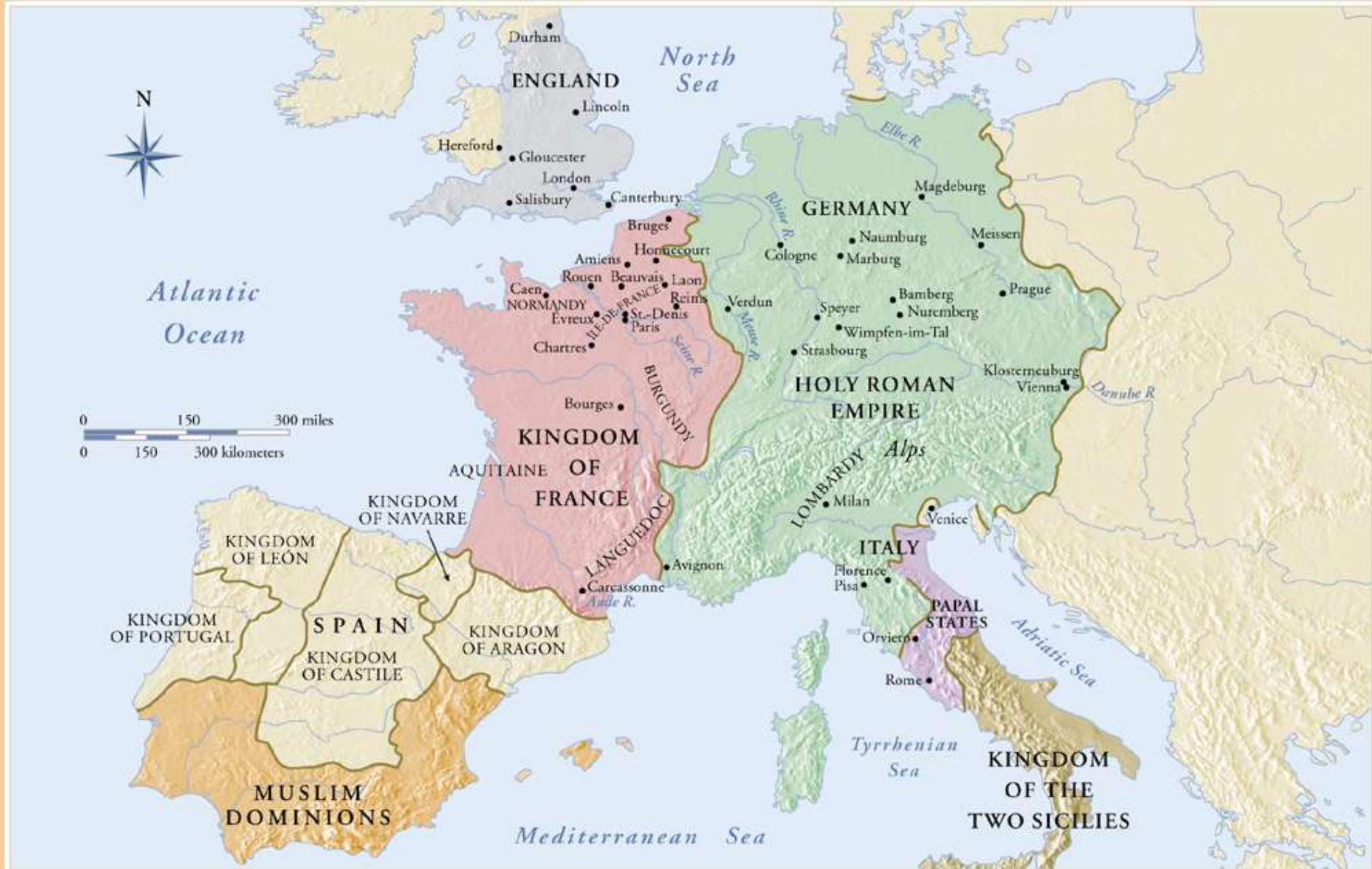


Gothic Architecture

12-15th c.

The term “Gothic” was popularized by the 16th c. artist and historian Giorgio Vasari who attributed the style to the Goths, Germanic invaders who had “destroyed” the classical civilization of the Roman empire. In it’s own day the Gothic style was simply called “modern art” or “The French style”

Europe About 1200



England and France were becoming strong nation-states while the Holy Roman Empire was weakened and ceased to be a significant power in the 13th c.

Gothic Age: Historical Background

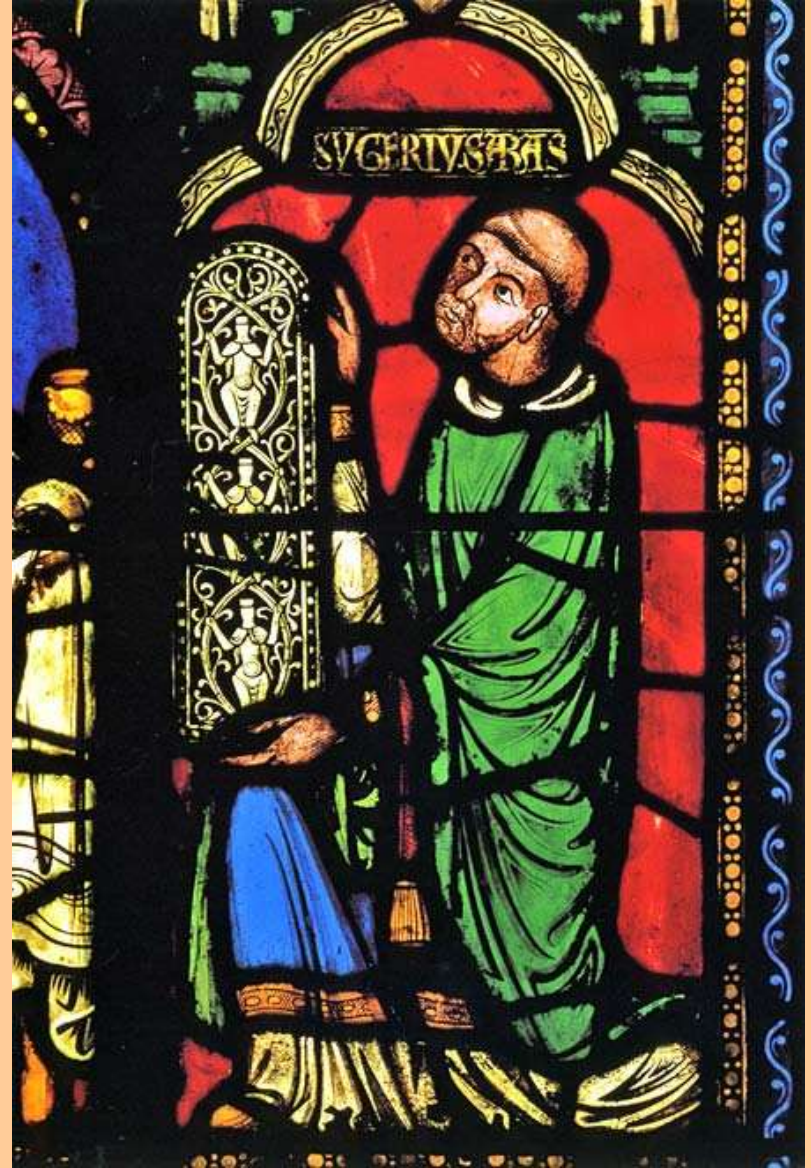
- **Widespread prosperity**
- **Development of cities.** Although Europe remained rural, cities gained increasing prominence. They became centers of artistic patronage, fostering communal identity by public projects and ceremonies.
- **Guilds** (professional associations) **of scholars founded the first universities.** A system of reasoned analysis known as scholasticism emerged from these universities, intent on reconciling Christian theology and Classical philosophy.
- **Age of cathedrals** (Cathedral is a large church in which a residential bishop has his official seat.)
- 11-13th c - **The Crusades** bring Islamic and Byzantine influences to Europe
- 14th c. - **Black Death** killing about one third of population in western Europe and devastating much of Europe's economy.
- 1378-1417 - **The Western Schism** - opposing popes resided in Rome and in France
- 1377 - **Hundred years' war** between France and England started

French Gothic Architecture

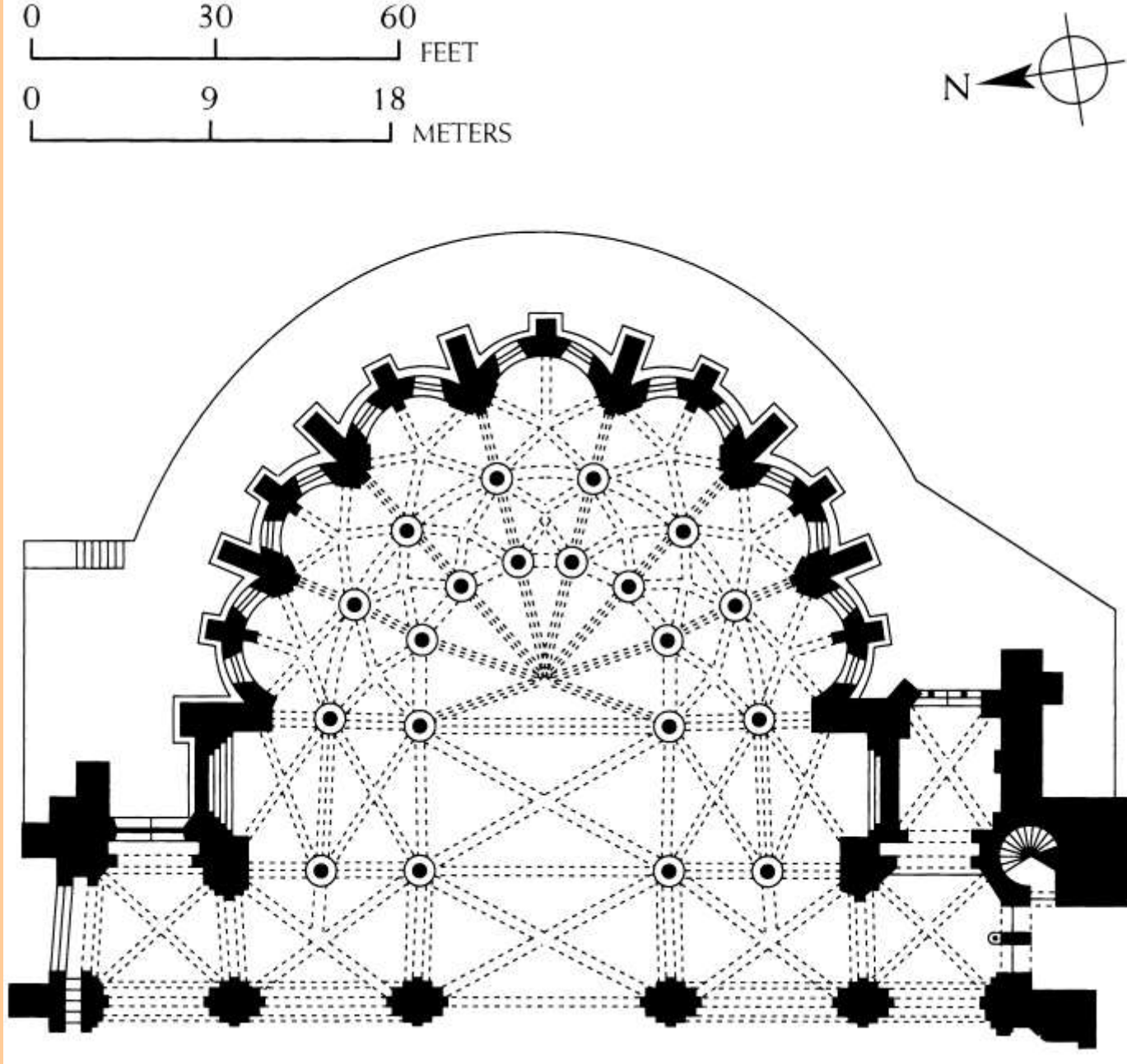
The Gothic style emerged in the Ile-de-France region (French royal domain around Paris) around 1140. It coincided with the emergence of the monarchy as a powerful centralizing force. Within 100 years, an estimate 2700 Gothic churches were built in the Ile-de-France alone.

Abbot Suger, 1081-1151, French cleric and statesman, abbot of Saint-Denis from 1122, minister of kings Louis VI and Louis VII. In 1147, Louis VII left on crusade and Suger became the regent. Suger's work on the church of Saint-Denis was instrumental in the development of Gothic architecture.

<https://youtu.be/2EciWH-1ya4>



Stained glass representation of Abbot Suger in the Jesse Window of the Basilique St-Denis. An 1800s product of the restoration work by Viollet-le-Duc

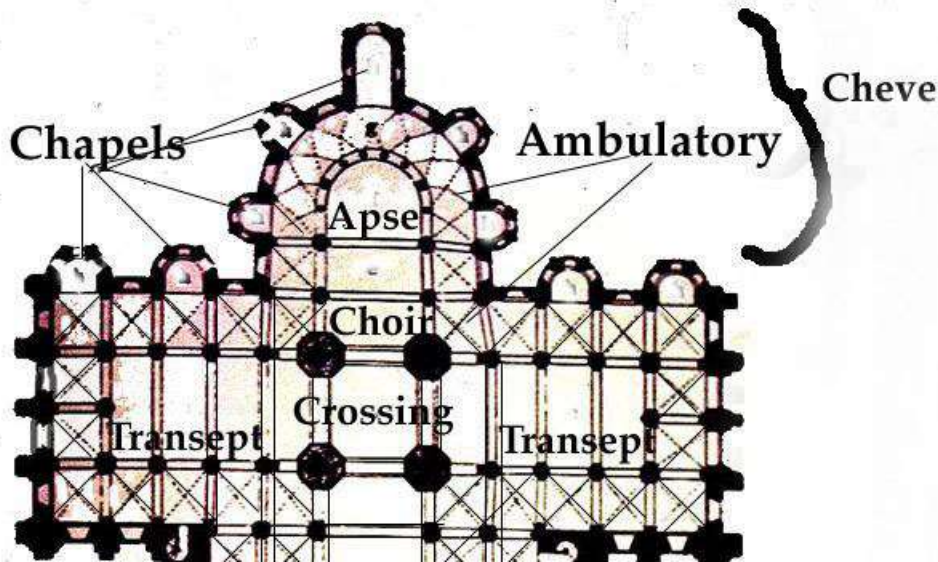
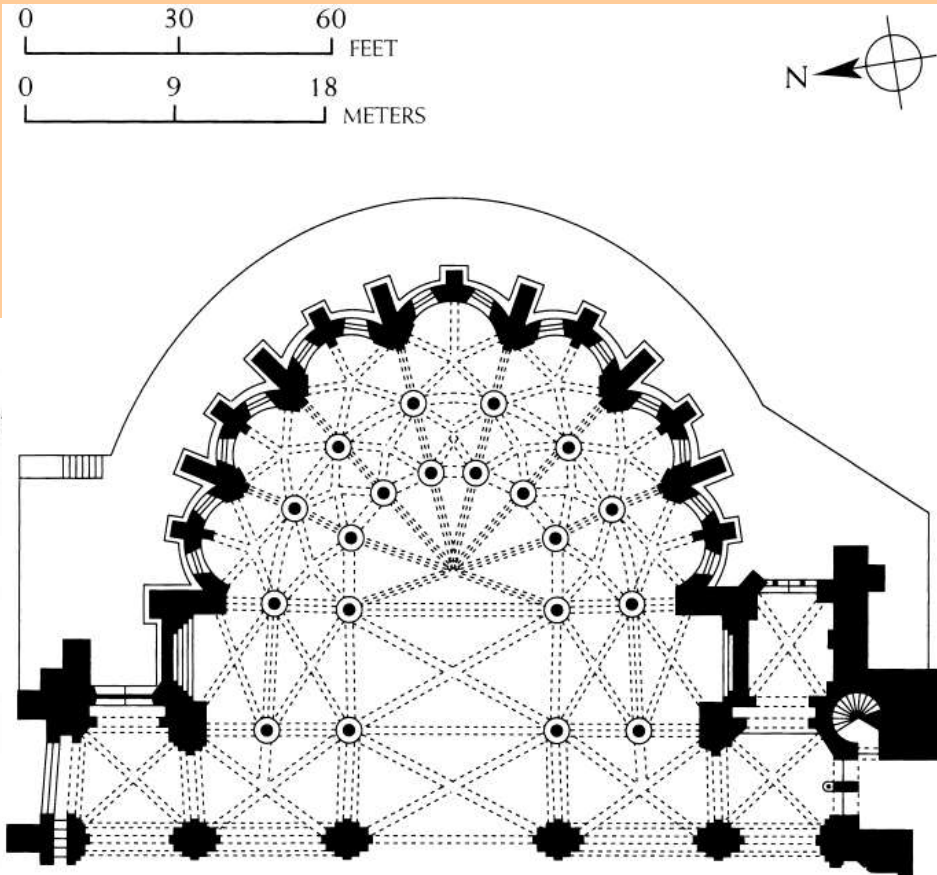


Plan of the east end, abbey church, Saint-Denis, France, 1140–1144

*Plan of the east end, abbey church,
Saint-Denis, France, 1140–1144*

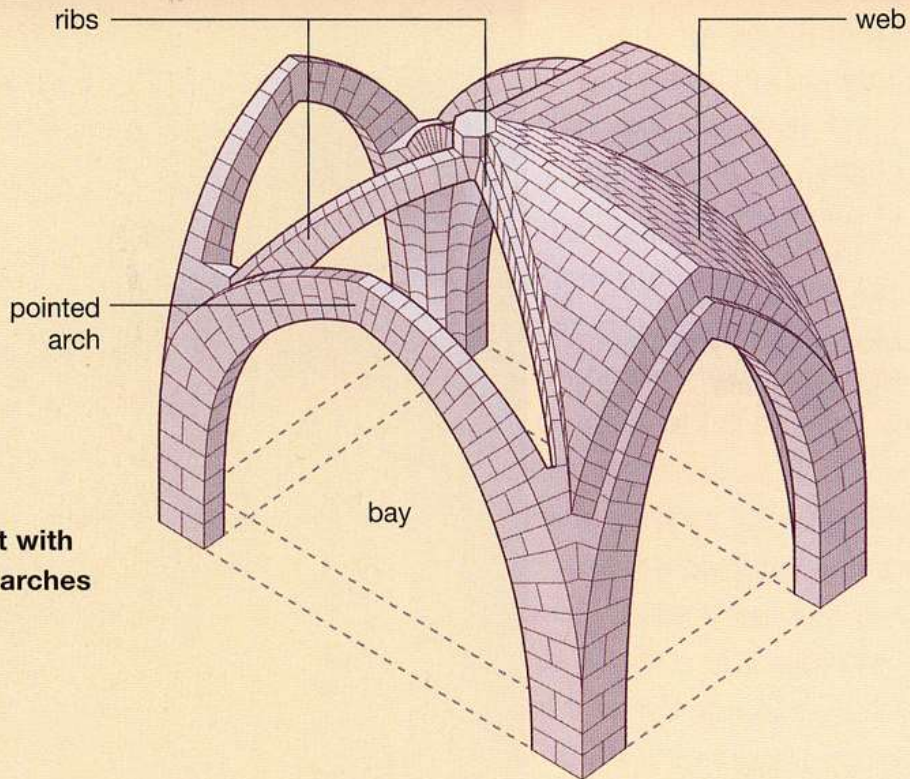
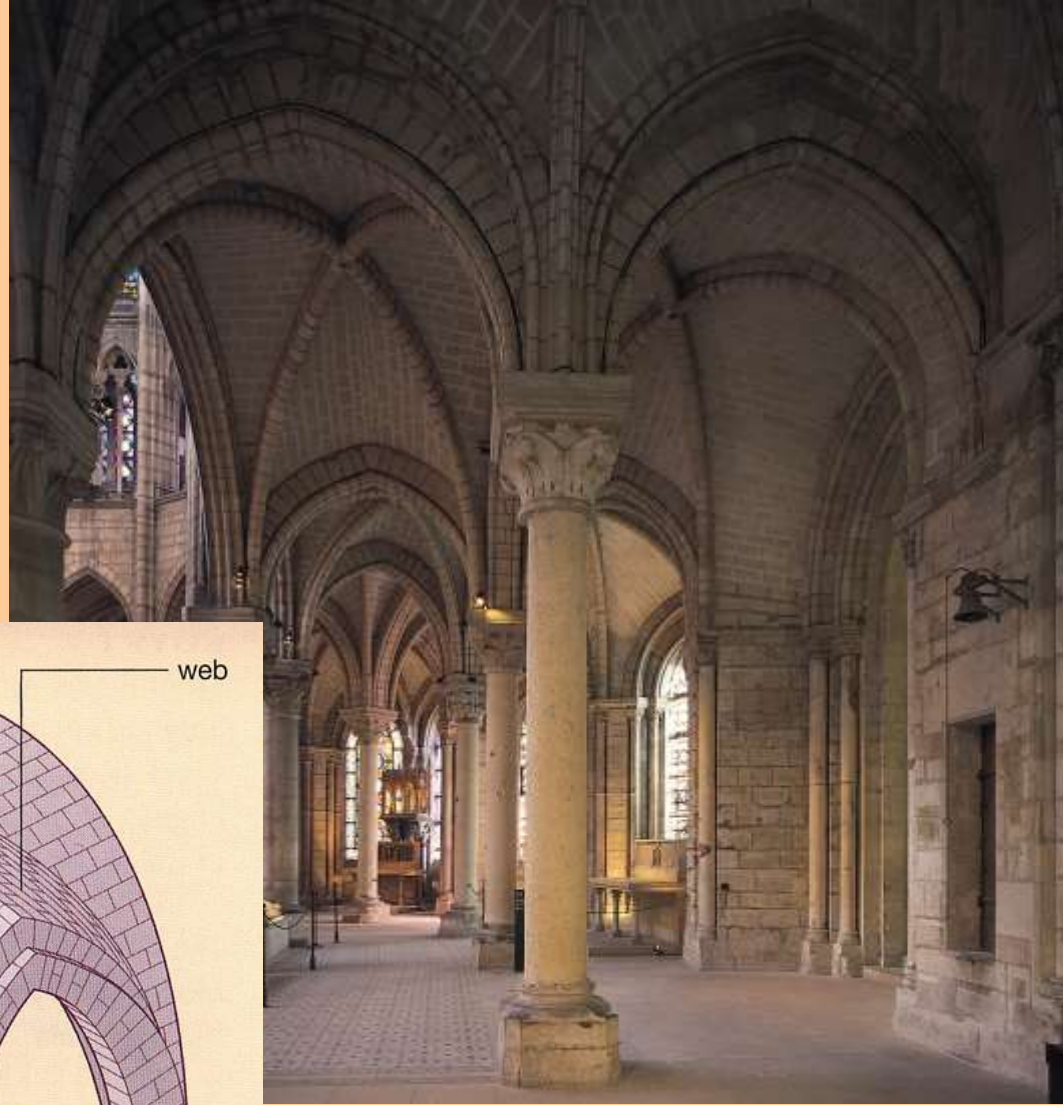
Comparison - Romanesque.

*Plan of the east end, St. Sernin,
Toulouse, France, 1070-1120*



Rib Vault

A vault in which the surface is divided into webs by a framework of diagonal arched ribs.



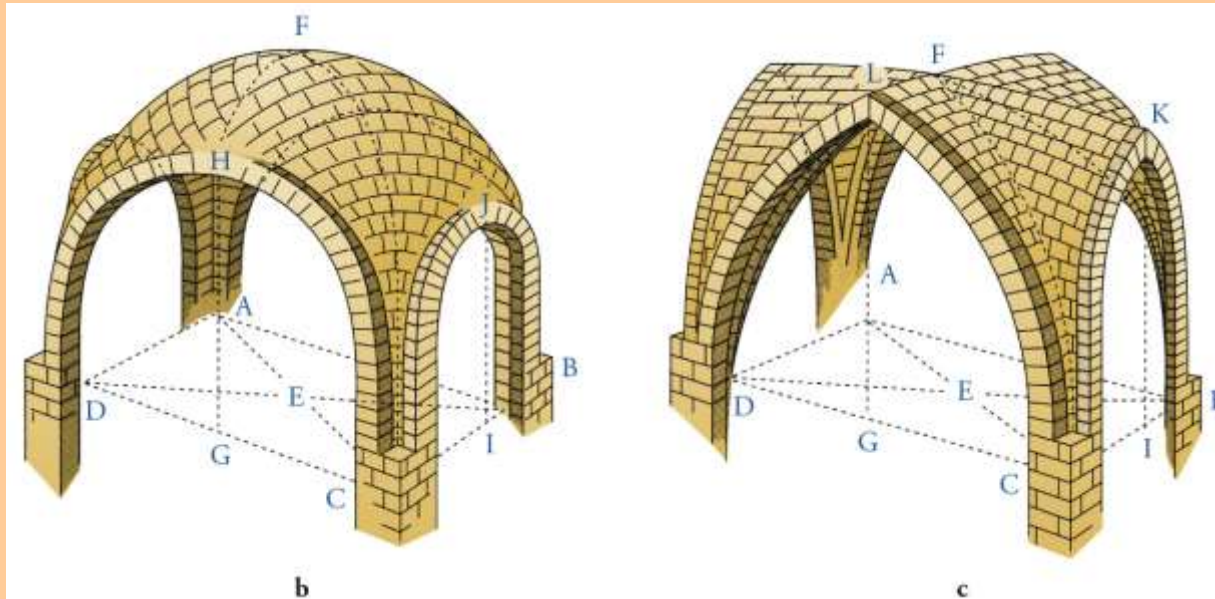
Rib vault with pointed arches

Ambulatory and radiating chapels, abbey church, Saint-Denis, France, 1140–1144.

Advantages of rib vaults with pointed arches:

- All crowns are at the same level.
- Channel the weight more directly downward, thus require less buttressing and permit opening up walls and placing large windows beneath the arch.
- Lead the eye upward thus make the vault appear taller.
- Flexibility permits vaulting of compartment of varying shapes.

The first wide use of pointed arches was in Sasanian architecture, and Islamic builders later adopted them. French Romanesque architects borrowed them from Muslim Spain and passed it to their Gothic successors.



Rib vaults with semicircular (*b*) and pointed (*c*) arches.

Four story Early Gothic elevation
(nave arcade, vaulted gallery,
triforium and clerestory)

Triforium

The story in the nave elevation found below the clerestory and consisting of a series of arched openings. Usually without windows (blind arcade) or with stained glass.

Notre Dame = Our Lady (The Virgin Mary).

*Interior of Laon Cathedral
(Notre Dame Cathedral at Laon)
looking northeast, begun ca. 1190.
80 feet high. Laon, France*

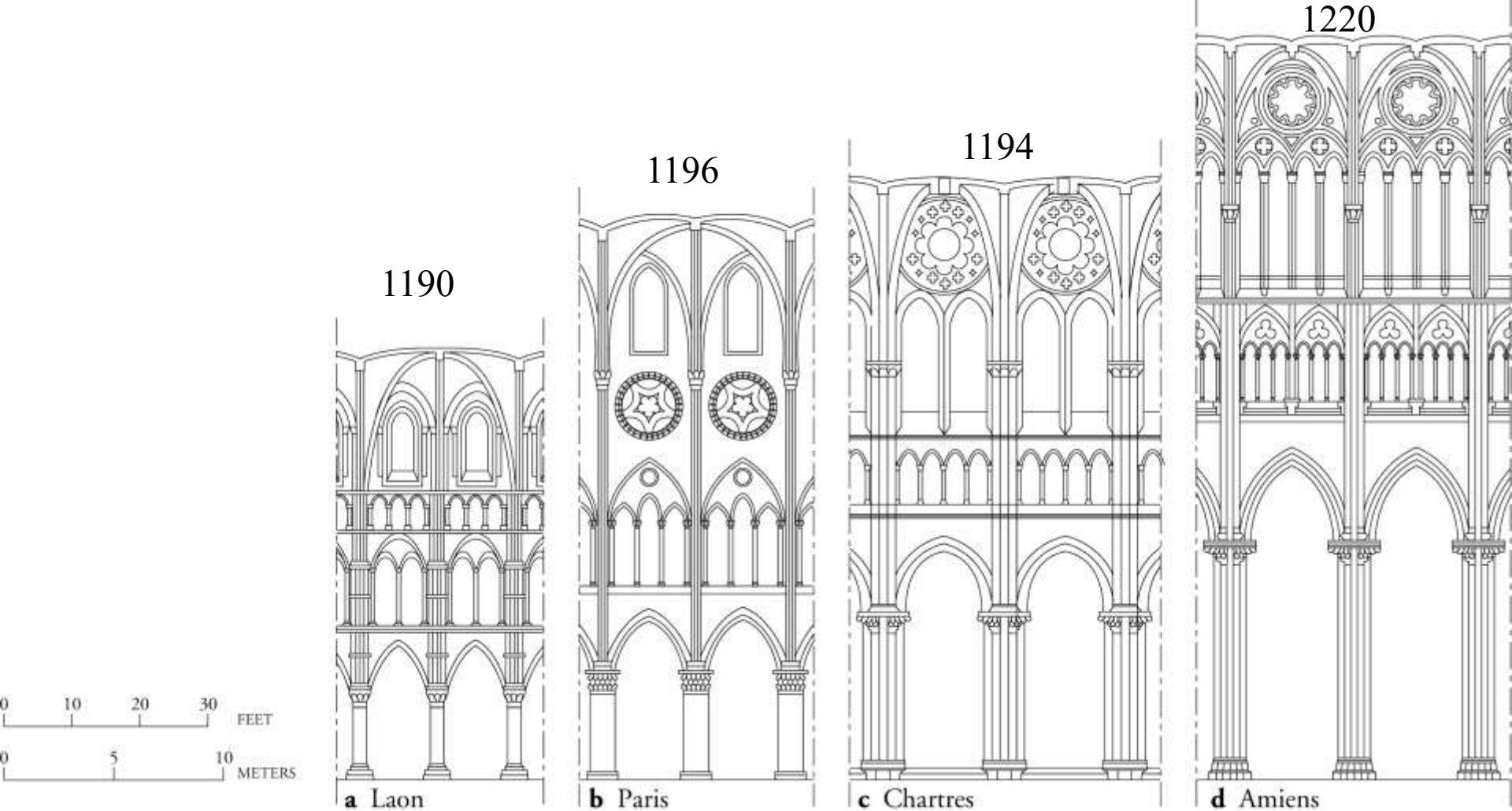




Comparison: Romanesque.
Interior of Saint-Sernin, Toulouse,
France, ca. 1070–1120.



Interior of Laon Cathedral
looking northeast, begun ca. 1190.
80 feet high. Laon, France



Nave elevations of four French Gothic cathedrals at the same scale.

Gothic nave design evolved from the Early Gothic four story elevation to the High Gothic three story elevation (nave arcade, triforium and clerestory).

The height of the vaults also increased from 80 to 144 feet.

Master masons were highly skilled lay craftsmen who combined the roles of architect, builder, craftsman, designer and engineer. They were in charge of hundreds of people and often worked on more than one project at the same time. Master masons gained in prestige during the 13th c.

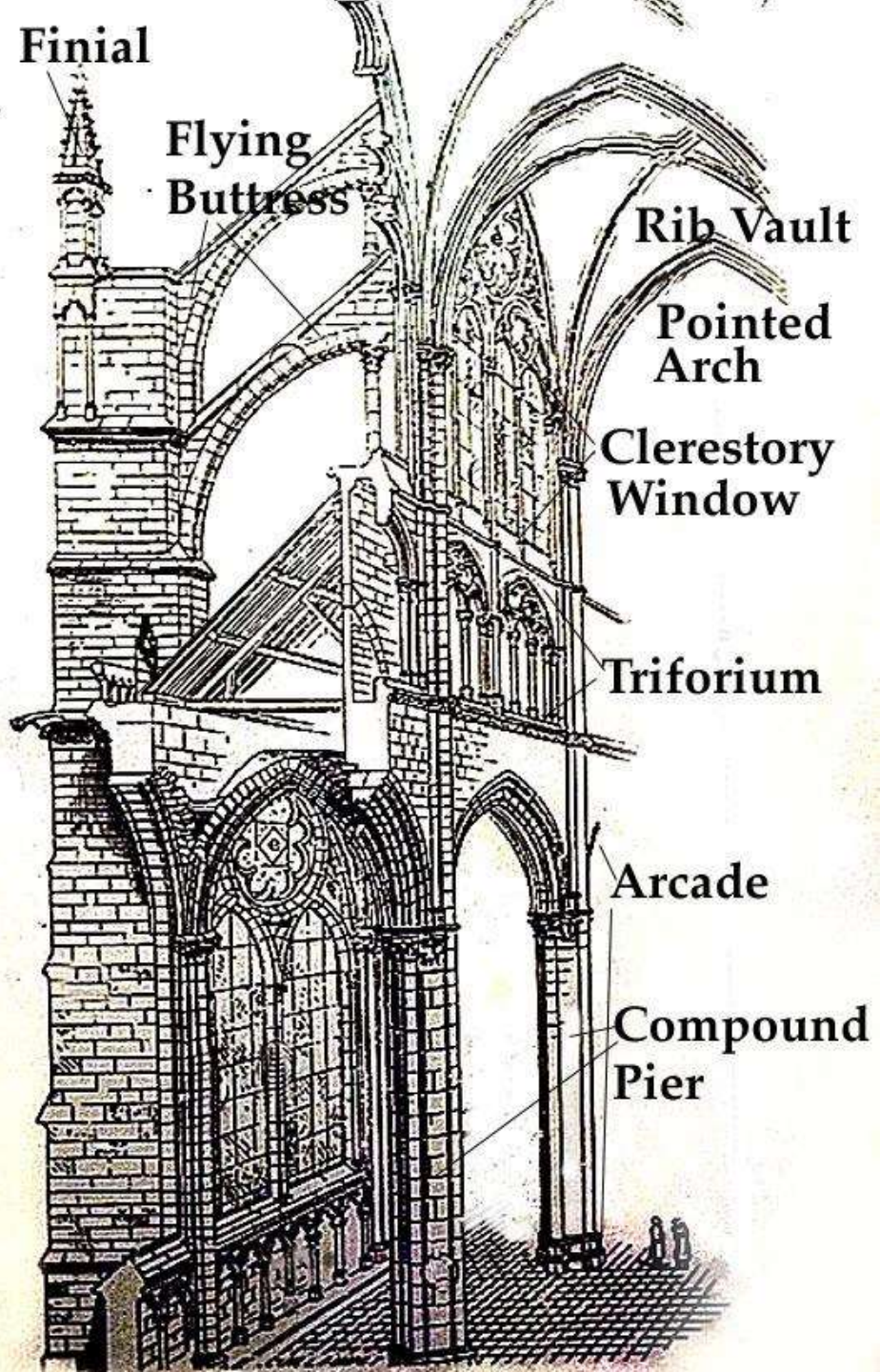
Masons at Work.

Detail of a miniature from the picture Bible made in Paris during the 1240s



Flying Buttress:

An arched supporting pier outside a building which takes most of the weight of the roof, allowing the walls to be devoted to window-space rather than being used to support the roof.





Notre-Dame (looking north), Paris, France, begun 1163; nave and flying buttresses, ca. 1180–1200; remodeled after 1225. It was among the first buildings in the world to use the flying buttresses

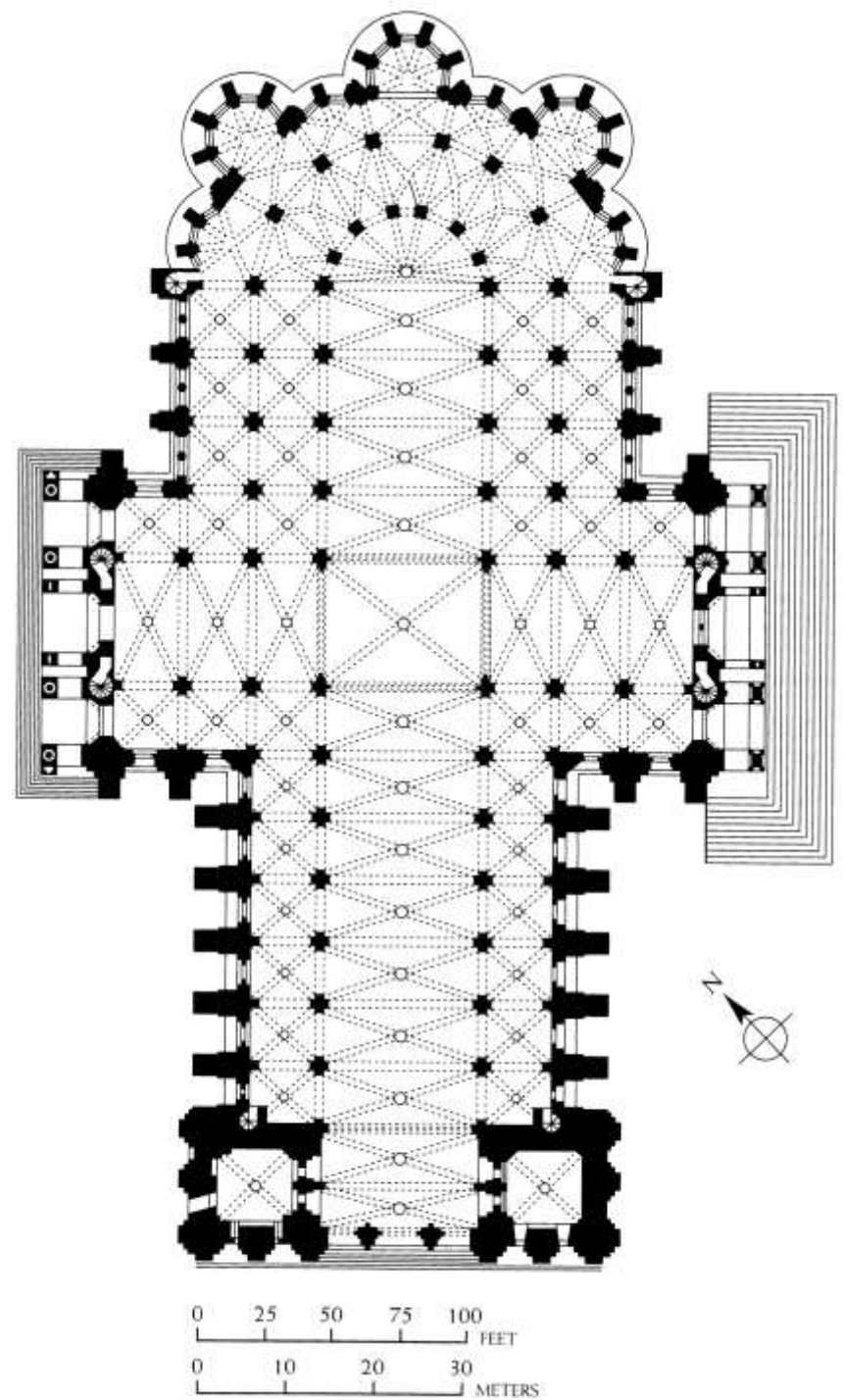


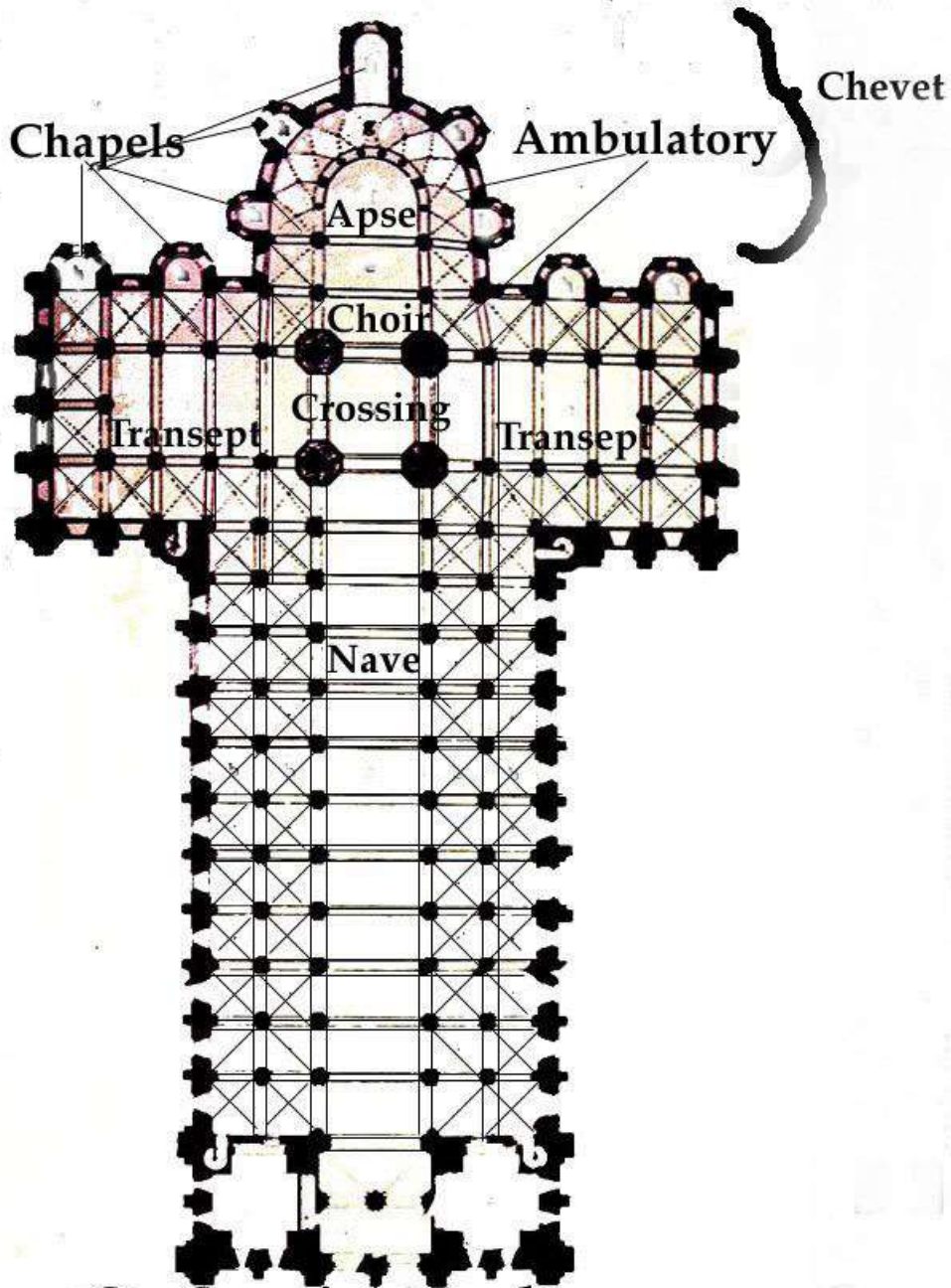
On 15 April 2019 the cathedral caught fire, destroying the 19th c. spire and the oak frame and lead roof.



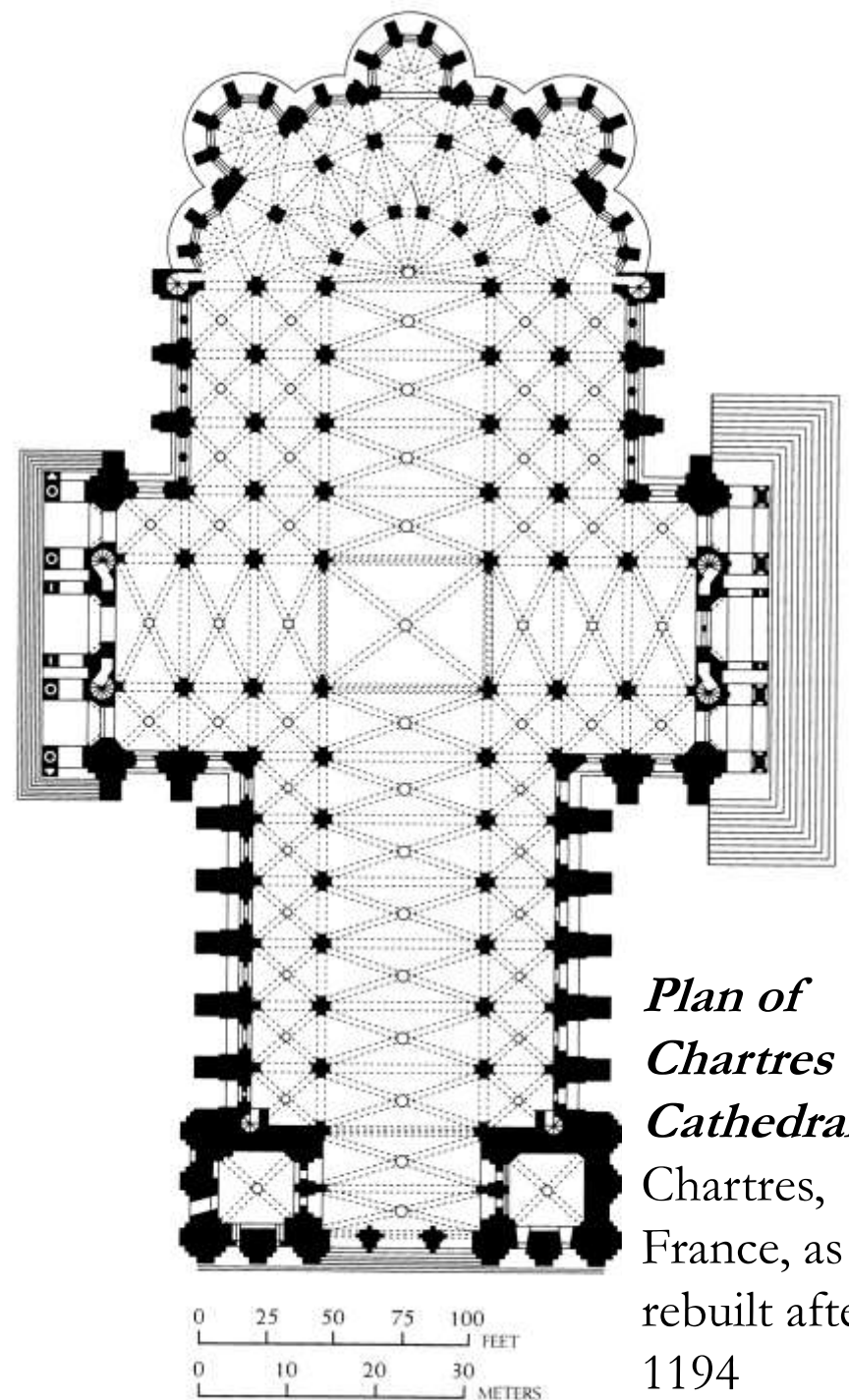
Gargoyles at Notre Dame Paris, France,
begun 1163
(serve as drain pipes as well as decorations.)

Plan of Chartres Cathedral, Chartres,
France, as rebuilt after 1194

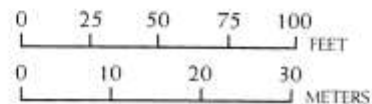




**St. Sernin, Toulouse
Pilgrimage Church**



*Plan of
Chartres
Cathedral,
Chartres,
France, as
rebuilt after
1194*



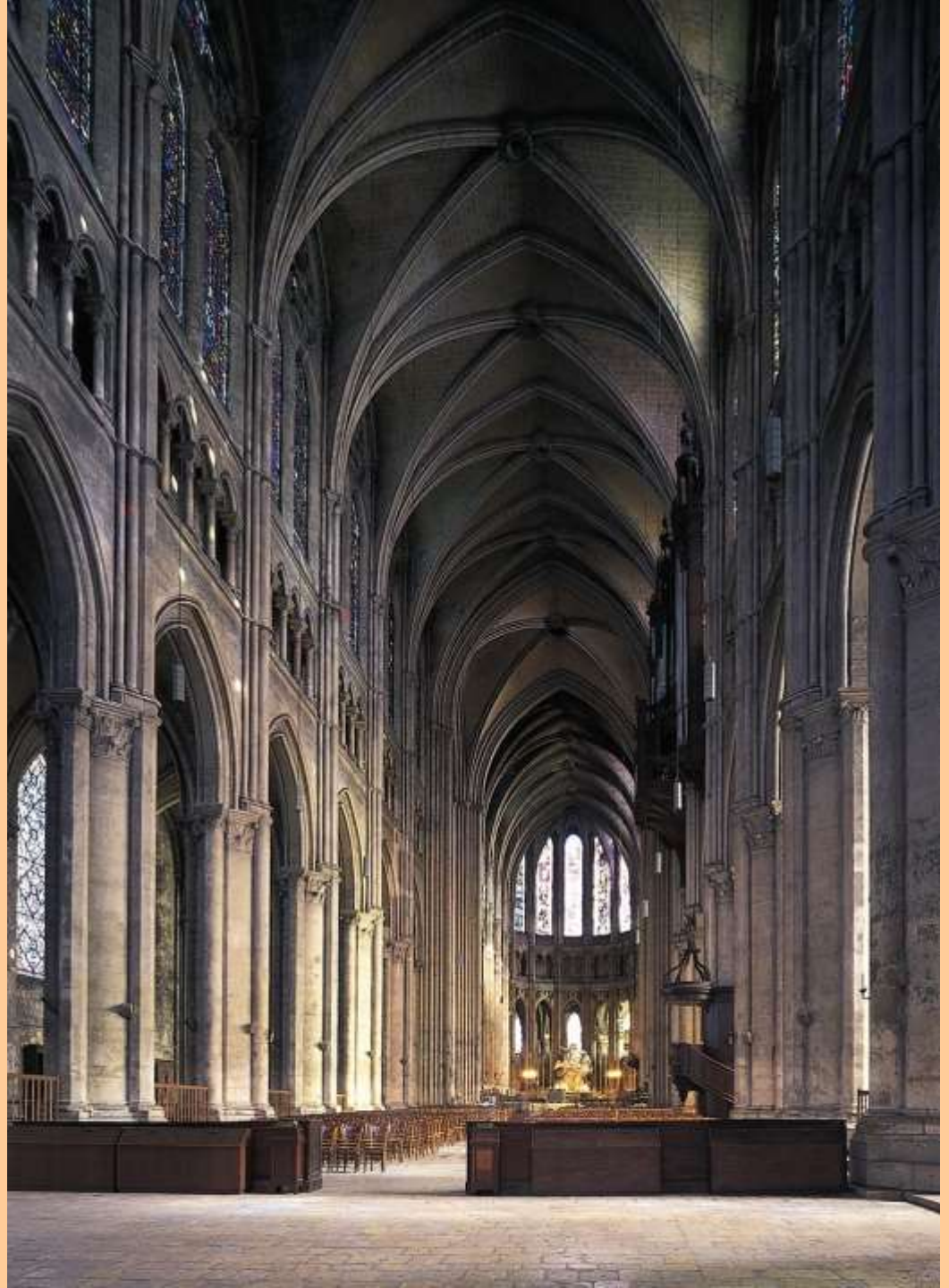


Aerial view of Chartres Cathedral (looking north), Chartres, France, as rebuilt after 1194.

Interior of Chartres Cathedral

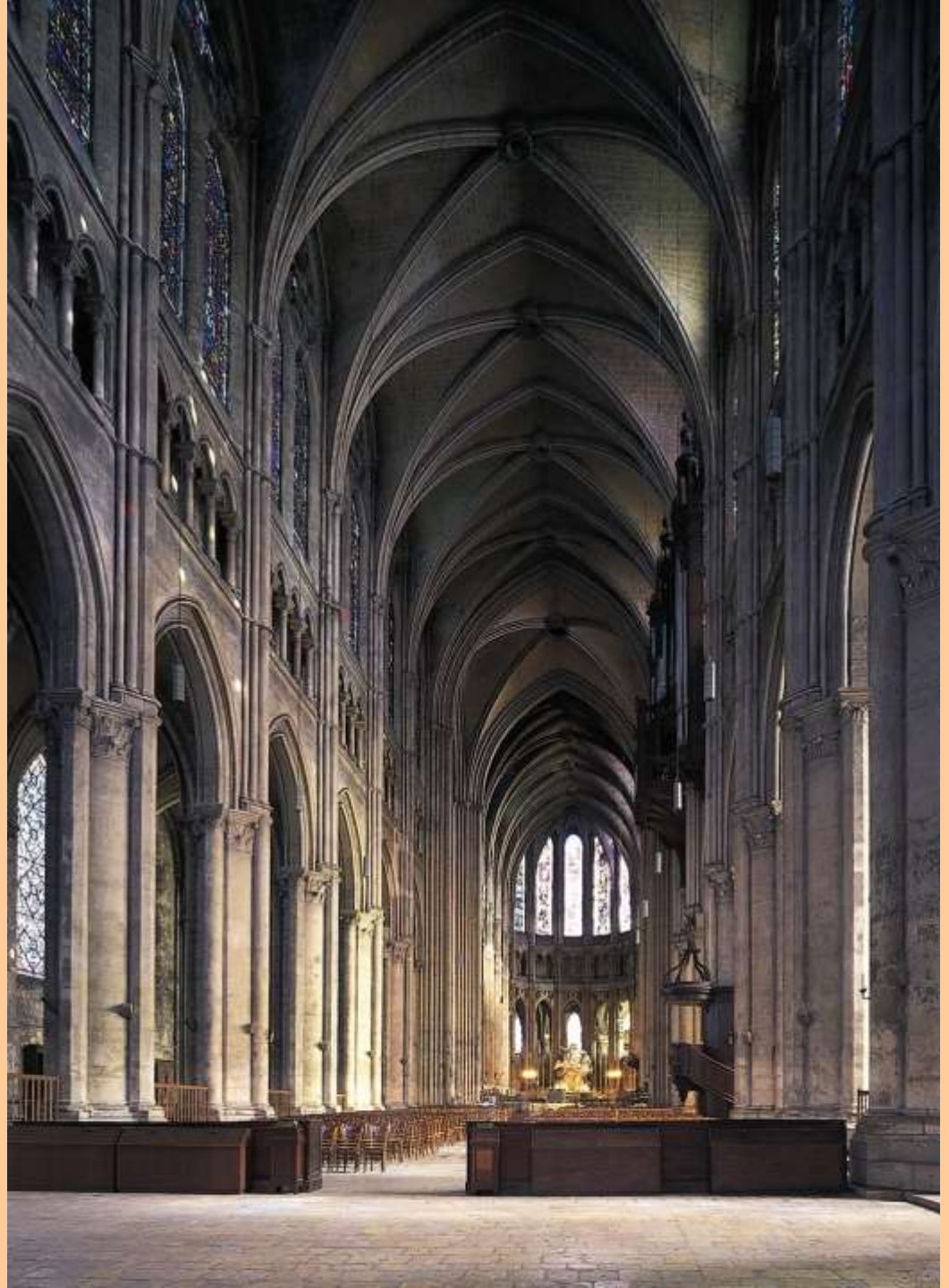
(looking east), Chartres, France,
begun 1194.
120 feet high

Typical Gothic
architecture: pointed
arches and ribbed groin
vaults rising from
compound piers over
rectangular bays
supported by exterior
flying buttresses



Interior of Chartres Cathedral
(looking east), Chartres, France,
begun 1194.
120 feet high

The relic of the Tunic of the
Virgin from Chartres Cathedral.





Chartres Labyrinth

**ROBERT DE LUZARCHES,
THOMAS DE CORMONT, and
RENAUD DE CORMONT,
Interior of Amiens Cathedral
(looking east), Amiens, France,
begun 1220. 144 feet high.**



**ROBERT DE LUZARCHES,
THOMAS DE CORMONT, AND
RENAUD DE CORMONT,
vaults, clerestory, and triforium of
the choir of Amiens Cathedral,
Amiens, France, begun 1220.**





Comparison: Romanesque.
Interior of Saint-Sernin, Toulouse,
France, ca. 1070–1120.



**ROBERT DE LUZARCHES, THOMAS
DE CORMONT, and RENAUD DE
CORMONT**, interior of Amiens Cathedral
(looking east), Amiens, France, begun 1220.

Saint Chapel was built as a repository for the crown of thorns and other relics of Christ passion



Interior of the upper chapel, Sainte-Chapelle, Paris, France, 1243–1248.

*Interior of the upper chapel,
Sainte-Chapelle, Paris, France,
1243–1248.*

6,450 square feet of stained glass
account for more than three
quarters of the structure.



In Gothic architecture the guiding principle was to reduce sheer mass and replace it with intricately framed void.

**West facade of Laon
Cathedral, Laon, France, begun
ca. 1190.**

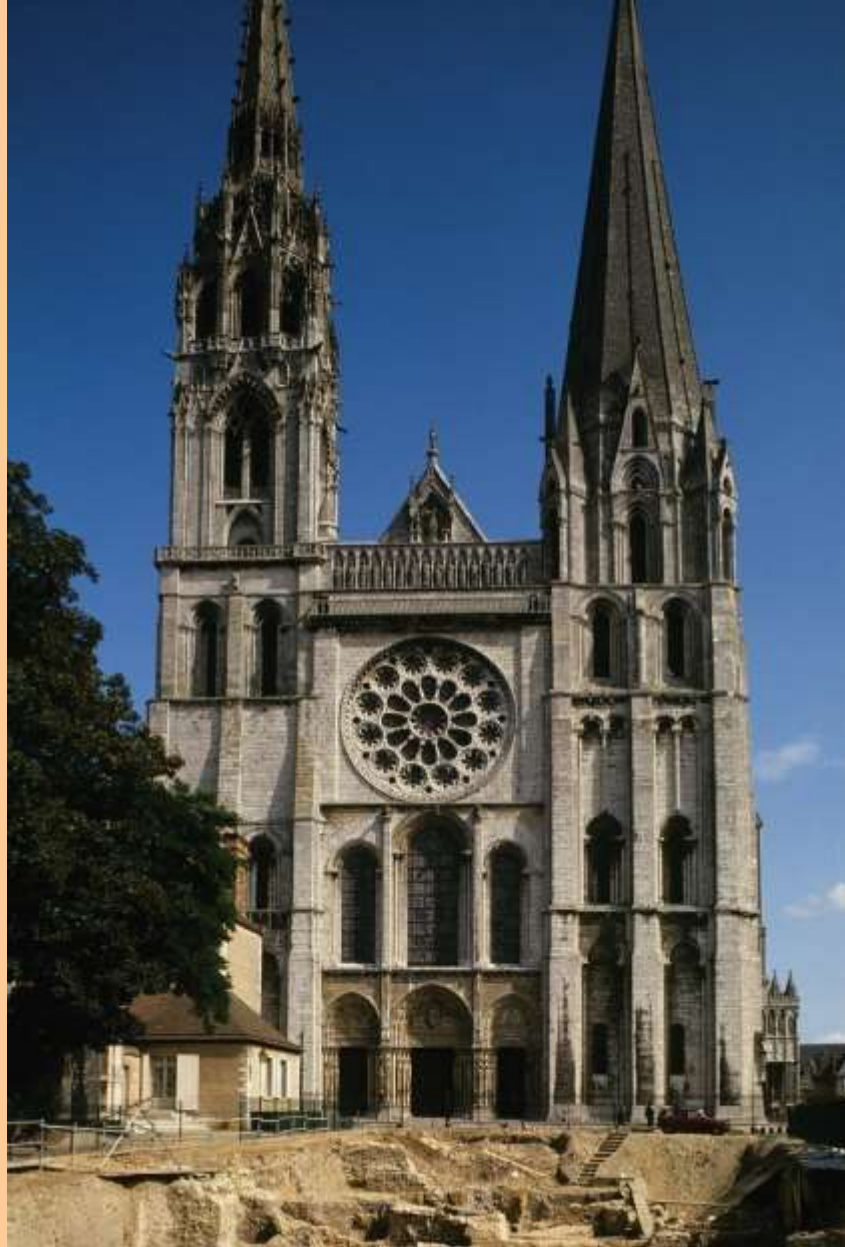


Comparison - Romanesque. West facade of Saint-Étienne, Caen, France, begun 1067.
(The spires are a Gothic addition)



West facade of Laon Cathedral, Laon, France, begun ca. 1190.





**Early Gothic - West facade,
Chartres Cathedral, Chartres, France,
ca. 1145-1155. (left tower - 16th c.)**

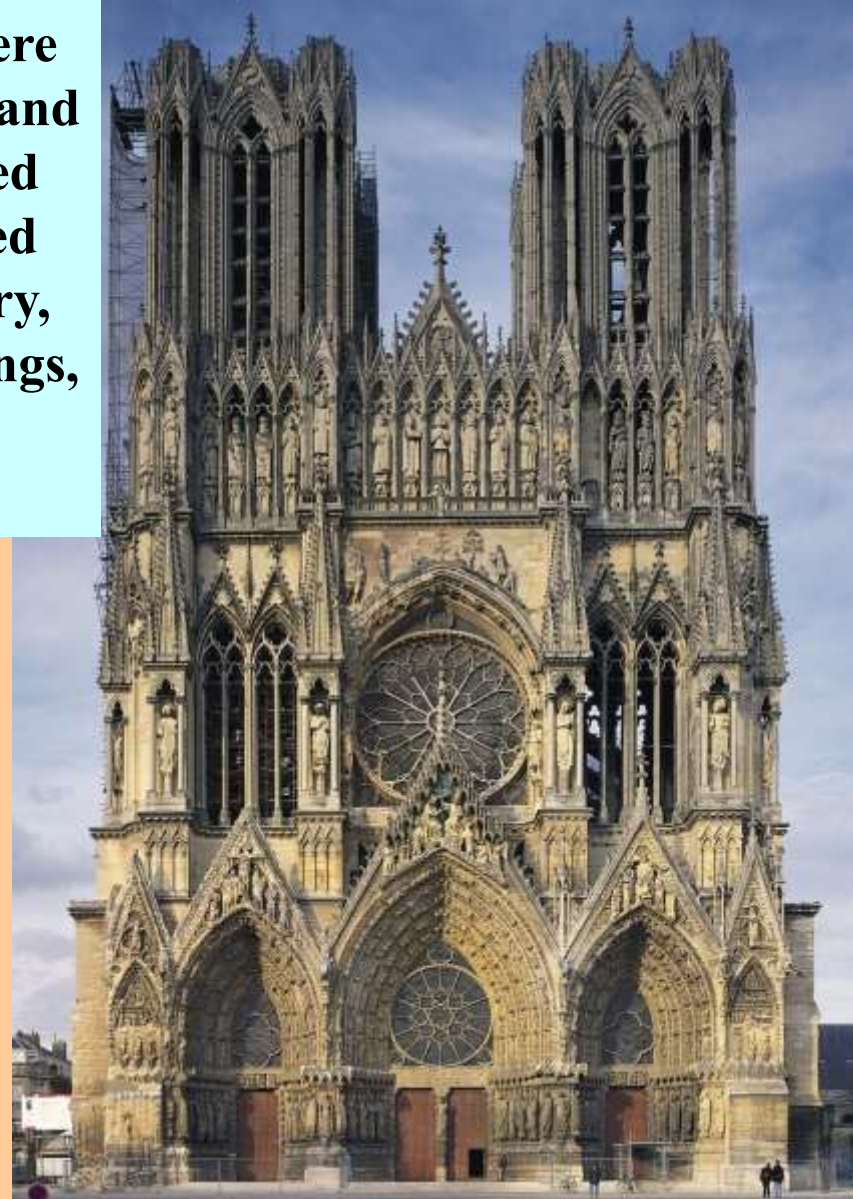


**West facade of Laon Cathedral,
Laon, France, begun ca. 1190.**

Church walls were decorated inside and out with engaged columns, applied filigree or tracery, horizontal moldings, pinnacles and finials.



Early Gothic: West facade of Laon Cathedral, Laon, France, begun ca. 1190.



High Gothic: West facade of Reims Cathedral, Reims, France, ca. 1225–1290.



Royal Portal, west facade, Chartres Cathedral, Chartres, France, ca. 1145–1155.

Jamb statues

Figures carved on the jambs of a doorway or window.

<https://youtu.be/Jk3VsinLgvc> 18:50



Royal Portal, west facade, Chartres Cathedral, Chartres, France, ca. 1145–1155.

Comparison - Romanesque.

Gislebertus, *Last Judgment*, west tympanum of Saint-Lazare, Autun, France, ca. 1120–1135. Marble, approx. 21' wide at base.





Comparison - Romanesque. Lions and Old Testament prophet (Jeremiah or Isaiah?), from the trumeau of the south portal of Saint-Pierre, Moissac, France, ca. 1115–1130. Marble, approx. life-size.



Old Testament Kings and Queens, jamb statues, central doorway of Royal Portal, Chartres Cathedral, Chartres, France, ca. 1145–1155.



Annunciation and Visitation,
jamb statues of central doorway,
west facade, Reims Cathedral,
(Notre Dame de Reims), France,
ca. 1230-1255

- Made by three different sculptors

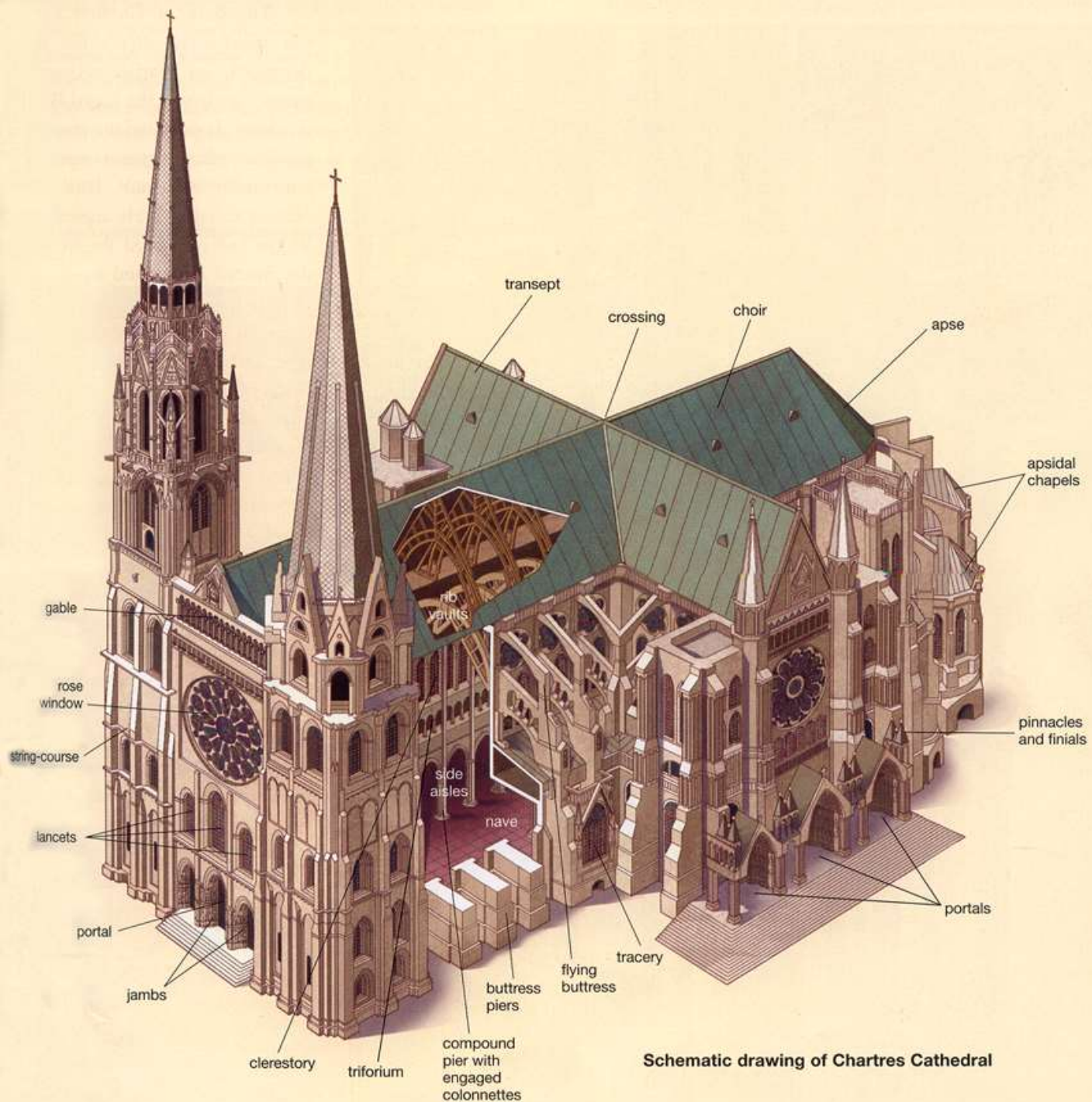




The Green Man: A foliate head in the shape of an acanthus leaf: a corbel supporting the Bamberg Horseman, Bamberg cathedral, Germany, ca. 1235–1240.

Characteristics of Gothic Architecture

- Elegant tall buildings
- Light penetrated through stained glass windows
- Ribbed Groin Vaults
- Pointed Arches
- Flying buttresses
- High towers flanking the facade
- Deep porches decorated with architectural sculpture
- In France – large rose window



Schematic drawing of Chartres Cathedral

Cutaway view of a typical French Gothic cathedral

- (1) pinnacle
- (2) flying buttress
- (3) vaulting web
- (4) diagonal ribs
- (5) transverse rib
- (6) springing
- (7) clerestory
- (8) oculus
- (9) lancet
- (10) triforium
- (11) nave arcade
- (12) compound pier with responds



Late Gothic Architecture in England



Perpendicular Style – 1330-1540

Phase of late Gothic architecture in England. The style, concerned with creating rich visual effects through decoration, was characterized by a predominance of vertical lines in stone window tracery, enlargement of windows to great proportions, and conversion of the interior stories into a single unified vertical expanse.

Interior and Exterior of Gloucester Cathedral, Gloucester, England, 1332–1357.

Gloucester Cathedral, Gloucester, England,
1332–1357.



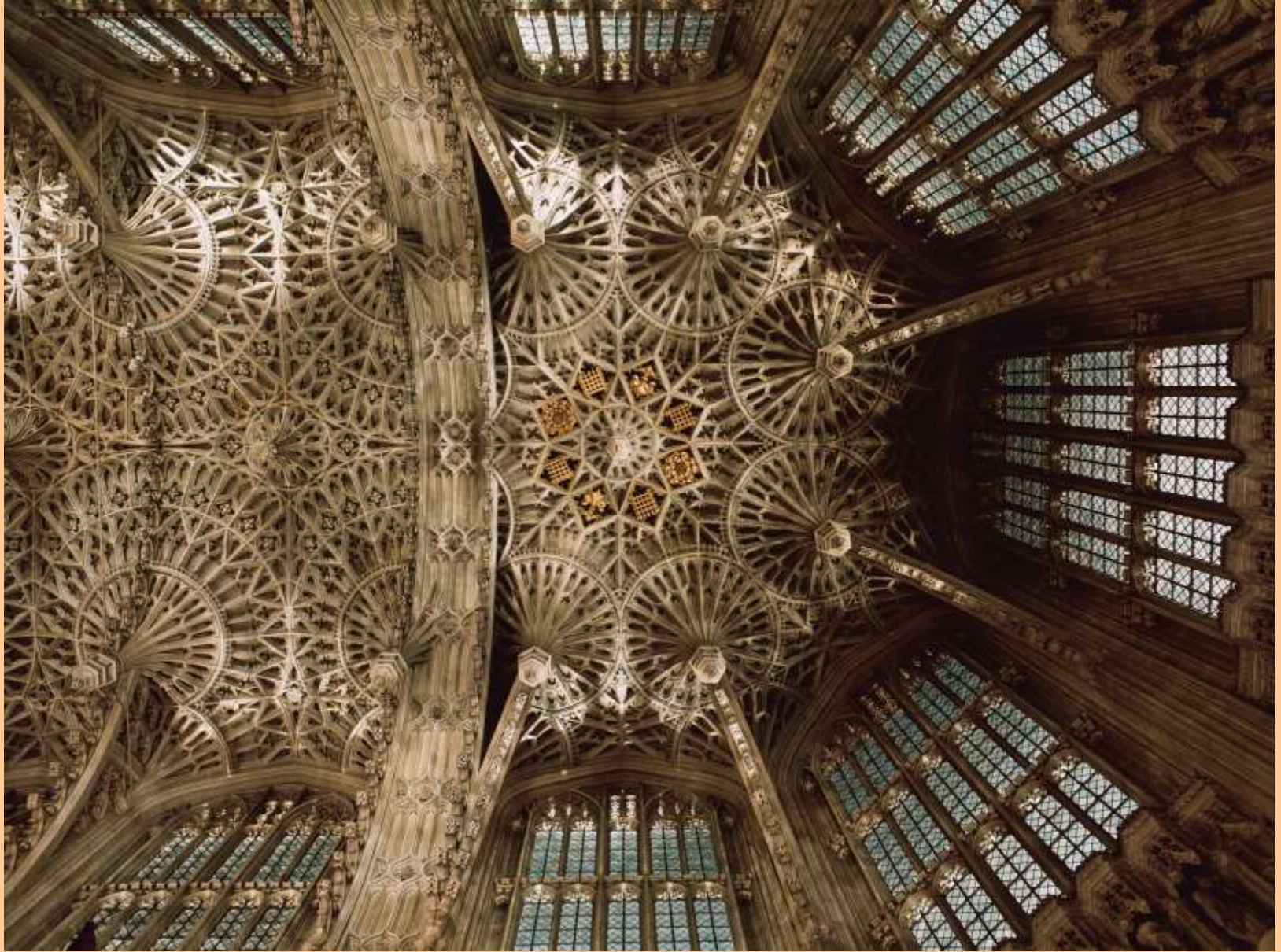
**Comparison: West facade of
Reims Cathedral, Reims, France,
ca. 1225–1290.**

VERTUE Robert. *Bath Abbey.* Interior. Nave. Fan vaulting. c. 1499-1536

Perpendicular Style

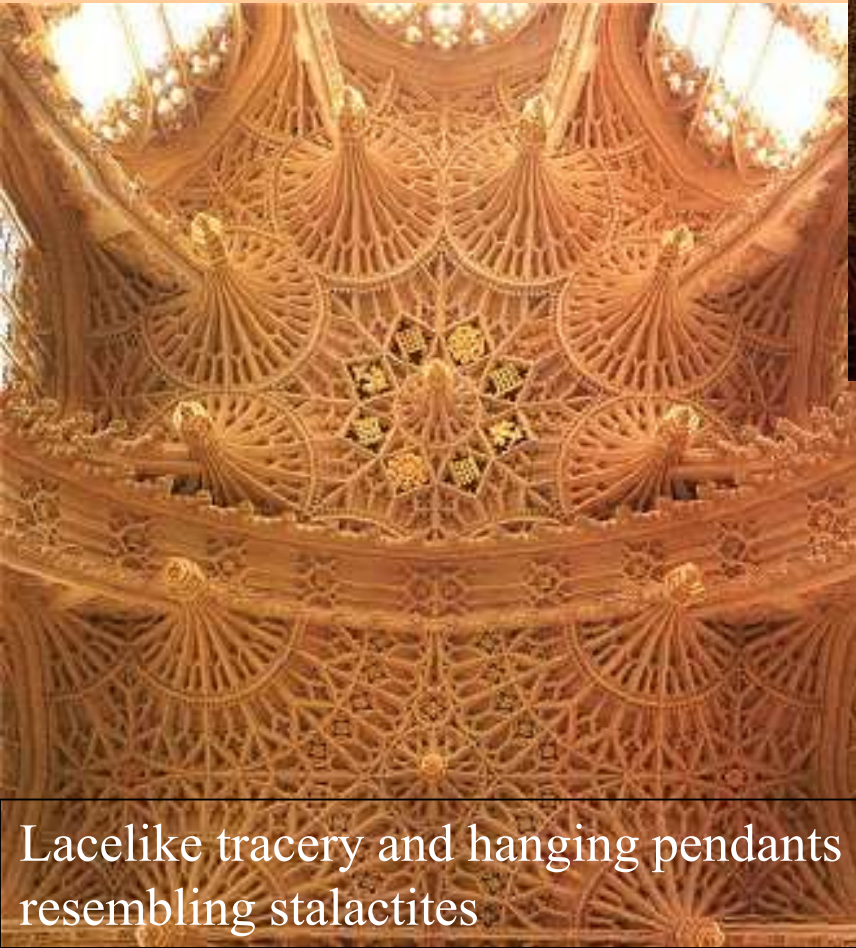
Fan vaults, springing from slender columns or pendants, became popular.





ROBERT and WILLIAM VERTUE, fan vaults of the chapel of Henry VII, Westminster Abbey, London, England, 1503–1519.

**ROBERT and WILLIAM
VERTUE, fan vaults of the
chapel of Henry VII,
Westminster Abbey, London,
England, 1503–1519.**



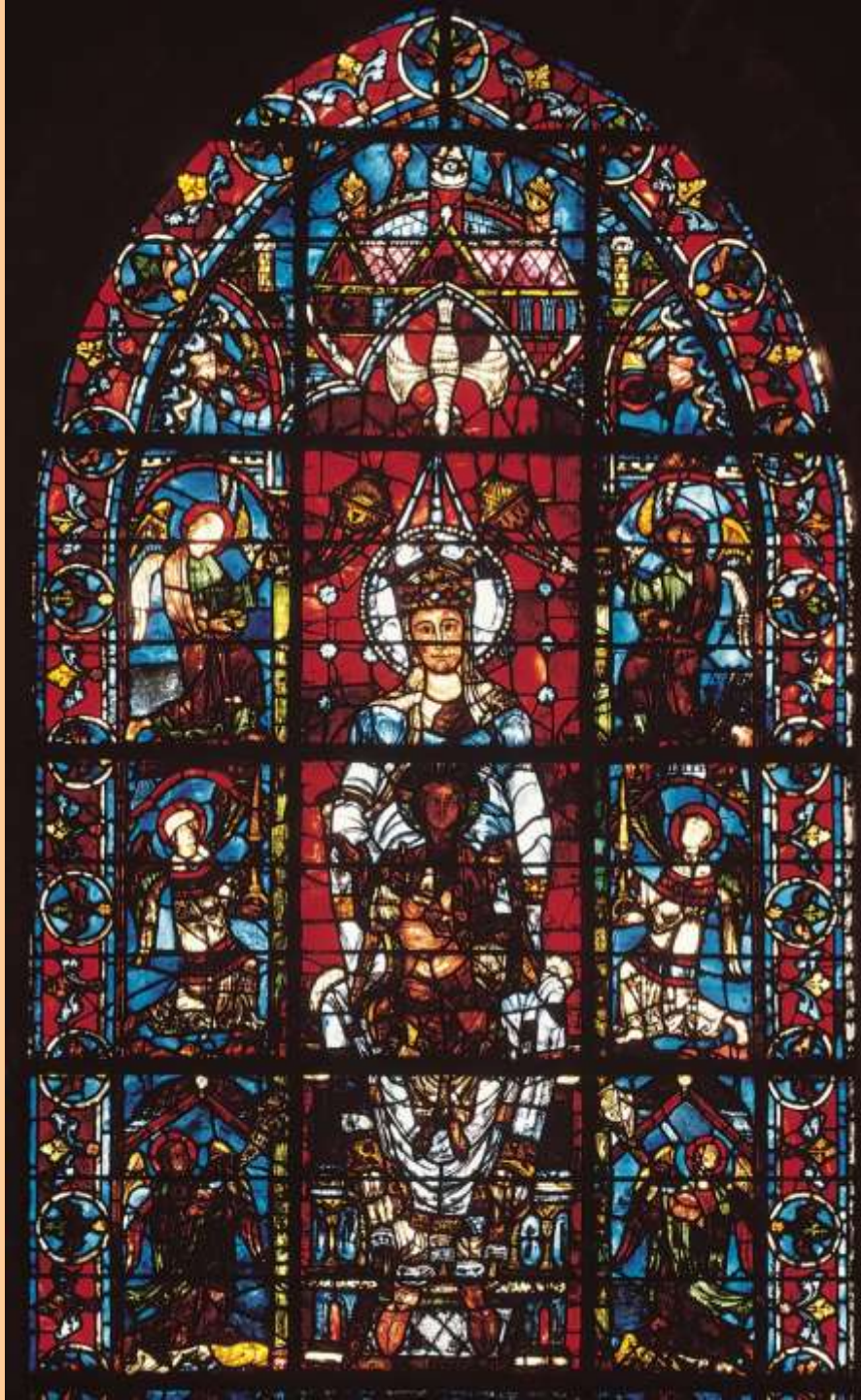
Lacelike tracery and hanging pendants
resembling stalactites



**Comparison: Islamic. Muqarnas dome,
Hall of the Two Sisters, Palace of the
Lions, Alhambra, Granada, Spain,
1354–1391.**

French Stained Glass Windows

Virgin and Child and angels (Notre Dame de la Belle Verrière), detail of a window in the choir of Chartres Cathedral, Chartres, France, ca. 1170, with 13th century side panels. Stained glass, full height 16’.





Virgin (Theotokos) and Child enthroned, apse mosaic, Hagia Sophia, Constantinople (Istanbul), Turkey, 867



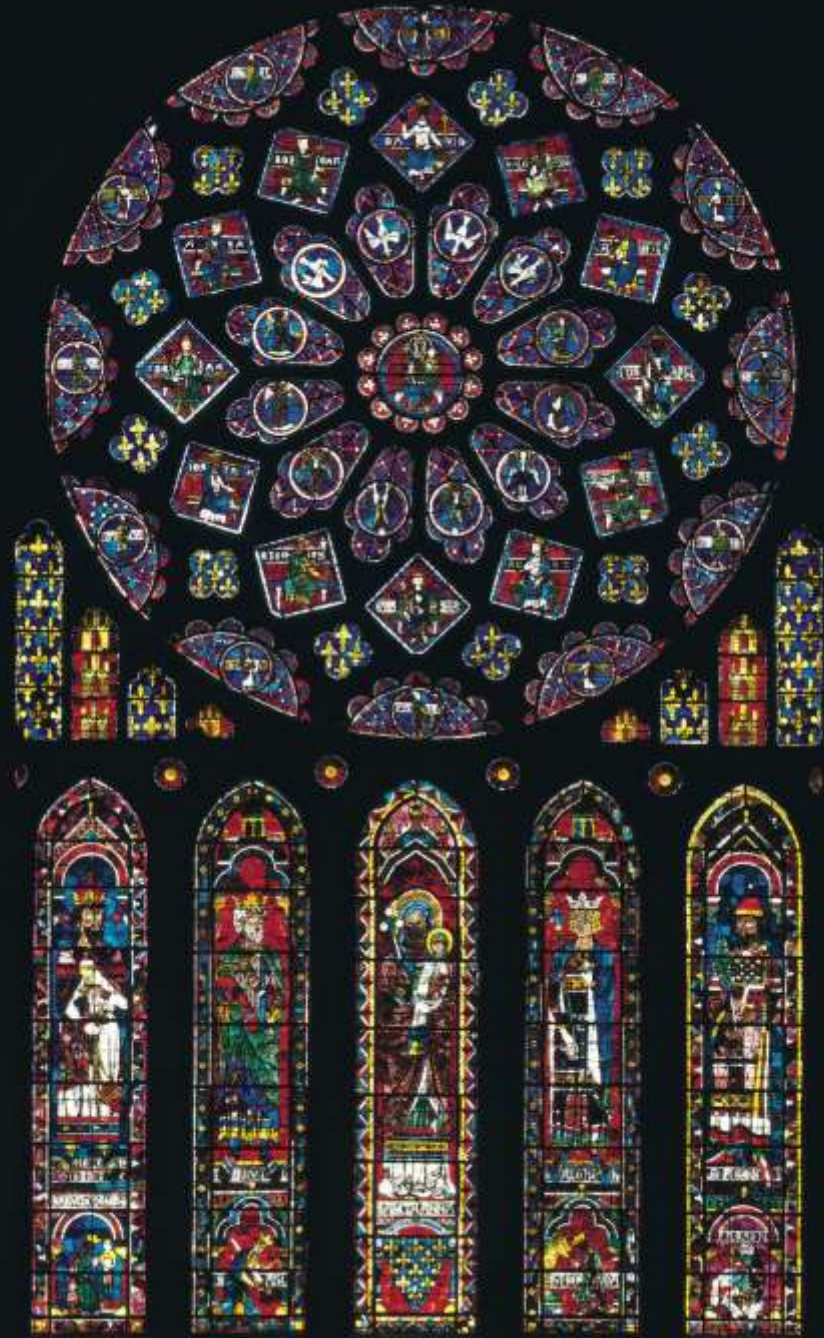
Virgin and Child and detail of a window in the choir of Chartres Cathedral, Chartres, France, ca. 1170. Stained glass

Rose window:

A large round window on the west façade or transept, containing tracery (interlaced and branching lines) that became more elaborate as the Gothic era progressed

Lancet window:

A narrow window with pointed arches.



Rose window and lancets, north transept, Chartres Cathedral, Chartres, France, ca. 1220. Stained glass, rose window 43' in diameter.

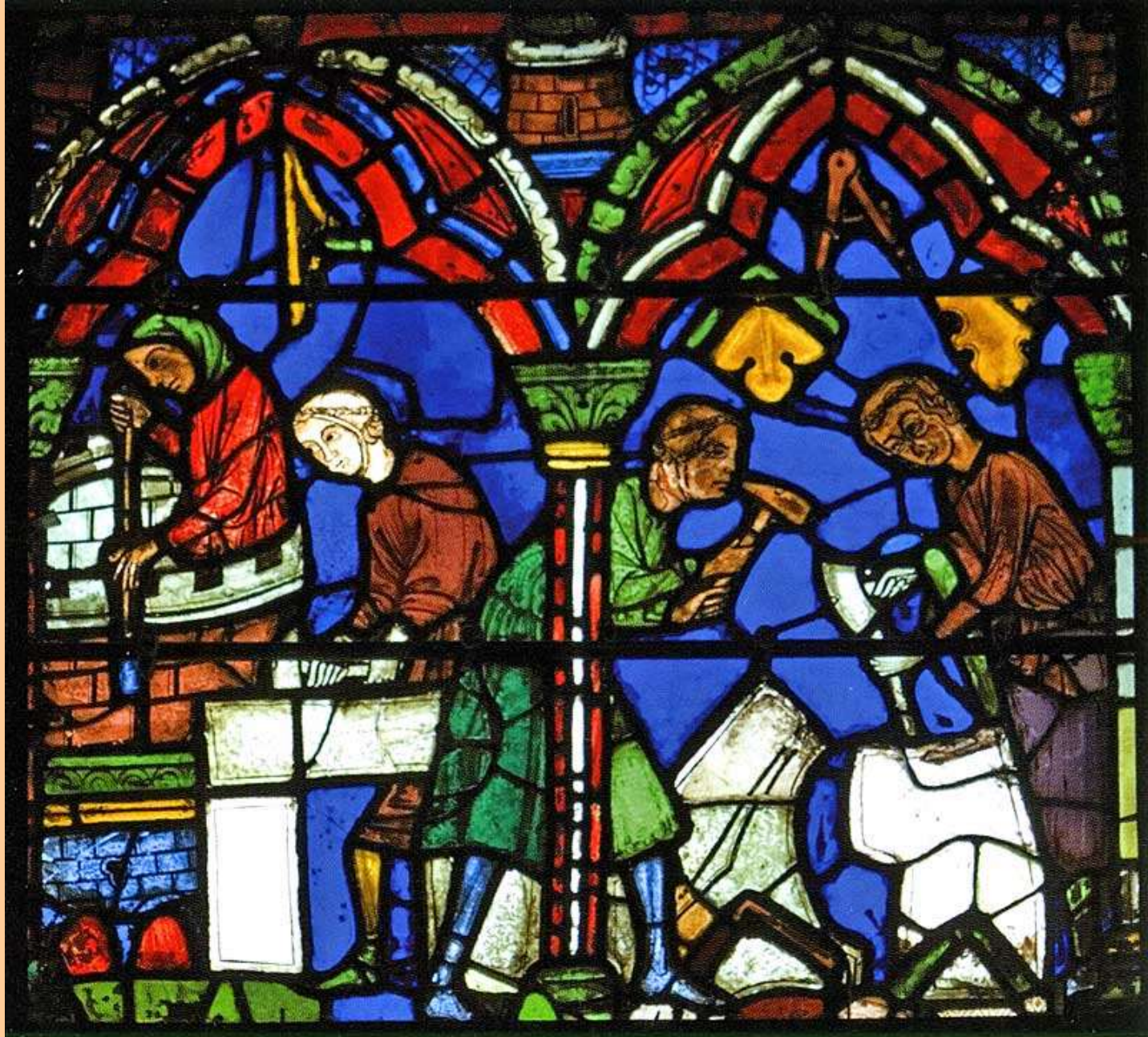


At Chartres Cathedral, for the first time in medieval art, the lowest register of stained-glass windows depicts working artisans and merchants instead of noble and clerical donors. (Early 13th c.)

Shoemaker

Wheelwright (a person who builds or repairs wheels)





The St Cheron Window - Masons, Stonecutters and Sculptors



Notre-Dame, Paris, France, begun 1163; nave and flying buttresses, ca. 1180–1200



West facade of Reims Cathedral, Reims, France, ca. 1225–1290.

Interior of Chartres Cathedral, Chartres, France, begun 1194. 120 feet high



Discussion Question

What are the key architectural and decorative elements of the Gothic cathedrals? Bring specific examples

Rose window and lancets, north transept, Chartres Cathedral, Chartres, France, ca. 1220. Stained glass, rose window

