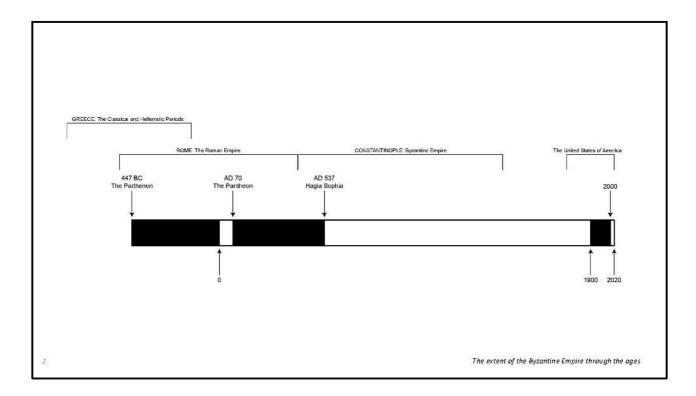
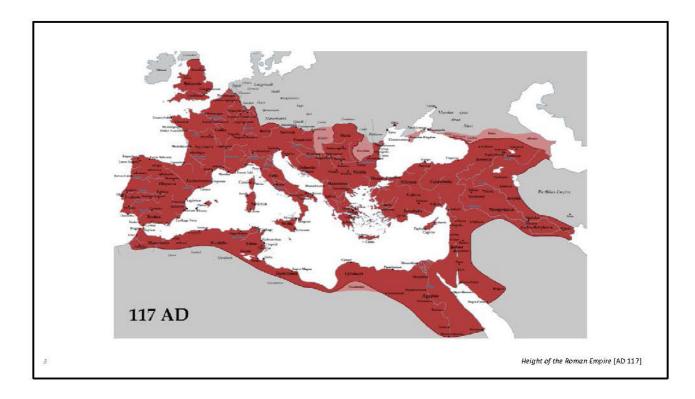
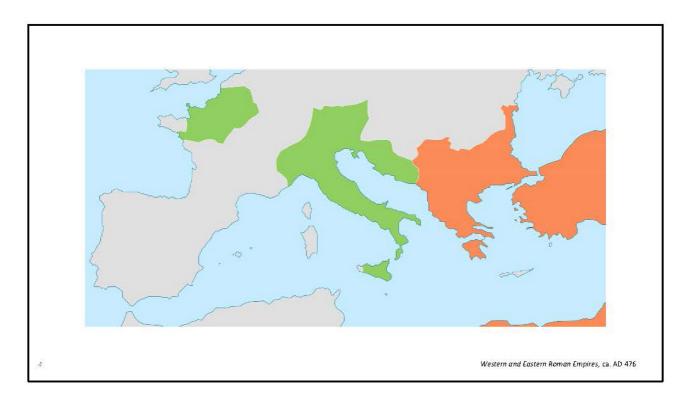
BYZANTIUM

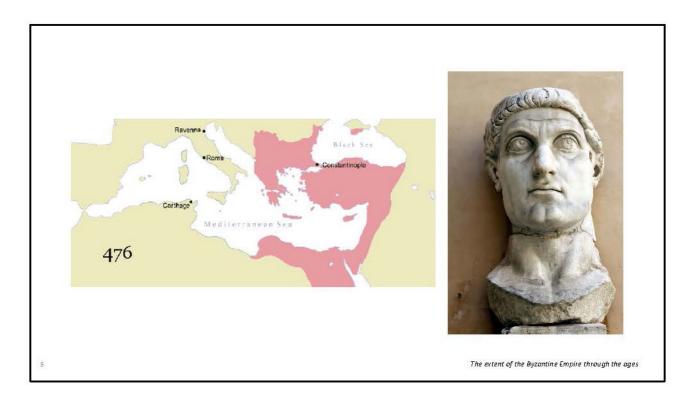




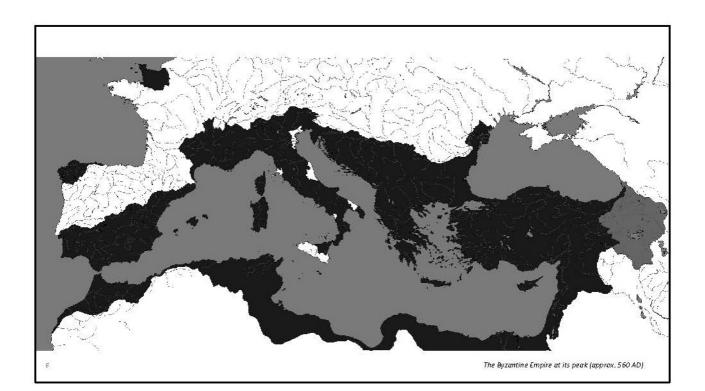
- Towards the end of the $3^{\rm rd}$ century AD, political instability weakened the Roman Empire
- borders of the empire changing regularly



- Western Roman Empire was centered in Rome, but then shifted to other cities including Milan, Ravenna, and Split (Croatia)
- *This idea of a Split between Western and Eastern is a matter of historical convenience rather than accuracy



- The first most and important ruler of the Byzantine Empire was Constantine the Great,
- Heart of trading route



mechanikos architekton oikodomos

Emerging role of 'The Architect'

mechanikos architekton oikodomos

engineer architect builder

- During the early Byzantine Period, two roles that we consider 'architect' today
- Architekton was more of a master builder master mason
- Mechanikos was more exalted, far rarer not only knowledge of building, but knowledge of mathematics
- Oikodomos builder, skilled laborer



- Ravenna the capital of the Western Roman Empire in 402
 - Until 476
- Became an exarchate to the Eastern Roman Empire from 584 to 751

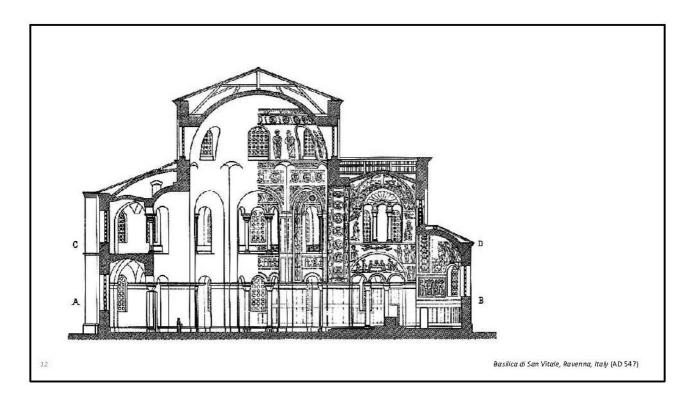


Basilica di San Vitale, Ravenna, Italy (AD 547)

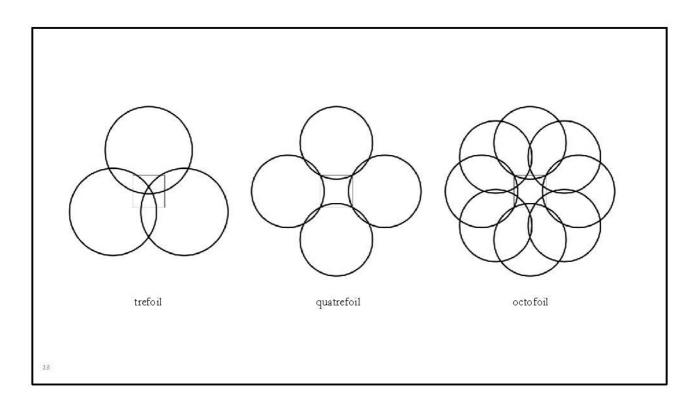
- Prior to Byzantium, there was no 'Christian Art and Architecture'
 - This had to be invented
 - Didn't really take shape until about AD 500
- One of the most important early Byzantine Works: Basilica di San Vitale, Ravenna [AD 547]



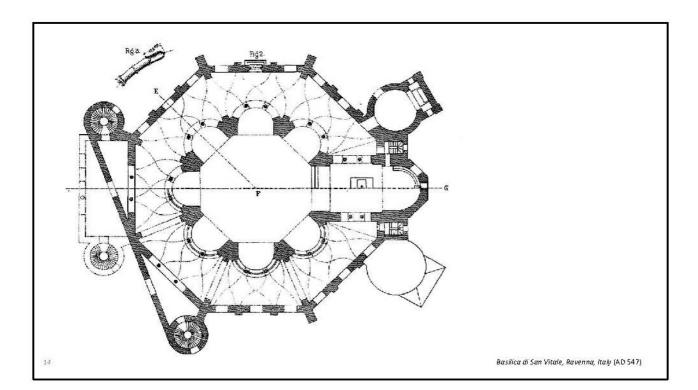
Basilica di San Vitale, Ravenna, Italy (AD 547)



- Hierarchical progression of height from outer to central bay

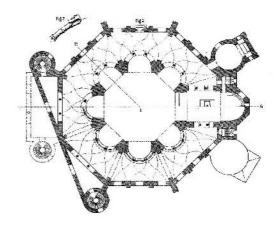


Common Theme: CENTRALIZED ORGANIZATION



poché

The abstract representation of solidity (e.g. walls, floors) in architectural drawings, often filled with a hatch pattern or a solid shade.



15







- Parity between art and architecture
 - Using emerging art forms through an emerging architectural form







Examples of Byzantine style capitals

- Many possible reasons for changes in captials:
 - More numerous buildings
 - Changing landscape of knowledge
 - Quite simply change of taste



- unfluted shafts become more common



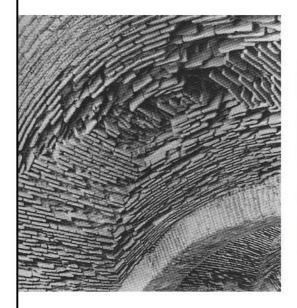
Example of a column capital at Hagia Sophia. Constantinople (Istanbul)

 Oftentimes Byzantine capitals are described as lower quality in terms of techniques – simply not true

-



- Architecture in the East tended towards Ashlar Masonry, in the West was thin Brick





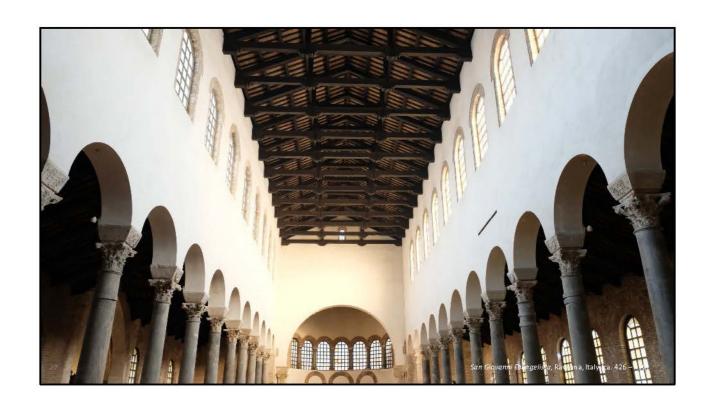
Byzantine Brickwork

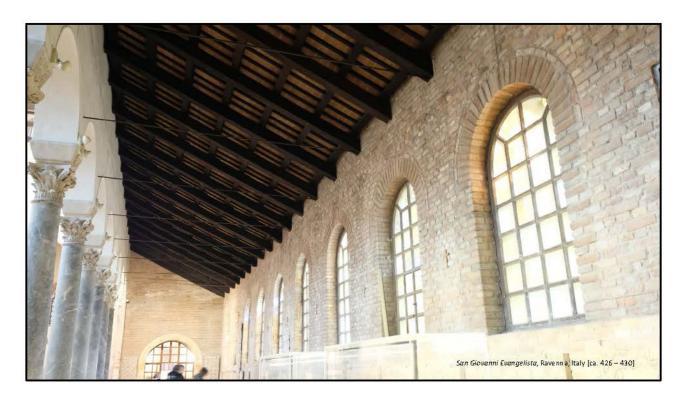




Byzantine Brickwork







- Tension rods are not original, and prevent bowing of the inner and outer walls



Hagia Sophia, Constantinople (Istanbul), Turkeγ (AD 537)

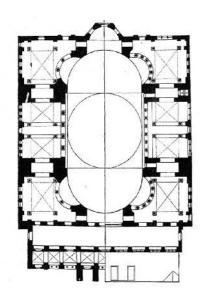
- Moving on to the most important work of Early Byzantium
- FIRST: Timber roofed basilica, burned down in AD 404
- SECOND: Burned down in AD 532
- THIRD: AD 537 constructed

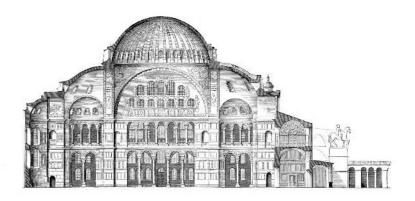
29



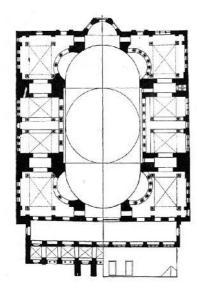
Hagia Sophia, Constantinople (Istanbul), Turkey (AD 537)

Massive: By far the largest domed structure built in Byzantium





Hagia Sophia, Constantinople (Istanbul), Turkey (AD 537)





Hagia Sophia, Constantinople (Istanbul), Turkey (AD 537)

32

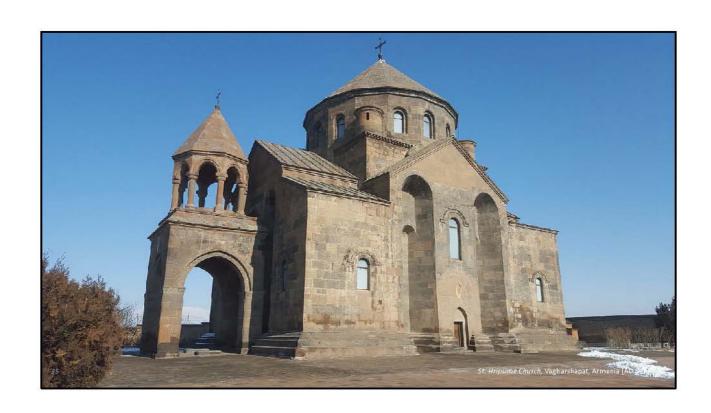


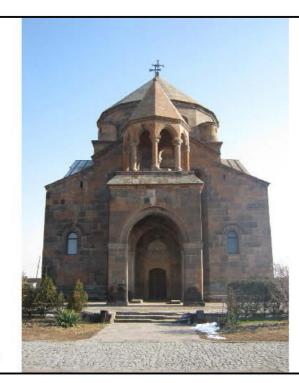
Hagia Sophia, Constantinople (Istanbul), Turkey (AD 537)

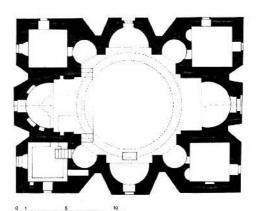
- Catholic iconography was removed when Constantinople was taken over by the Ottomans
- Nevertheless, much of the Islamic features are still over 500 years old



Hagia Sophia, Constantinople (Istanbul), Turkeγ (AD 537) View from upper gallery

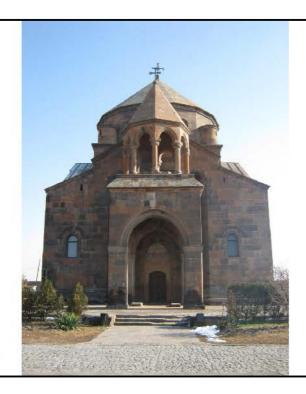






St. Hripsime Church, Vagharshapat, Armenia [AD 618]

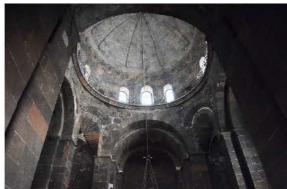
35





St. Hripsime Church, Vagharshapat, Armenia [AD 618]





St. Hripsime Church, Vagharshapat, Armenia [AD 618]



39 St. Mark's Basilica, Venice, Italy (1092)

- Eastern Roman style in the 'West' Venice
 - But again, be cautious of such clear distinctions





St. Mark's Basilica, Venice, Italy (1092)

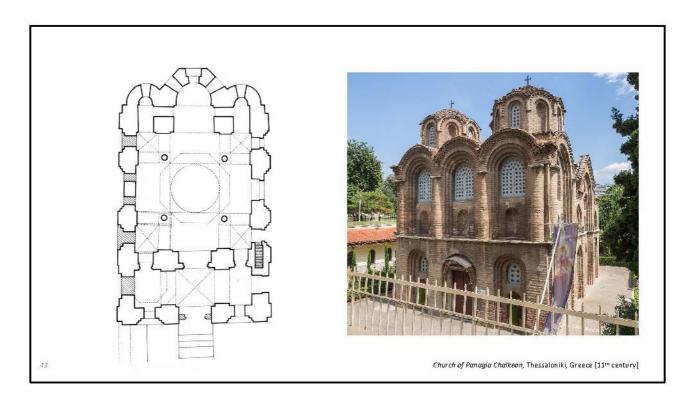


- St. Mark's Basilica was built during a stylistic period much more eclectic than the Hagia Sophia



Church of Panagia Chalkeon, Thessaloniki, Greece [1119 century]

- An example of the late Byzantine style, with more adorned details around geometric blocks
- Indicative a change forward in the Byzantine style



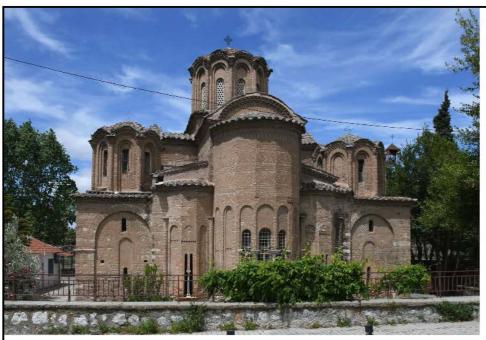
 A standard 'Four-column'/3-bay church, which is indicative of a formal styles that exists even today



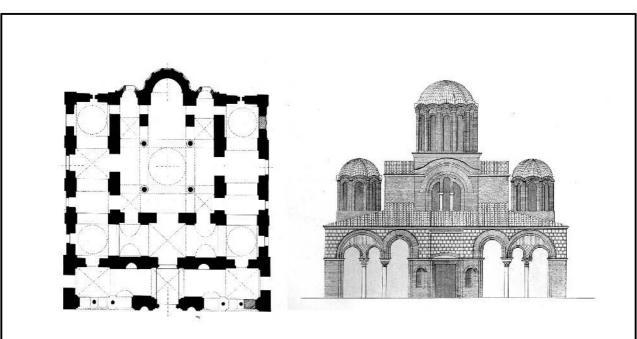


Church of Panagia Chalkeon, Thessaloniki, Greece [1111 century]

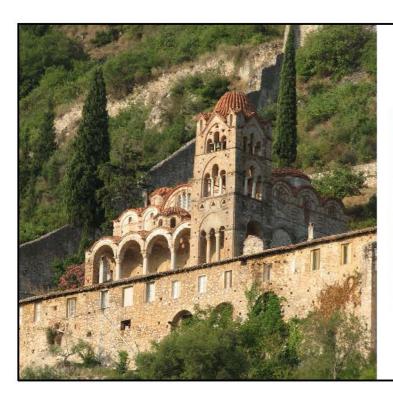
- Is one of the earliest examples in which is a Recession of Planes, a trend that will continue into subsequent movements
- 'Blind niche' on the little domes over the Narthex



Church of the Holy Apostles, Thessaloniki, Greece [14th century]



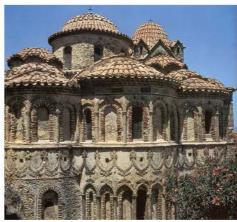
Church of the Holy Apostles, Thessaloniki, Greece [141 century]



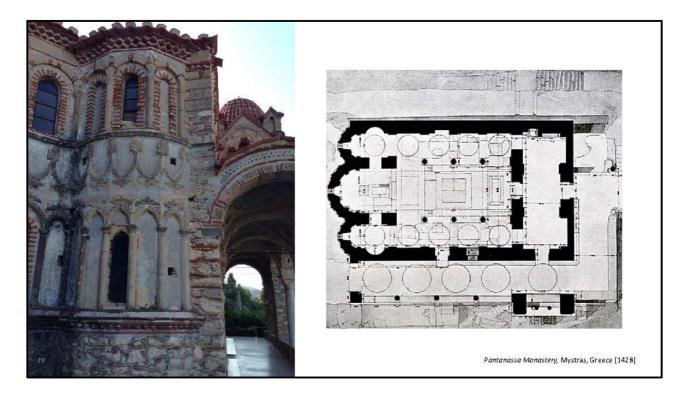


Pantanassa Monastery, Mystras, Greece [1428]

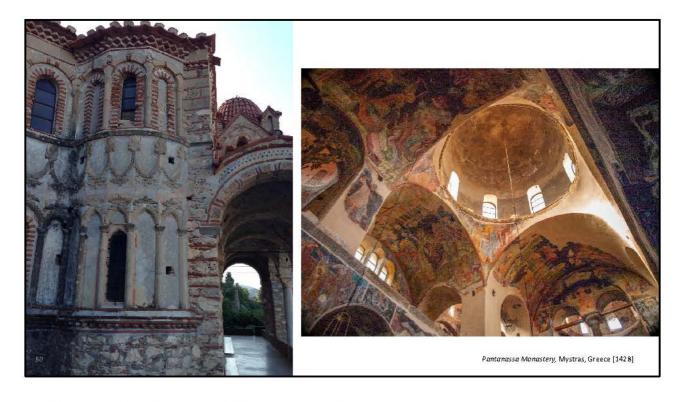




Pantanassa Monastery, Mystras, Greece [1428]



- Heavy use of brick as ornamental device



- Frescoed interior, now in heavy disrepair

After Antiquity

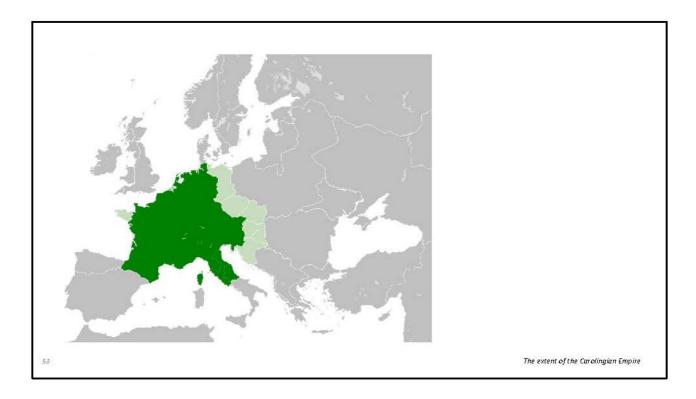
Carolingian, Romanesque, Early and High Gothic



Carlovingian, Carolingus, Karolinger, Karlings

52

- Carolingian in particular refers to architecture of Northern Europe during $8-9^{th}$ centuries (AD 800-899)



- Covering modern-day Western Europe, including France, Italy, Switzerland, and Germany
- The end of the Carolingian dynasty was marked by the emergence of the Kingdom of France and the Holy Roman Empire



Western and Eastern Roman Empires, ca. AD 476



Map of various kingdoms at AD 526





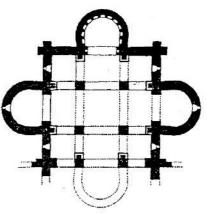
Charlemagne (Charles the Great), [AD 742 - 814]

- Among the most notable ruler of the late Frankish Empire, known as the Carolingian Empire, was Charles the Great, Charlemagne
- Crowned as "Emperor of the Romans" by Pope Leo III, year AD 800
- Charlemagne wanted to establish himself as a Roman Emperor, so it was only fitting to send his architects throughout Europe to study the classical Roman style.



Lorsch Abbey Gatehouse, Lorsch, Germany (ca. 800)





Oratory, Germigny-des-Prés, France [806]

- Clear influence from the Byzantine style highly centralized layout
- Remember, point of covering this period is to show transition, more so than the style itself (so few examples)



Oratory, Germigny-des-Prés, France [806]



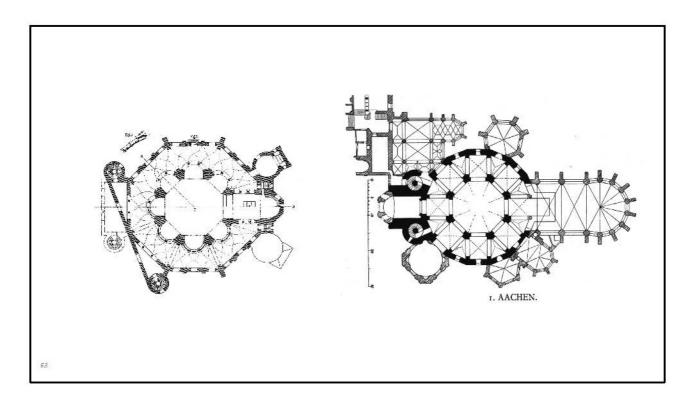
Oratory, Germigny-des-Prés, France [806]







- Aachen was within the Carolingian Empire, and now situated in Germany, near the German-Belgian border.
- The entire building is known as the Aachen Cathedral, but what concerns us here is the central area, known as the Palatine Chapel.
- Under the direct supervision of Charlemagne, construction on the Palatine Chapel began around 792.



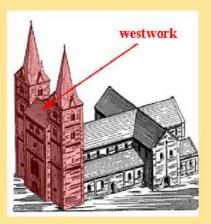
- Modeled after San Vitale in Ravenna (on the left)
- 16-sided outer wall, 8-sided (octagon) inner area
- Was heavily damaged in WWII, and so much of what we see today is relatively new, although the basic structure is still original.



Palatine Chapel, Aachen, Germany (792 - 805)

westwork

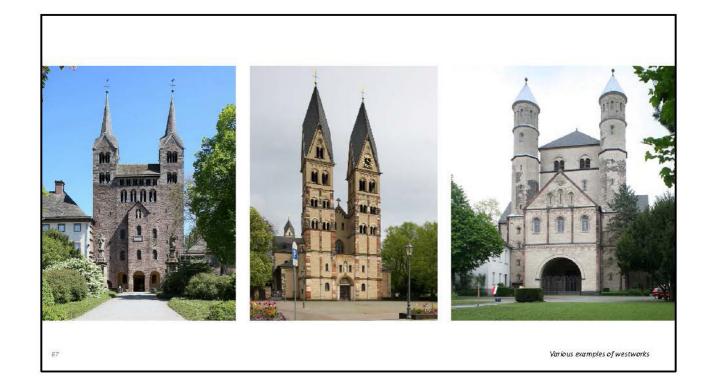
Western front to a church, composed of a tower or towers with multiple floors between, usually wider than the nave of the church.



westwork

Western front to a church, composed of a tower or towers with multiple floors between, usually wider than the nave of the church.





- Examples of later types of westworks — contribution of the Carolingian period.

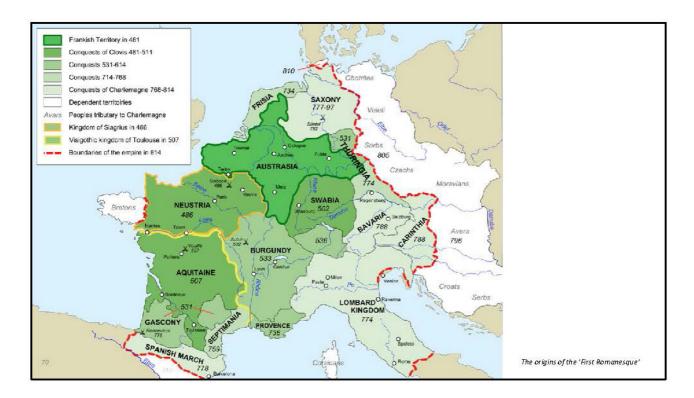
ROMANESQUE

- Periodization is often inaccurate but necessary for categories
- Basis of periodization:
 - Place
 - Date
 - Characteristics

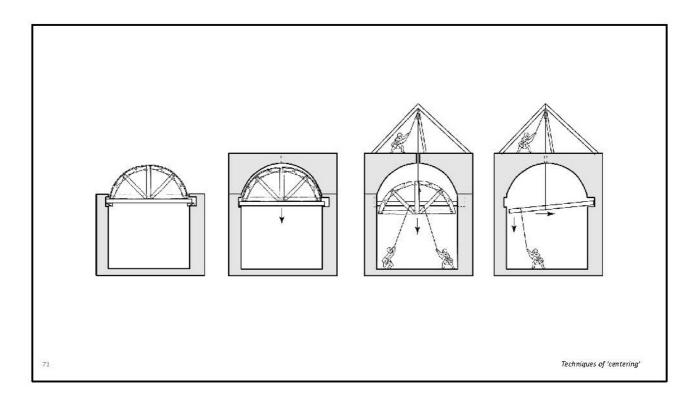
Key comments on the Romanesque

- Approximately from AD 800 to 1,200
- Heavily influenced by classical Roman architecture
- Political/Religious stability represented through massiveness
- Massiveness to express strength of religion, fortress-like
- Semi-circular arches
- Thick walls
- Arcades with rows of arches

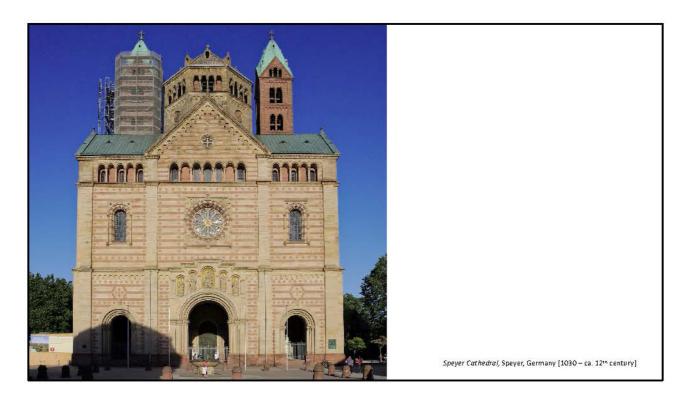
- Oftentimes it's more accurate to describe certain characteristics as 'Romanesque', rather than entire buildings
- Given the term really as a filler
- Some even call the Romanesque simply the Early Gothic



- Why did the Romanesque style emerge?
 - Increased knowledge in building, taking Roman vaulting as a starting point
 - Increased stability, which led to the formation of groups with knowledge of more complicated building processes
 - Masons worked as 'travelling bands', moving from one city to another, making buildings and passing down knowledge



- The technology of centering was taken from classical Rome, but there was a consistency of quality due to stability
- Centering is also called 'False-work' or 'Form-work'



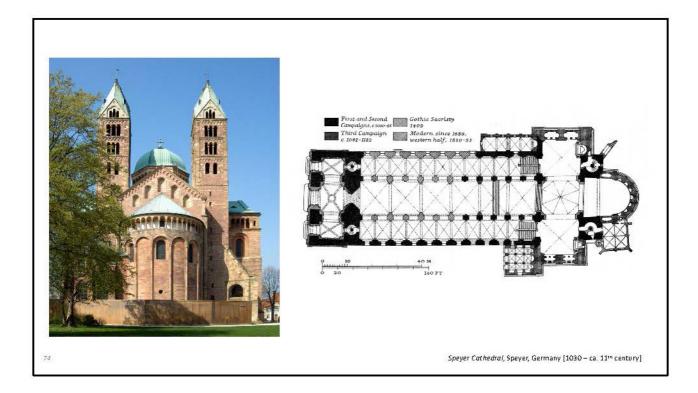
- Represents the German Early Romanesque



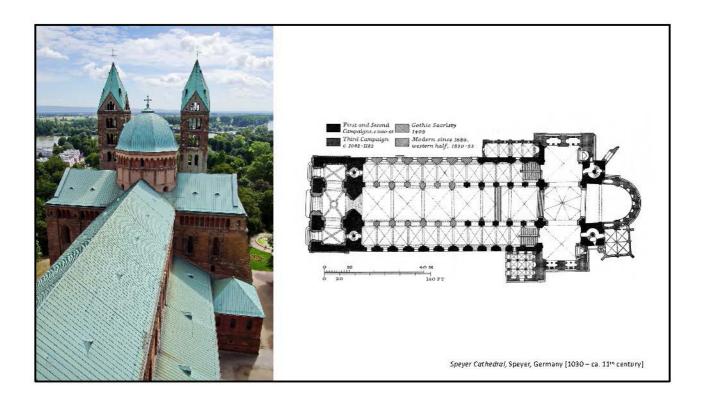
Speyer Cathedral, Speyer, Germany [1030 - ca. 1111 century]

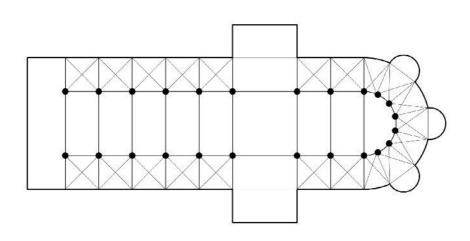
- Interior view of the nave

- Expression of mass, bulk, stability
- Construction of piers (thick columns), and only the representation of columns through pilasters



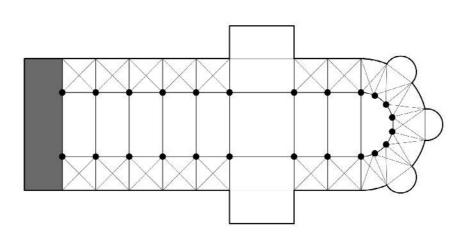
- Looking at the East elevation of the building
- Notice the immense structures that make up the building (thick poche)





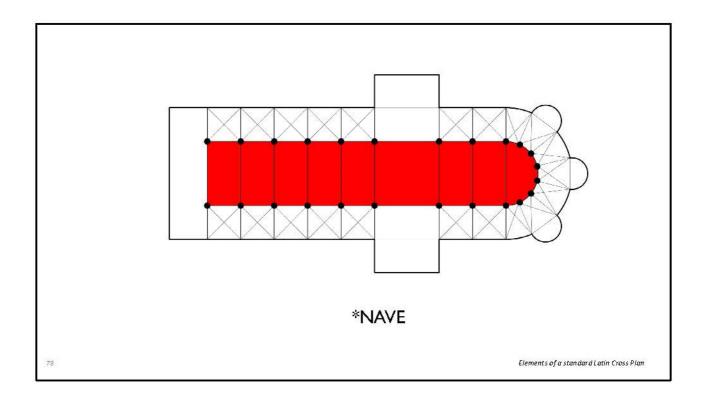
LATIN CROSS PLAN

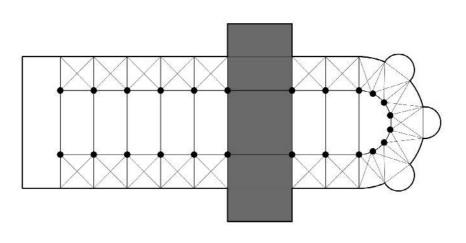
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NARTHEX

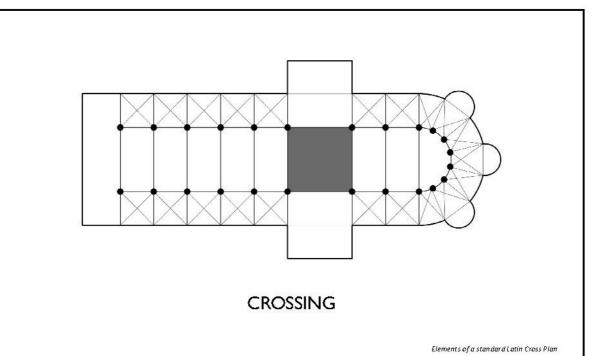
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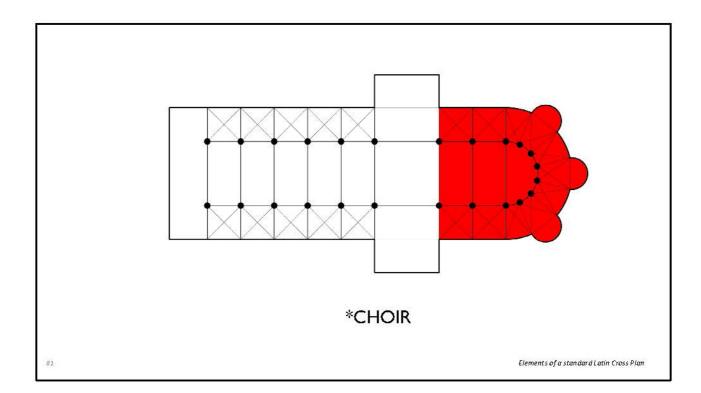


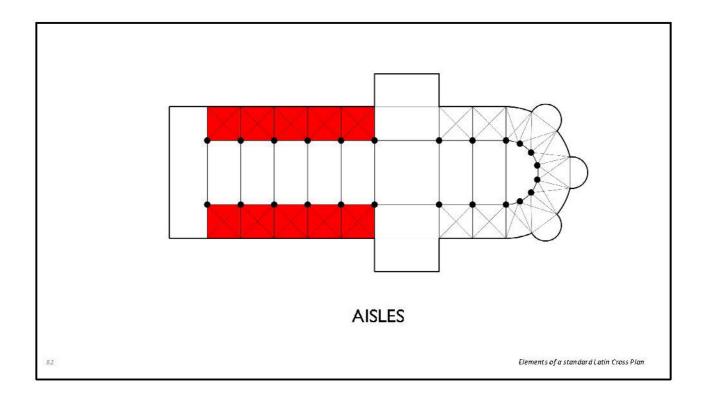


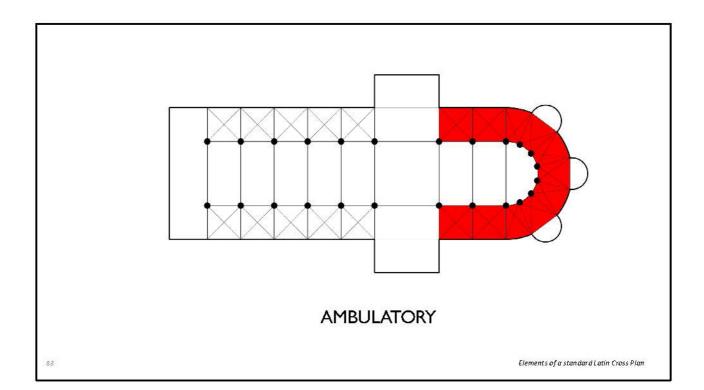
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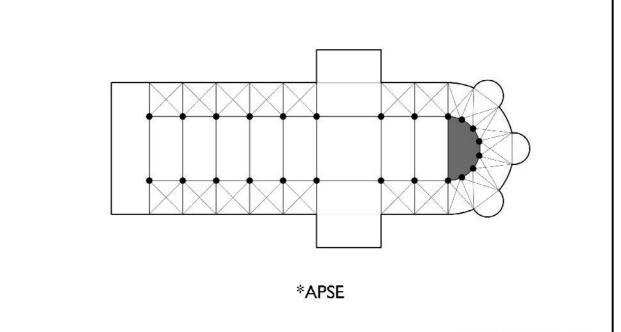
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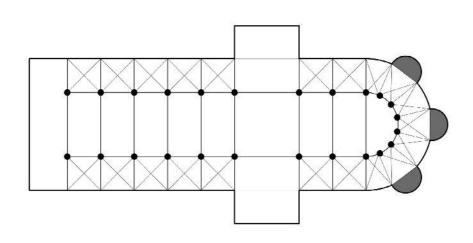








84



APSIDIOLES

Elements of a standard Latin Cross Plan



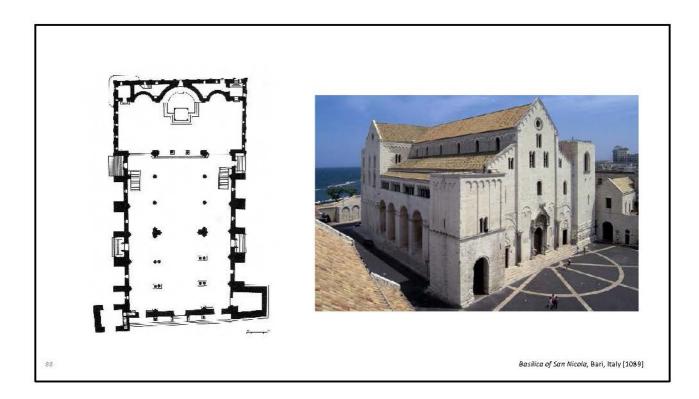
Basilica of San Nicola, Bari, Italy [1087 - 1197]

- On the exterior, clear use of Romanesque semi-circular window openings, echoes of that motif through reliefs and ornamental corbels.

corbel

An armature projecting from the face of a wall, most often supporting some load.





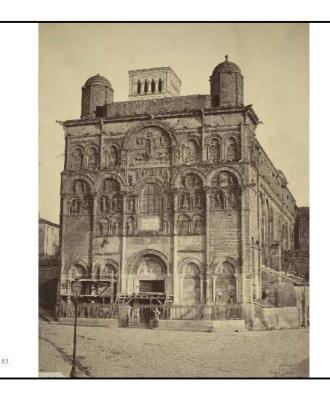
- An almost fortress-like plan, minimal reference to the conventional Latin cross
 - During this period, still developing various typologies



- The original contribution of this church was that above the side aisles were a pair of second story aisles
- To accommodate for this increased load, we see two interior arches that span the nave



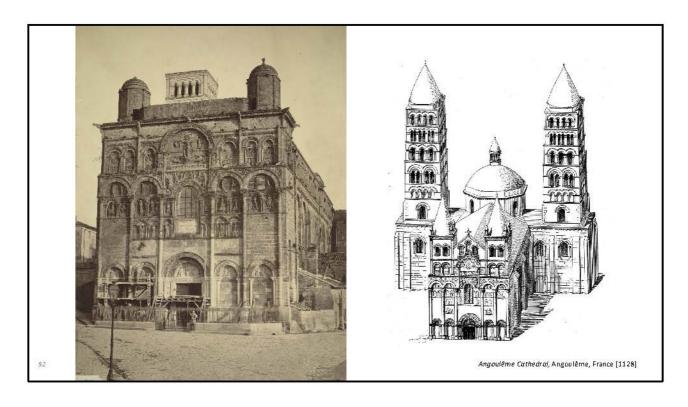
- Above the aisles to either side, a view of the matronaeum in which women would be seated during service.



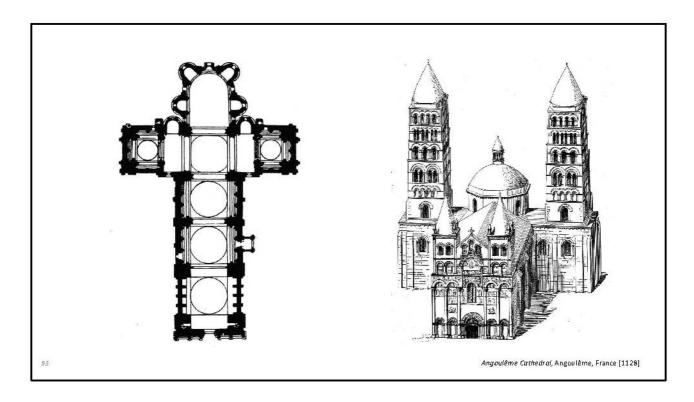


Angoulême Cathedral, Angoulême, France [1128] Left: photo [ca. 1856 – 1886]

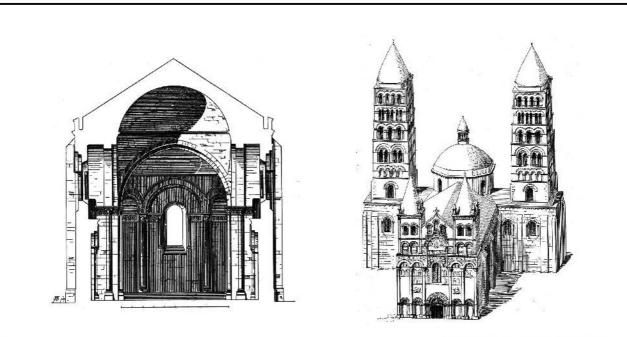
- As the decades continue up until the end of the Romanesque period (*roughly 1200*), we see an increase in ornamentation, such as on the Westwork of Angouleme Cathedral
- Also notice some other curious features indications of lightness



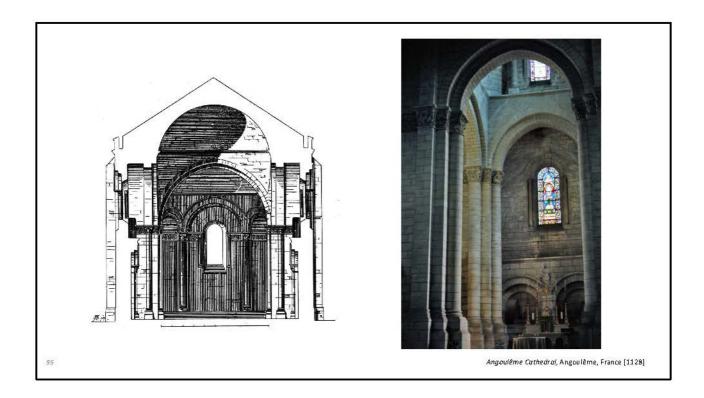
- Alterations were made between 1866 – 1885



- Still at this stage, a pretty simple Latin-Cross layout
 - No aisles present, meaning could only accommodate for a smaller number of visitors



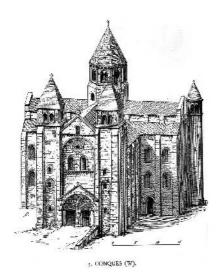
Angoulême Cathedral, Angoulême, France [1128]



- View of 'Clustered Columns,' a regular feature in the next architectural period



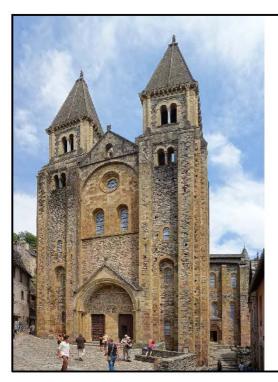
- Photo ca. 1860, just after the major renovations to the Westwork





Abbey Church of Sainte Foy, Conques-en-Rouergue, France [ca. 8th - 12th centuries]

- Was constructed as a refuge for Spanish monks
- An example of the Mature Romanesque
- Relatively unadorned exterior, massiveness of proportions, with buttresses throughout all sides of the outer façade



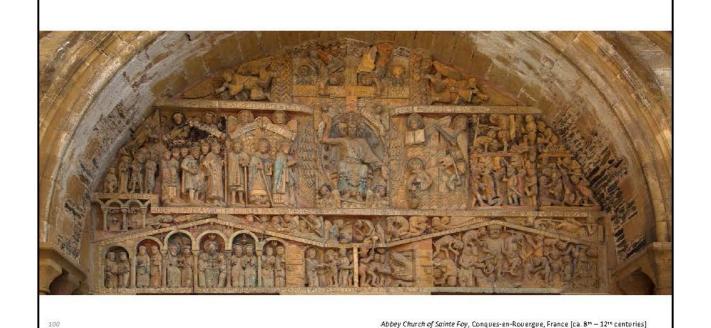


Abbey Church of Sainte Foy, Conques-en-Rouergue, France [ca. 8th - 12th centuries]

- Because of its proportions, the general layout looks like something between Byzantine centralized clusters of volumes, and a very short Latin cross layout



- View of the Westwork
- Prominent use of semi-circular arches, both to frame the center face as well as for opening



 Where ornamentation does occur, for example in the tympanum above the front entry, we see quite a lot of biblical narratives.

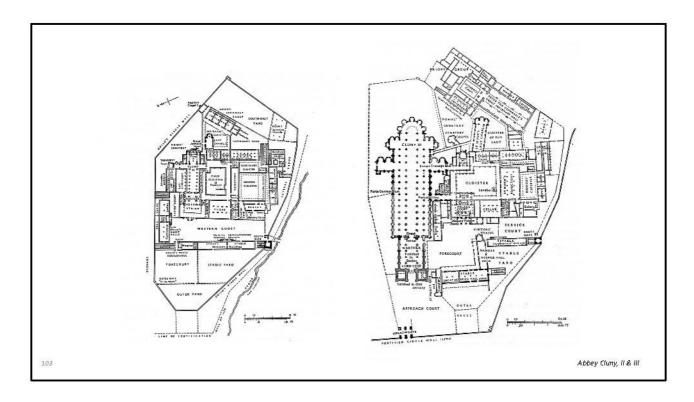
- As an aside, pay attention to the style of the figures



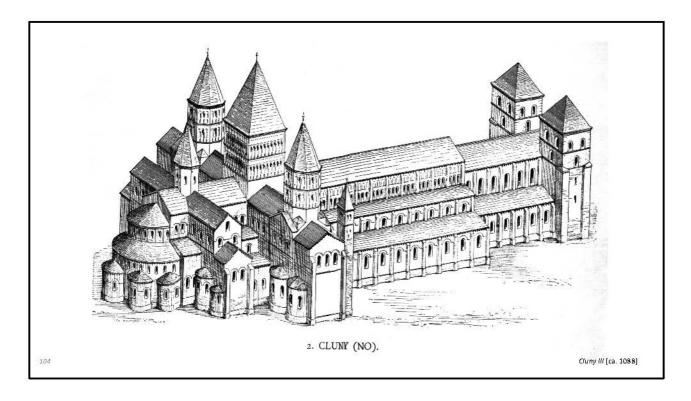


Abbey Church of Sainte Foy, Conques-en-Rouergue, France [ca. 8th - 12th centuries]

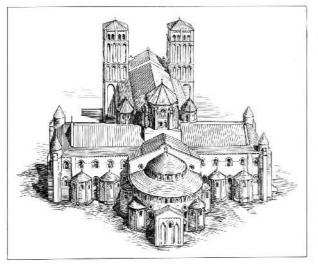




- The next project is arguably one of the most famous Romanesque examples Cluny Abbey in France
- It's difficult to provide a single image of it, because like the Acropolis, construction was ongoing over a period of 800 years, from the 4th century to the 12th century
- Rather than just a cathedral, more importantly it was an abbey, so it contained many religious functions, including a church, cloister, cemetery, and spaces for public functions.
- Left, Cluny II: plan at 1050
- Right, Cluny III: plan at 1157
- Not much information is given on either Cluny I or II the first we know to have been a very modest church, most likely of timber construction



- What we do know much more of is Cluny III, as you see here, constructed in various phases, though you can mark it down as about AD 1088
- Unfortunately it no longer stands as a whole, and was almost totally demolished shortly after the French Revolution, 1810

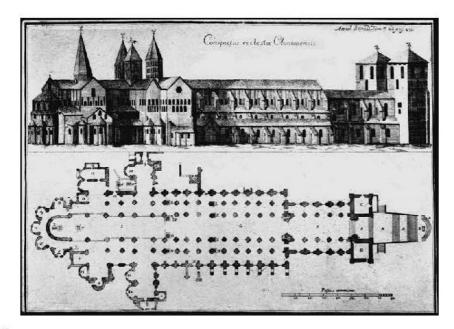


105



Lorsch Abbey Gatehouse, Lorsch, Germany (ca. 800)

A view of the church from the side of the semi-circular apse, showing how this was really a combination of styles between Byzantine and high Romanesque



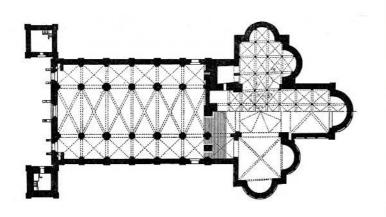
Abbey at Cluny

- We see in the plan that this was an important church, and one in which pilgrimages were a regular occurrence... why?
 - Double aisles... this was to accommodate for a much larger occupancy than your standard church.



Parma Cathedral, Parma, Italy [1117]

- Example of the Late Romanesque, where there is a clear departure away from intentional massiveness (only limited by technical constraints)
- Highly detailed ornamentation



108



Parma Cathedrai, Parma, Italy [1117]

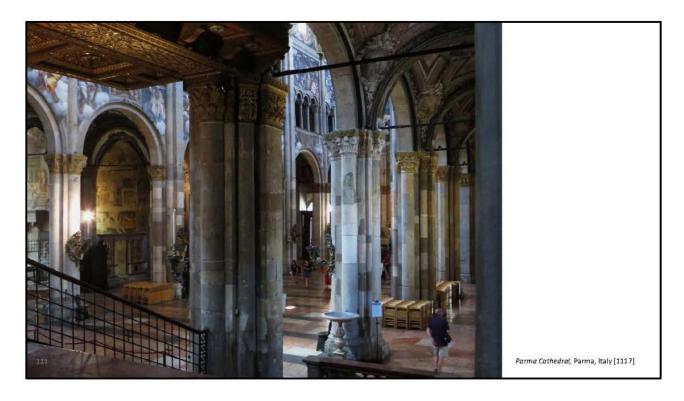
loggia

An exterior corridor that is supported by a series of columns or arches, and is exposed to the outside





- But the talking point of this Late Romanesque cathedral is clearly the interior
- Moving beyond the austerity of the Early Romanesque style, adornment increasingly becomes an important element to sacred architecture



- A view from the elevated choir looking westward

Key comments on the Romanesque

- Approximately from AD 800 to 1,200
- Heavily influenced by classical Roman architecture
- Political/Religious stability represented through massiveness
- Massiveness to express strength of religion, fortress-like
- Semi-circular arches
- Thick walls
- Arcades with rows of arches

11.

- Summary