HISTORY OF ARCHITECTURE - PART II

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Fromm website: syllabus, bibliography, glossary, pdf of lecture. contact me if you don’t find what you need.

Lecture format: 75 +/- images (including floor plans!) / class, you’ll just see my screen

Zoom format: contact the facilitator in chat, or as otherwise directed

Questions: before or after class, or on breaks, or if we have time or by e-mail

Slide format: see right. None of this information is as complete as I’d like – I just assemble what I find. i.e. are dates beginning or completion? Are dimensions interior or exterior?

What we’ll cover in Part II: (chapter 5.2, 200 BCE to 9.1,1200)
  - Pantheon, (redux)
  - Ancient China
  - Ancient Mexico
  - Early Christian
  - Byzantine
  - Gupta India
  - Islam
  - Tang China
  - Mayan
  - India/ Southeast Asia
  - Islamic Spain, Morocco
  - Romanesque Europe (maybe)

SLIDE FORMAT:
  - Title: Angkor, Cambodia
  - Architect: or patron or culture
  - Date: 12th century
  - Source: https://markspostcards.wordpress.com/2014/12/15/angkor-wat-cambodia/
  - Medium: postcard; stone temple
  - Size: n/a
  - Vocabulary: postcard (OUP)
  - Notes: with sources in parenthesis (OUP)
OUTLINE:

5.1 ANCIENT ROME: GOVERNING THROUGH ARCHITECTURE
   Intro: Roma Caput Mundi
   Antecedents: Etruscan Architecture: tombs
   Roman temples
   Engineering etc.: orders, arches, vaults, roads
   Roman cities: Rome, Pompeii
   Theatres and Baths
   Insula and Domus (plural: domūs)
   Imperial Rome/ Rome of the Emperors: Villas, a couple of misc. structures, the Forum
   The Pantheon, redux

5.2 ANCIENT CHINA: THE PIVOT OF THE COSMOS IN MUD AND WOOD

5.3 ANCIENT MEXICO: PYRAMIDS AND SACRIFICE

**domus**: an ancient Roman house for wealthy citizens, usually served by an atrium, or impluvium court, and an enclosed garden
**insula**: an ancient Roman apartment block
**villa**: a freestanding home with grounds, outside a city (Kleiner)

- **Grids**: All three empires relied on urban grid systems.
- **China**: the emperor was semi-divine, and his palace was a sacred precinct;
- **Rome**: the state became part of its theology.
- The Colosseum was the largest building in the empire, and the Pantheon combined a temple front with a vaulted structure used in baths and obscured sacred and secular.
**Title:** The Pantheon, Rome  
**Architect:** rebuilt by Emperor Hadrian; possibly designed by Apollodorus of Damascus

**Date:** 125-128 CE  

**dome:** curved roof usually spanning a circular or polygonal base and sometimes raised on a drum.

**Note:** There was likely bronze sculpture in the pediment – may have shown a battle of the titans; this is an octastyle portico. Columns are monolithic and from stone quarried in Egypt.

M·AGRIPPA·L·F·COS·TERTIVM·FECIT or in full, "M[arcus Agrippa L[ucii] f[ilius] co[n]s[ul] tertium fecit," means"Marcus Agrippa, son of Lucius, made [this building] when consul the 3rd time." Archaeological excavations have shown that the Pantheon of Agrippa had been completely destroyed except for the façade. (wikipedia) but this may not be it

**Source:** wikipedia

**Medium:** Brick, concrete, marble veneer

**Size:** dome: 143'/43.5 m. int. dia.
Title: Pantheon, Rome

Architect: rebuilt by Hadrian; possibly by Apollodorus of Damascus; engraving by Giovanni Battista Piranesi (1720-78)

Date: circa 118–128 CE / consecrated as Sancta Maria ad Martyres (known as Santa Maria dei Martiri) 609 CE

Note:

• Originally commissioned by Marcus Agrippa as a temple (destroyed) to all the gods of Ancient Rome
• Hadrian’s greatest architectural legacy is the domed temple of the Pantheon: the Pantheon embodied the ideal of sacred governance. The exterior is conventional: a temple front set within a colonnaded temenos. Once past the colossal bronze doors, the hemispherical hall, 43 m (137 ft, 150 Roman feet) both in height and diameter, comprised a world unto itself. It is a complex structure, unparalleled in vaulted concrete technology.
• note the Corinthian capitals and the arches on the rotunda.

source: wikimedia

Medium: Brick, concrete, marble veneer

Size: dia. of dome 143’ (43.5 m)
THE PANTHEON

Note:
- Hadrian’s Pantheon served as a temple to all the gods.
- A conventional temple front in a colonnaded temenos, which masked the unusual round and domed interior space.
- There used to be stairs and an arch on axis.
- This axis meant visitors only saw the temple front. The interior rotunda was a surprise.
- Parts of the temple front may be original to the temple by Marcus Agrippa

Title: Pantheon, Rome

Architect: Originally commissioned by Marcus Agrippa as a temple (destroyed) to all the gods of Ancient Rome

Source: right: Pearson; left: https://www.picturesfromitaly.com/rome/the-pantheon-also-known-as-santa-maria-rotonda-rome

Medium: aerial photo; schematic drawing

rotunda: circular room

originally clad in bronze plates that were taken to Constantinople in 655 and replaced with lead

originally clad in stucco

originally clad in white marble
THE PANTHEON

relieving arch: an arch built over a lintel to relieve or distribute the weight of the wall above (Merriam-Webster)

Title: The Pantheon, Rome
Architect: Roman   Date: 126 CE
Medium: concrete, granite (columns), marble   Size: 43.3 m. interior dia. and interior height
THE PANTHEON – (what’s going on?)

Title: The Pantheon, Rome
Artist: drawing by Andrea Palladio
Date: 125-128 CE, drawing made 1570
Source: OUP
Medium: floor plan
Size: dia. of dome 143’ (43.5 m)

**exedrae:** niches (Stokstad)

**Note:**
- the drawing is made over 1000 years after the building was built – it is an analysis drawing made by another architect.
- What’s the thing in the back???
- Rafaello Sanzio is buried on the left, and King Victor Emanuelle-II on the right.
- Seven exedrae rectangular alternating with semi-circular punctuate the wall (Stokstad)

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Title: The Pantheon, from model of Rome
Source: http://www.romecabs.com/blog/2012/07/seven-wonders-of-ancient-rome/

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the recesses are created between spur buttresses that link inner and outer shells
THE PANTHEON – (what’s going on?)

**Title:** Pantheon

**Artist:** Giovanni Battista Piranesi (1720-1778)

**Date:** circa 118–128 CE


**Medium:** Reconstruction Drawing of the Interior

**Size:** diameter of dome 143' (43.5 m)

**Note:** see drawings at top left
THE PANTHEON – (what’s going on?)

Title: Plan of the City of Rome. Part 3 with the Santa Maria Maggiore, the Pantheon and Trajan’s Column
Artist: Antonio Tempesta (Italian, Florence 1555–1630 Rome)
Date: 1645
Source: MMA 1983.1027(3)
Medium: Etching with some engraving
Size: 21 7/8 x 16 3/8 in. (55.5 x 41.6 cm)
Note: Part of the top half of the map. Depicted is a central part of the city with the Santa Maria Maggiore, Trajan’s Column and the Pantheon.
THE PANTHEON – (what’s going on?)

Title: Speculum Romanae Magnificentiae: The Pantheon

Artist: Nicolas Beatrizet (French, 1515–c. 1566 Rome (?))

Date: 1549+/-1649 print

Source: MMA.41.72(1.18)

Medium: Engraving

Size: 15 7/16 x 17 3/16 in. (39.2 x 43.6 cm)

Note: This print comes from the Speculum Romanae Magnificentiae (The Mirror which found its origin in the publishing endeavors of Antonio Salamanca and Antonio Laferri. During their Roman publishing careers, the two publishers - who worked together between 1553-1563 - initiated the production of prints recording art works, architecture and city views related to Antique and Modern Rome. The prints could be bought individually by tourists and collectors, but were also purchased bound together in an album. (MMA)
THE PANTHEON – (what’s going on?)

In 609 CE Pope Boniface IV rededicated the Pantheon as the church of St. Mary of the Martyrs.
Title:
Pantheon, Rome

Architect:
rebuilt by Emperor Hadrian; possibly by Apollodorus of Damascus

Date:
photo date n/a

Source:
Getty images

Note:
• don’t miss the cross on the obelisk.
• the 16th century fountain is by Giacomo della Porta.
Title: Pantheon, Rome

Architect: rebuilt by Emperor Hadrian; possibly by Apollodorus of Damascus

Date: photo date n/a

Source: Twitter (I know, I know....)

Note: from Twitter:
“until 1883 Pantheon had Bell towers called by the Romans “donkey’s ears”. Bernini had built them during the Baroque era but they were in contrast with the architecture of the Pantheon”

The second temple front really is there though blurry in the lower image. Enough, let’s go in.
Title: The Pantheon  
Architect: rebuilt by Emperor Hadrian; possibly by Apollodorus of Damascus

Date: circa 118–128 CE  
Oculus: a round window, usually at the apex of a dome.

Note: the oculus removed material at the most critical point for the load. The section of the dome thickens as it descends, and the aggregates of the concrete get heavier.

Source: Pearson

Medium: Reconstruction Drawing of the Interior

Size: dia.143’ (43.5 m); oculus 27’ dia.; walls up to 20’ deep.
Note:

• All structural considerations went toward the support of its 5000-ton dome. The oculus works as a compression ring to lock the structure.
• The radiating lines of force follow the five concentric rings of coffers on the interior ceiling.
• The barrel vaulted entry and opposite it the semi-dome apse, along with the six niches with alternating aedicules that radiate around the central expanse all belonged to this system of hollows under relieving arches. (OUP)
• two tiers of columns, pilasters, entablatures, more than half of the original decoration survives. The repetition of square and circle dominates. (Stokstad)
Title: The Pantheon *Rome: Engineering an Empire*

**Architect:** rebuilt by Emperor Hadrian

**Date:** circa 118–128 CE / Film: 2005  
**Note:** n/a

**Source:** Directed by Christopher Cassel, narrated by Peter Weller, Kralyevich Productions, NYC  
**Medium:** Documentary film  
**Size:** 2 minute: Total film: 94 minutes
THE PANTHEON

Title: *Interior of the Pantheon, Rome*

Artist: Giovanni Paolo Panini (1691-1765, Italian)

Date: circa 1734 CE

Museum: The National Gallery of Art, Washington D.C.

Medium: oil on canvas

Size: 50-3/8 x 39” (128 x 99 cm) painting size

Note:
- Hadrian assembled materials from throughout the realm in his Pantheon, and held them together with the wondrous amalgamating capacity of concrete.
- in each of the five rings of coffers the moldings are adjusted and foreshortened as the coffers get smaller (Fletcher)
- Trabeated articulation of the wall belies the actual structure of arches and vaults that sustains the great dome.
- the attic story has rectangular “openings” that resemble windows. (Moffett)
Title: Interior of the Pantheon, Rome
Artist: Giovanni Battista Piranesi
Date: 1765-78
Source: https://www.archweb.it/architetture_roma/pantheon/Pantheon_Piranesi/Pantheon_Piranesi_3.jpg
Medium: n/a
Size: n/a
Note: this image is also in Fletcher
End of Chapter 5, Part 1
and end of Part-I. Hope to see you for Part-II