Readings

Pages 78-85
Great Architecture of the World
Colosseum (Flavian Amphitheater): 80CE (AD)

• Begun by Vespasian on Nero’s Lake of his Golden House
• 2 complete passageways encircling it with ramps from seating areas – allowed for handling of large audiences
Colosseum (Flavian Amphitheater): 80CE (AD)

• Used as late as 523 CE (AD)
Temples:

Often for 3 Gods – individual chambers (Cellas)

Divine accommodations were pushed back on high podium

Viewed from only one viewpoint – the front

Ideal position was at the end of the open space / axis

Flat, frontal view

1st Century Augustus and Tiberius rebuilt most of the temples in Rome – Retained base, but changed the exterior to meet current Hellenistic and Roman style
Pantheon:  25 BCE -213 CE (AD)
One of the last great Pagan Temples
Portico:  Corinthian granite columns by Agrippa (25 BCE)
120-124AD Hadrian built the rotunda, with an oculus at the highest point, an opening through which the sun shines
Pantheon: 25 BCE - 213 CE

142’ spherical rotunda with a 30’ oculus, height of dome equals diameter of the floor plan (in theory could hold a sphere).

Coffered ceiling: once embellished with stucco, was introduced to reduce weight.
Pantheon: 25 BCE - 213 CE

21' walls built of concrete sandwiched between layers of brick, sheathed in marble veneer.

142'
3.37 Pantheon: relieving arches in the wall (MacDonald).
Pantheon:
25 BCE - 213 CE

Built with 8 great recesses
7 for major gods
1 for the entrance
14. Section of the Pantheon. Original disposition. (According to Adler.)
Pantheon: 25 BCE - 213 CE: Its monumental size is unparalleled by any other masonry structure up to now.
Pantheon: 25 BCE - 213 CE
Welcome to architecture 1121- HISTORY OF ARCHITECTURAL TECHNOLOGY
Class 6 - Early Christian, Byzantine and Carolingian Architecture.

Byzantine mosaic
Mausoleum of Galla Placidia, Ravenna
Wikimedia Commons http://commons.wikimedia.org
Last years of the Roman Empire

395 CE Roman Empire Divided
East in Constantinople, West in Rome

402 CE (AD) Moved capital to Ravenna

476 CE (AD) Western Roman Empire fell to the Ostrogoth

493-553 Ostrogothic Kingdom
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>300 - 400 CE</td>
<td>basilica of maxentius: 312 CE</td>
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<tr>
<td></td>
<td>mausoleum of galla placidia: 425 - 450</td>
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<td></td>
<td>constantine: r. 324 - 337</td>
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<td></td>
<td>galla placidia: r. 425 - c. 440</td>
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<tr>
<td></td>
<td>constantine recognizes christianity 325</td>
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<td></td>
<td>fall of ravenna to coloacer: end of western roman empire 476</td>
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<tr>
<td></td>
<td>honorius moves capital to ravenna 402</td>
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<td>theodoric at ravenna: 402 - 526</td>
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<tr>
<td></td>
<td>justinian: r. 526 - 565</td>
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<tr>
<td></td>
<td>belisarius conquers ravenna for justinian 539</td>
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<tr>
<td>600 - 700 CE</td>
<td>islamic era begins when muhammad flees mecca 622</td>
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<td>death of muhammad 632</td>
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<td></td>
<td>muslim conquest of spain 711</td>
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<td>koren recorded c. 660</td>
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*Bold type indicates islamic chronology.*
Early Christian Architecture: from the collapse of the Roman Empire to the rise of the great monasteries and Gothic cathedrals

Middle Ages 500 – 1420 CE (AD)

Dark Ages were 500-800CE (AD) – many invasions and warfare

313 CE (AD) Emperor of Constantine adopted Christianity

330 CE (AD) moved Capital to Constantinople (=Istanbul)
Church Building began
There were two types:

I. Basilica: A Christian church building having central nave with a semicircular apse at one or both ends and two side aisles formed by rows of columns, a narthex, and a clerestory.
   A. Apse – semicircular termination
   B. Transept – projecting arm
   C. Nave – central space
   D. Aisles
   E. Narthex - vestibule
   F. Atrium - courtyard
Church Building began
There were two types:

II. Circular or Octagonal: A center space covered by a dome, surrounded by an ambulatory with clerestory lighting.

Ambulatory- continuous aisle
Church Buildings

East preferred the Circular or Octagonal: more mystical with a pure form – the circle and dome; also see the Greek cross plan with four equal arms, which could be inscribed in a square.

West preferred the Basilica, as they focused more on congregational worship, cruciform shape symbolizing the cross, with a longer central axis.
Byzantine 330 – 1453 CE (AD)

Mostly Churches
Plan – Cross in a square capped with domes
Support - Pendentives and piers
Décor – Lavish inside (mosaics), plain outside
Effect – Mysterious
Inspiration – Heavens
Goal – arouse emotion and transport
Rome

Christianity starts early with followers in 1\textsuperscript{st} Century

Sant’ Agnese Fuori 630 CE (AD) Basilica with columns supporting arches along the aisles
Sant’ Agnese Fuori 630 CE (AD) Basilica with columns supporting arches along the aisles
Rome

Santo Stefano Rotondo: 468 CE (AD), diameter is 210’, huge nave encircled by ionic columns, 22 clerestory windows
Rome

Santa Costanza 330 CE, Circular church, domed brick roof, tomb for Constantine’s daughter
Santa Costanza 330 CE
Rome

Old St. Peters 326CE – 200’ long nave, timber roof, rows of closely spaced columns
Ravenna  City of Mosaics

San Vitale 526-547 CE. Two concentric octagons domes made of clay pots fitted into one another, covered w/timber roof and tiled
San Vitale 526-547 CE
San Vitale 526-547 CE

www.flickr.com by lsala66
Hagia Sophia 532-37 CE (AD). Istanbul, Turkey

Architects: Isidore of Miletus and Anthemius of Tralles

Almost Square – walls broken by aisles

Light breathtaking, enters through a wreath of window around the dome.

Converted to a Mosque in 1453 CE

Soaring height 182‘

Diameter of 102’
Hagia Sophia 532-37 CE (AD), Istanbul, Turkey
Section and plan of Hagia Sophia.
(After drawings by Van Nice and Antoniades.)
Domes on pendentives (left) and squinches (right).
Pendentives

Solved the problem of placing a dome over a square base – squinches were awkward. Previously domes had rested on circular buildings, ie. the Pantheon in Rome.
Hagia Sophia 532-37 CE (AD), Istanbul, Turkey

Commissioned by the Emperor Justinian, means Divine Wisdom

Shallow dome supported by four pendentive vaults that rise from the four lofty arches that define the space below

Design allowed vast place for congregating, free from walls and columns

A brake with classicism of Rome: column capitals decorated with serpentine foliage, reflecting the more sensual and organic architecture of the East.

One of the most influential buildings in history, because of the soaring space and stunning play of natural light.
Hagia Sophia  532-37 CE Istanbul, Turkey
Greece

Little Metropolis Church
13th century

Athens Greece

38’ x 25’

Smallest Cathedral

Antique marble reliefs
Russia
988 EC, Adopted Christianity
Borrowed arch from Constantinople
Shallow Dome failed with snow loads
Thus – the Russian Onion Dome

St. Basil’s  Red Square,
Moscow  1550-60 CE
Commissioned by Ivan the Terrible
St. Basil’s  Red Square, Moscow 1550-60 CE
Commissioned by Ivan the Terrible
8 small churches clustered around one main church
Originally white, but was painted in the 17th century
St. Basil’s 1550-60 CE (AD)

Plan is basically a greek cross

 Wikimedia Commons http://commons.wikimedia.org
Church of the Transfiguration, Kizhi Russia 1714
Venice, Italy

5th Century
founded on a Lagoon cut off from Mainland Escaping Barbarians

St. Marks  St. Marks Square Venice, 1063-1073 CE (AD)
Venice, Italy

St. Marks  St. Marks Square  Venice 1063-73 CE
Looks East rather than West for influences
Almost 100’ central dome 42’ in diameter
Mosaics from different periods
5 deep recessed west portals lead into the Narthex
7-48 Plan of St. Mark’s. (After Sir Banister Fletcher.)
St. Marks  St. Marks Square  Venice, 1063-73 CE

Looks East rather than West for influences, reflecting Venice’s extensive trade patterns with the East

Greek cross plan and 5 domes each resting on four piers

Almost 100’ central dome 42’ in diameter
Mosaics from different periods
5 deep recessed west portals lead into the Narthex