

College of Engineering
Department of Interior Design

History of Interior Design

2nd year – 1st Semester

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Room No. 313

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College of Engineering
Department of Interior Design

Rome Architecture





Course Reading List and References:

- A History of Interior Design
by John Pile & Judith Gura



Roman Architecture

- ▶ From 800 -300 BC, among all cities in Italy, Rome became the most powerful.
- ▶ 334 – 264 BC, Rome conquered all of Italy and established one of the strongest empires in history.
- ▶ Depended on conquest by land to extend their power

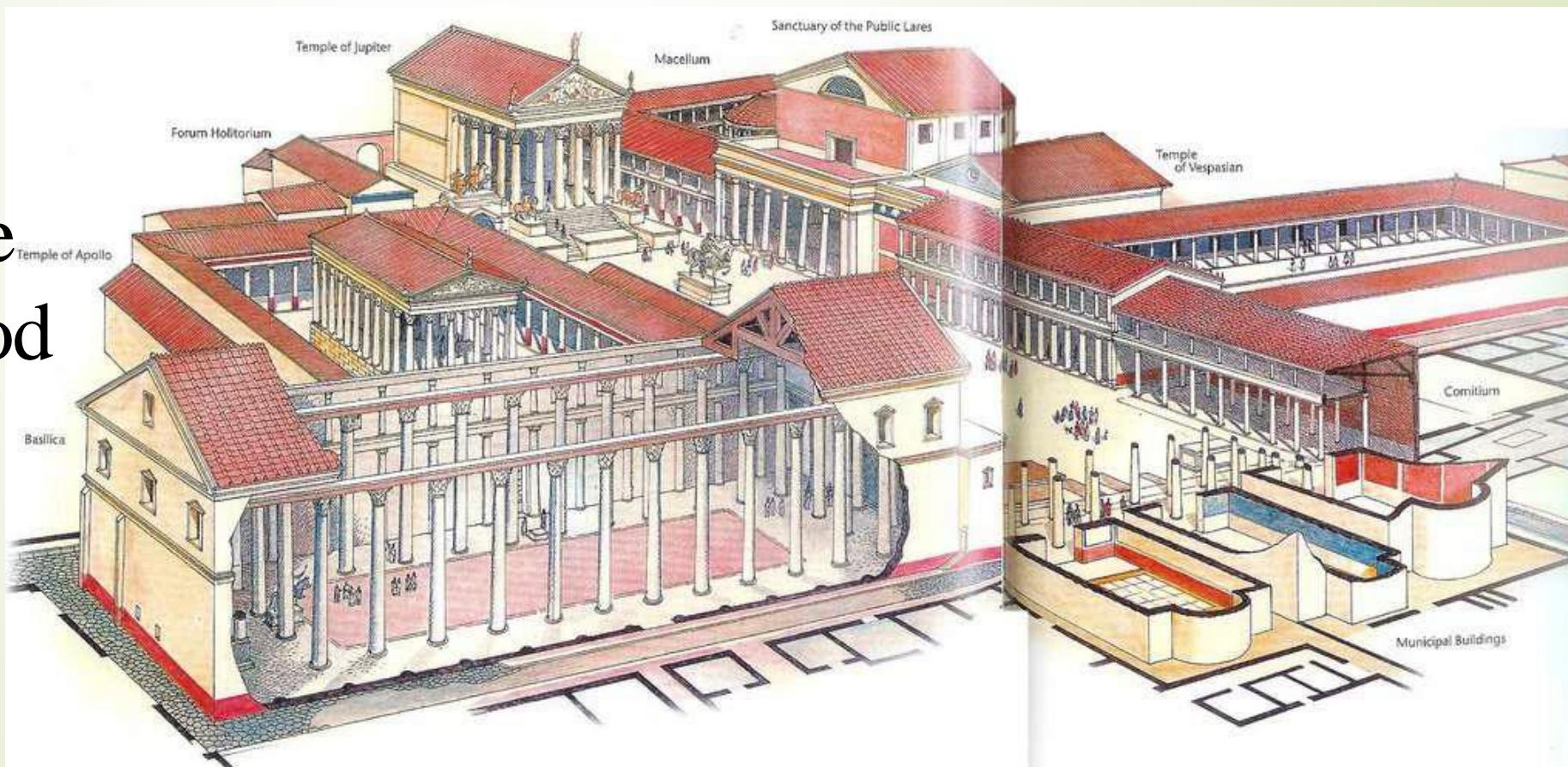
→ Kings need palaces and priests need temples -- but democracy needs large gathering places



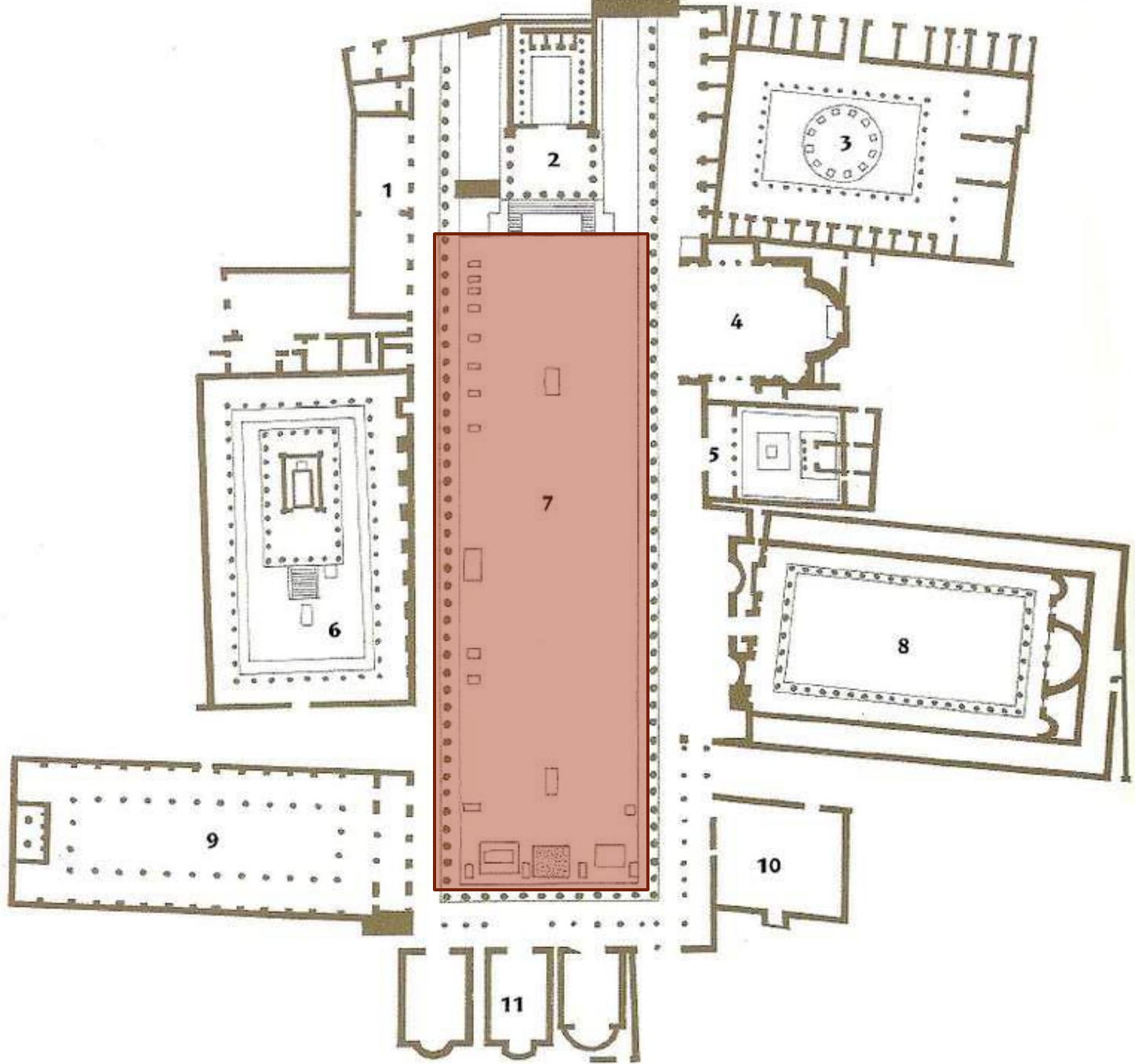
Like the Greek agora, the Roman **Forum** was the center of religious, political, and economic life



► The best preserved Forum is at Pompeii, and dates from the Imperial period



► The forum was a large rectangular public square enclosed by a colonnade

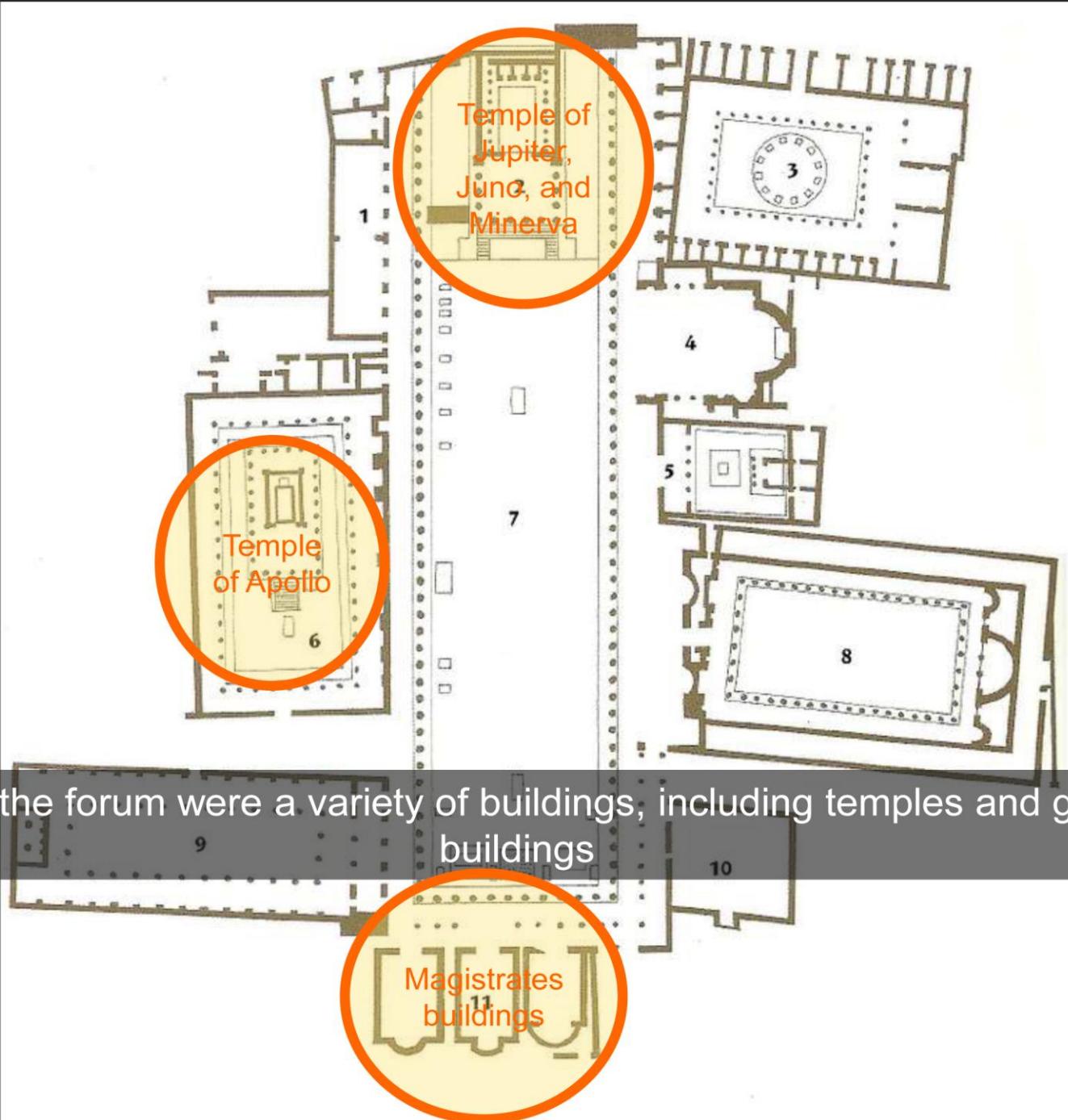


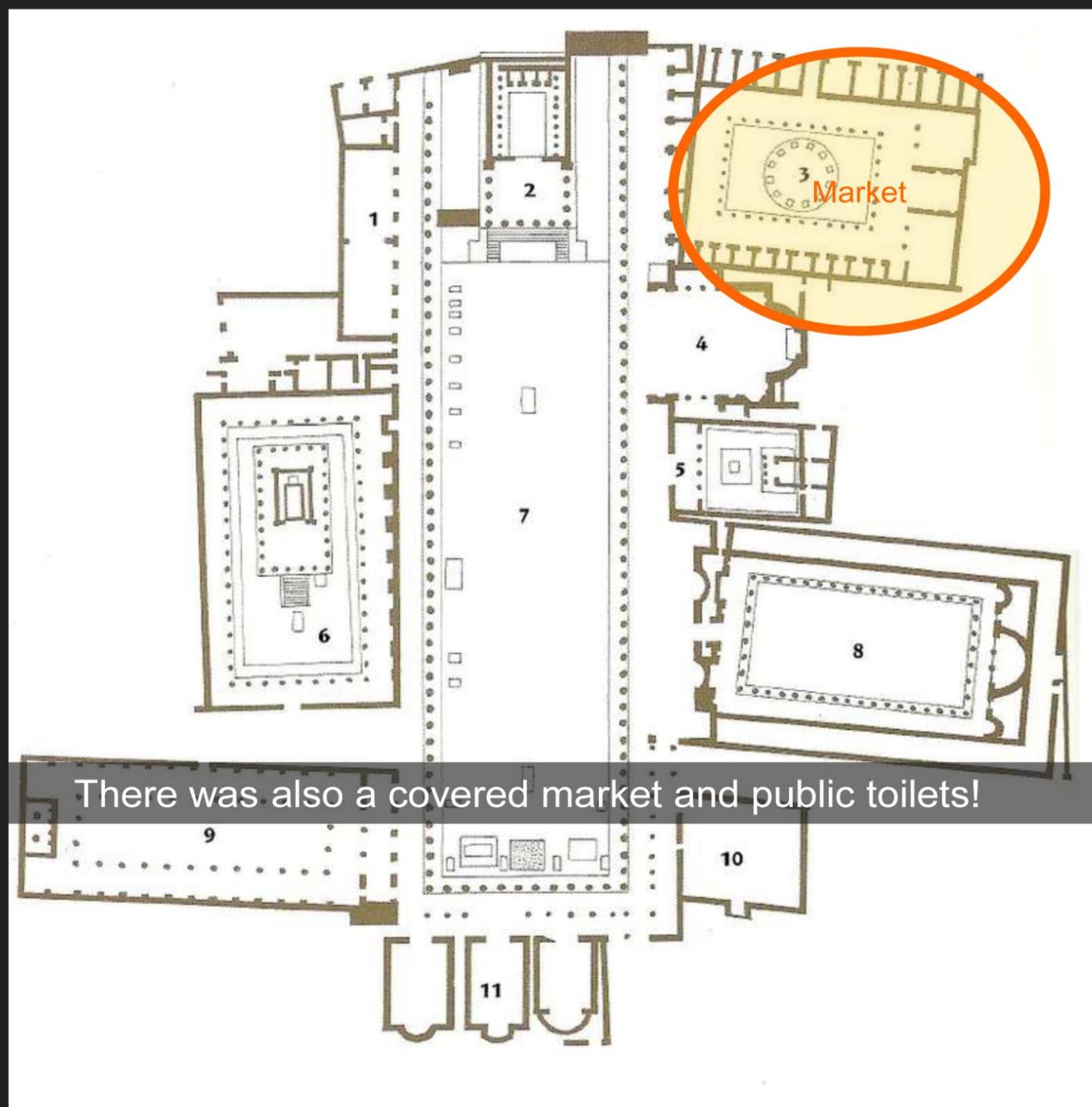
→ And in this aerial view of the actual site you can still see some of the columns of the colonnade still standing

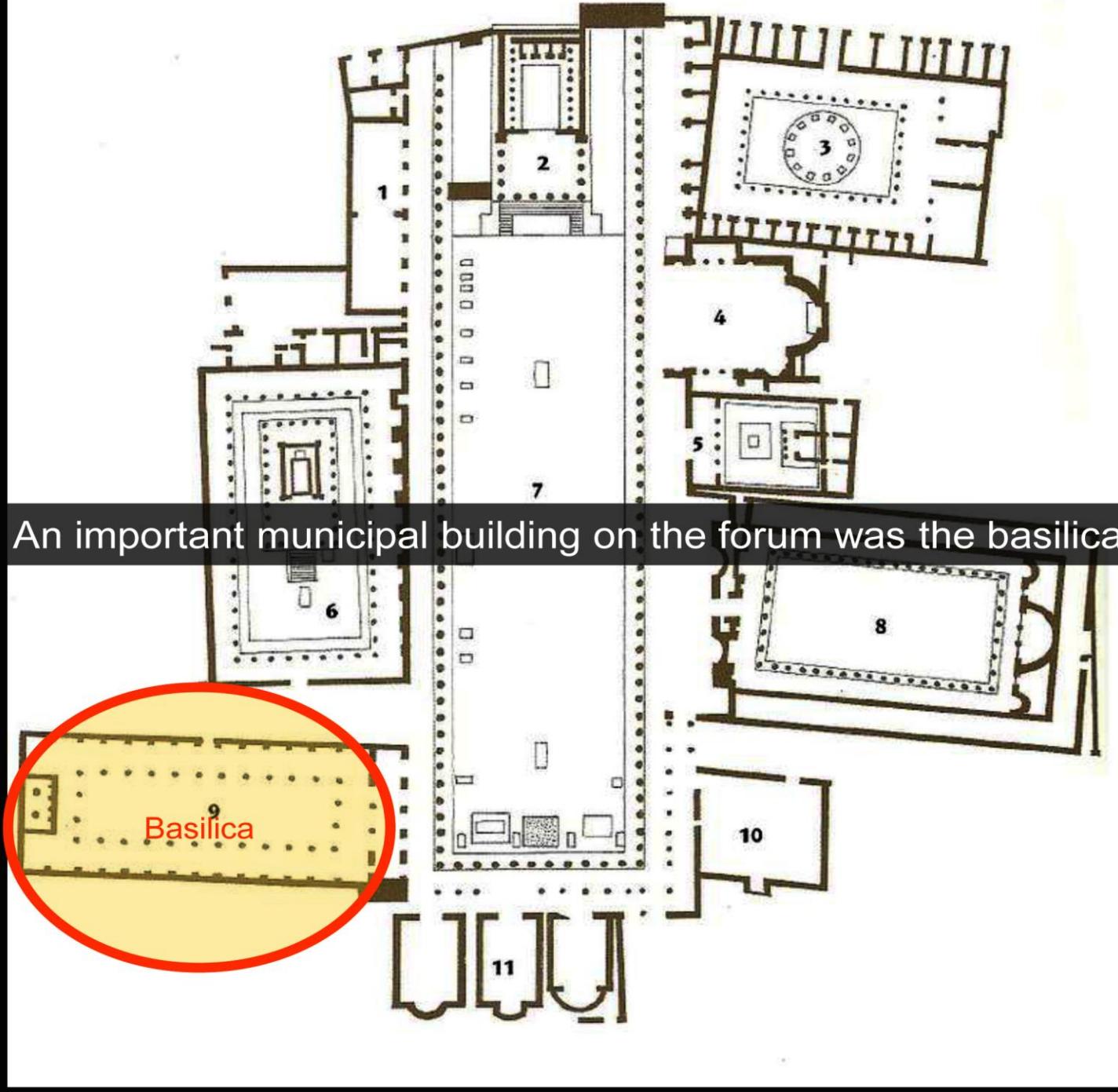




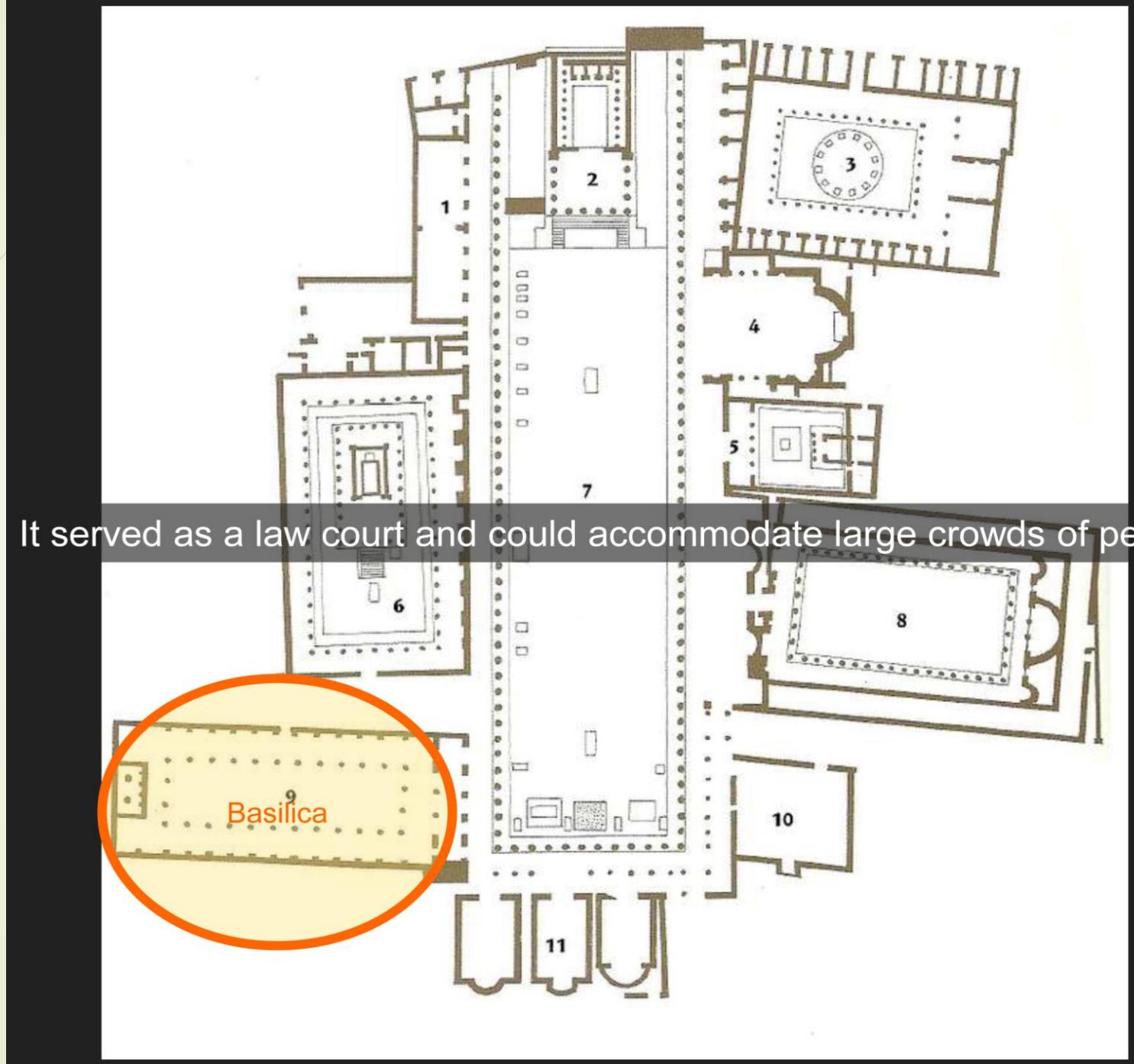
Surrounding the forum were a variety of buildings, including temples and government buildings





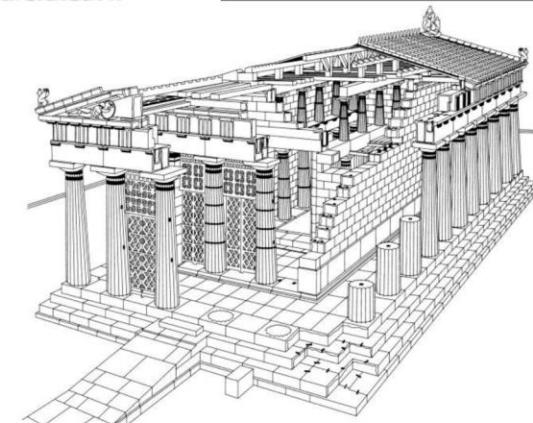


An important municipal building on the forum was the basilica



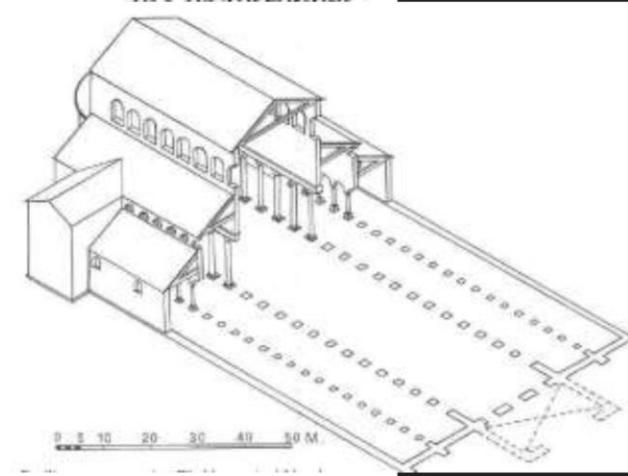
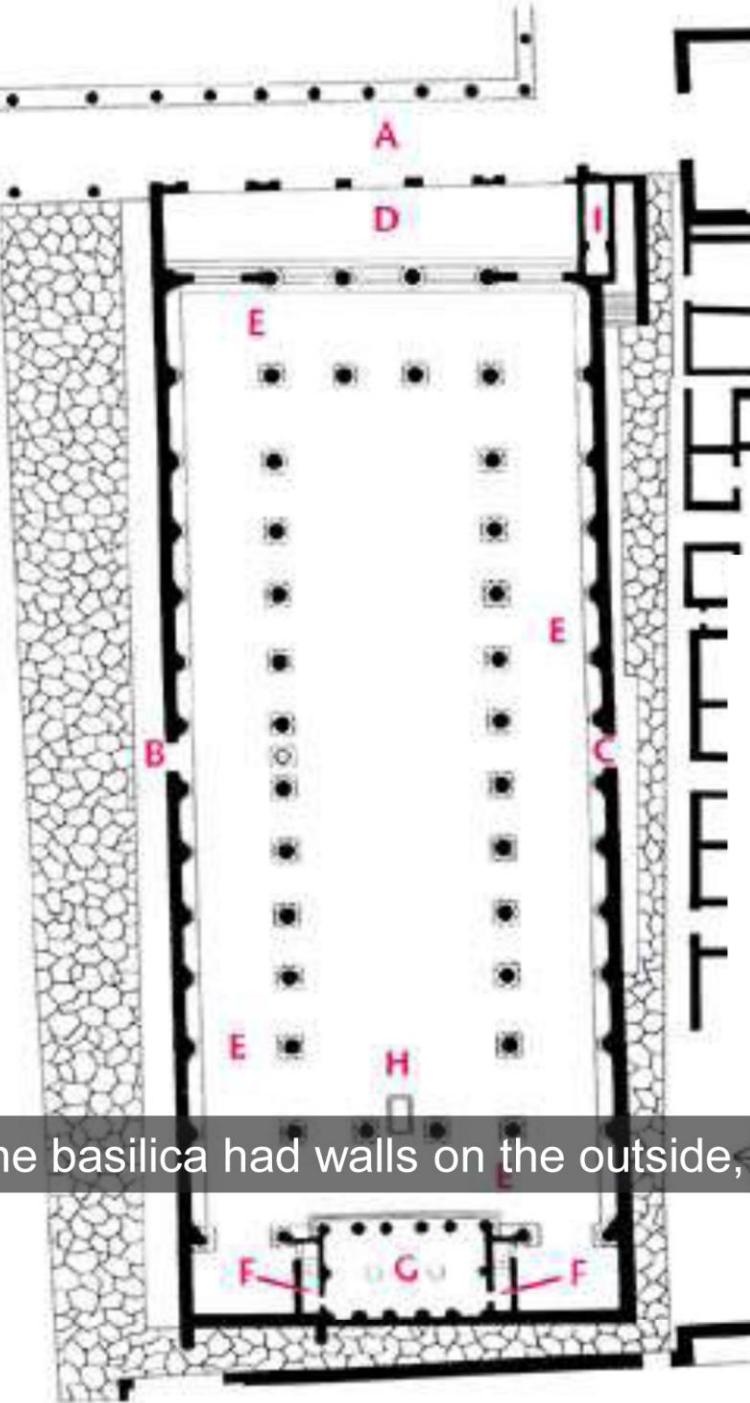
THE BASILICA

- A The Forum portico
- B Entrance from Via Marina
- C Entrance from Vico di Chiampionnet
- D Chalcidicum



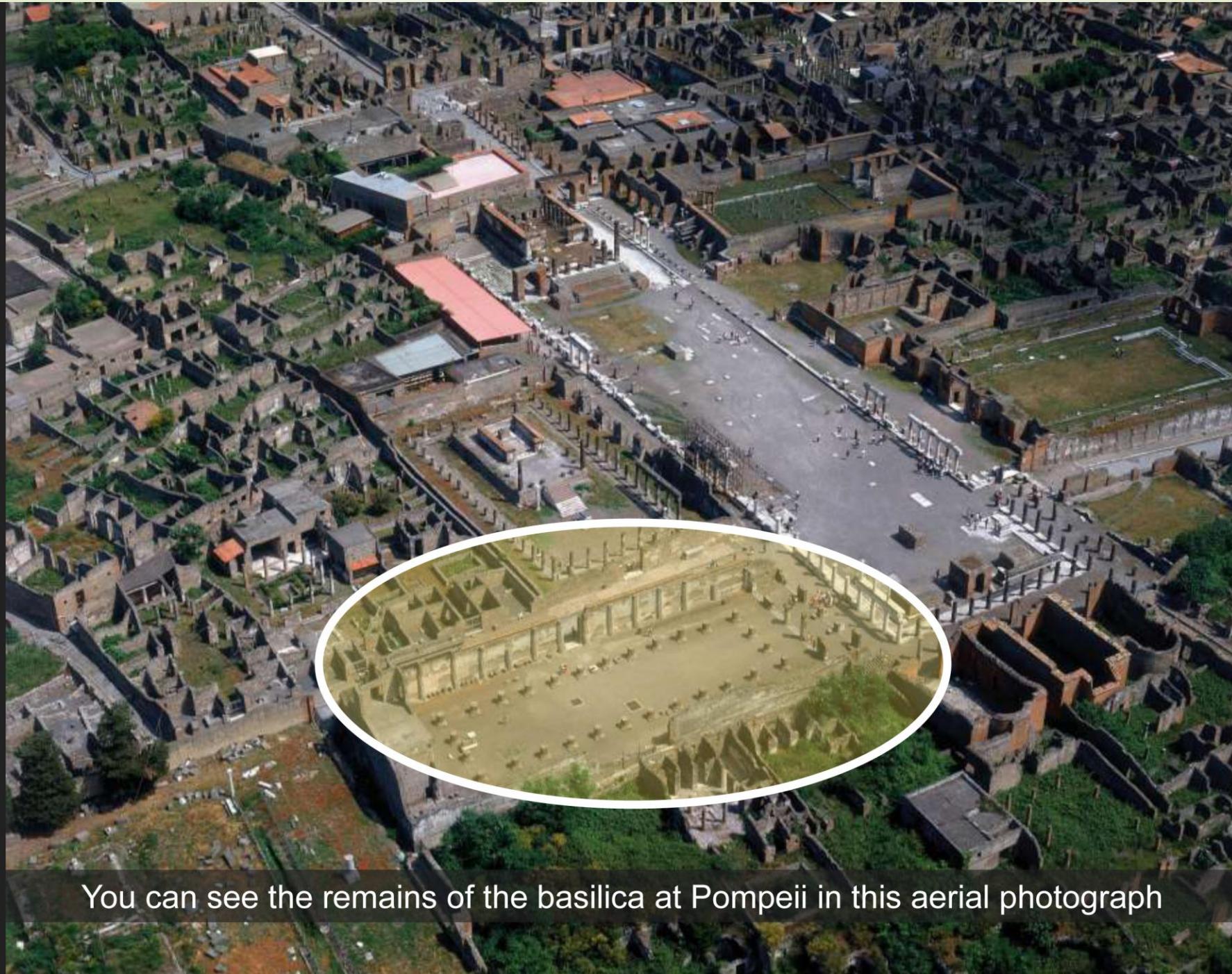
It was like a Greek temple turned inside out

THE BASILICA



The basilica had walls on the outside, and columns on the inside

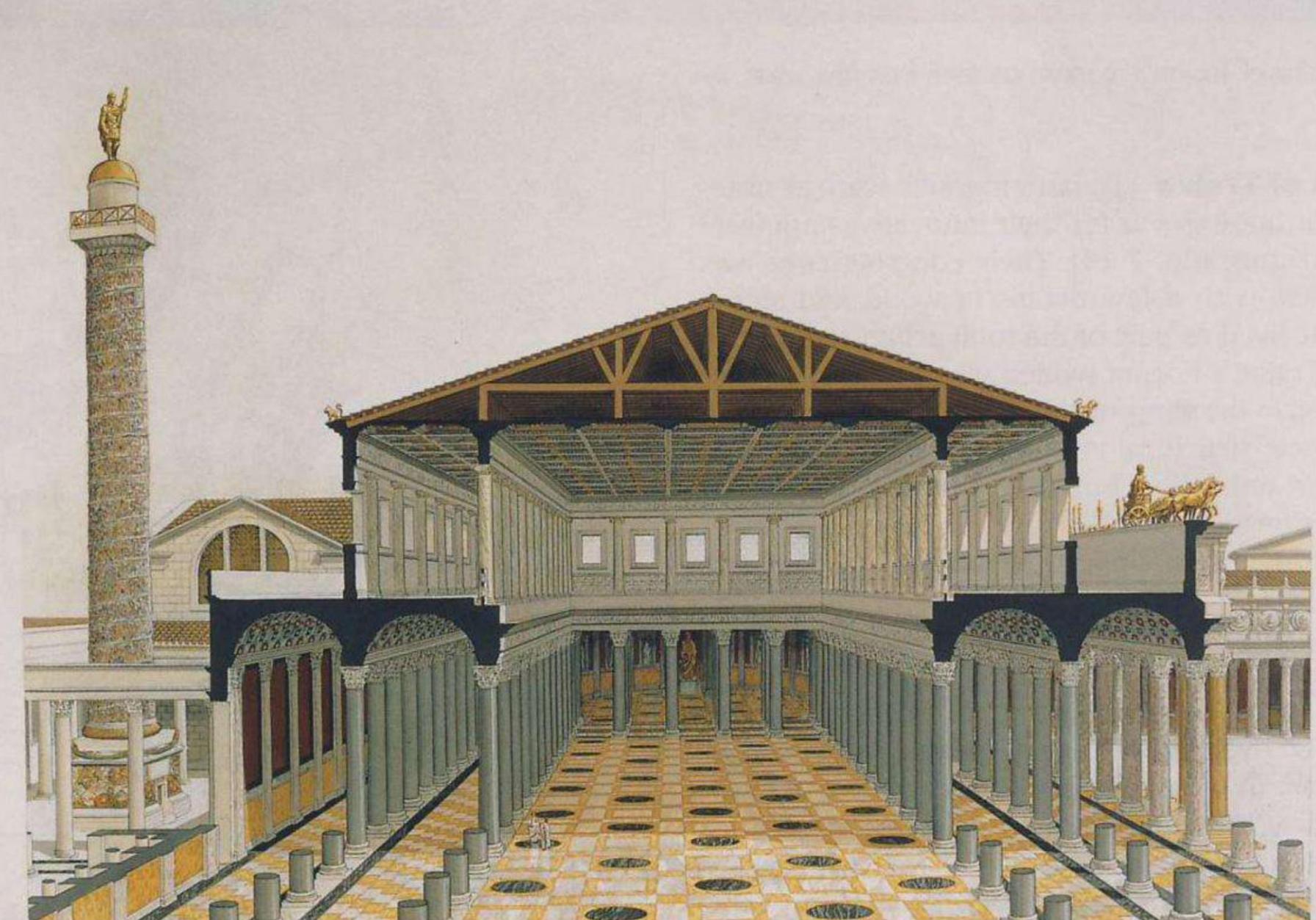




You can see the remains of the basilica at Pompeii in this aerial photograph



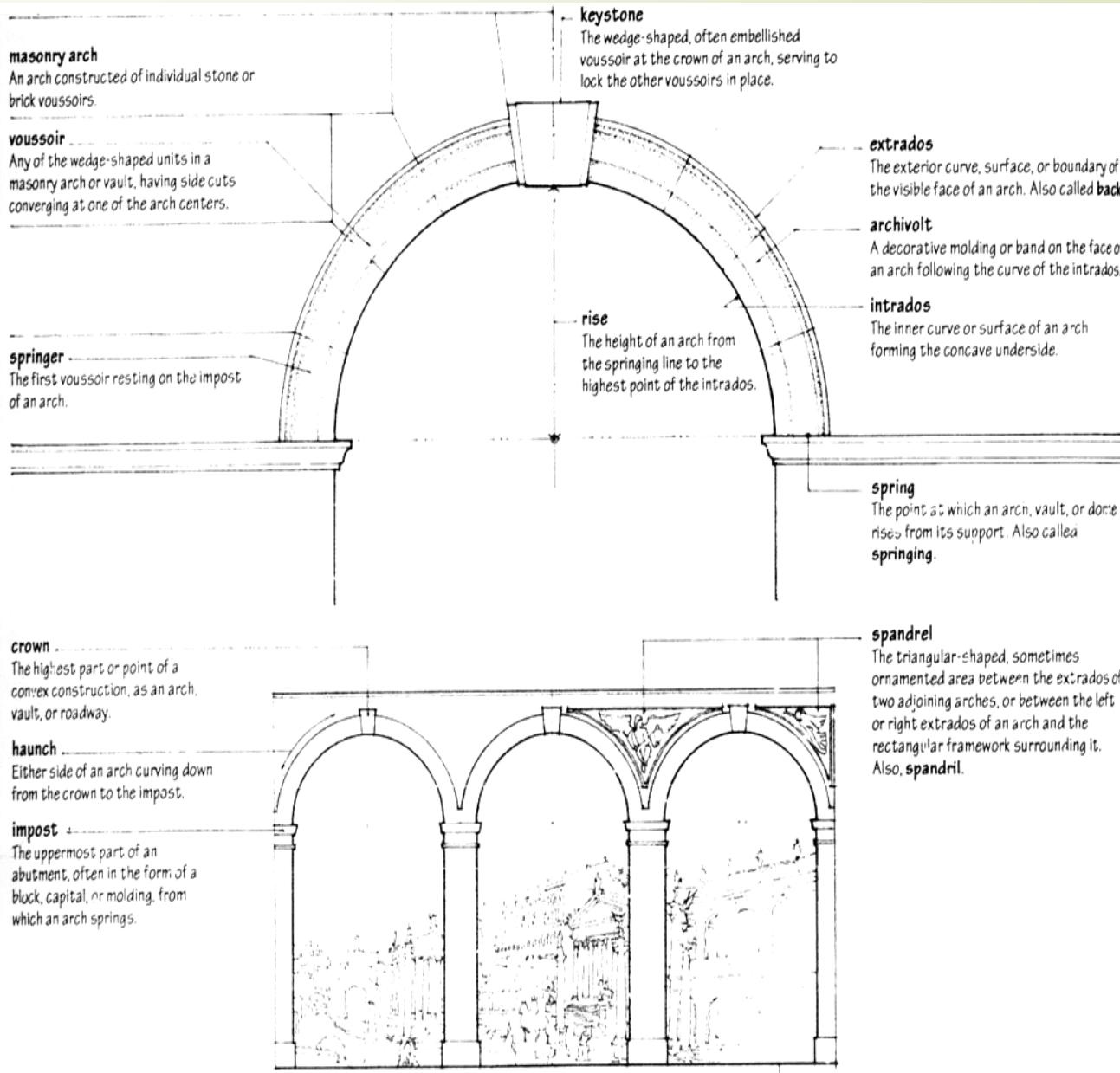
And some of the original columns are still standing



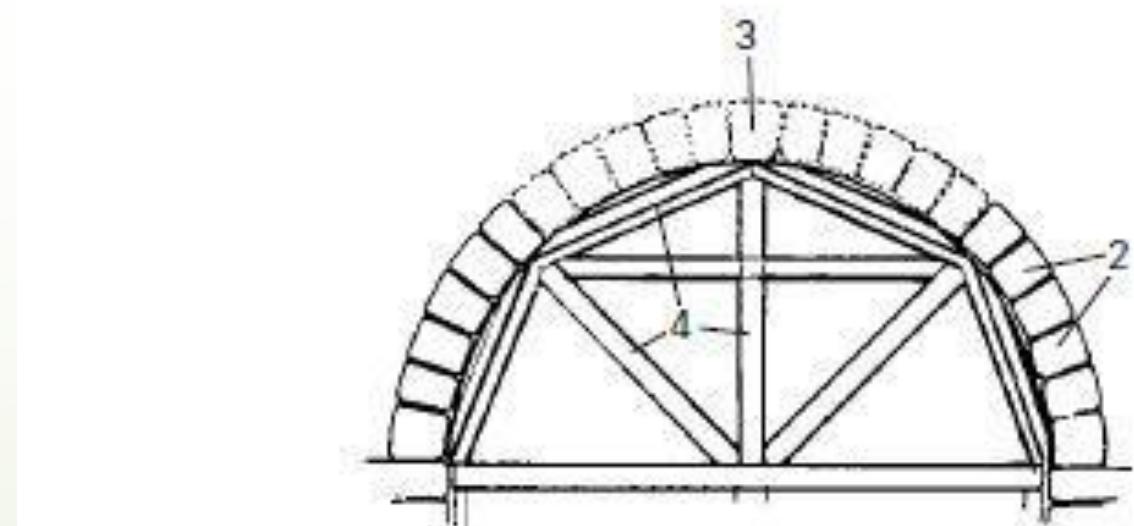
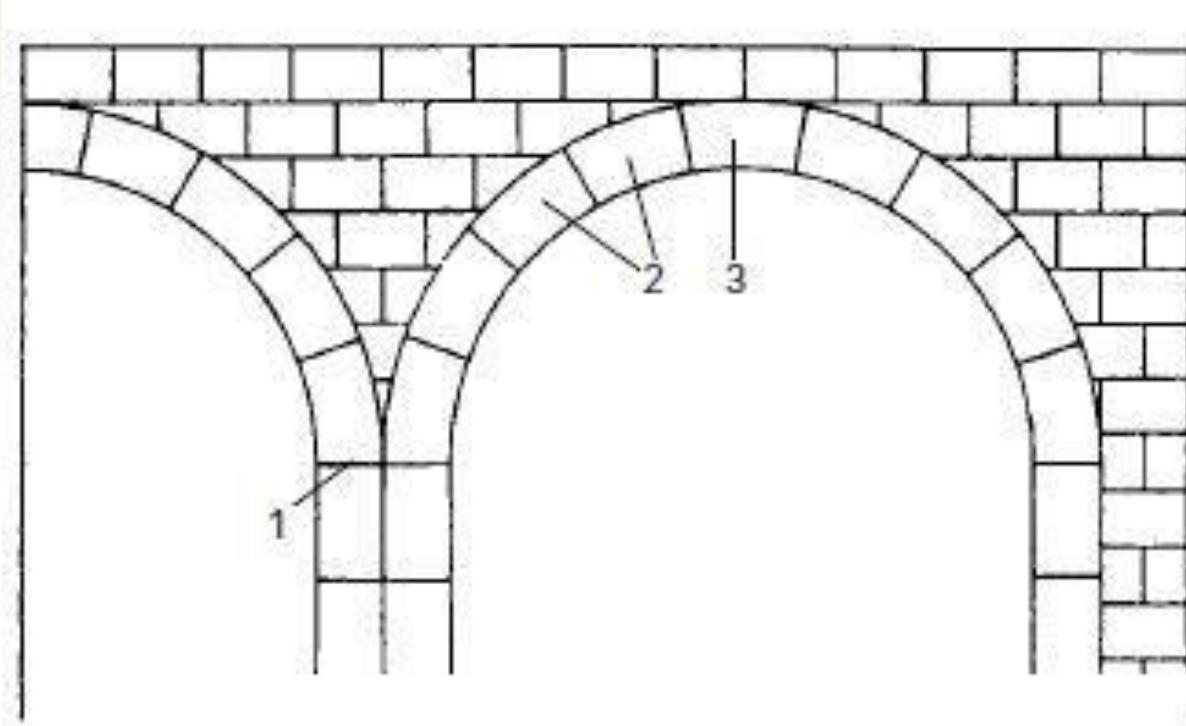
You need to know something about the Roman basilica because it will later become the model for the Early Christian church

Construction System

- ▶ Adopted column system of Greeks
- ▶ Arch and vault system started by Etruscans - combined use of column, beam and arch
- ▶ Were able to cover large spaces without the aid of intermediate support
- ▶ **(Arches, Vaults, and Domes)** used effectively by Romans



- its semicircular form is often called a **Roman arch**
- Ancient Roman architects and builders made extensive use of various forms of arch in the construction of doors, windows, and interior spaces.



- One of the most important discoveries was the use of concrete as a building material.
- **Lightweight, inexpensive, and durable**, concrete made it possible to build on a much larger scale than was previously possible.



But a new building principle was also necessary to bring the use of concrete to its full potential.



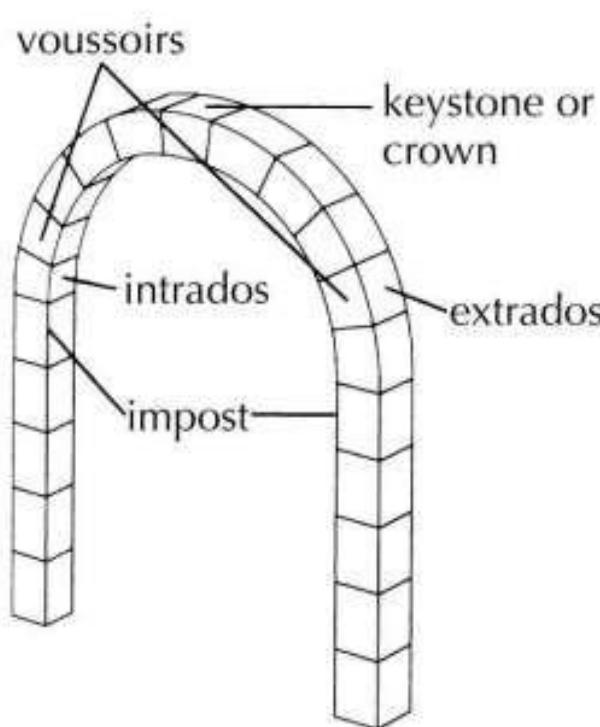


- The post and lintel system was limited in terms of the size of the space it could span.
- What did they use instead ??!!

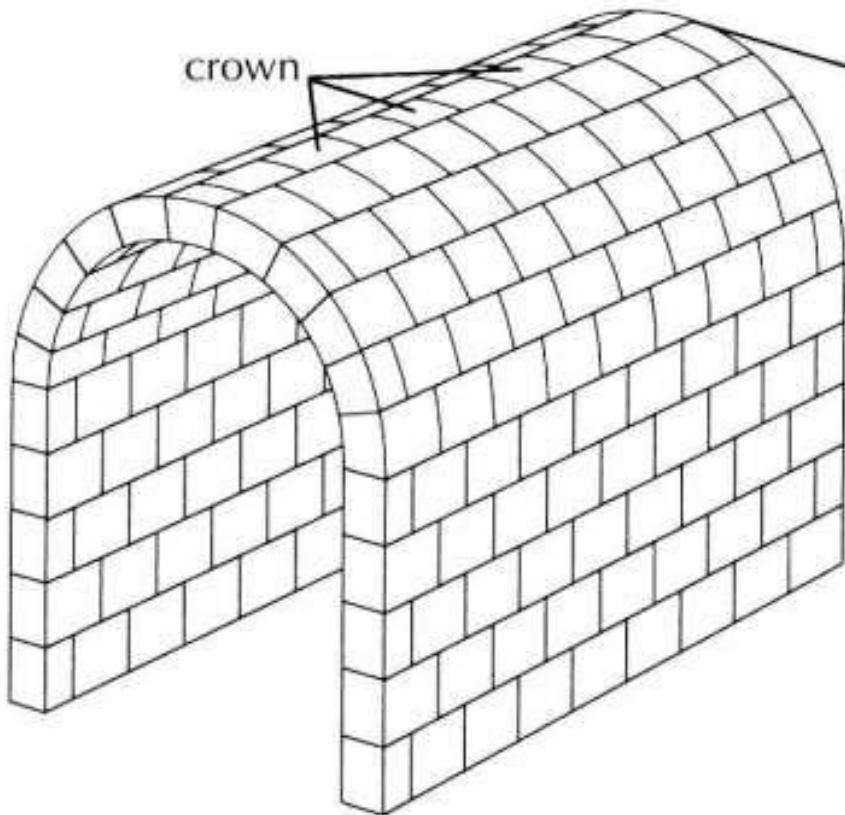
The Romans turned instead to the arch, which was critical to the development of Imperial architecture



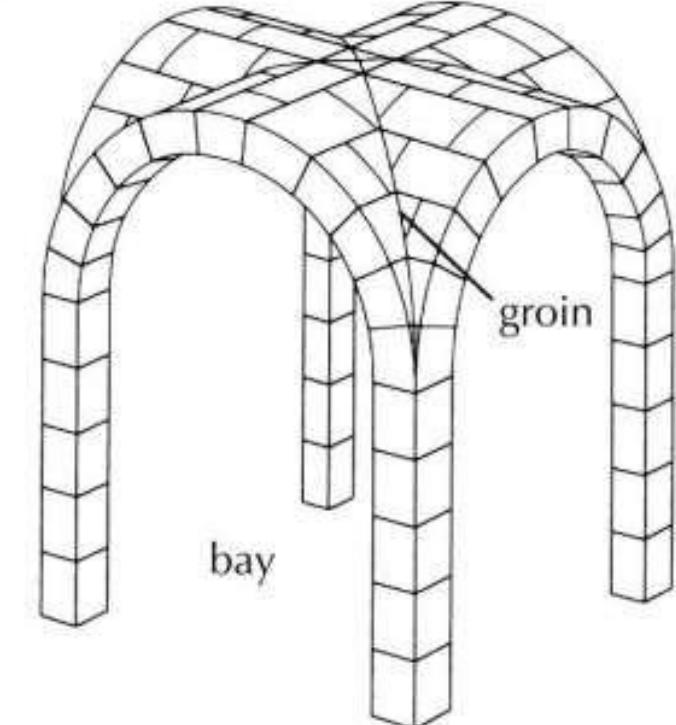
The arch became the basis of a new kind of vaulted architecture that enabled Roman architects to enclose space in entirely new ways.



arch



barrel vault



groin vault



Take



A Break

Quiz

- A: Please compare between Greek orders?
- B: What are the main characteristics of Egyptian furniture?

Dome

► A hemispherical dome is another type of vault



Roman Architecture

► Pantheon

- The Pantheon is not only one of the best-preserved buildings of antiquity but also one of the most influential designs in architectural history.
- It reveals the full potential of concrete, both as a building material and as a means for shaping architectural **space**.

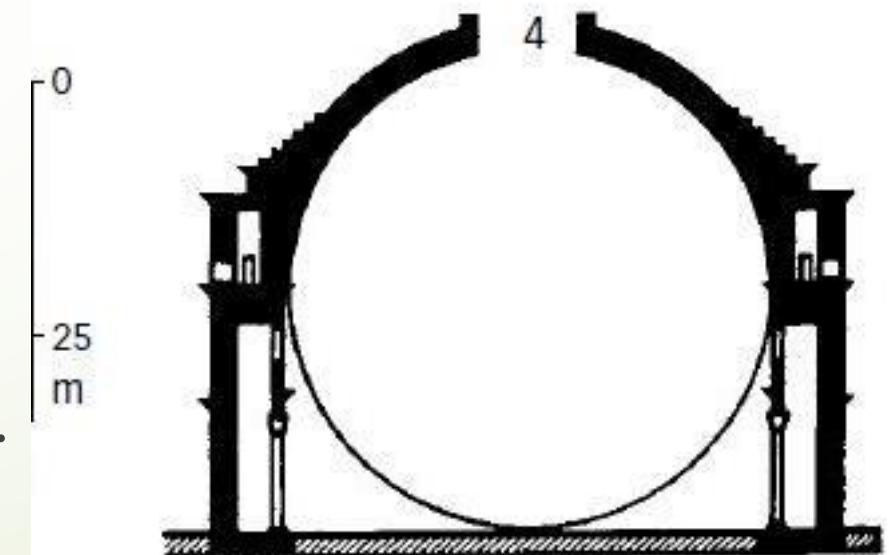
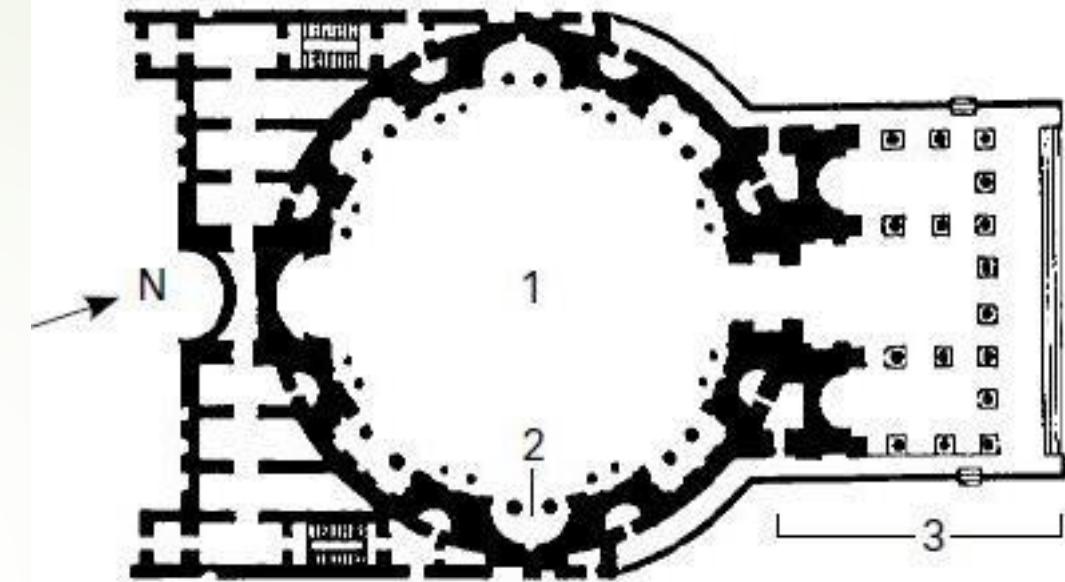


On the plaza there is an entrance portico with eight Corinthian columns.

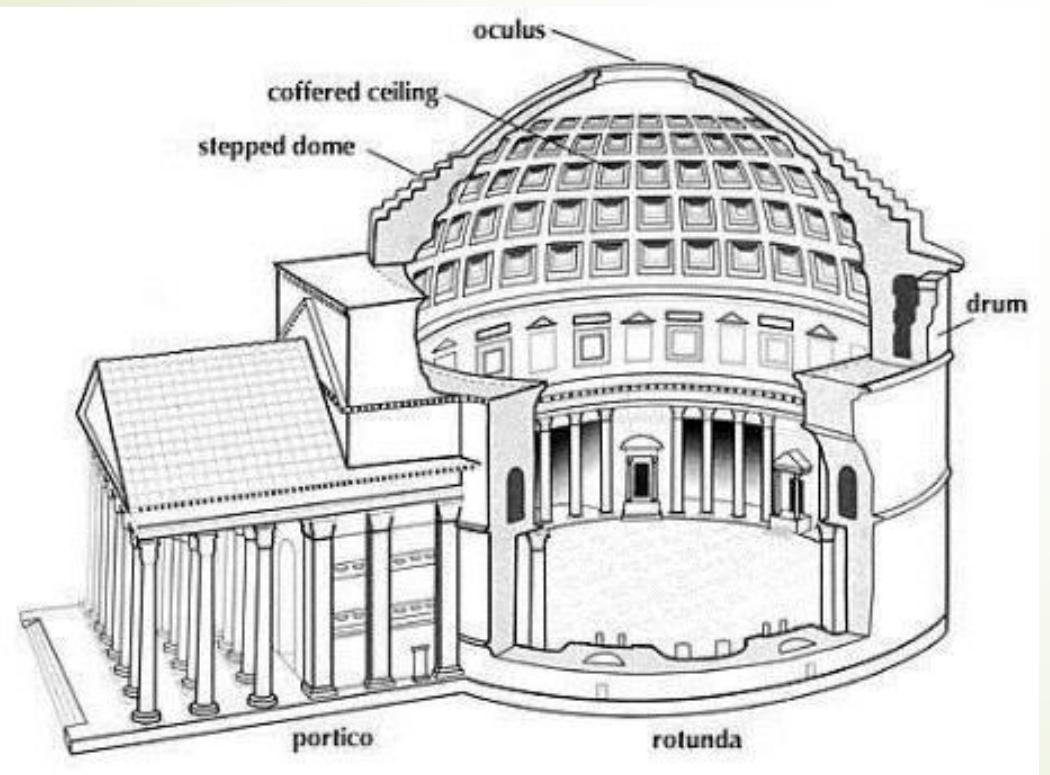


Plan and section of the Pantheon, Rome, c. 118– 28 C.E.

- ▶ 1 Rotunda
- ▶ 2 Niche
- ▶ 3 Portico
- ▶ 4 Oculus (“eye”)
- ▶ The circle that forms the basis of the plan also controls the section.
- ▶ The dome is a half sphere, while the walls below form a cylinder with a height just half its diameter.
- ▶ The circle drawn on the section thus fits the interior of the dome and touches the floor at its center.
- ▶ **142 feet in diameter = 43 meters**

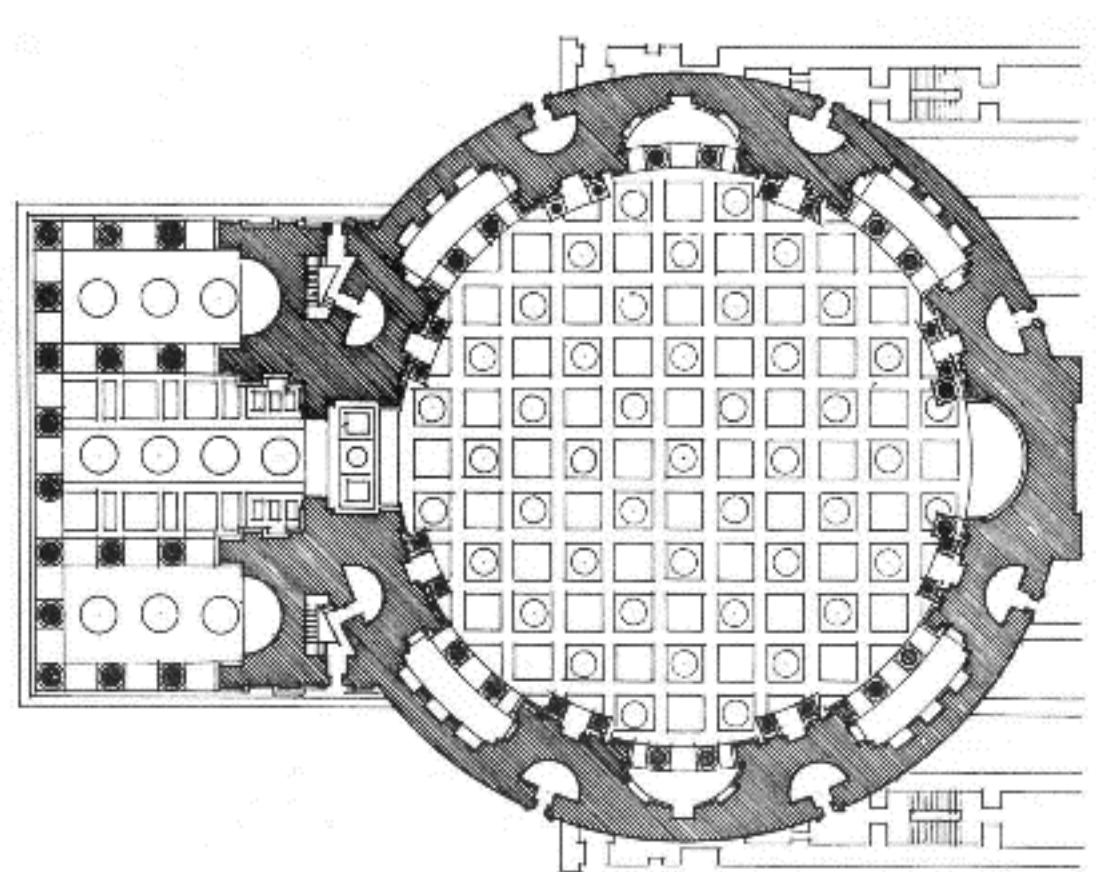
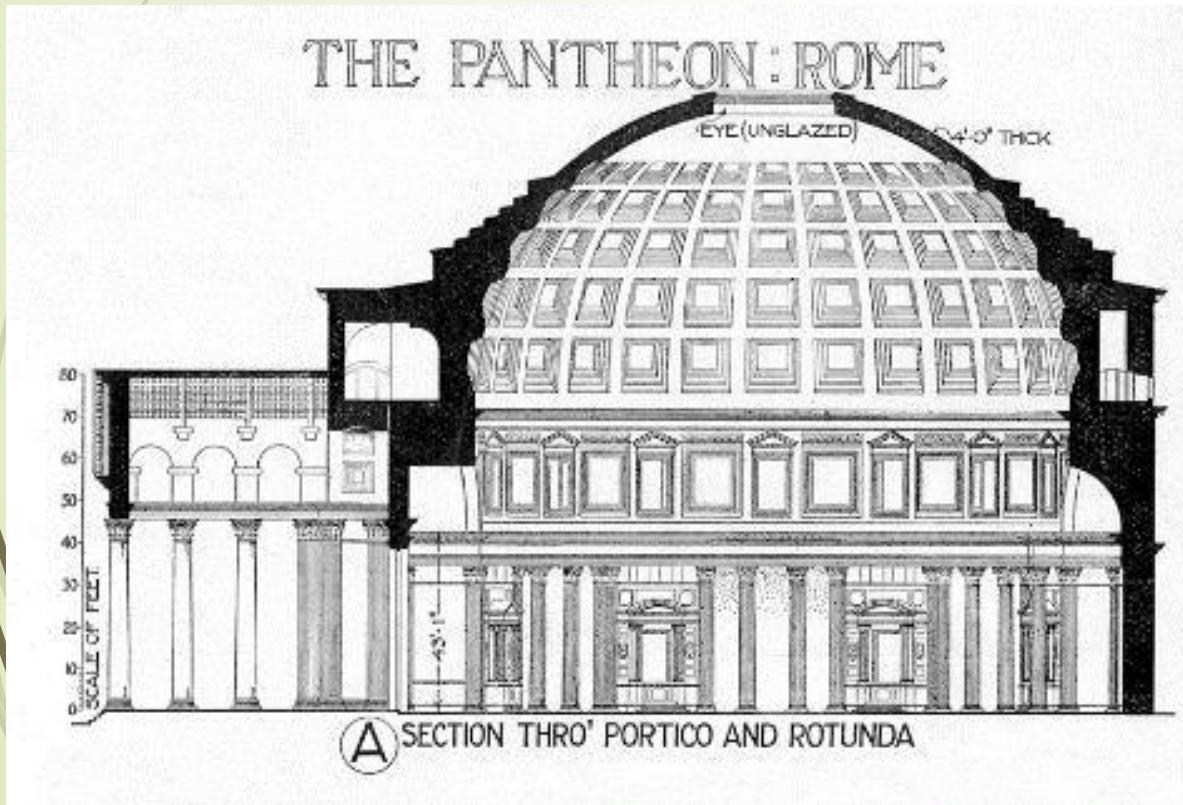


- **Oculus** (“eye”) is the only source of internal lighting.
- 30 feet diameter = 9 m.



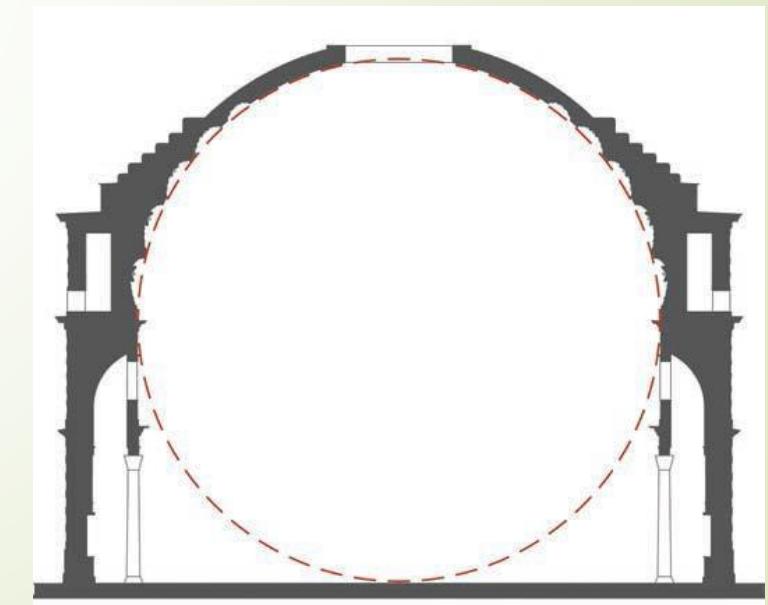
► But despite the luxurious skin of the Pantheon's interior, the sense experienced on first entering the structure is not the weight of the enclosing walls but **the space they enclose.**

► Roman architects were the first to conceive of architecture in terms of **units of space** .



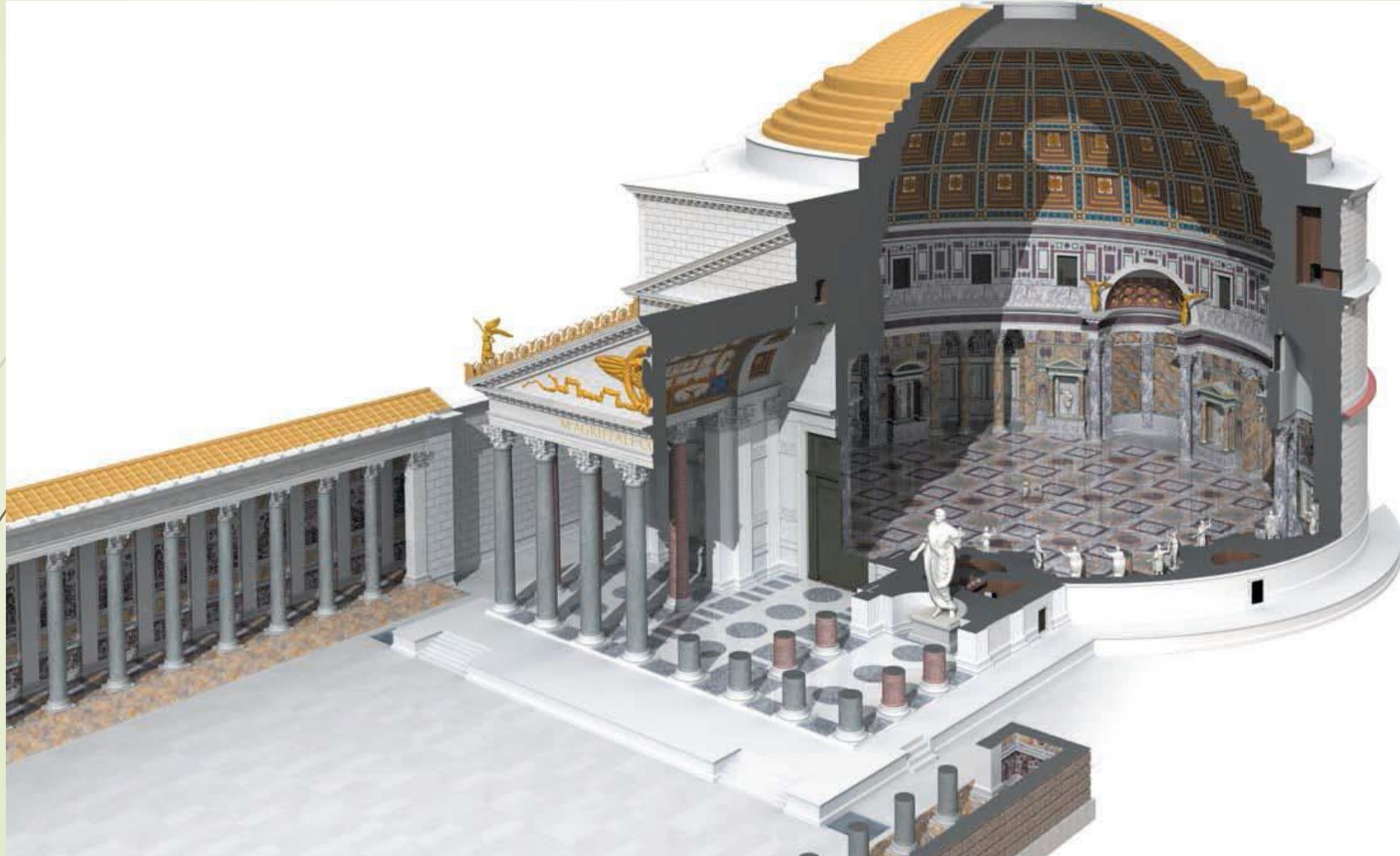
The Pantheon's interior is a **single unified, self-sufficient whole, uninterrupted by supporting solids.**

- ▶ It encloses visitors without imprisoning them, opening through the oculus to the drifting clouds, the blue sky, the sun, and the god.
- ▶ In this space, the architect used light not merely to illuminate the darkness but to create drama and emphasize the interior shape's symbolism.



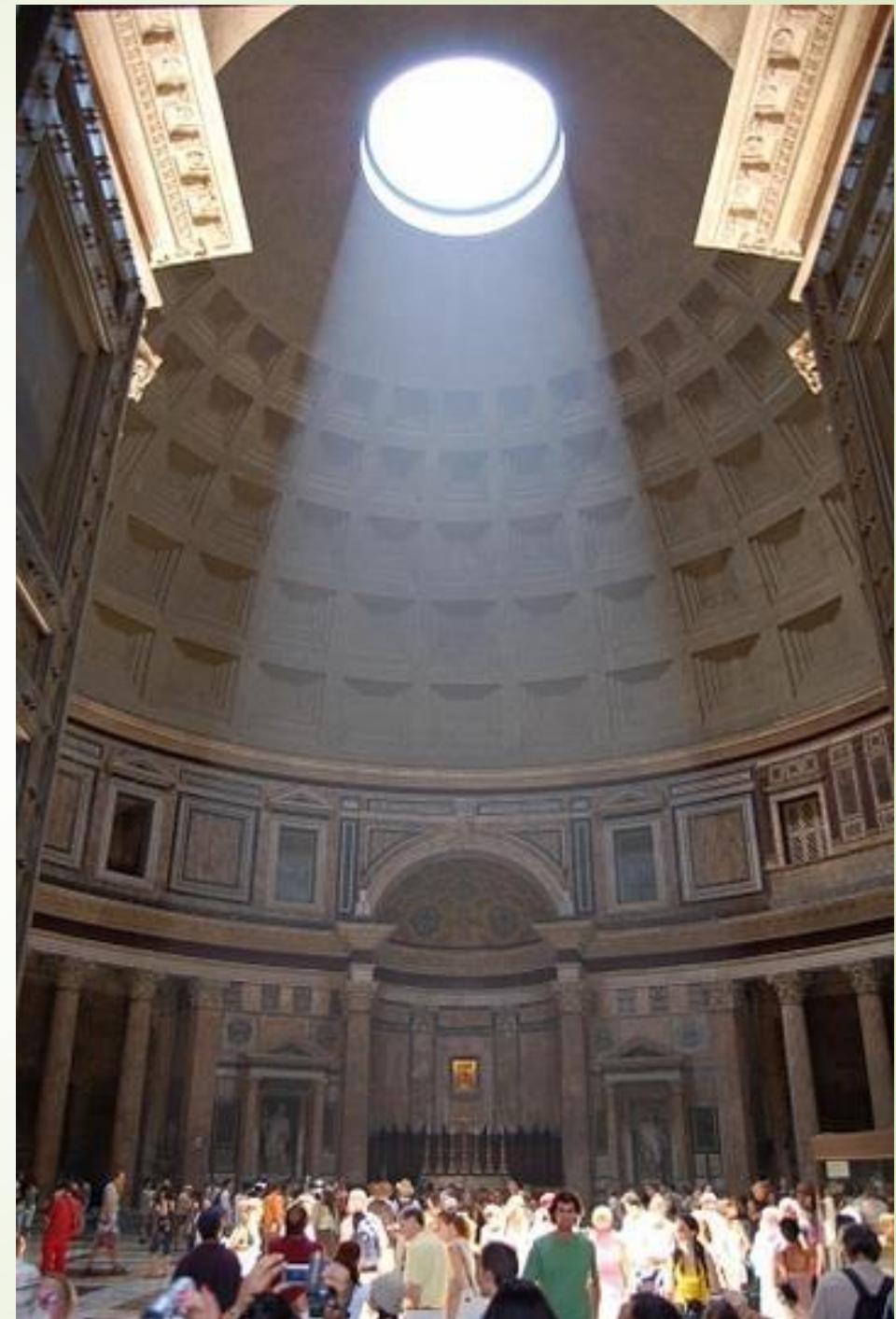
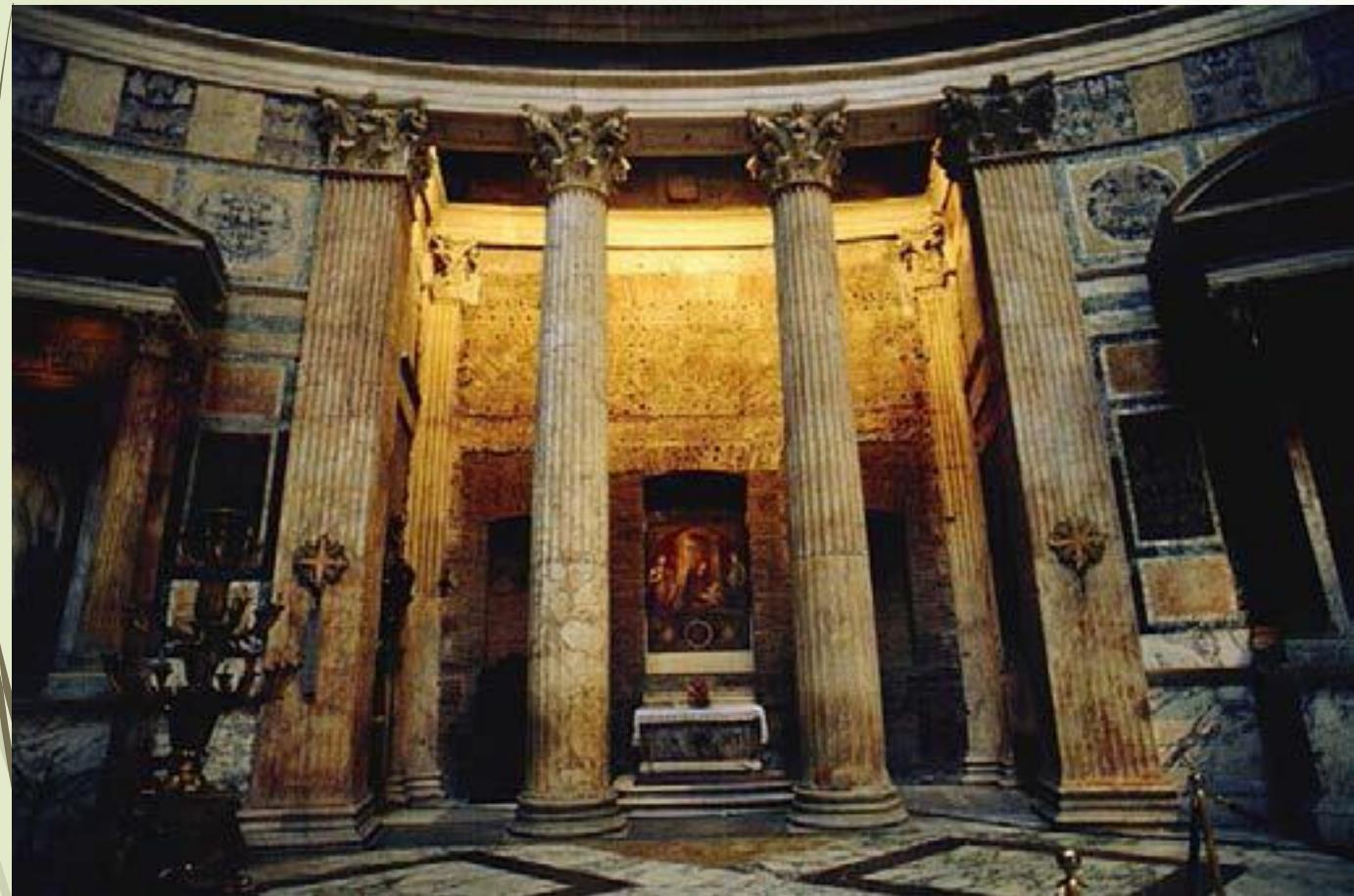
On a sunny day, the light that passes through the oculus forms a circular beam, a disk of light that moves across the coffered dome in the course of the day as the sun moves across the sky itself.





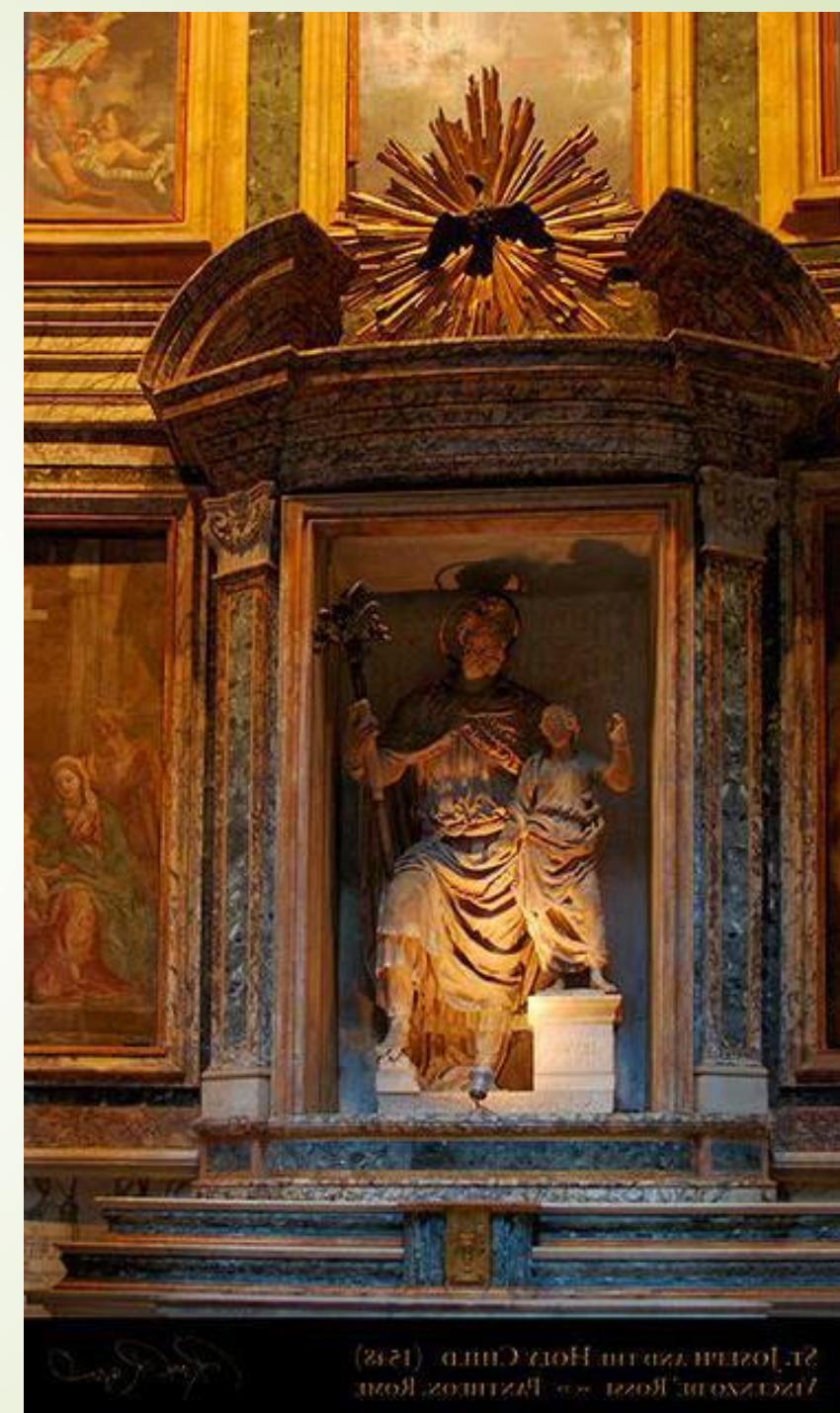
The dramatic effect of the beams of sun light-which stream in through the oculus to be reflected from the polished marble floor-and the special acoustical quality generated in a round room make **the Pantheon interior one of the most remarkable spaces surviving from ancient times.**







PANTHEON → CRUCIFIXION CHAPEL, ST. PETER'S (FRANCESCO MODERATE, 1720), APSE AND ALTAR → ROME



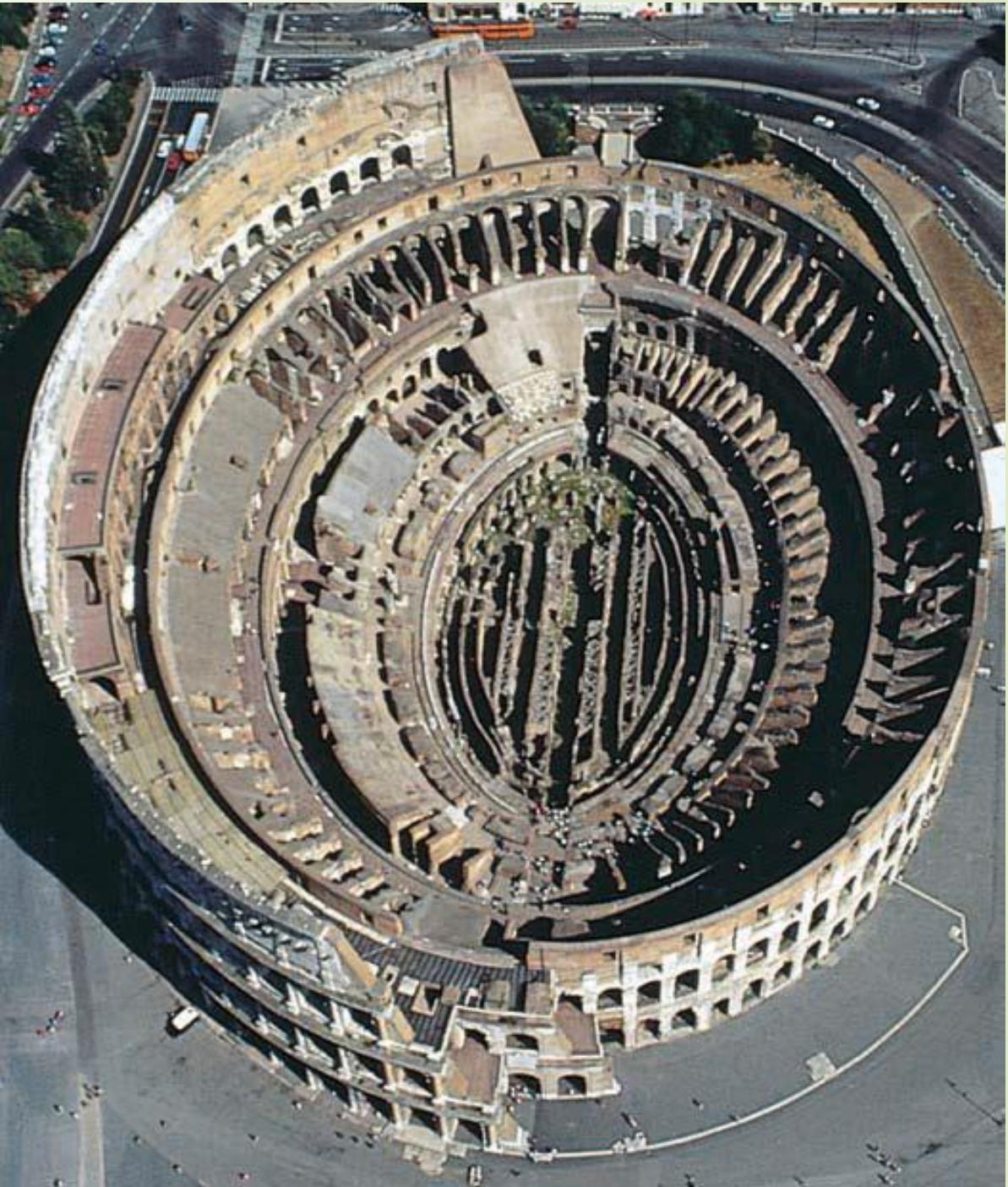
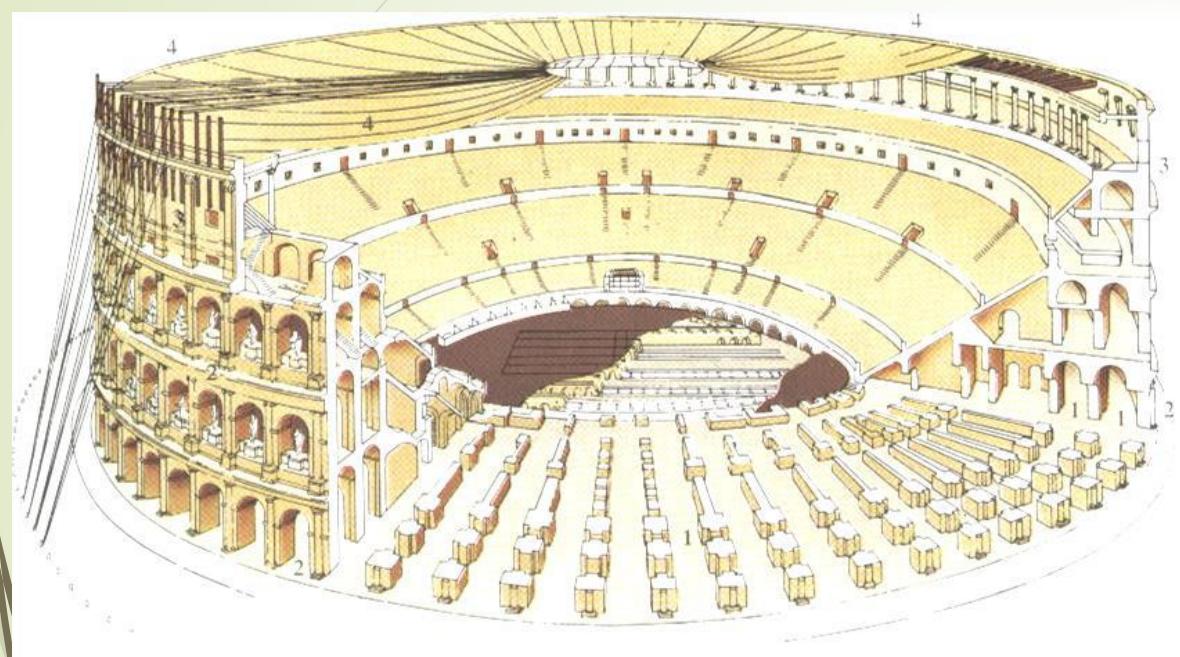
ST. PETER'S, ROME → CRUCIFIXION CHAPEL (1720)

► Colosseum

- Colosseum has been one of Rome's landmarks. Vespasian's (Roman emperor) decision to build the Flavian Amphitheatre, as it was known at the time, was a show of wealth and power.
- The Colosseum takes its name, however, not from its size-it could hold more than 50,000 spectators.
- Romans gathered in amphitheatres all over the Empire to see two main kinds of spectacles: gladiatorial combats and animal hunts.







→ The Colosseum was the largest and most important amphitheatre in the world, and the kinds of spectacles (performance, display) staged there were costlier and more impressive than those held anywhere else.



► Public Bath

► most Roman's enjoyed spending the afternoon at the Thermae or public bath. Men and women enjoyed coming to the baths not only to get clean but to meet with friends, exercise, or read at the library.







THANK
YOU
FOR
YOUR
ATTENTION