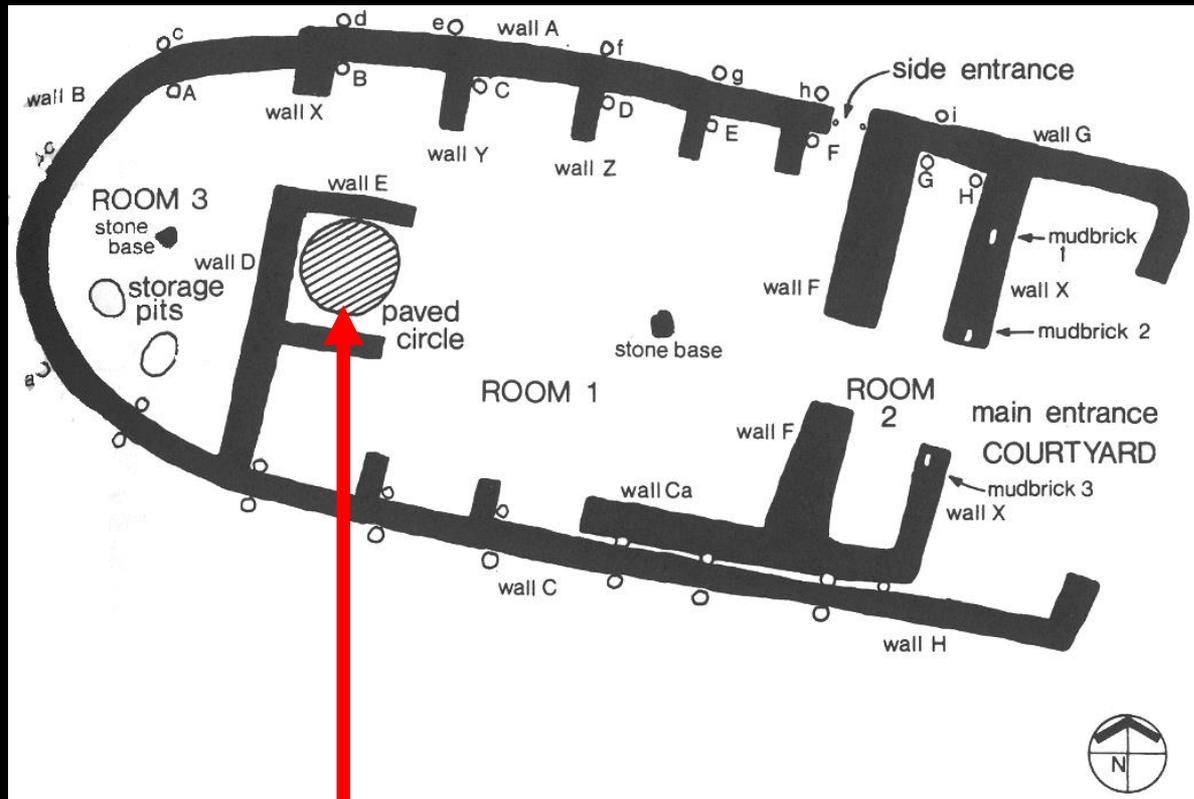
In Messenia.
A key-site to understand life during
Late Bronze, Sub-Mycenean
and Dark Ages periods.



Nichoria:

«Unit VI-1» (11th-10th centuries BC)

the largest known sub-Mycenean «megaron».
Possibly a ruler's dwelling?



Possible signs of ritual/religious practices performed inside the building
(unlike later Greek religious practices).

Smirne.

Housing and town-planning during the Proto-geometric period.



Main characteristics:

- Use of perishable materials (wood).
- Rounded shapes
- Elliptical plans
- Apses
- In a first phase all the buildings seem similar.



0 1 2 3
Escala en metros



Smirne.

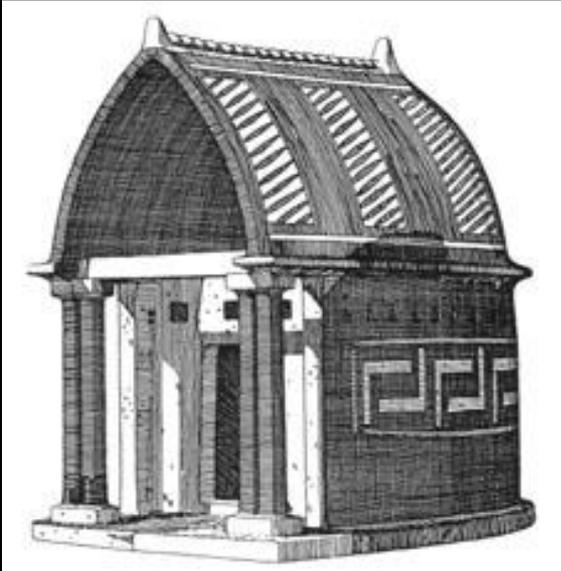
Reconstructive view of the city during the Proto-geometric period

Smirne.

10th-century Houses

House/ Temple (?) models of the Geometric period

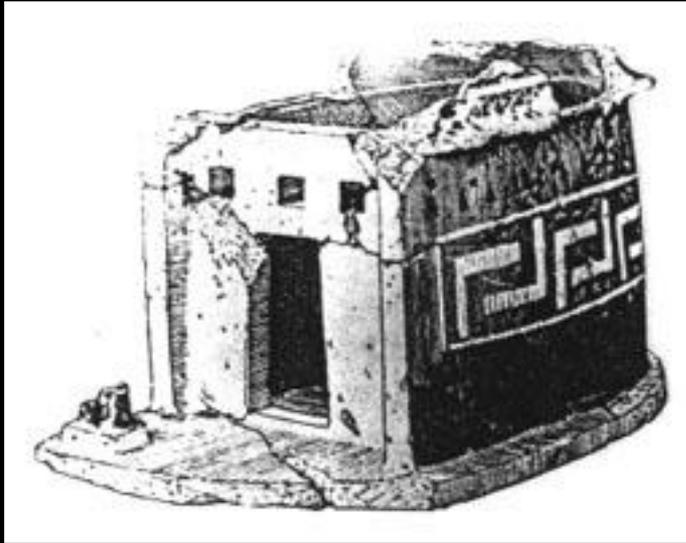
It is unclear whether these offerings mimic houses or temples, but the reality is that they seem to recall house plan types (especially regarding the apses or curved ending walls) whose examples can be found in many sites from the Dark Ages to the Protogeometric and Geometric time periods.



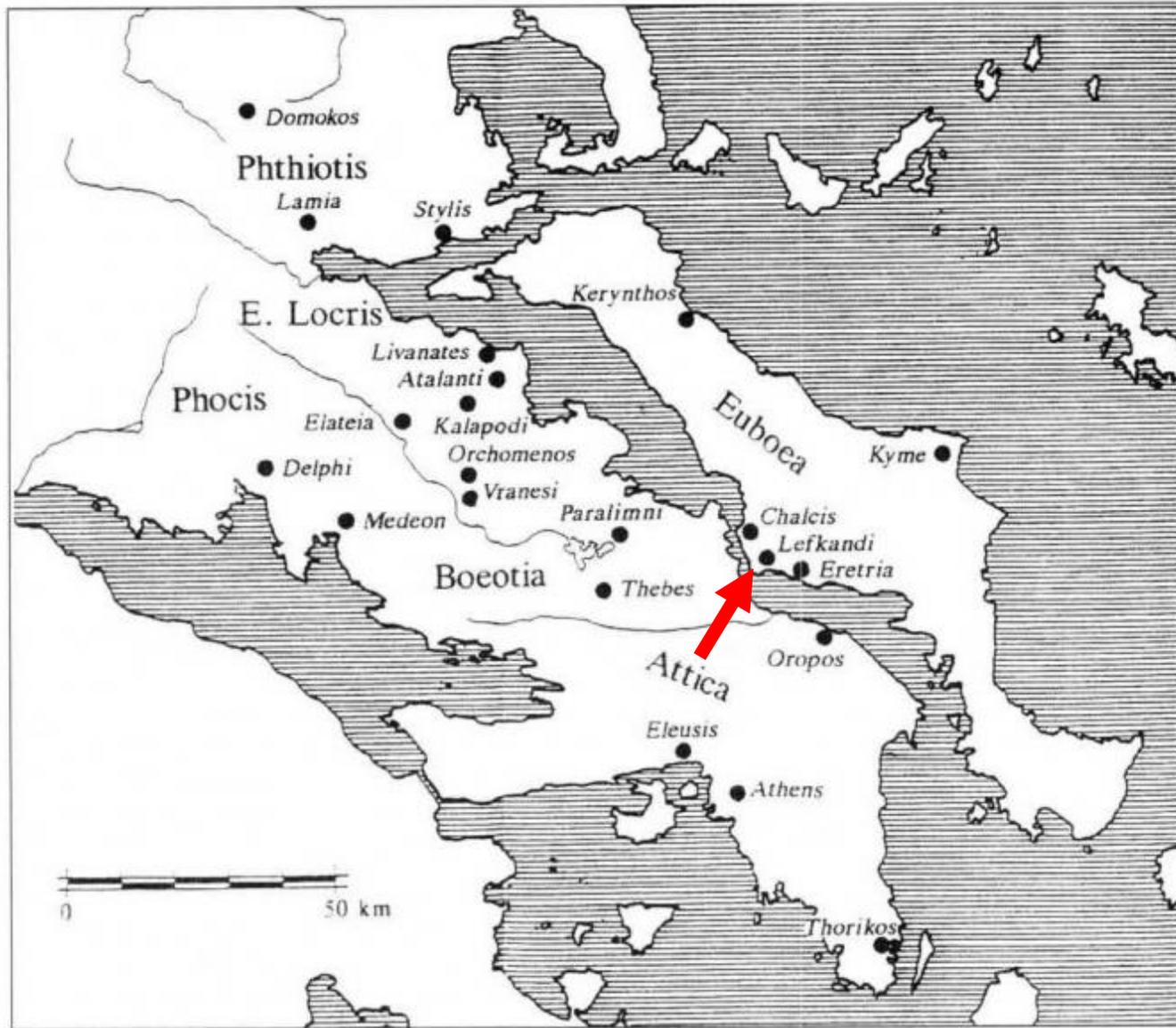
Perachora House/Temple models



ARGOS
House Model
(circa 720 BC)



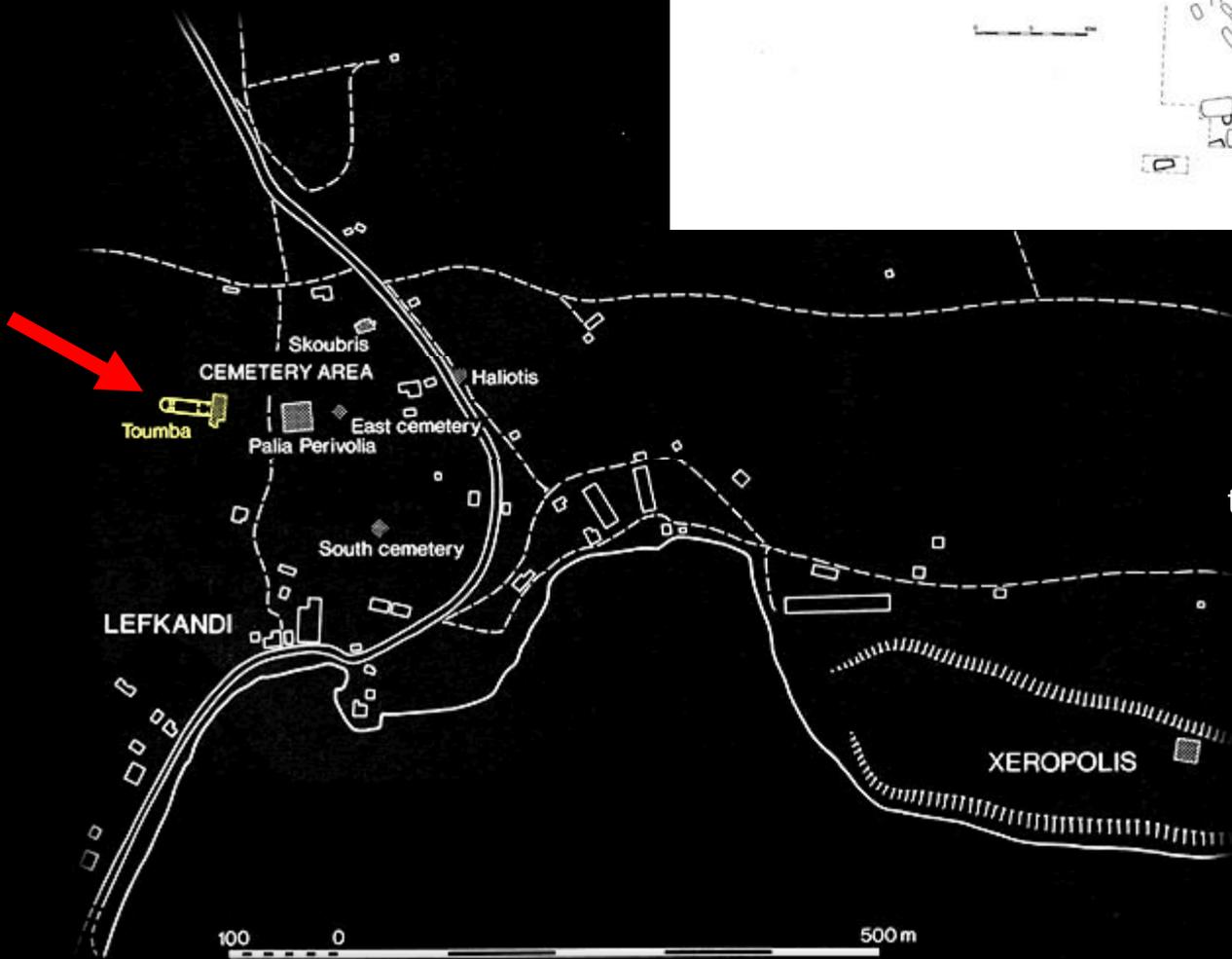
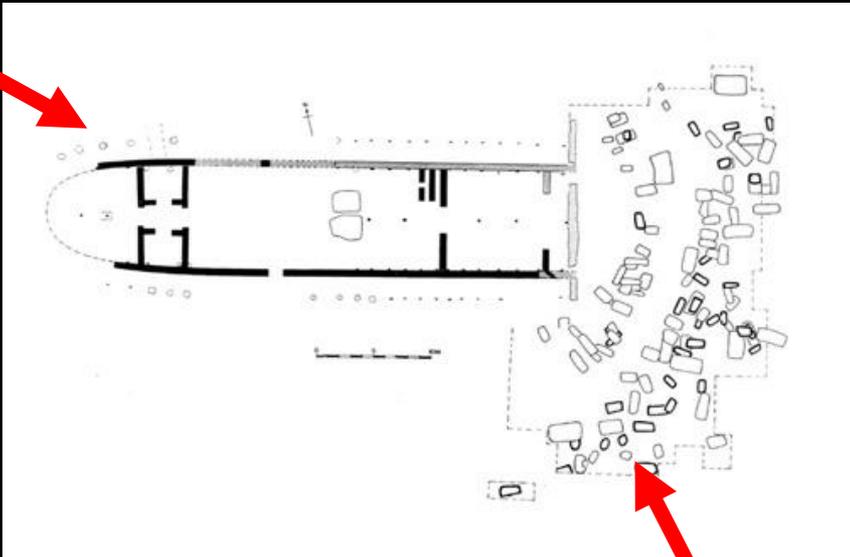
LEFKANDI, in Euboea



LEFKANDI:

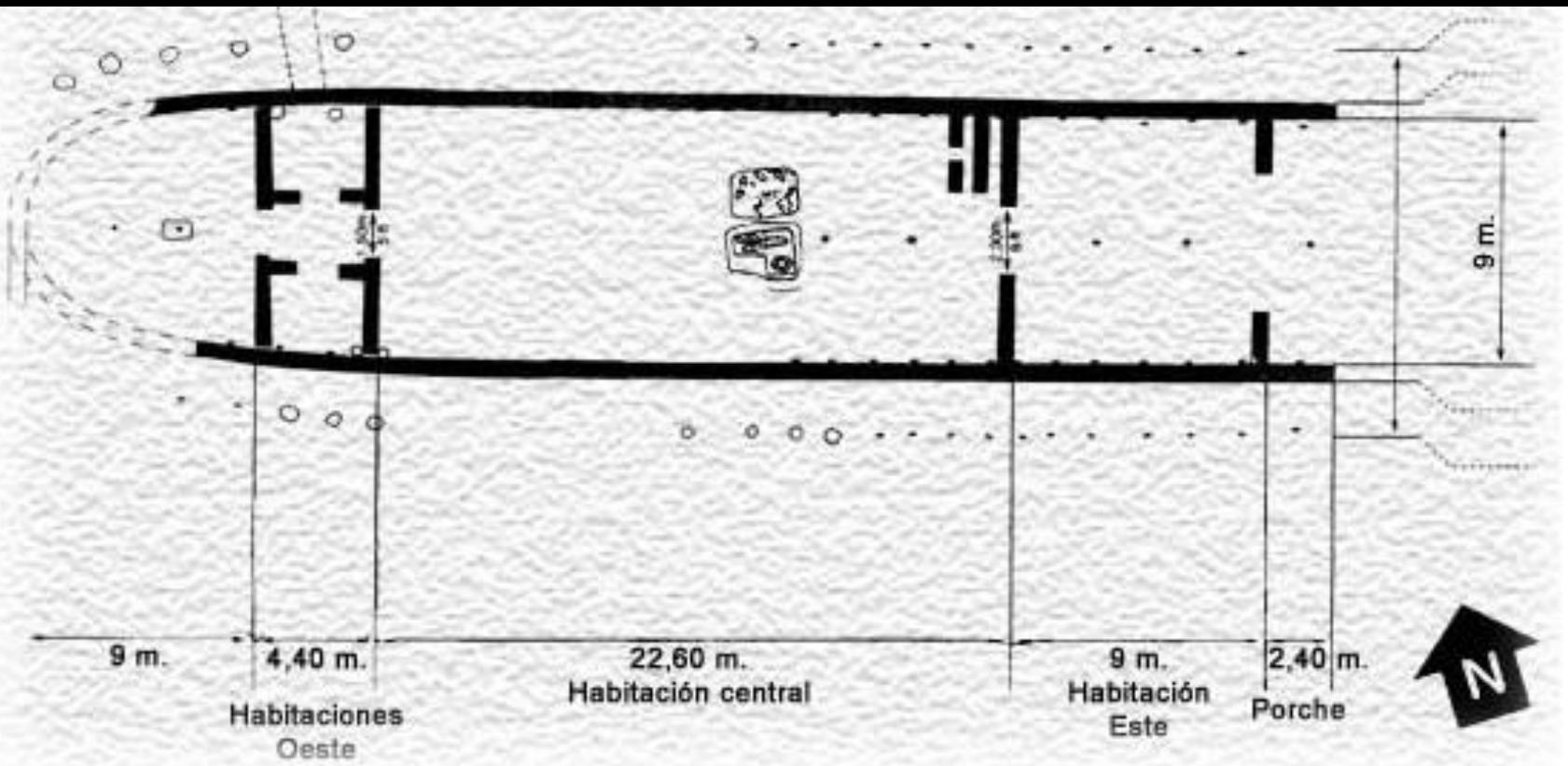
the so-called «Heroon» (10th century BC)

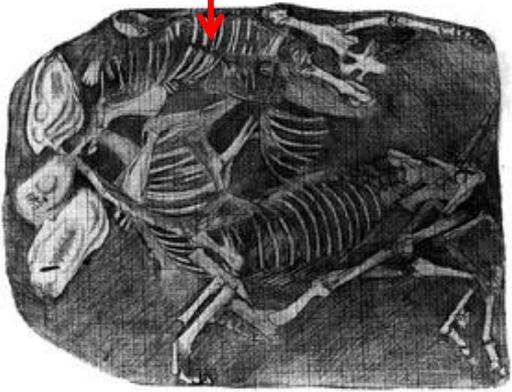
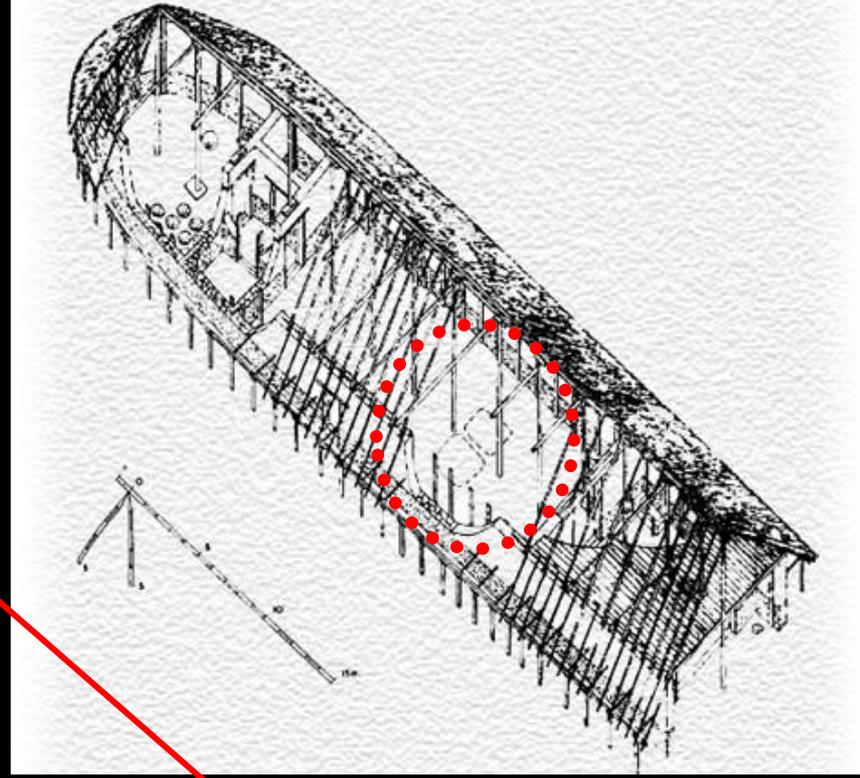
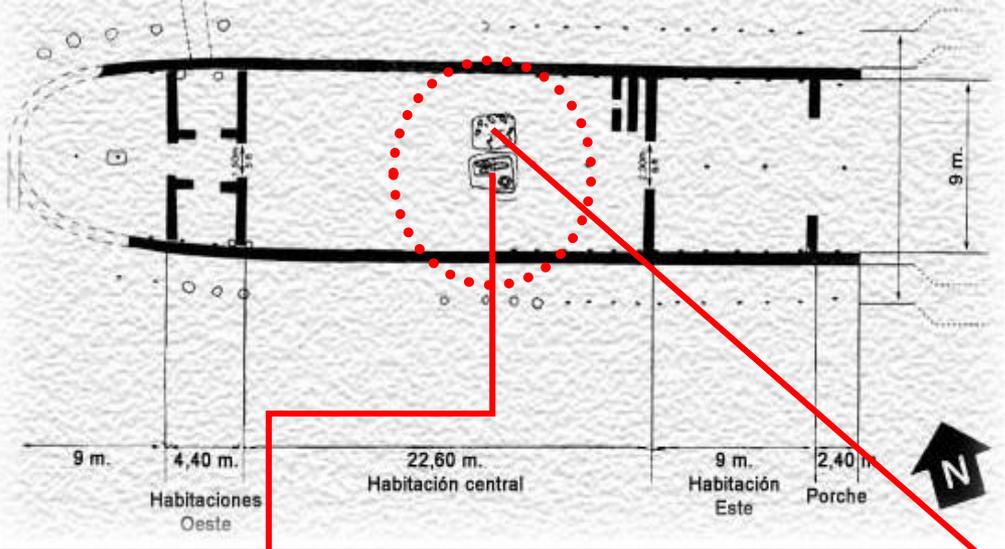
The «Heroon»



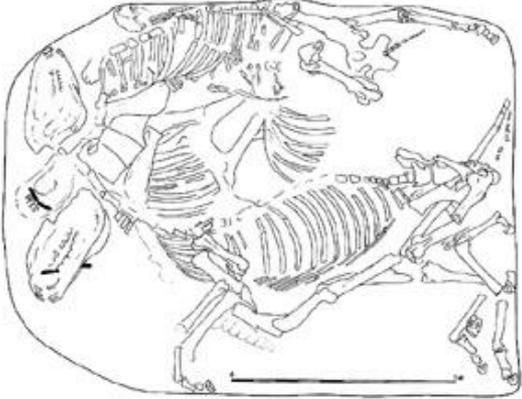
Minor burials
(mostly later than the Heroon)



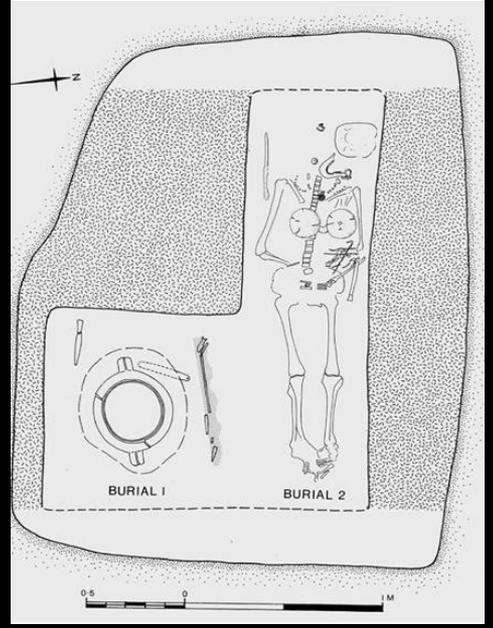




Sacrificed horses



- **Burial 1:** «Heroic» male cremation inside a Cypriot (?) bronze vessel.
- **Burial 2:** feminine, inhumation.



Finds from the HEROON



a



b



d

c



Εξά δεξιά τὴν ἀνατολίτικαν ἀσπίδα, ἣν τὸ ἀρχαῖον πρῶτον ἐκάλει τὸν ἄσπιδον καὶ ἔπειτα τὸν ἄσπιδον. Ἡ ἀσπίς, ἡ ἀσπίς, ἡ ἀσπίς, ἡ ἀσπίς, ἡ ἀσπίς.

Μία κομμάτι χρυσῆς ἀσπίδος, ἀπὸ τὸν ἄσπιδον ἀπὸ τὸν ἄσπιδον, ἀπὸ τὸν ἄσπιδον.



Τὸ χρυσὸν χρυσὸν ἀσπίδος καὶ ἀσπίδος τὸ ἄσπιδον ἀπὸ τὸν ἄσπιδον καὶ τὸ ἄσπιδον ἀπὸ τὸν ἄσπιδον, ἀπὸ τὸν ἄσπιδον, ἀπὸ τὸν ἄσπιδον, ἀπὸ τὸν ἄσπιδον, ἀπὸ τὸν ἄσπιδον.

Elaborated, locally made
objects together with precious
imports from Egypt and the
Middle East



The Centaur

- Eretria Museum
- Terracotta
- 10th c BCE
- Found in Heroon, split in two pieces, one in each grave.

Isis and Horus Necklace

Found in tombs near
Heroon at Lefkandi.

11th/10th century.

Faience, Egyptian in
origin.

Isis and Horus
statuettes common in
Egyptian world.





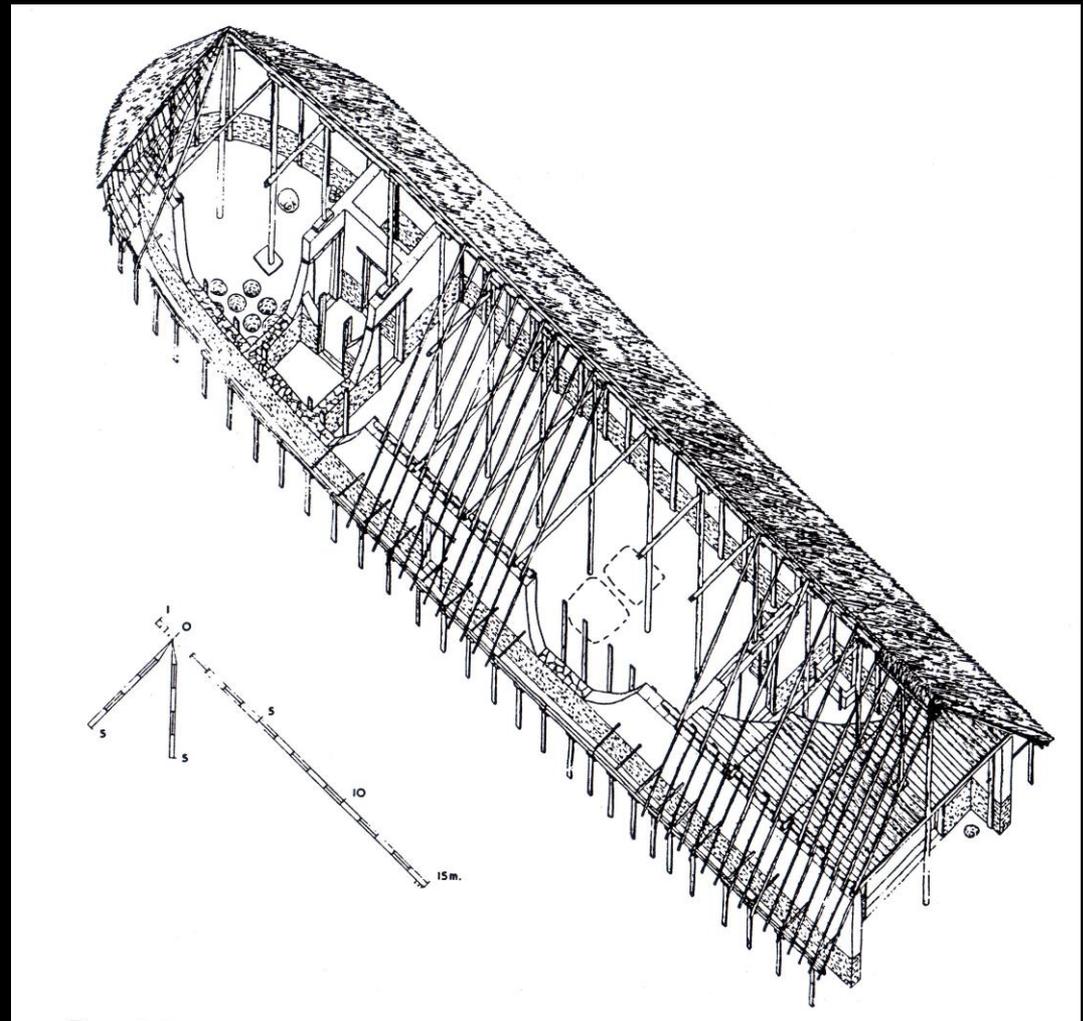
WHAT IS THE FUNCTION OF THE SO-CALLED «HEROON» OF LEFKANDI?

It is unknown whether the «Heroon» started as such.

According to some scholars this could have originally been the magnificent dwelling of a chieftain whose remains were buried here.

This argument seems confirmed by the complexity of the plan, including the big megaron-type hall, possibly for ceremonial/representative functions

In any case, most of the later burials dug around the Heroon date to later time periods, suggesting that the area became a necropolis only after the Heroon became the resting place of the «royal» couple.

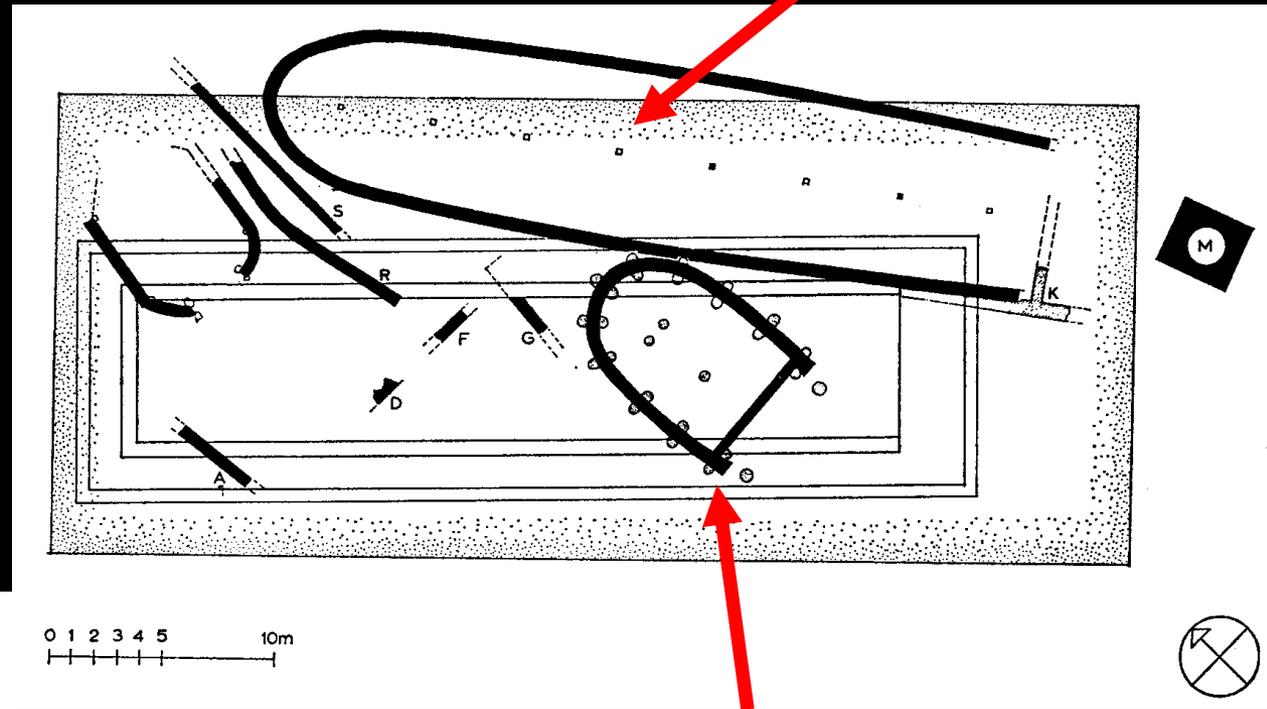


In any case, even if this is clearly not a temple, the Heroon of Toumba/Lefkandi remains an important step in the evolution of Greek attitude towards monumental buildings

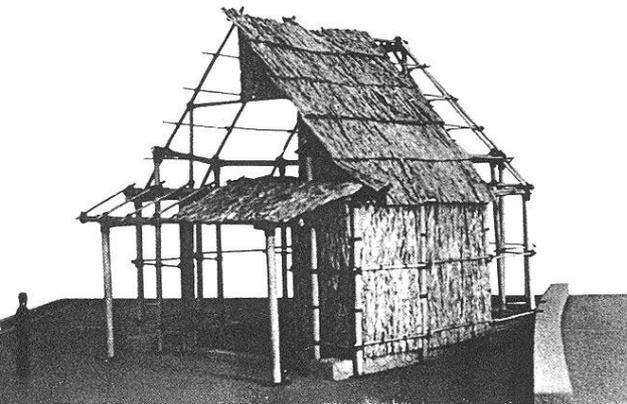
A revolution in the monumental architecture during the **Geometric period**.

• The **«Hekatompeda»**: the first real monumental temples.

Eretria during the 8th century BC: a moment of passage

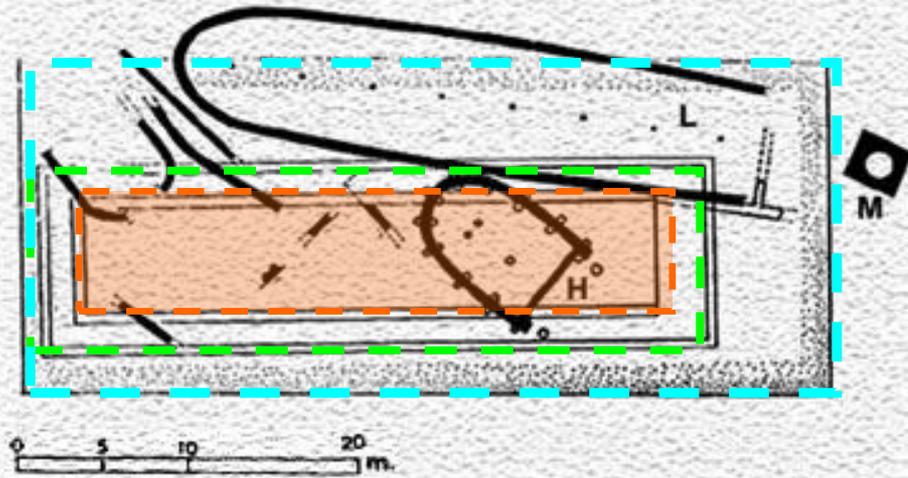


Hekatompedon
(mid 8th century BC)



Daphnephoreion
(Early 8th century BC)

• Possibly started as a Heroon



Later phases

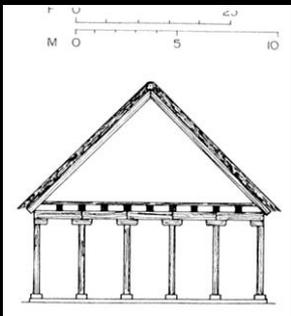
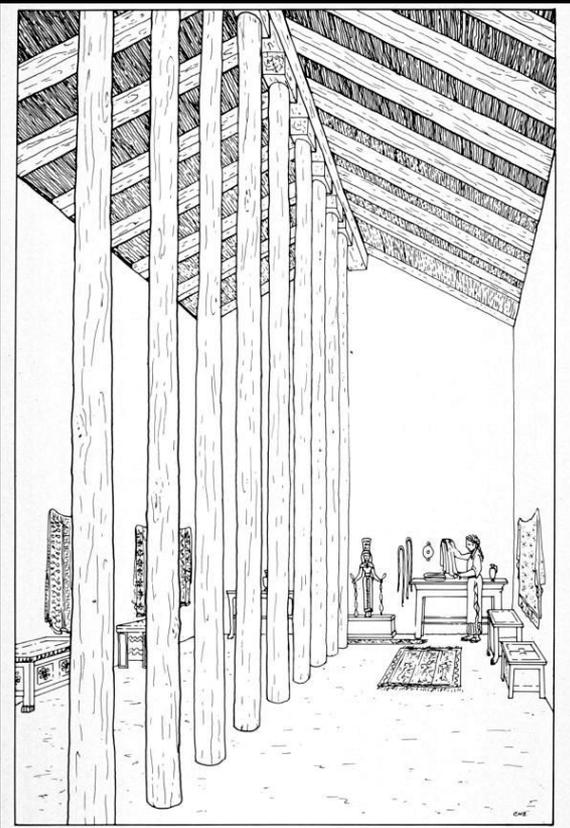


Early 6th
century
BC

Late 6th
century BC
phase,
Destroyed
by the
Persians in
490 BC

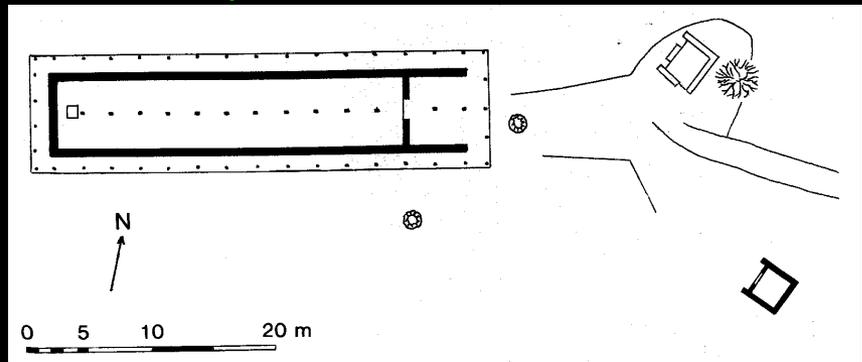
Heraion of Samos

(Early phase: 8th century BC)



Hypothetical view of the façade

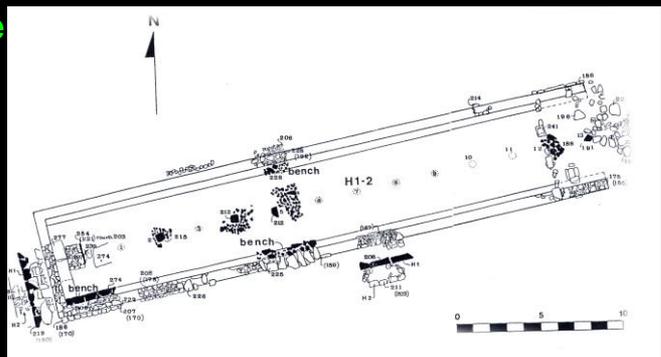
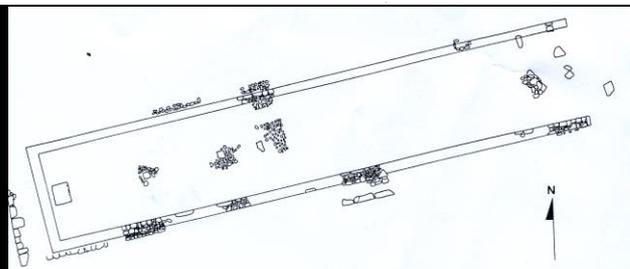
Classical reconstruction of the plan



Real evidence

Of the first early phases:

No trace of the columnade



Reconstructive view of the interior.

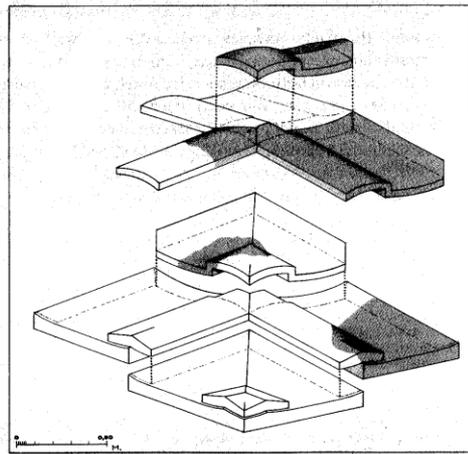
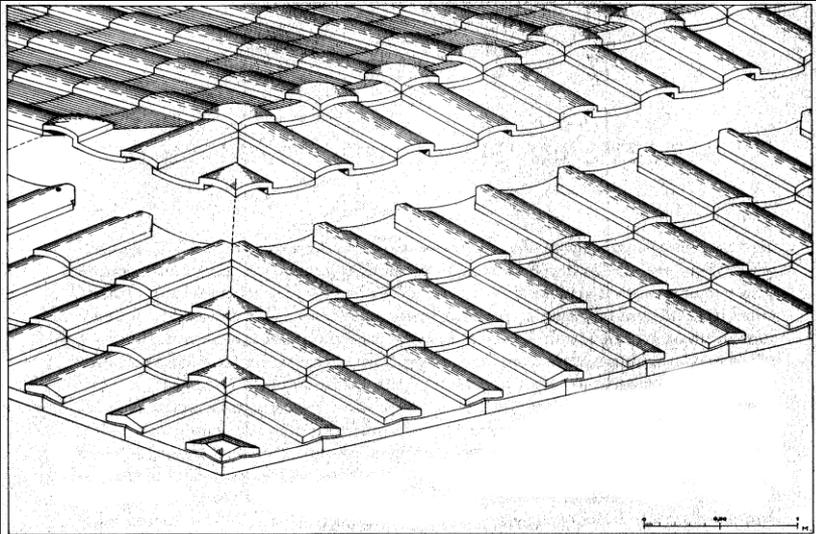
It clearly demonstrates the limits of the «Hekatompedon» design.

The «post & lintel» technique with a line of central poles supporting clay-covered roofs, cannot allow for larger buildings.

7th Century BC: a revolution in Greek Architecture: the TILES

The invention of tiles allowed for lighter ceilings/roofs therefore the widths of the temples can increase.

The archaeological evidence seem to suggest that the artisands of Corinth played a main role in this evolution.



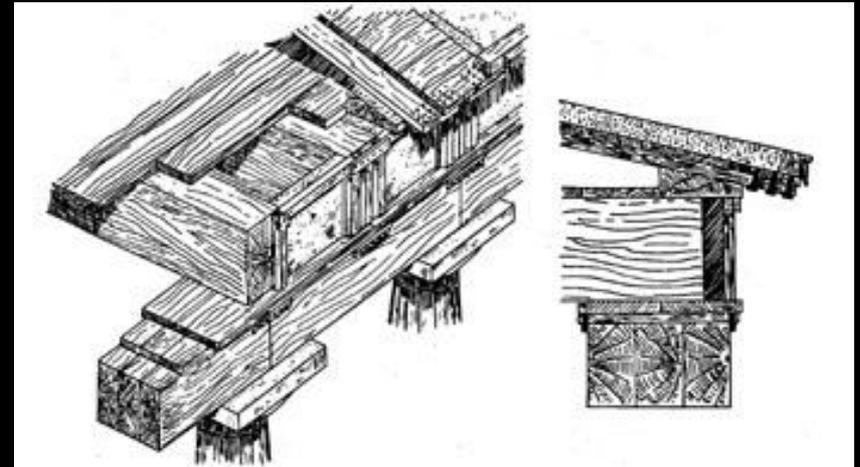
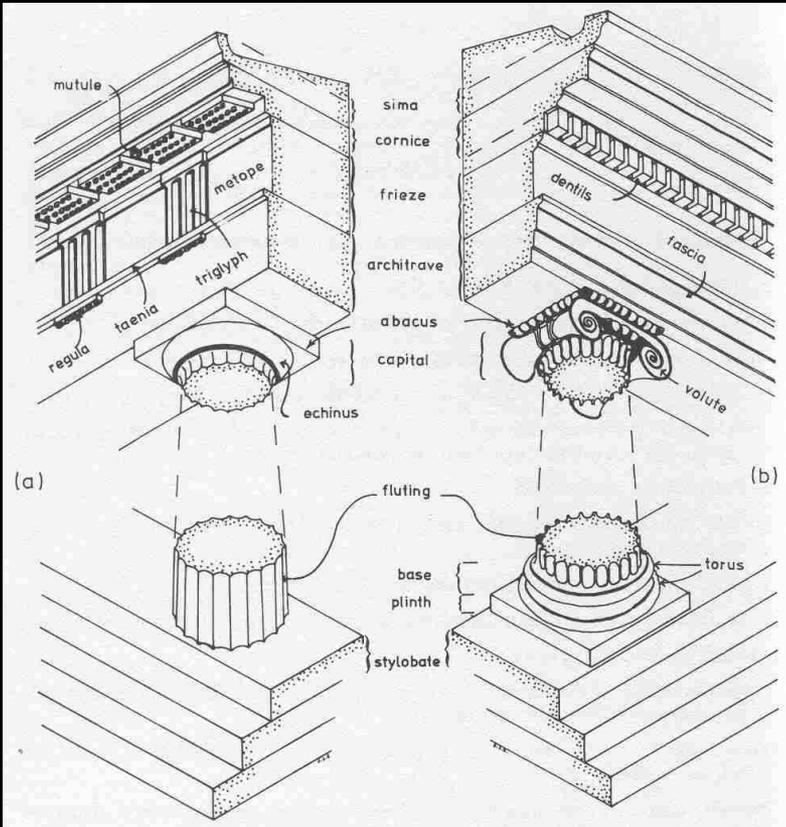
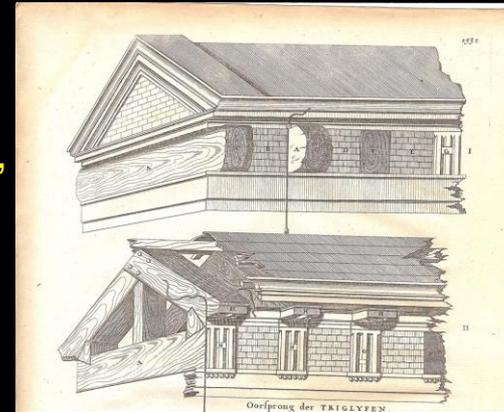
Corinth
Temple of Apollo on the
Acropolis
Phase 675-650 BC

TILES

No sign of Greek Architectural orders in the Hekatompeda of the 8th century.

When and how the Achitectoral orders appeared?

The 7th- century BC temples show some elements, but never the full orders.



Vitruvius' Hypothesis in Book IV, Chapter 3.

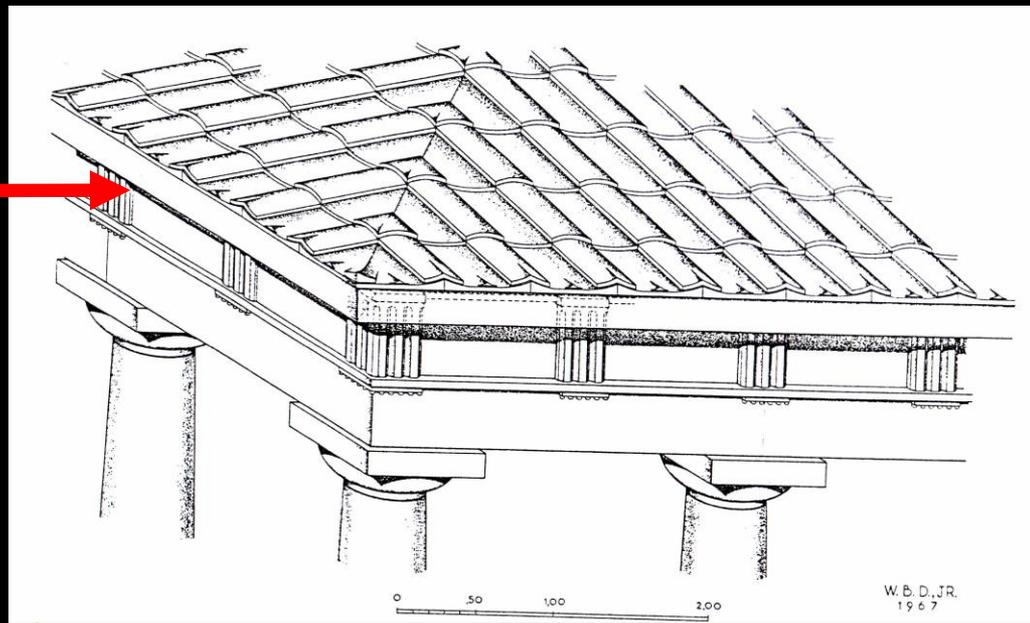
Transposition in stone of wooden architettura.

What is the evidence?

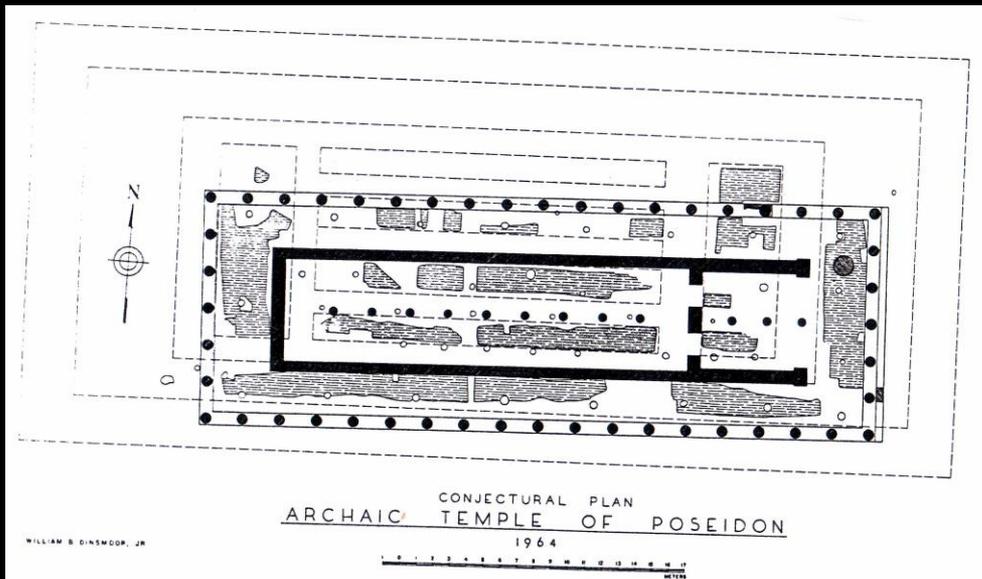


No pediment!

(one of the few real parts of Broneer's reconstructive hypothesis).



**Temple of Poseidon
in Isthmia
(7th century BC)**



Classical reconstruction of plan and elevation by Broneer.

In reality in this first phase:

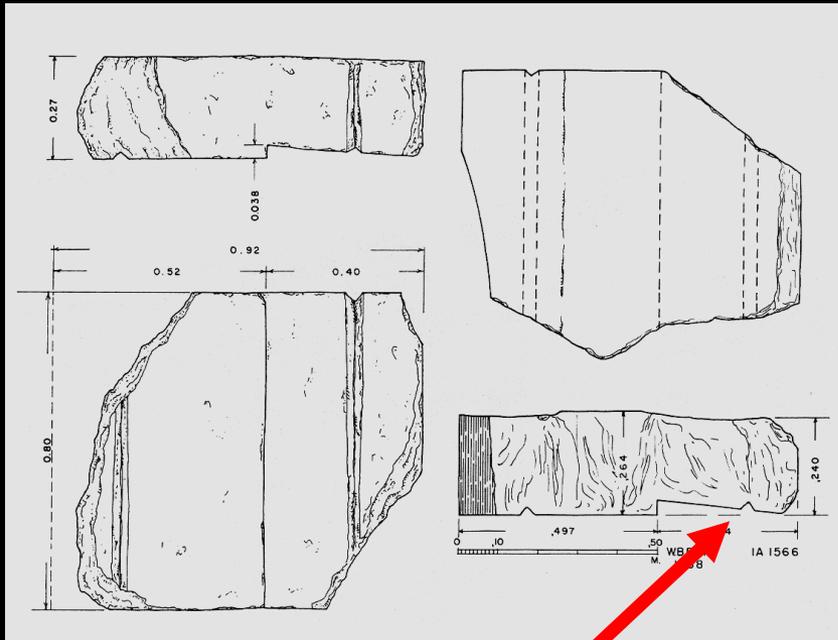
- No signs of Columns
- No signs of the Frieze

These elements are all parts of later phases.

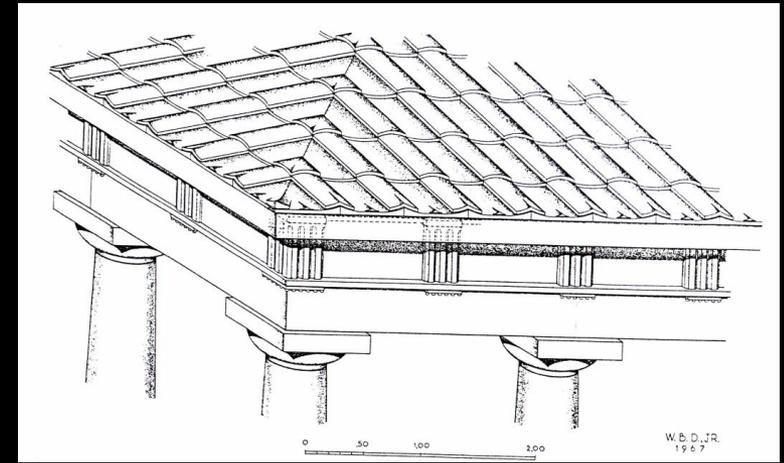
Broneer' reconstruction was influenced by his preconceptions regarding Greek Architecture.

Temple of Poseidon in Isthmia.

Fragment of Gheison (first documented example)

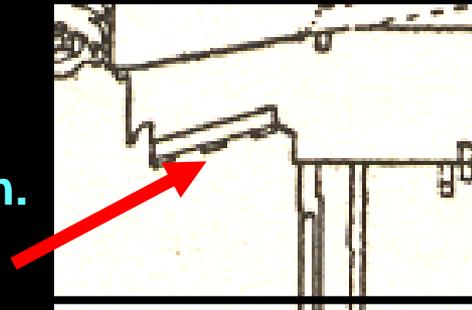


No mutule



Broneer's reconstruction is possibly wrong

Comparison with
a classical gheison.
Note the mutule

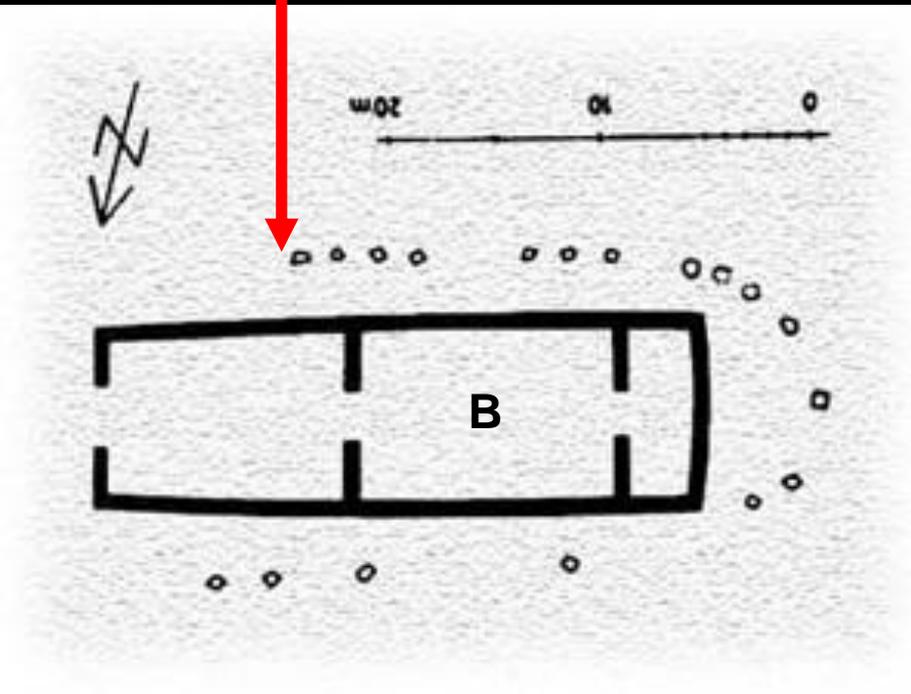
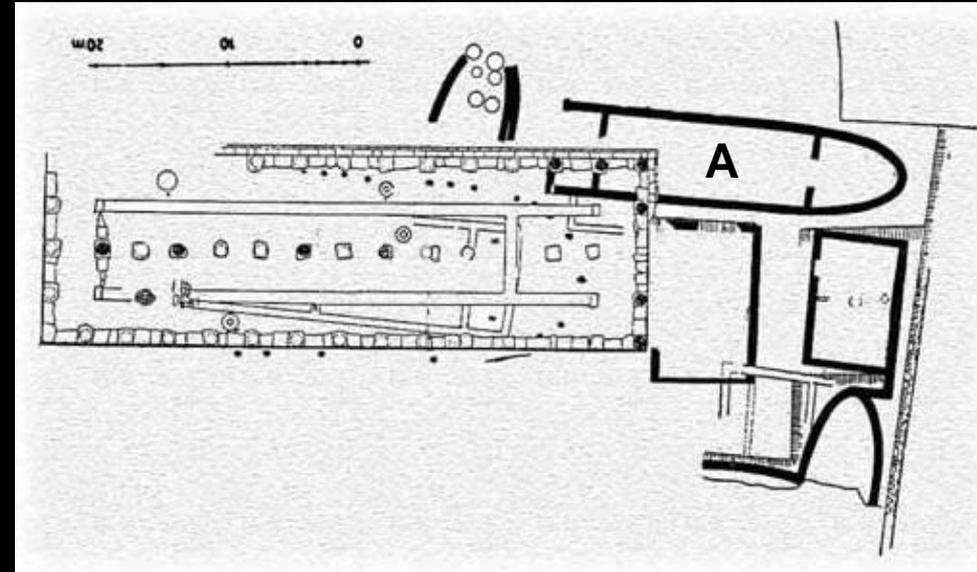
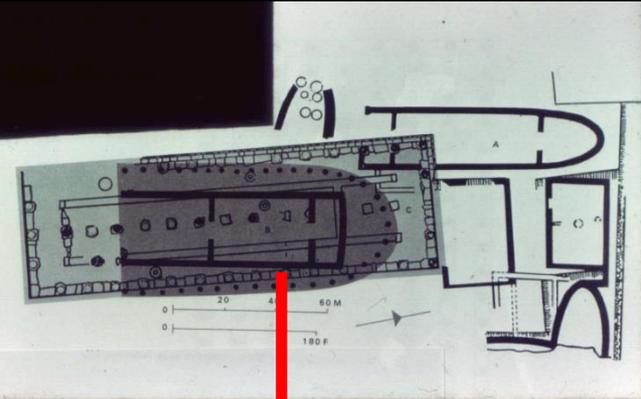


Archaic Temple at Isthmia, Greece. Constructed between 690 - 650 BC.
Design by Kerry Anne Lang Antonsen & Jimmy John Antonsen.

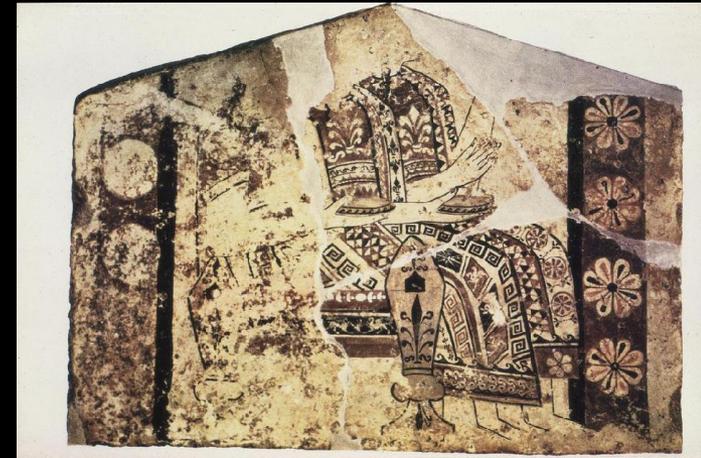
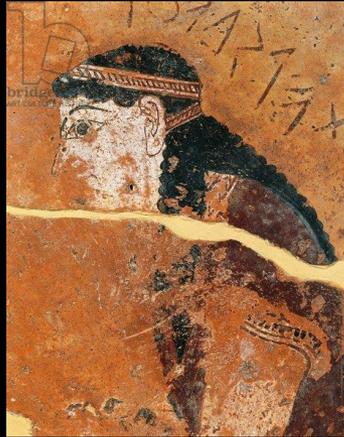


THERMOS (Aetolia)

Early buildings. Elliptical and rectangular buildings, Megaron A and Megaron B. The two latter are currently under study and their date and function remain problematic.



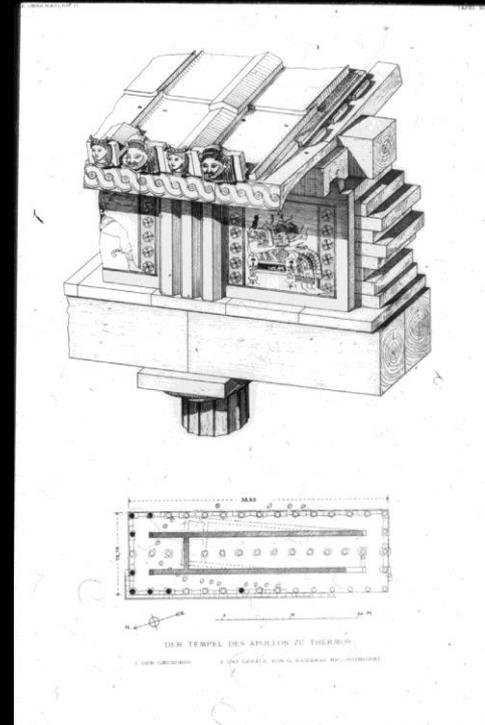
Thermos, Temple of Apollo. (630-620 BC)



Reconstruction,
Probably wrong.

• **No evidence of**
tryglyphs, gheison,
etc.

• **The temple probably**
displayed only the
metopes without the
other details of the
Doric Order

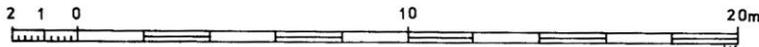
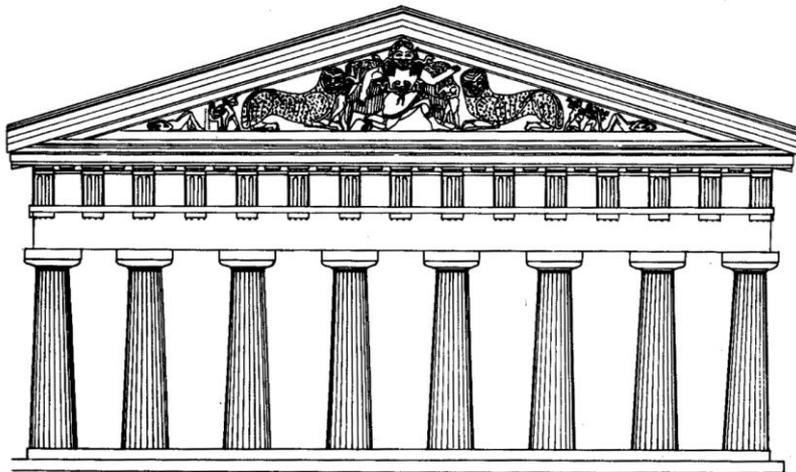
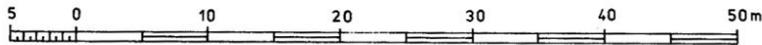
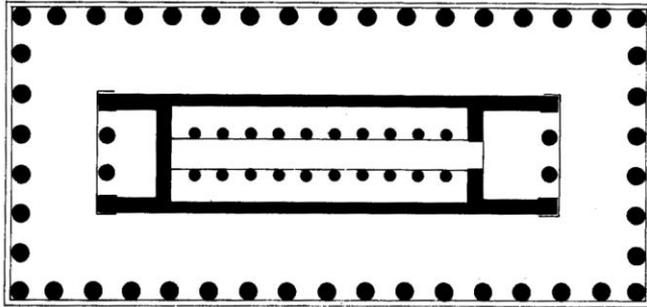


The so-called “metopes”

EARLY 6th CENTURY BC: the standardization of the Doric Order

Temple of Artemis in Corfù / Kerkyra.

580-570 BC



First real example of full, standard Doric Order.

The Ionic order will remain much more fluid and less standardized, until well into the Hellenistic period.

The «standardization» of the Doric Order is an important step in the evolution of Greek Architecture.

Vitruvius' hypothesis of «petrification» of wooden architectures seems contradicted by the evidence.

- The various parts of the Doric Order appeared separately during the 7th century (metopes in Thermos, Gheison in Isthmia, etc.) and not as working parts of the same system.

- Even if the divided the Greeks kept a sense of ethnic common ethnic identity, especially regarding panhellenic festivals in panhellenic sanctuaries. It is therefore possible that ideas were shared and phenomena of imitation/competition led to the standardization of the Doric Order already in the 6th century BC