

Gothic Architecture 1140-1500

Influenced by Romanesque Architecture

While Romanesque remained solid and massive – Gothic: 1) opened up to walls with enormous windows and 2) replaced semicircular arch with the pointed arch.

Style emerged in France

Support: Piers and Flying Buttresses

Décor: Sculpture and stained glass

Effect: Soaring, vertical and skeleton-like

Inspiration: Heavenly light

Goal: To lift our everyday life up to the heavens

Gothic Architecture 1140-1500

Dominant Art during this time was Architecture

Growth of towns – more prosperous

They wanted their own churches – Symbol of civic Pride

More confident and optimistic

Appreciation of Nature

Church/Cathedral was the outlet for creativity

Few people could read and write

Clergy directed the operations of new churches- built by laymen

Gothic Architecture 1140-1420

Began soon after the first Crusaders returned from Constantinople

Brought new technology: Winches to hoist heavy stones

New Translation of Euclid's Elements – Geometry

Gothic Architecture was the integration of Structure and Ornament – Interior Unity

Elaborate Entrances covered with Sculpture and pronounced vertical emphasis, thin walls pierced by stained-glass

Gothic Architecture Characteristics:

Emphasis on verticality

Skeletal Stone Structure

Great Showing of Glass: Containers of light

Sharply pointed Spires

Clustered Columns

Flying Buttresses

Pointed Arches

Ogive Shape

Ribbed Vaults

Inventive Sculpture Detail

Sharply Pointed Spires

Gothic Architecture 1140-1500

Abbot Suger had the vision that started Gothic Architecture

He wanted to enlarge his crowded church, and have larger windows

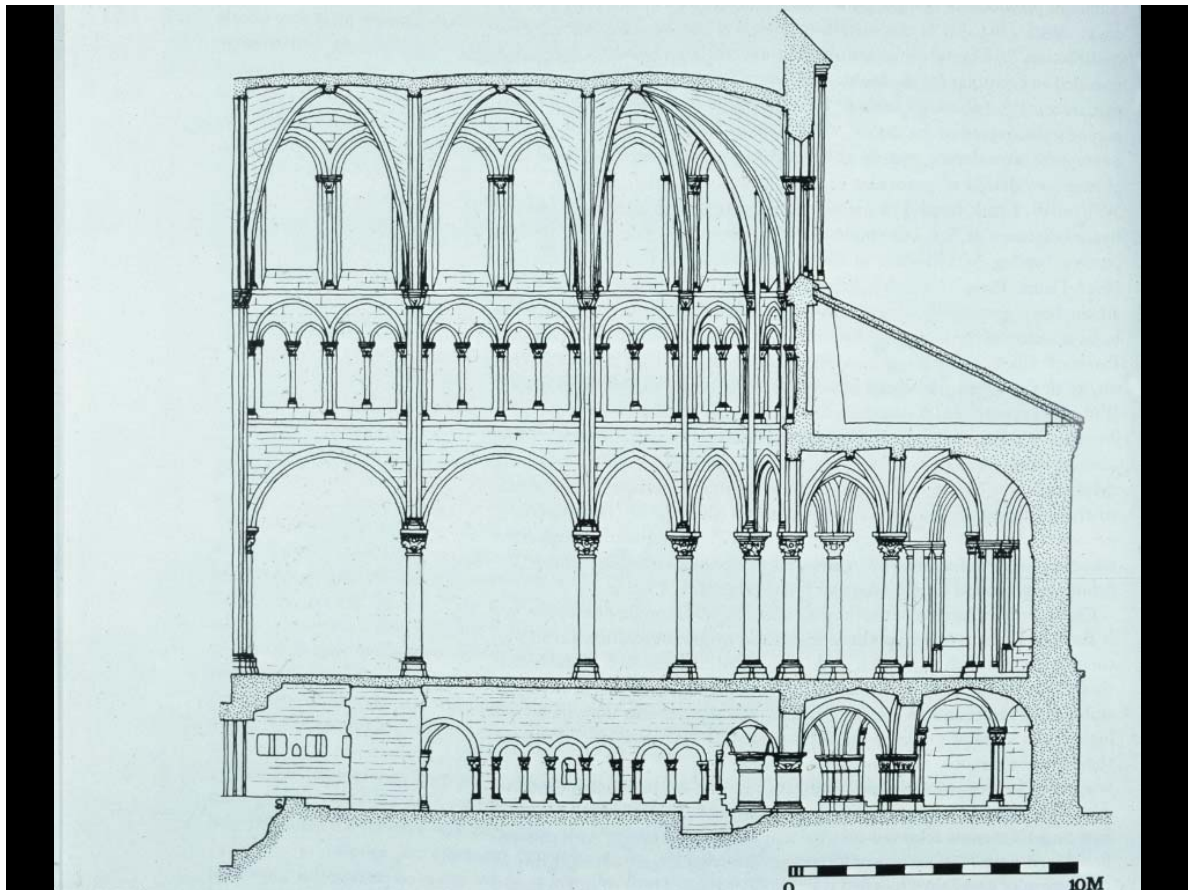
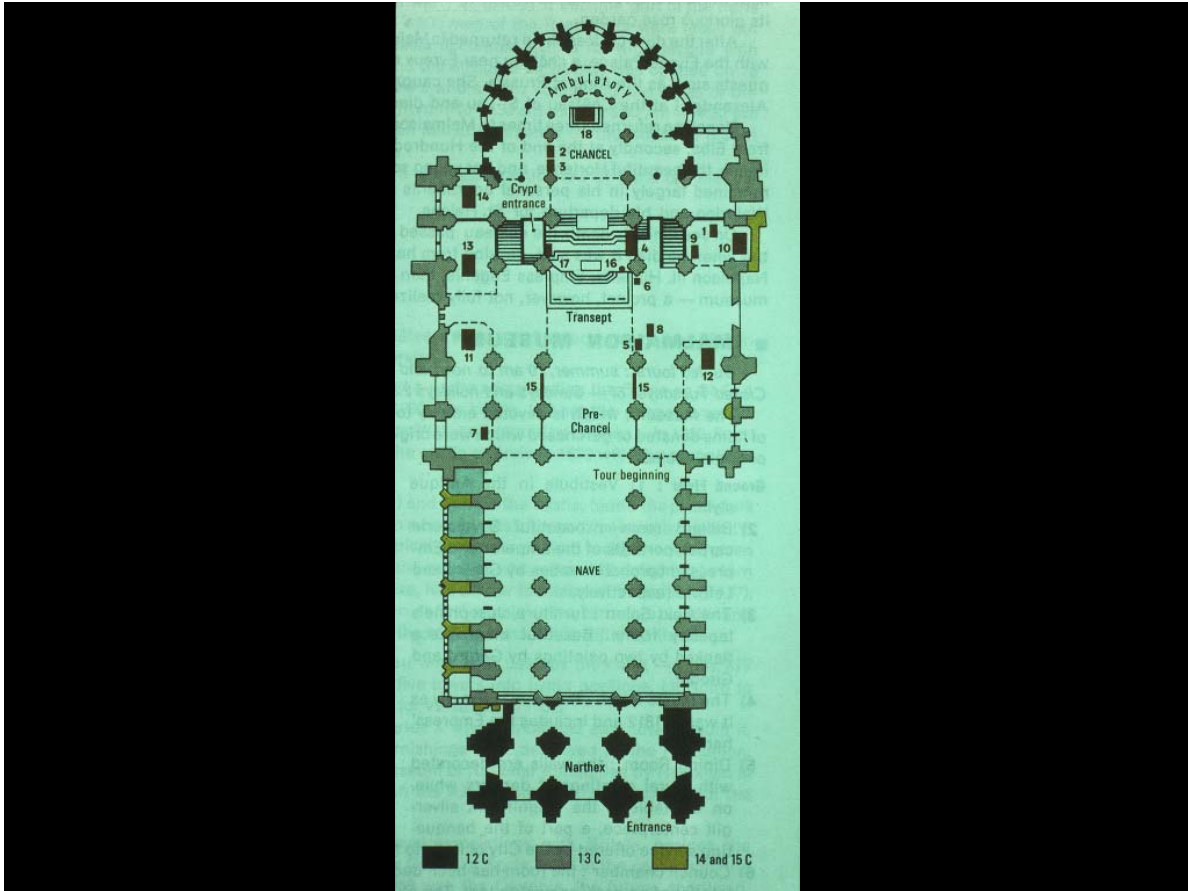
He imagined the interior without partitions, flowing free
Reconstructed the Choir of his Church – St. Denis (1135-44)

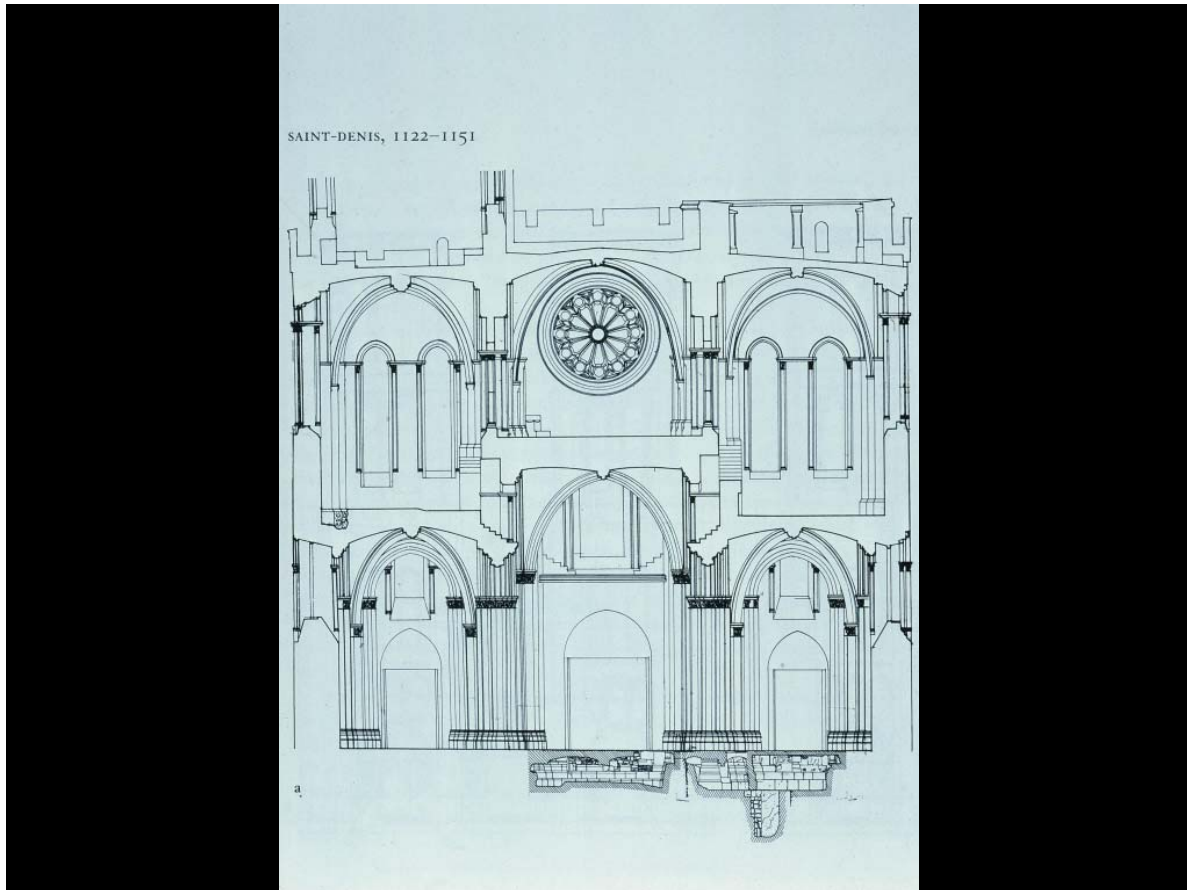
Used the Pointed Arch and Rib Vault







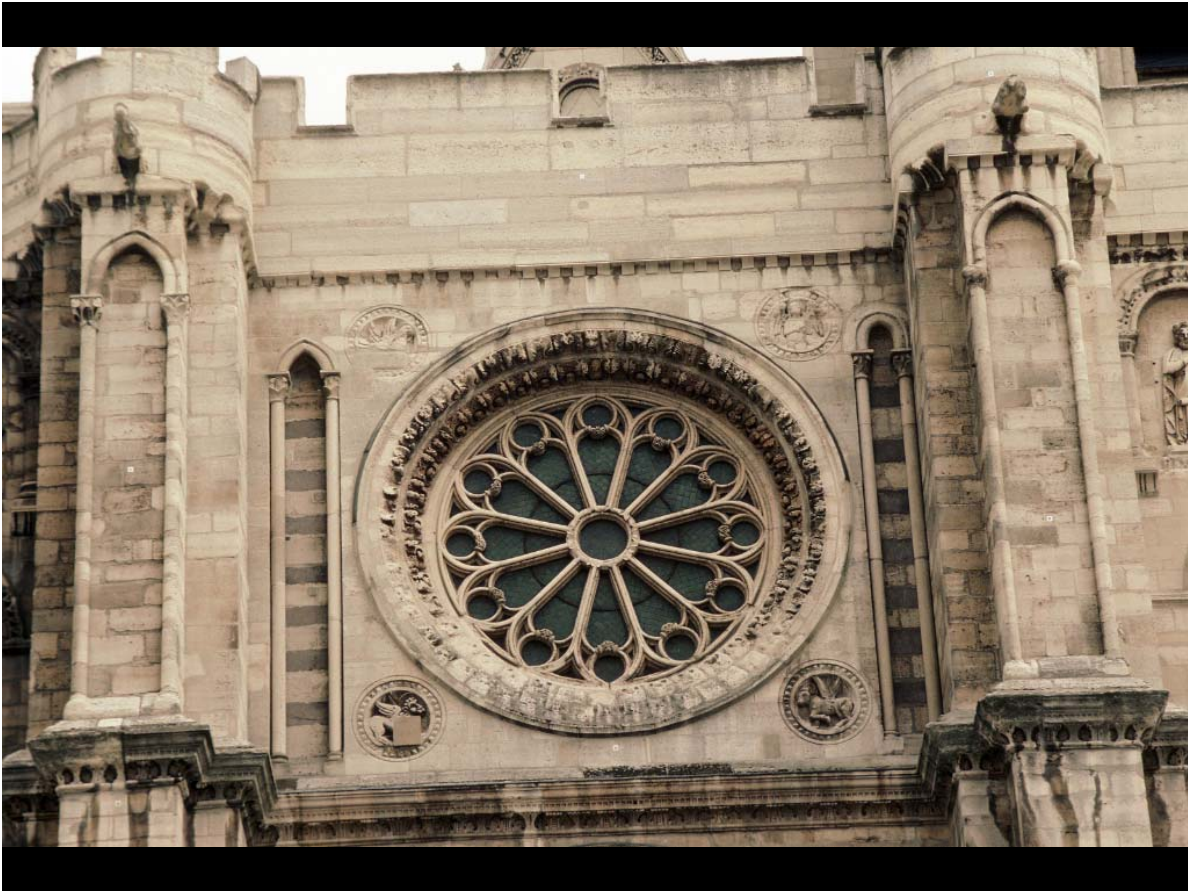




St. Denis 1135-1144



Rebuilt the West Façade and installed the first Rose Window between two towers



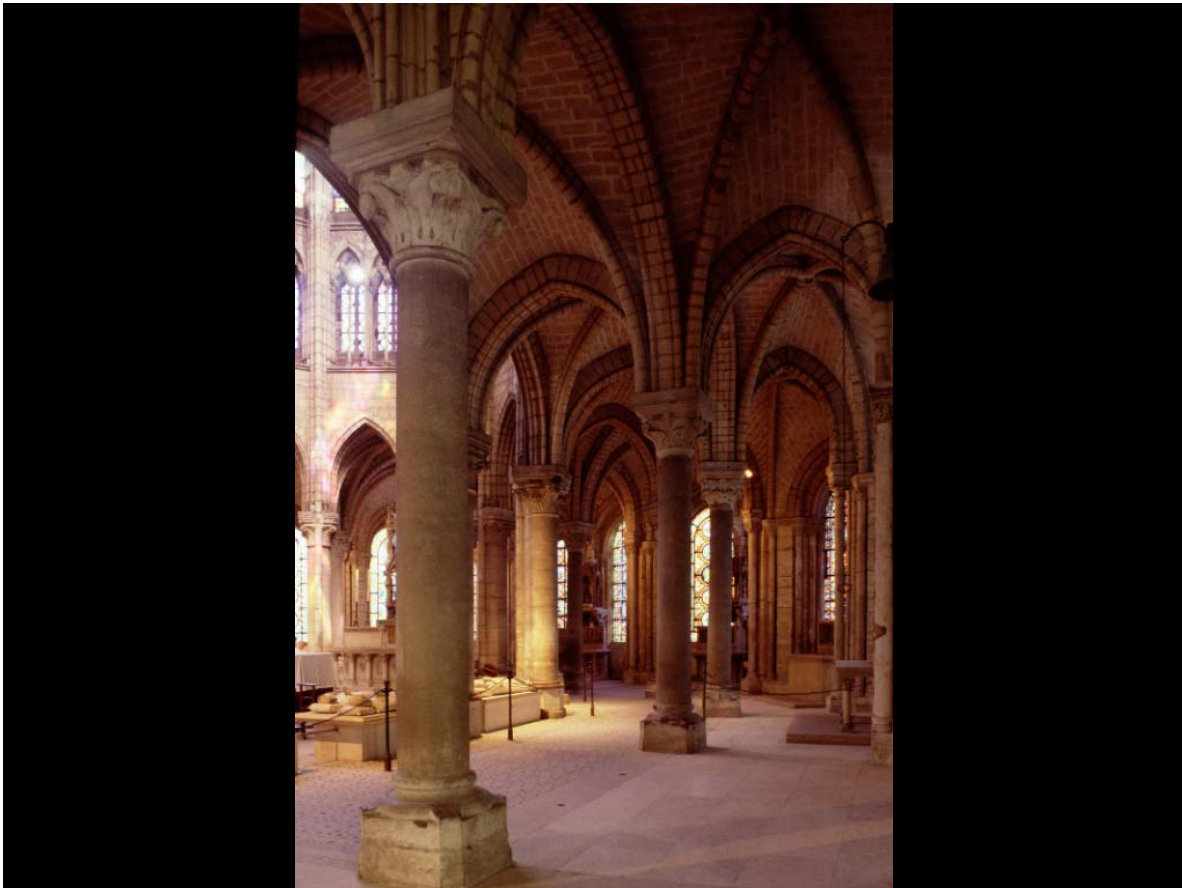
St. Denis 1135-1144

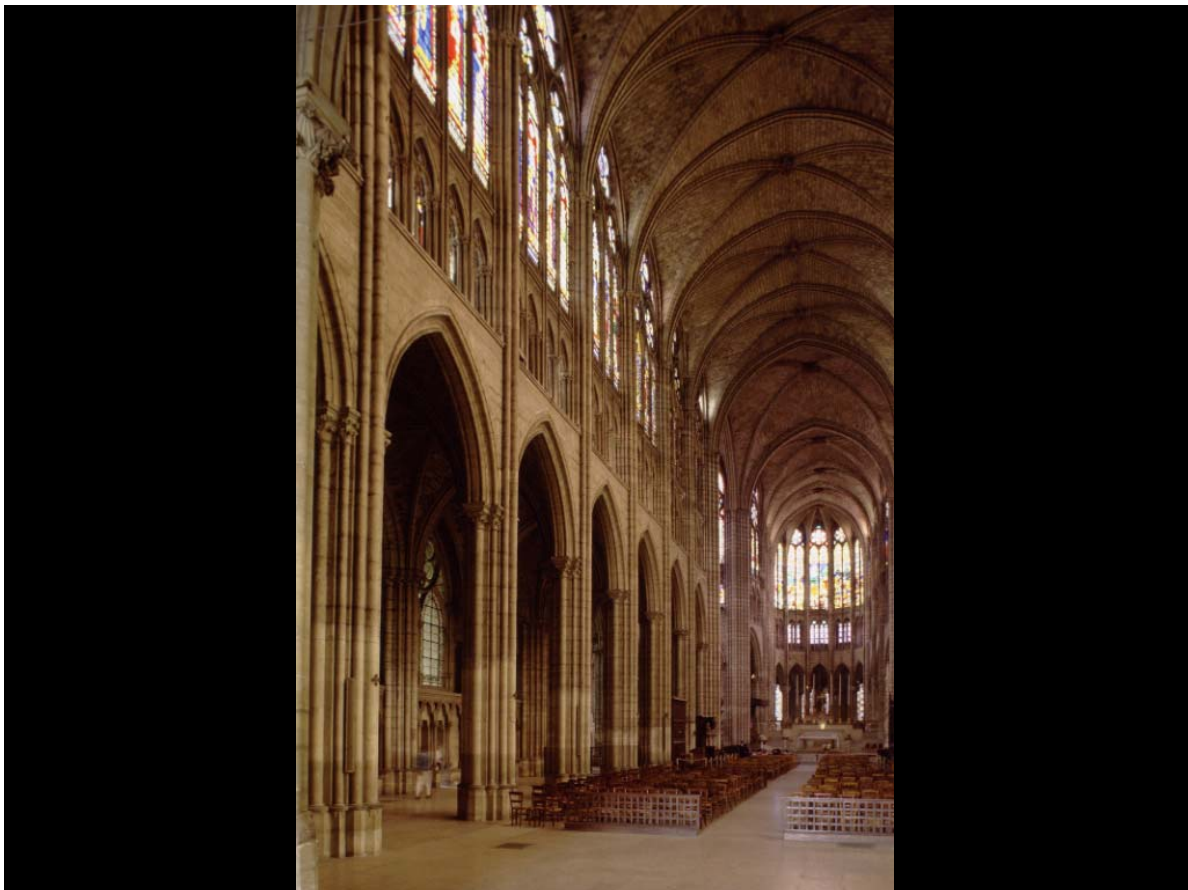


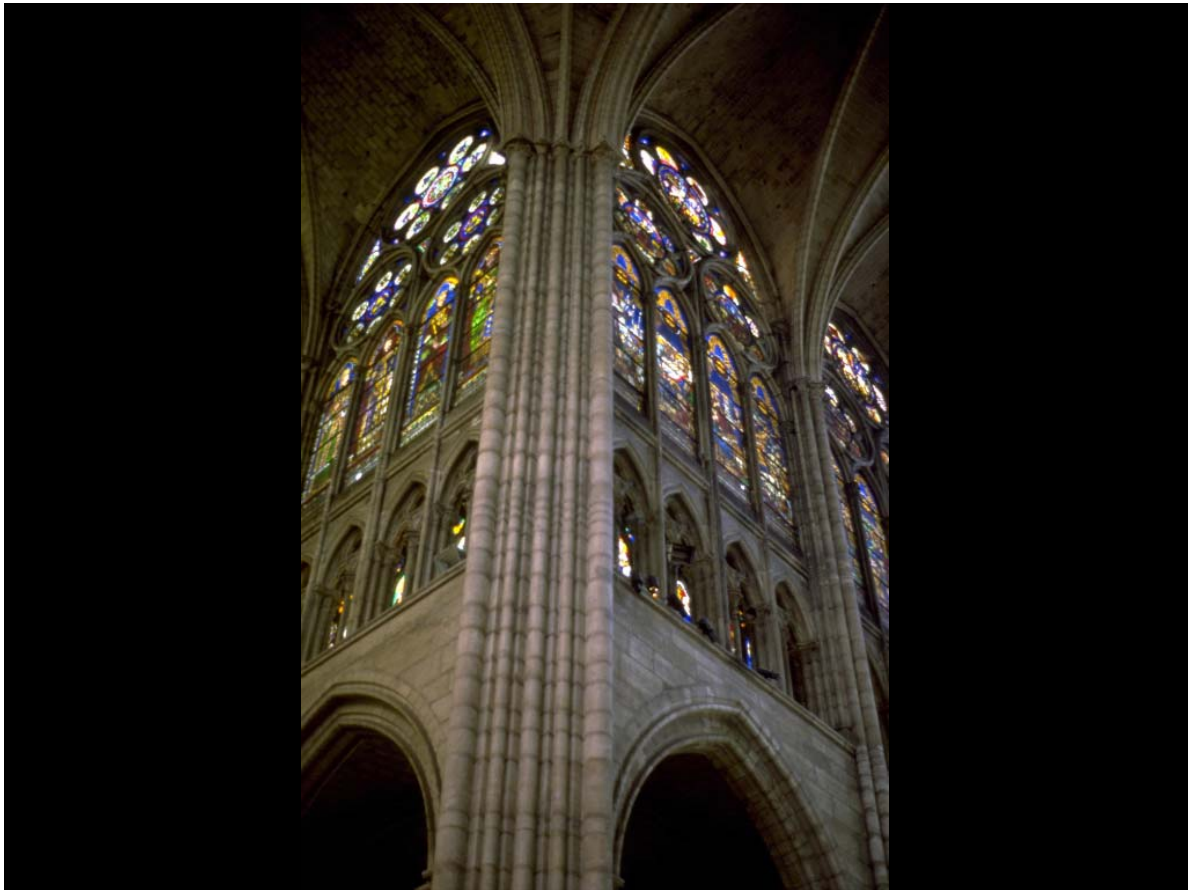
Replaced Stone walls in Chapels with Stained Glass

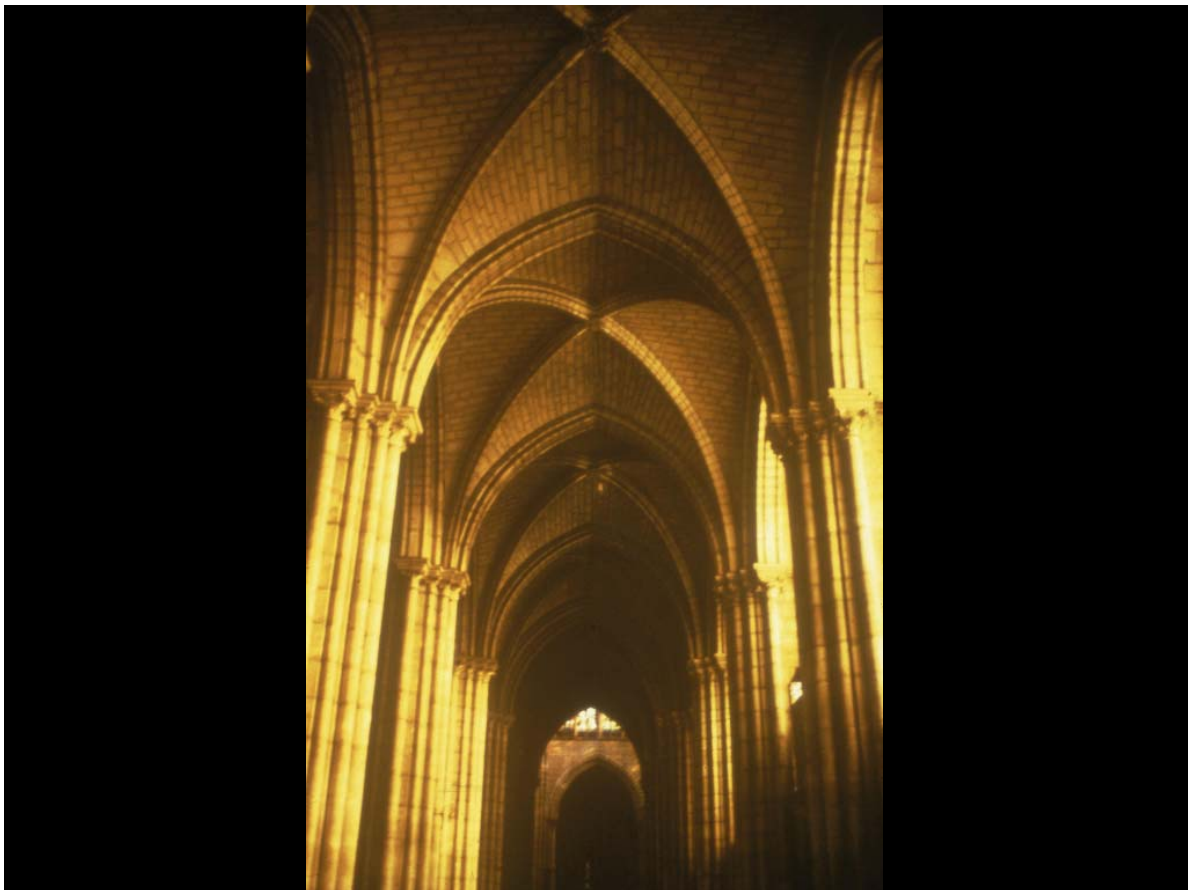
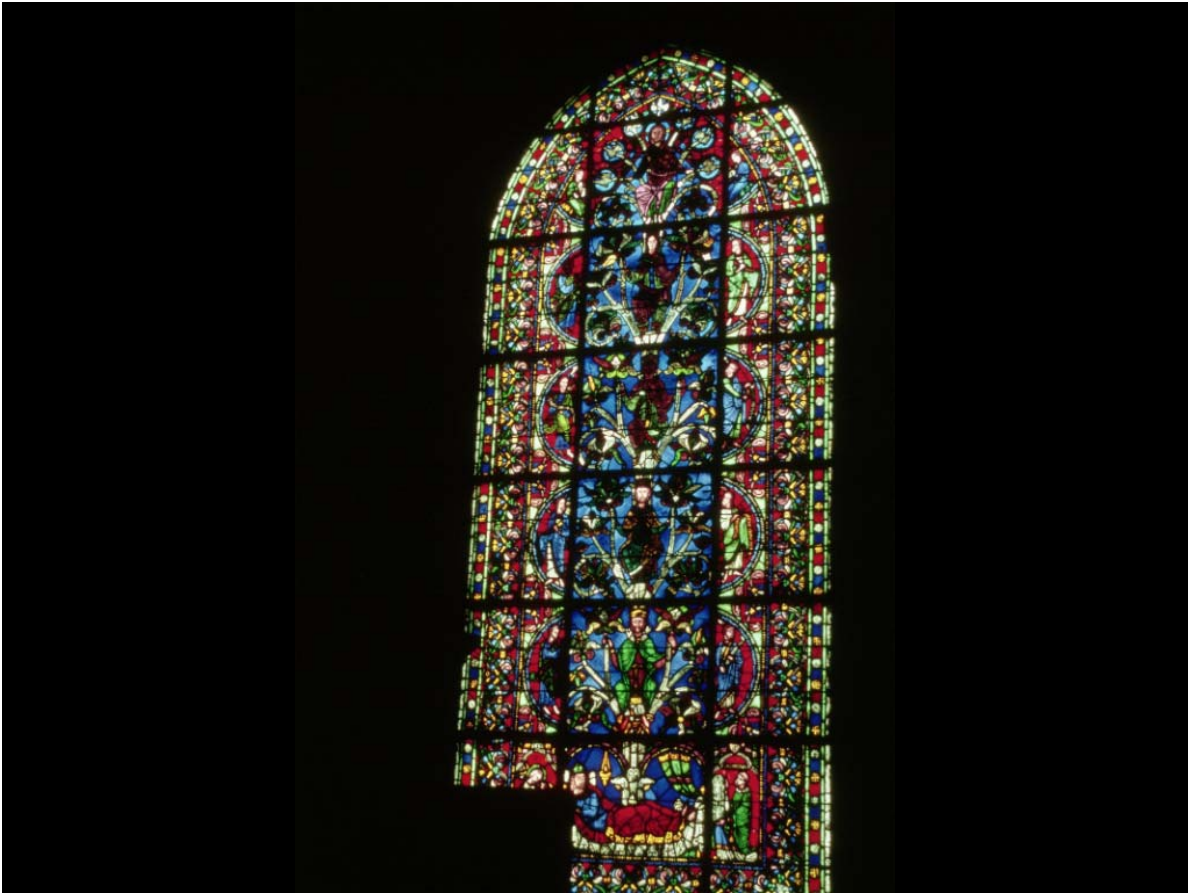


Substituted thin columns for heavy piers in the Ambulatory



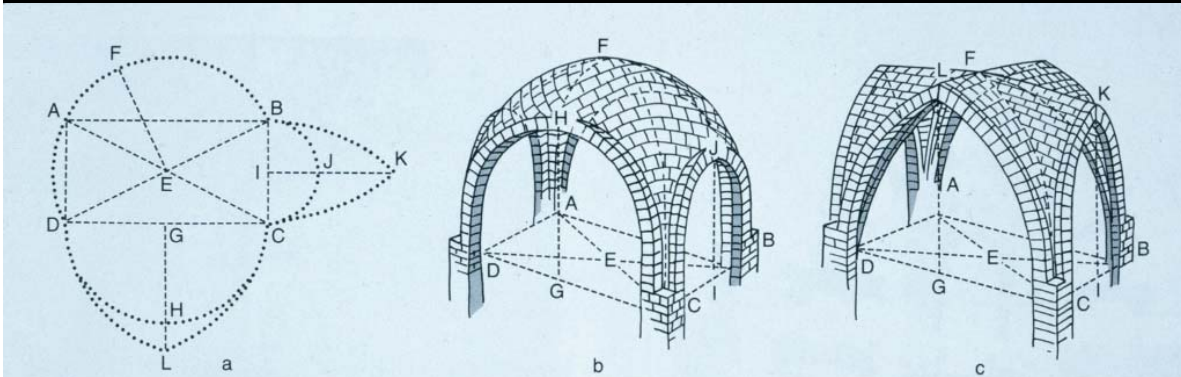






The Pointed Arch

Typical Roman Arch could only span square bays
 Pointed arch allowed for various sizes of bays (rectangular)
 Shape could be varied, made flatter or more pointed
 Exerted far less lateral force than the typical arch



Rib and Panel Concept

Concentration of forces at points of support rather than bearing walls

System of vertical ribs or piers at regular intervals that supported the vaults above

Advantages: Large windows, relatively light –skeleton-like



The Flying Buttress

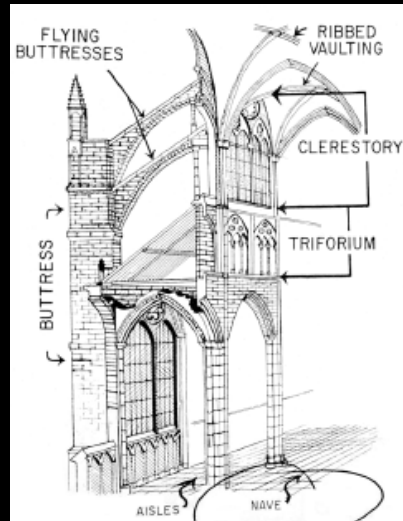
Gothic Vaults exerted tremendous forces both vertically and laterally
Downward loads were concentrated on piers, while the lateral loads needed to be resolved.

Heavy pier buttresses at right angles to the exterior walls counteracted the lateral forces

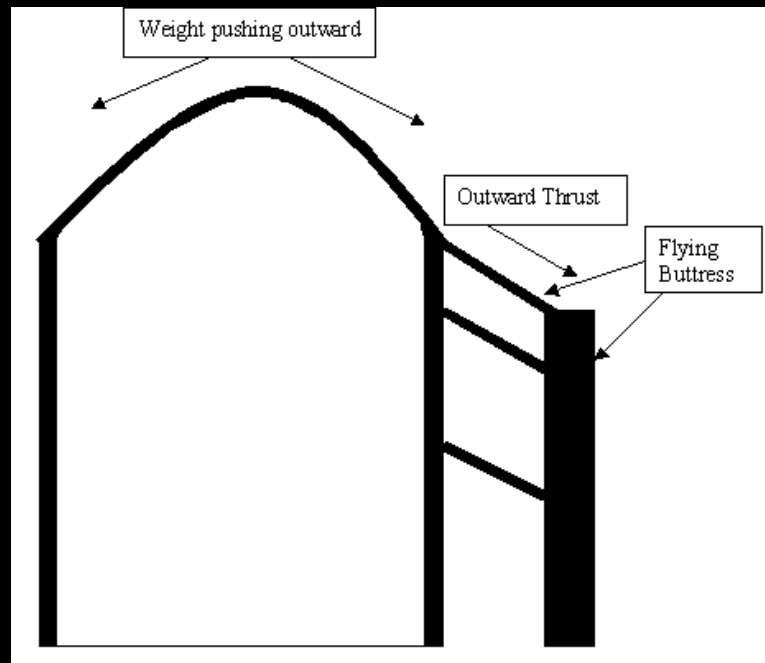
Side Aisles were incorporated into the Flying buttresses



The Flying Buttress



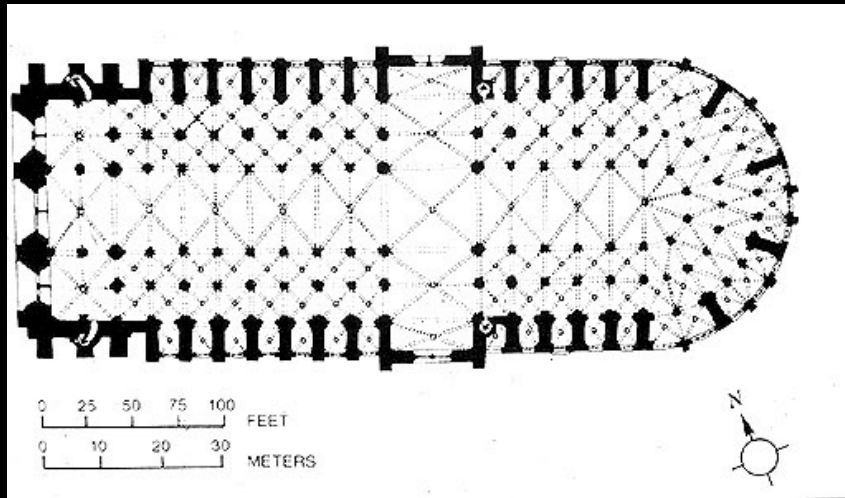
The Flying Buttress



Notre Dame Begun 1163.

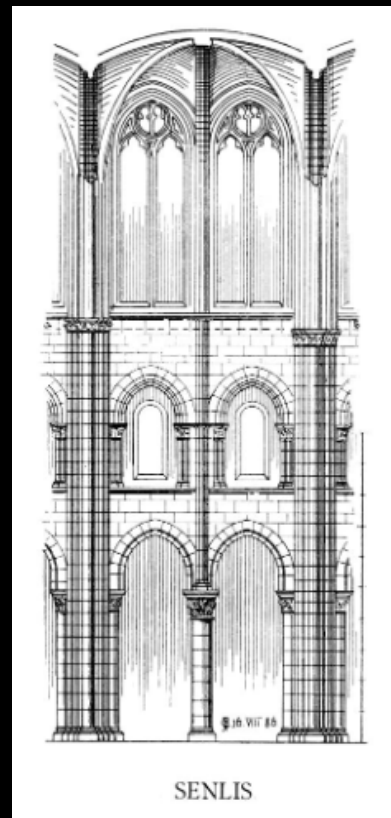
Continuous aisles that terminated in a Chevet (round apse)

Compact Cruciform Plan



Notre Dame Begun 1163.

Typical three story arrangement: Nave arcade, Triforium and the Clerestory

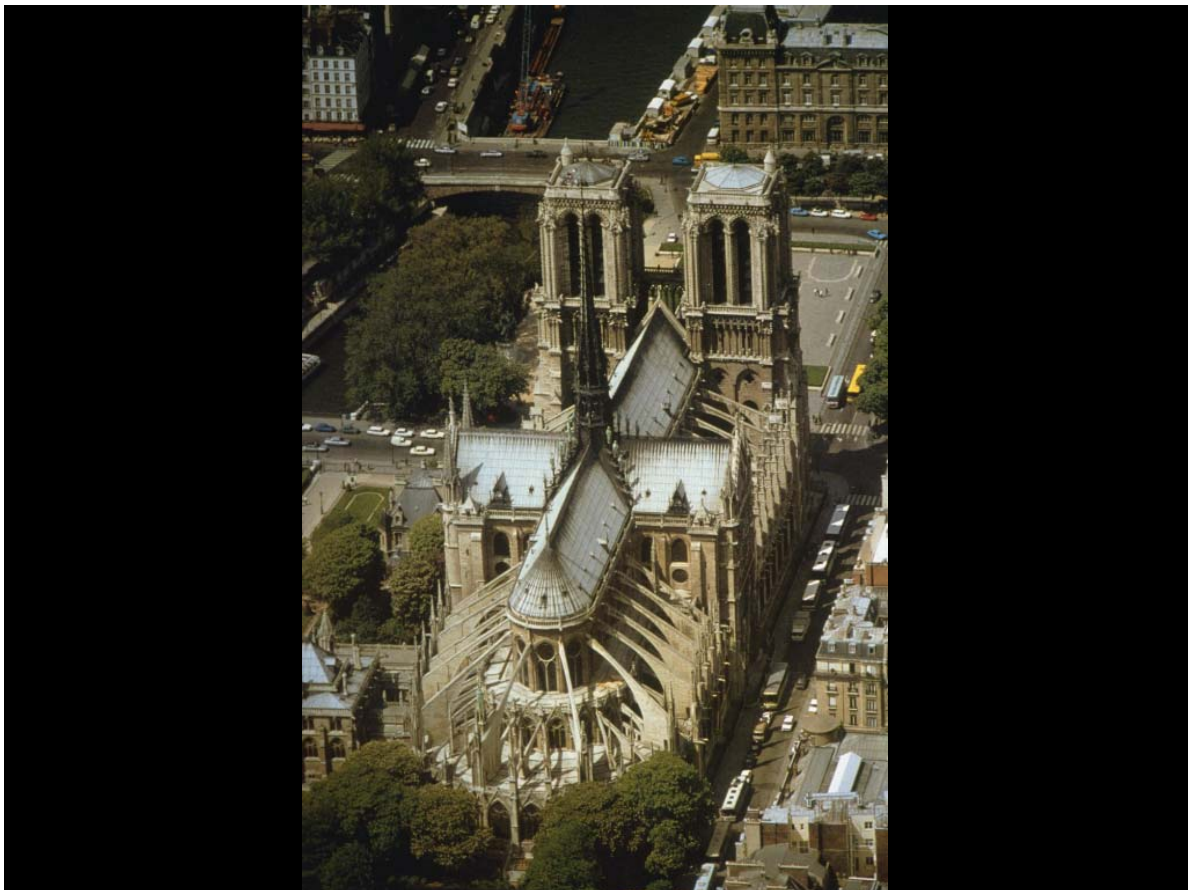
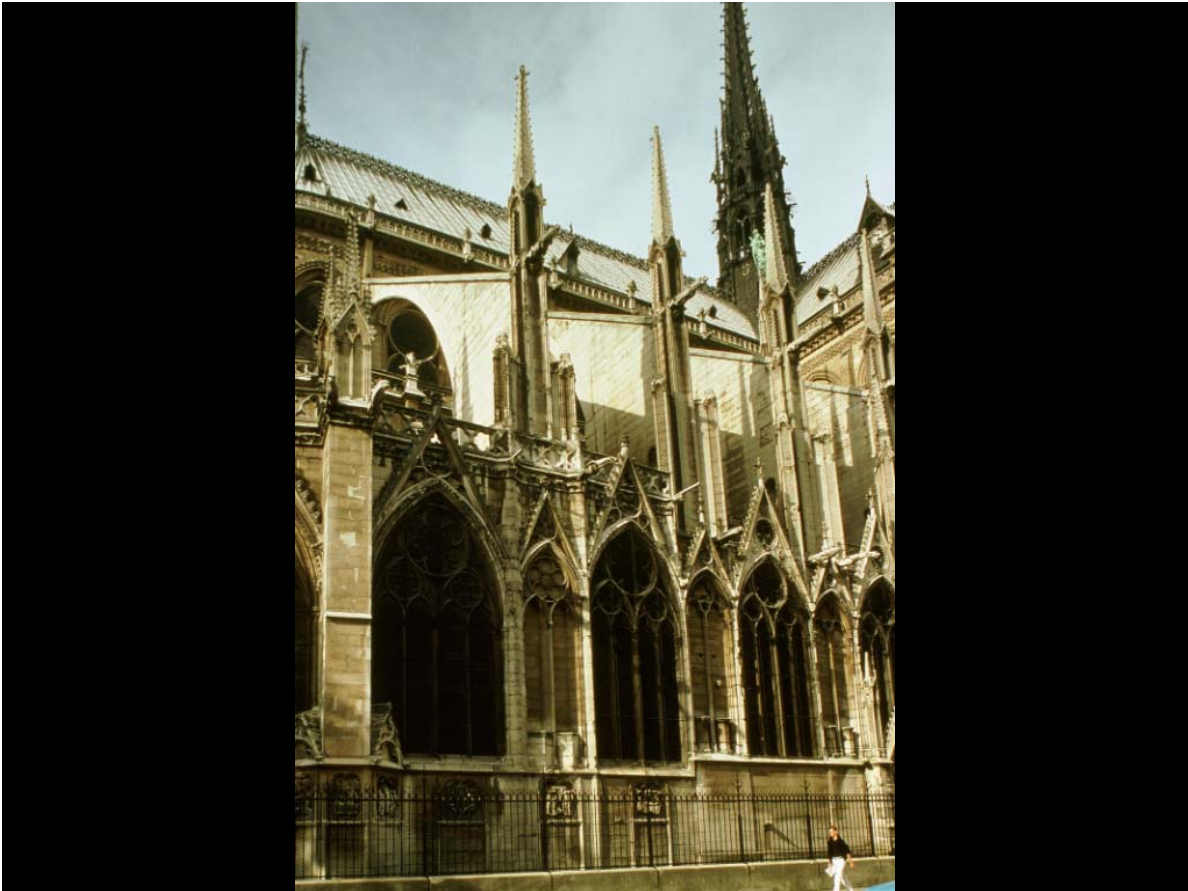


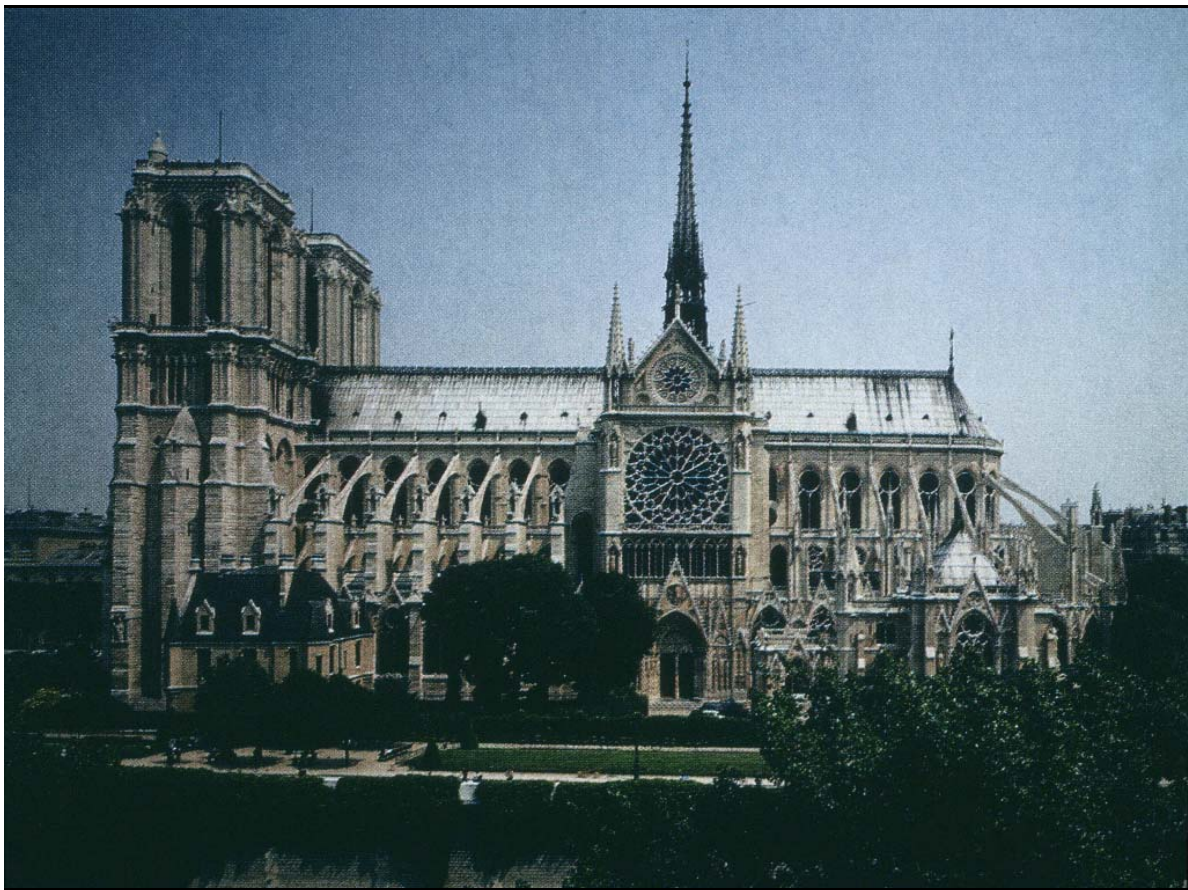
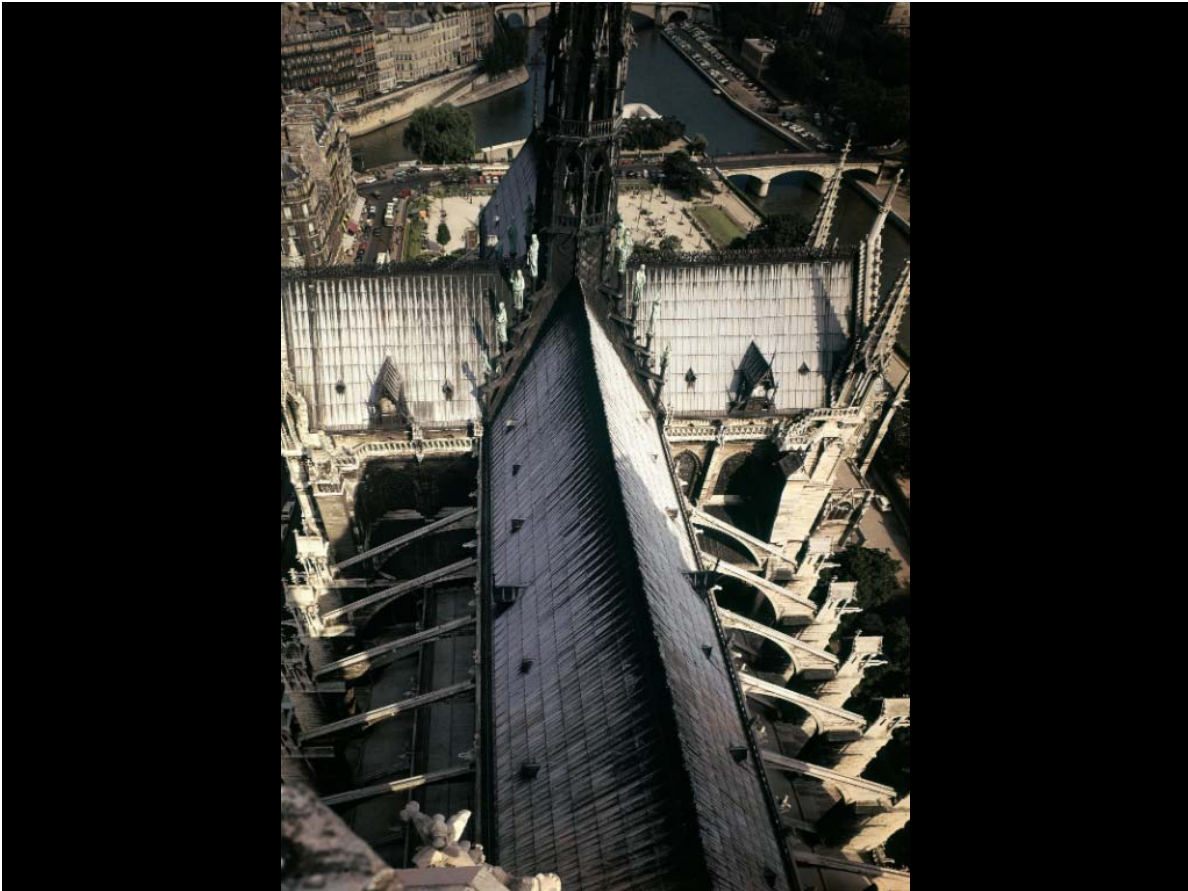


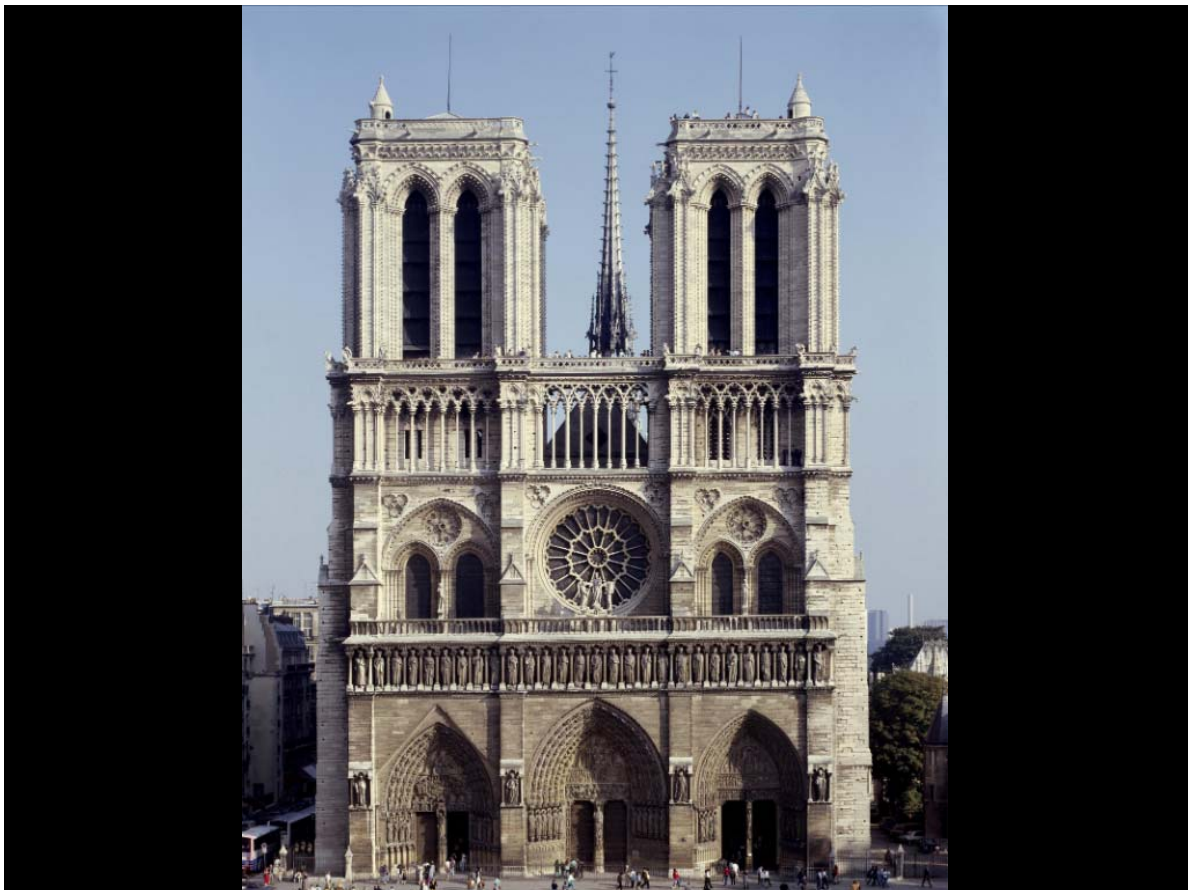
Notre Dame Begun 1163:
Flying Buttresses



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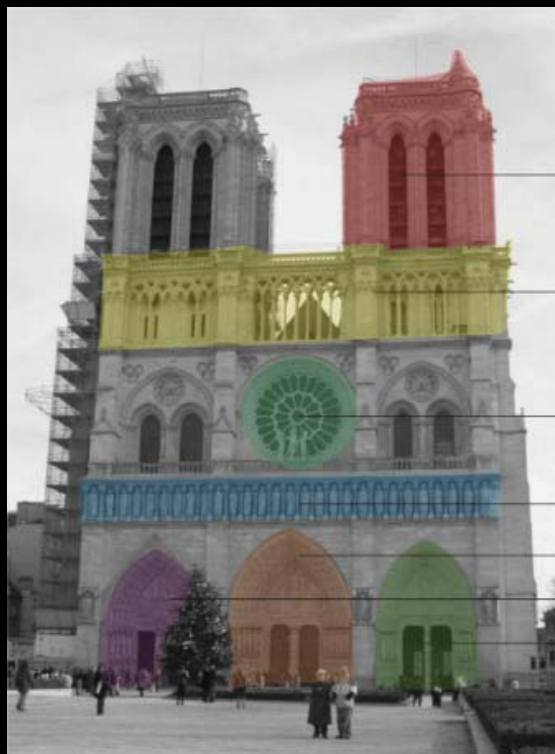




Notre Dame Begun 1163:
Western Façade with twin
Towers- deeply recessed
portals and Rose Window



Notre Dame Begun 1163:



South Tower

Galerie des Chimères

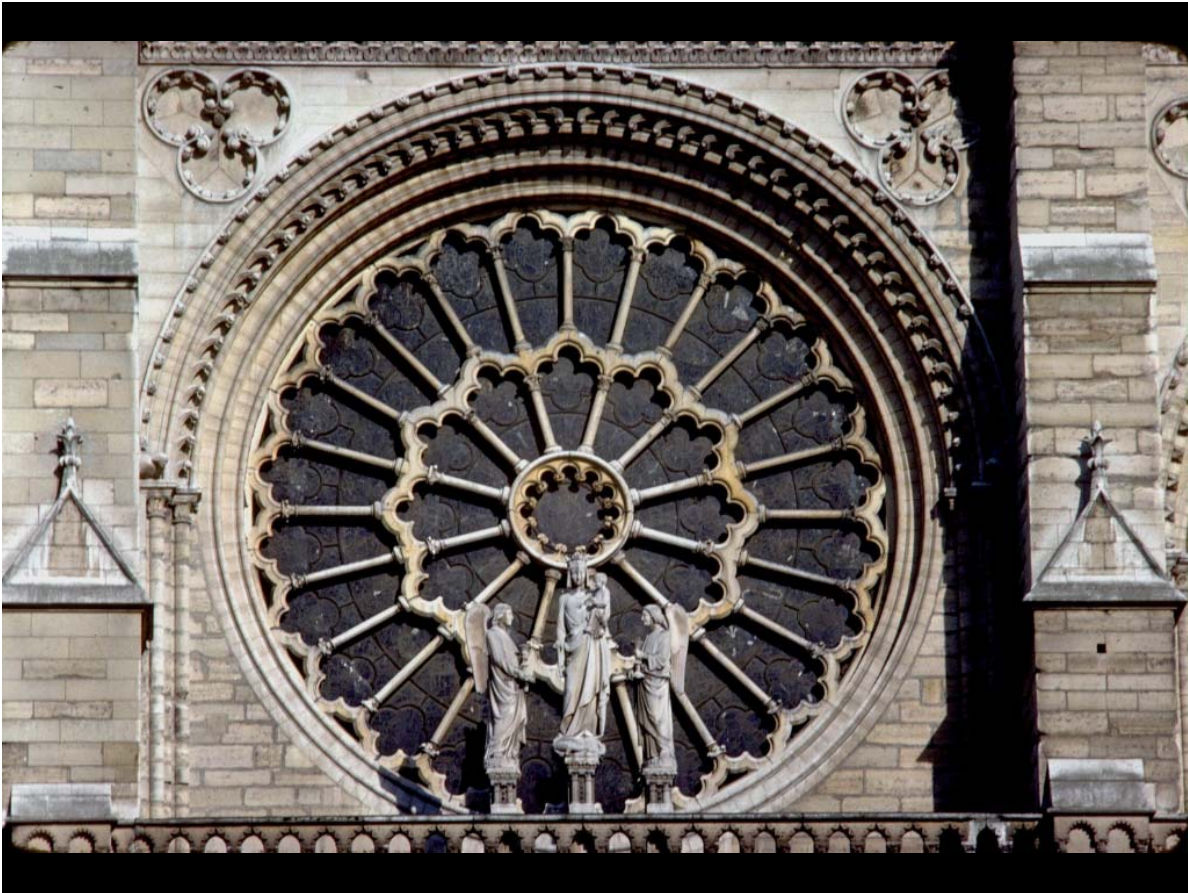
West Rose Window

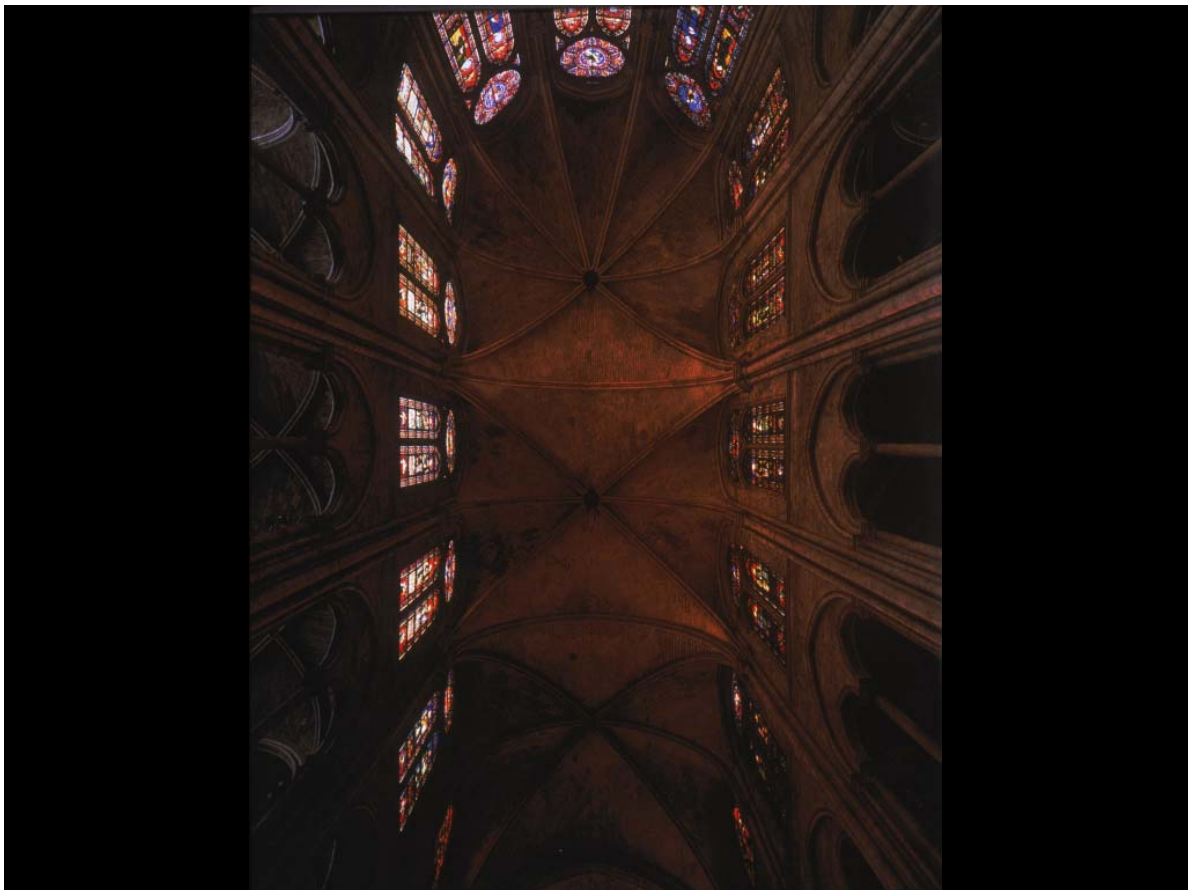
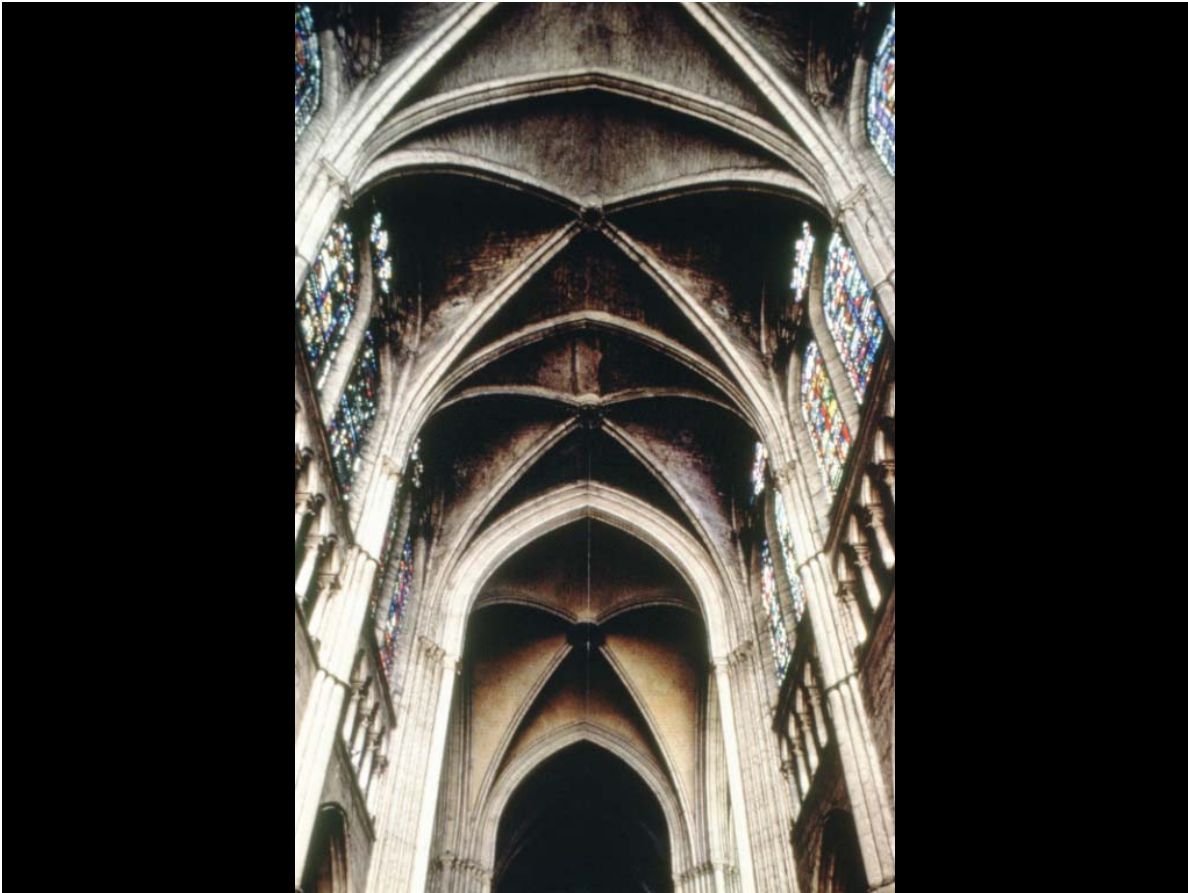
The Kings' Gallery

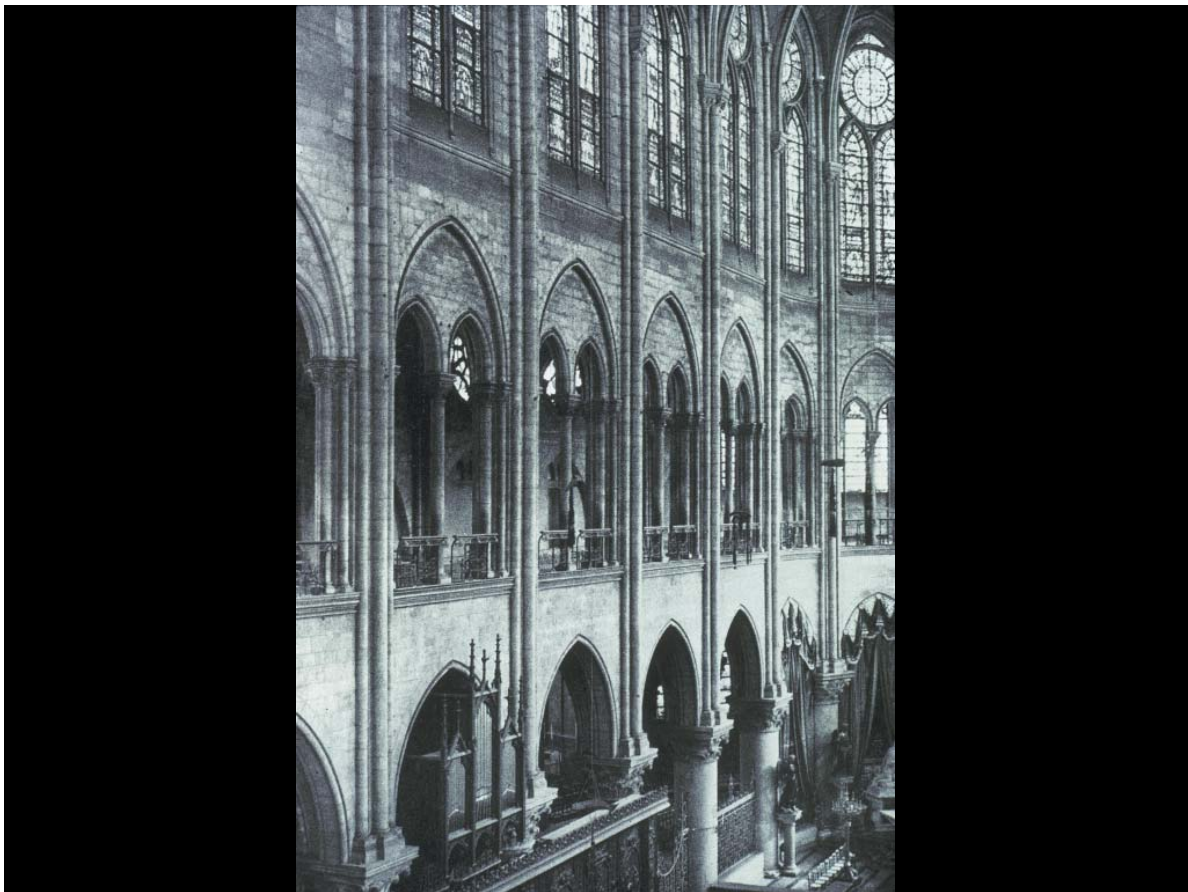
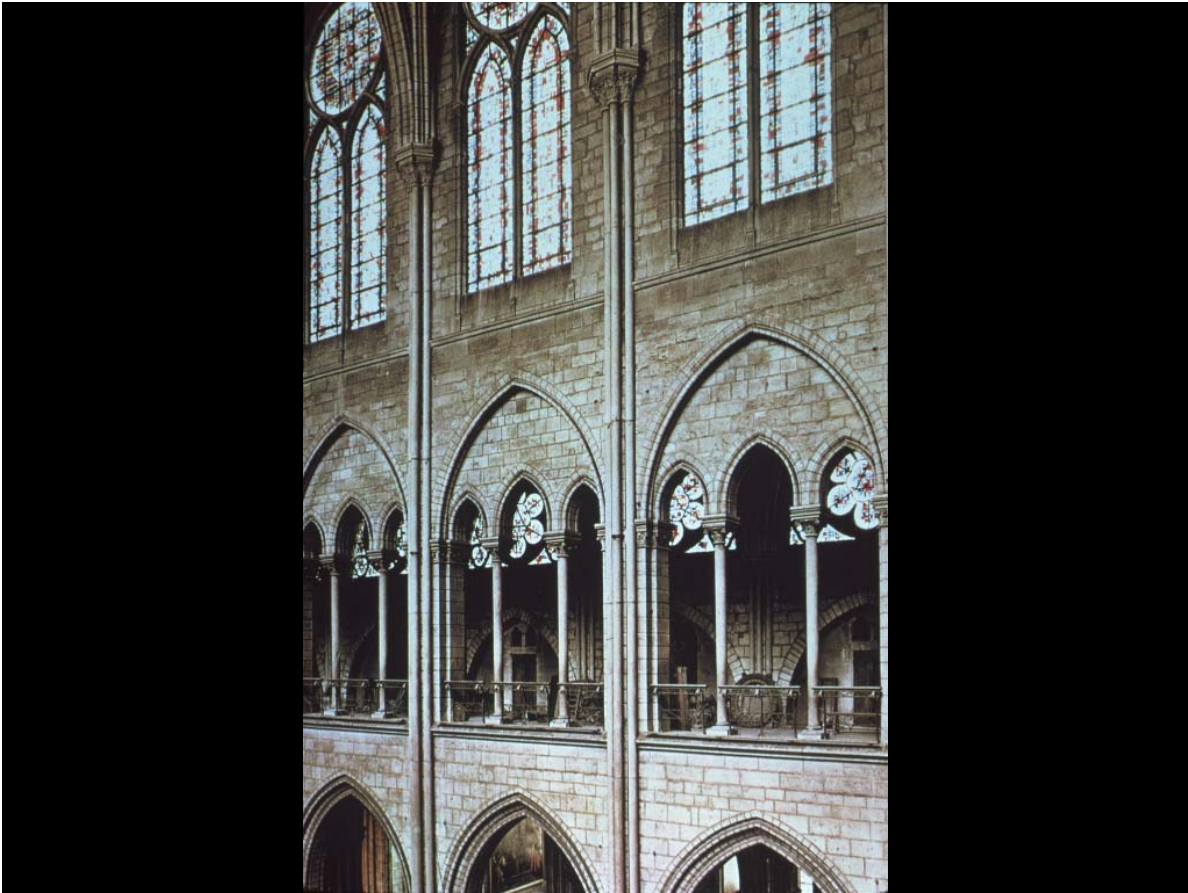
Portal of the Last Judgement

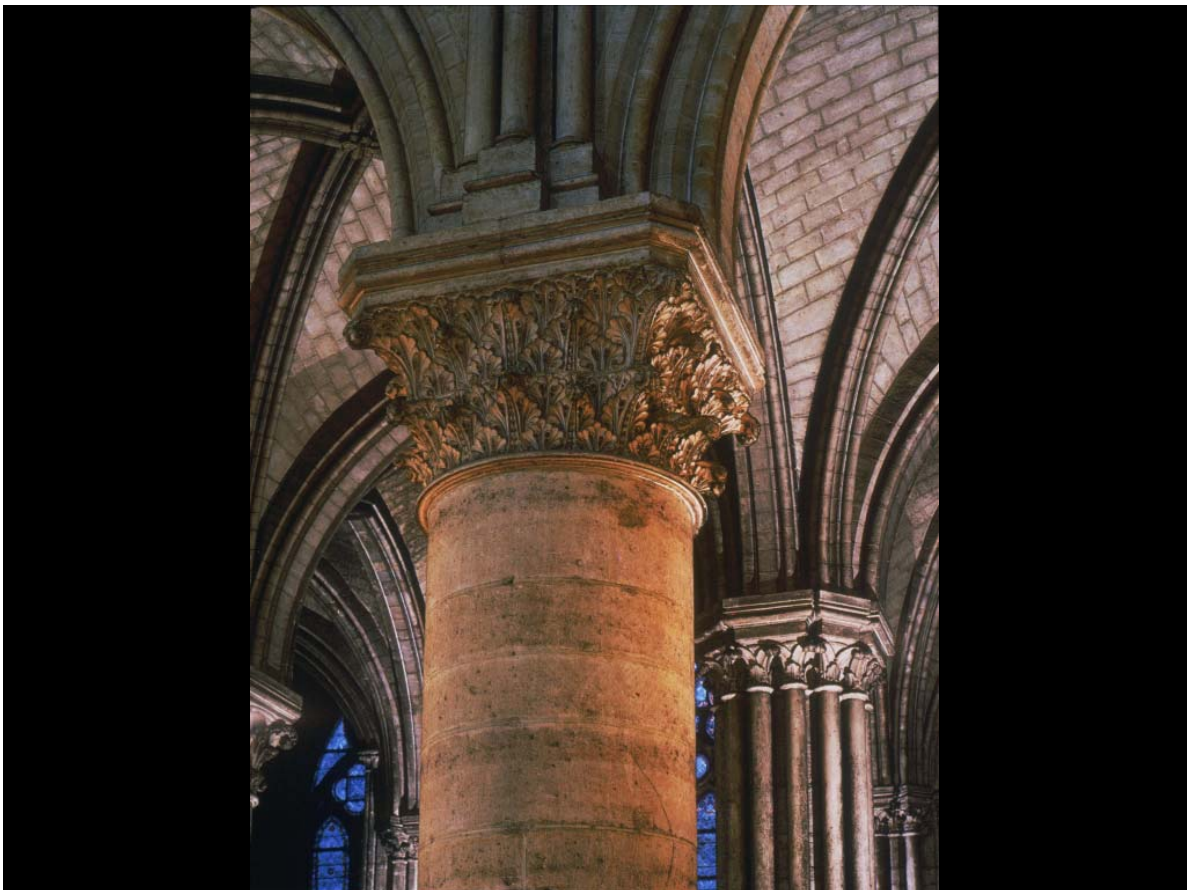
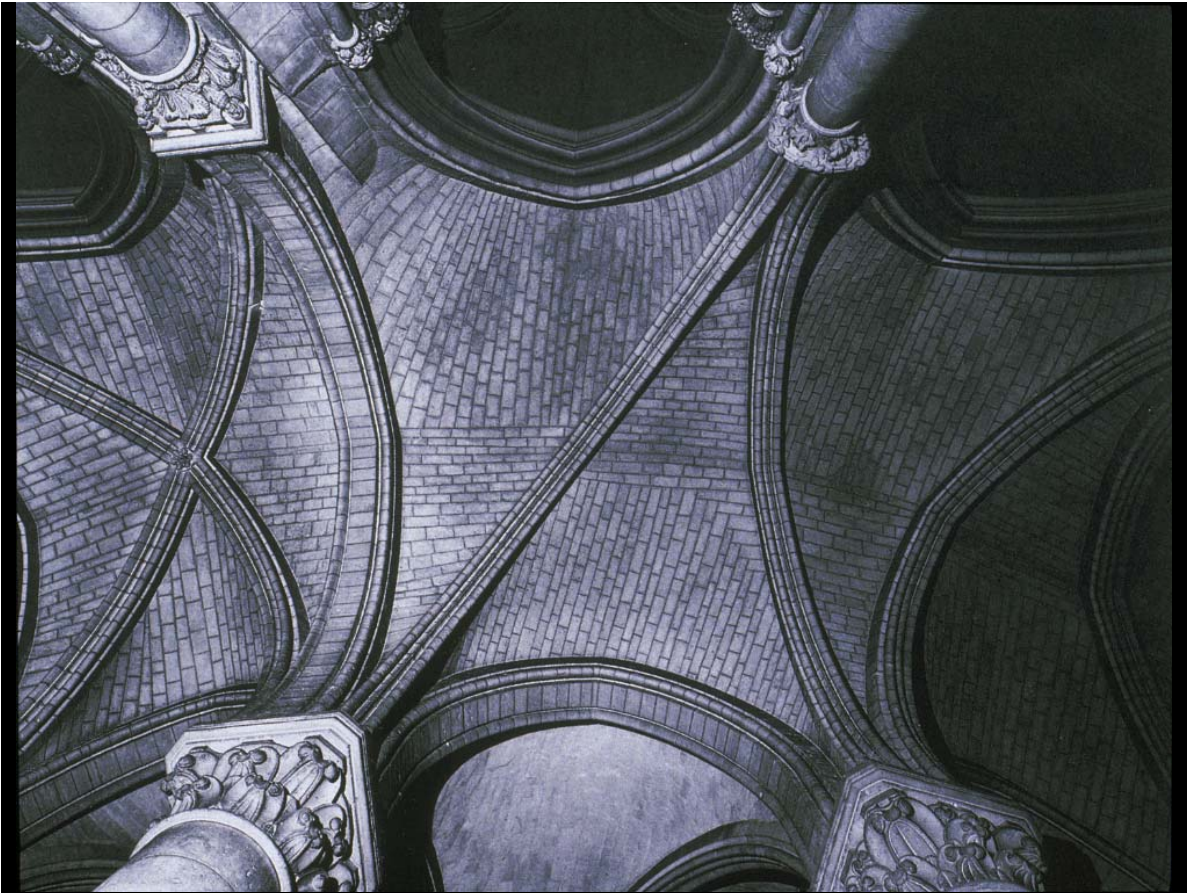
Portal to the Virgin

Portal to Saint Anne









Chartres Cathedral: 1194 - 1220

Known for its renowned stained glass and sculpture on the porches

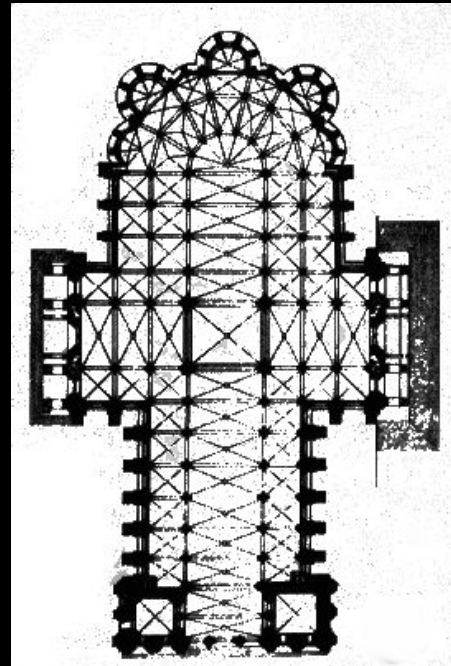
Built to house the tunic worn by the Virgin Mary when she gave birth to Jesus

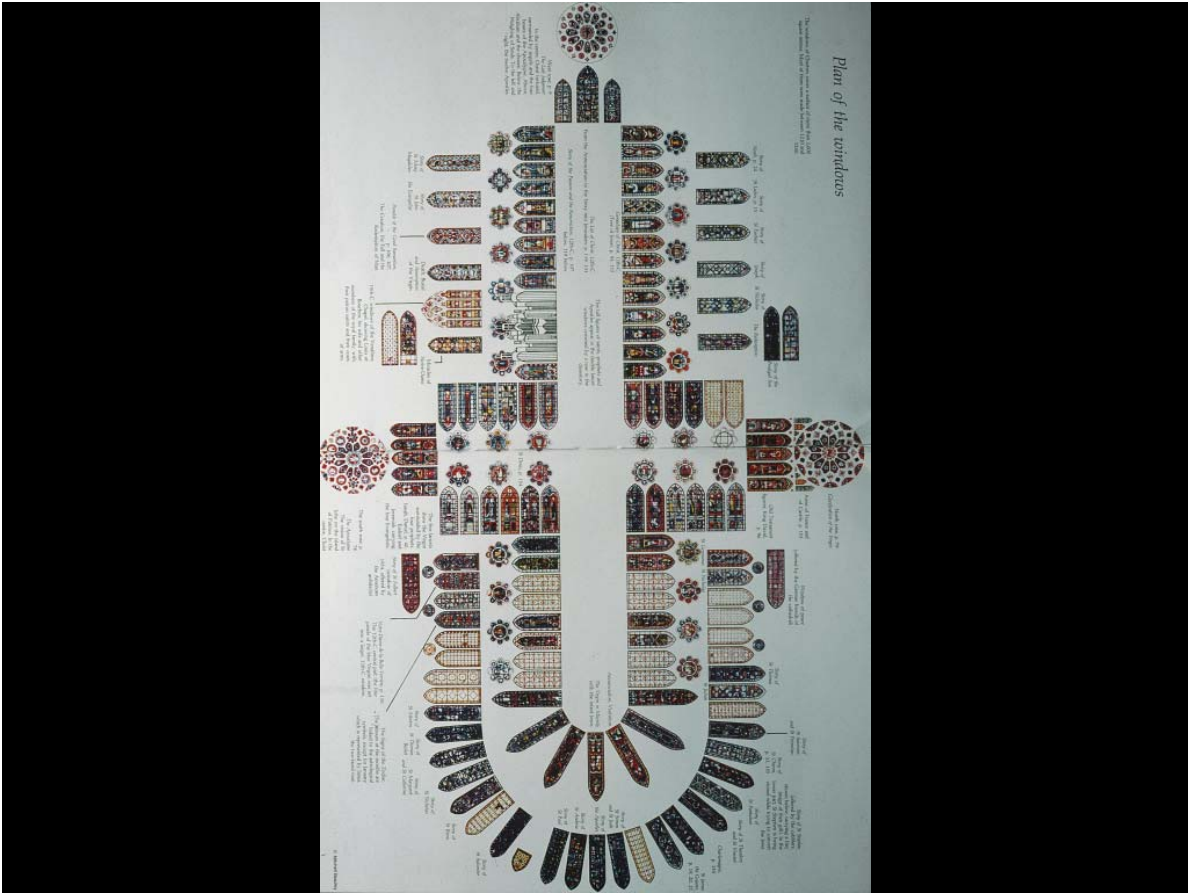


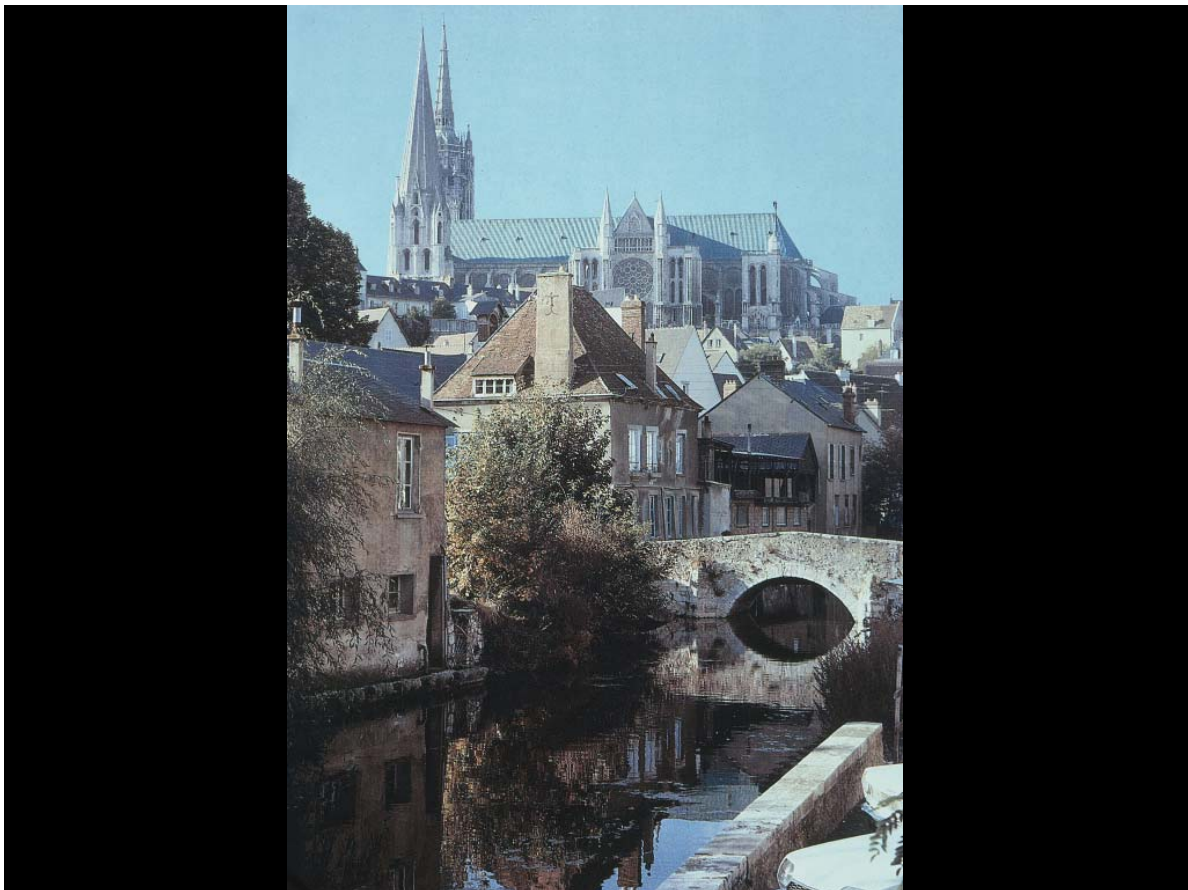
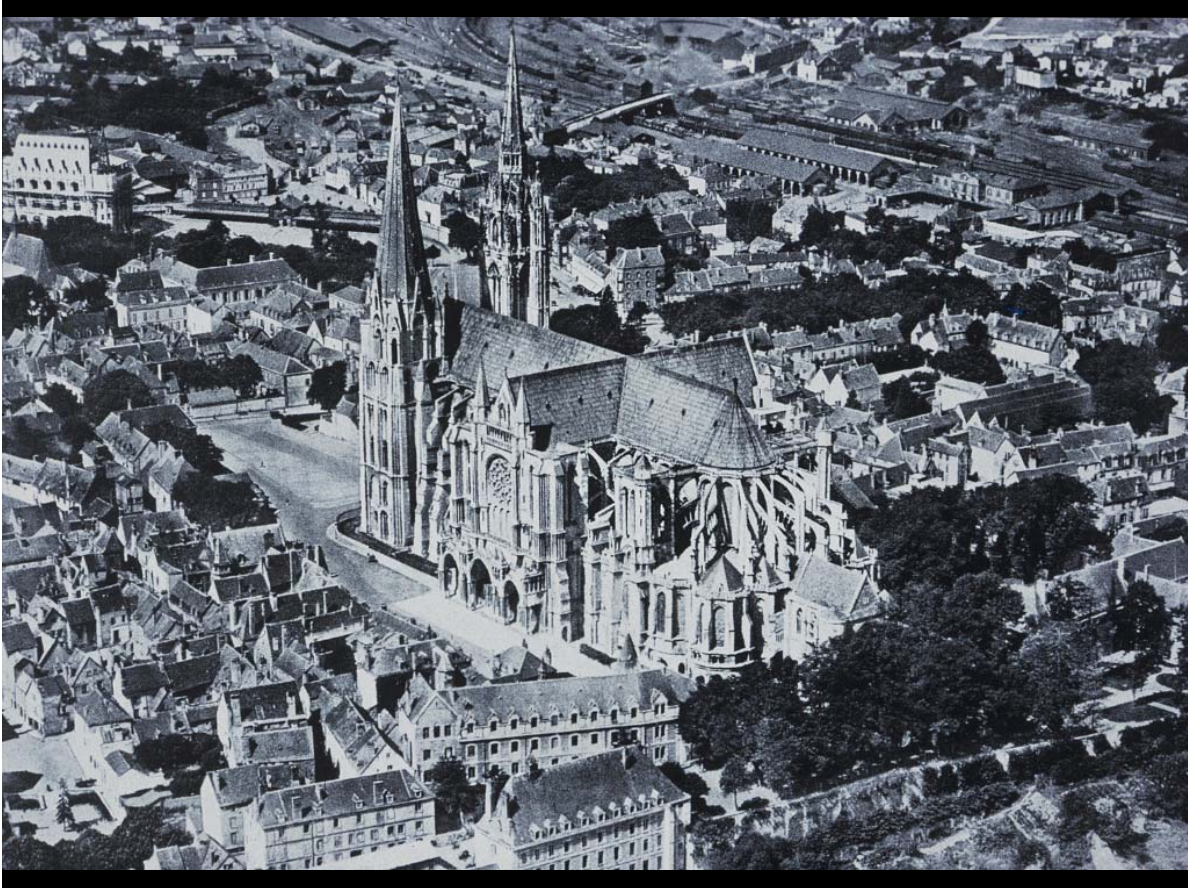
Chartres Cathedral: 1194 - 1220

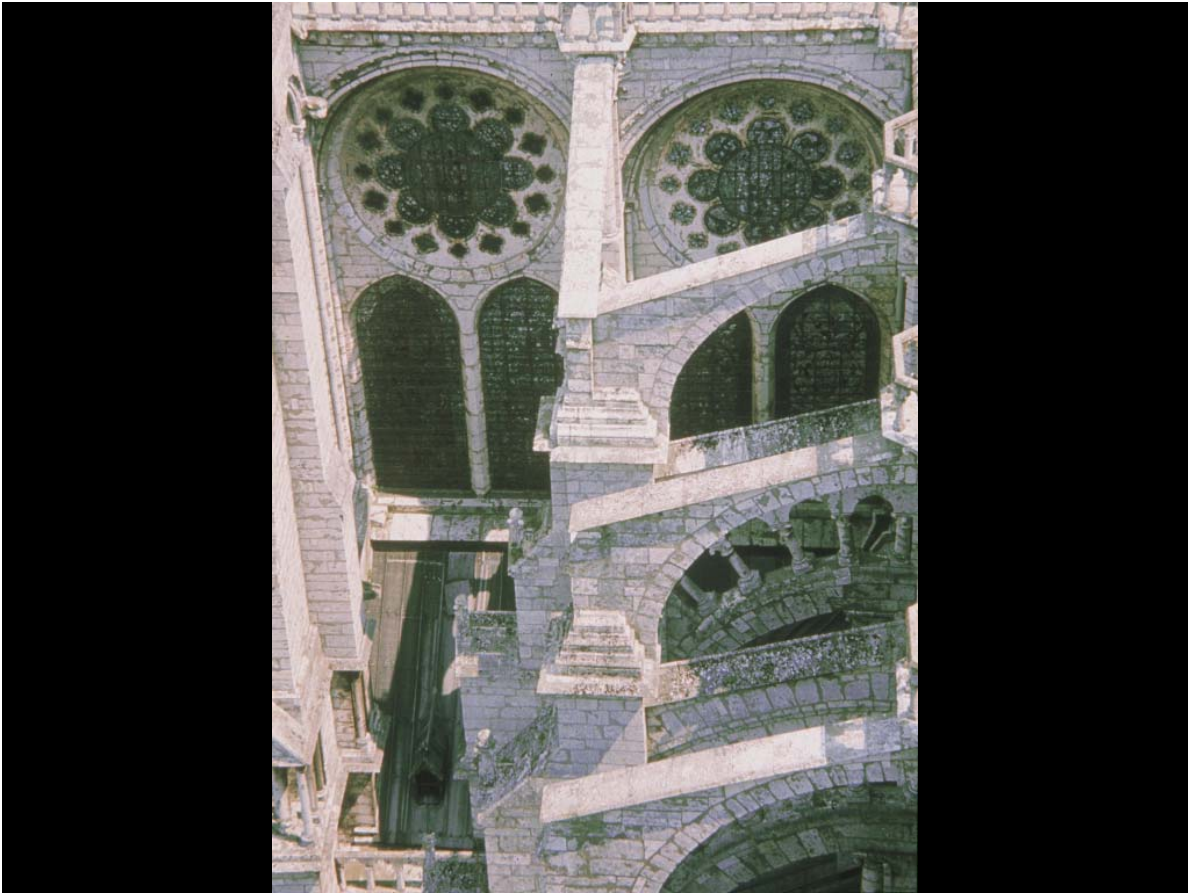
Entire city worked on Cathedral

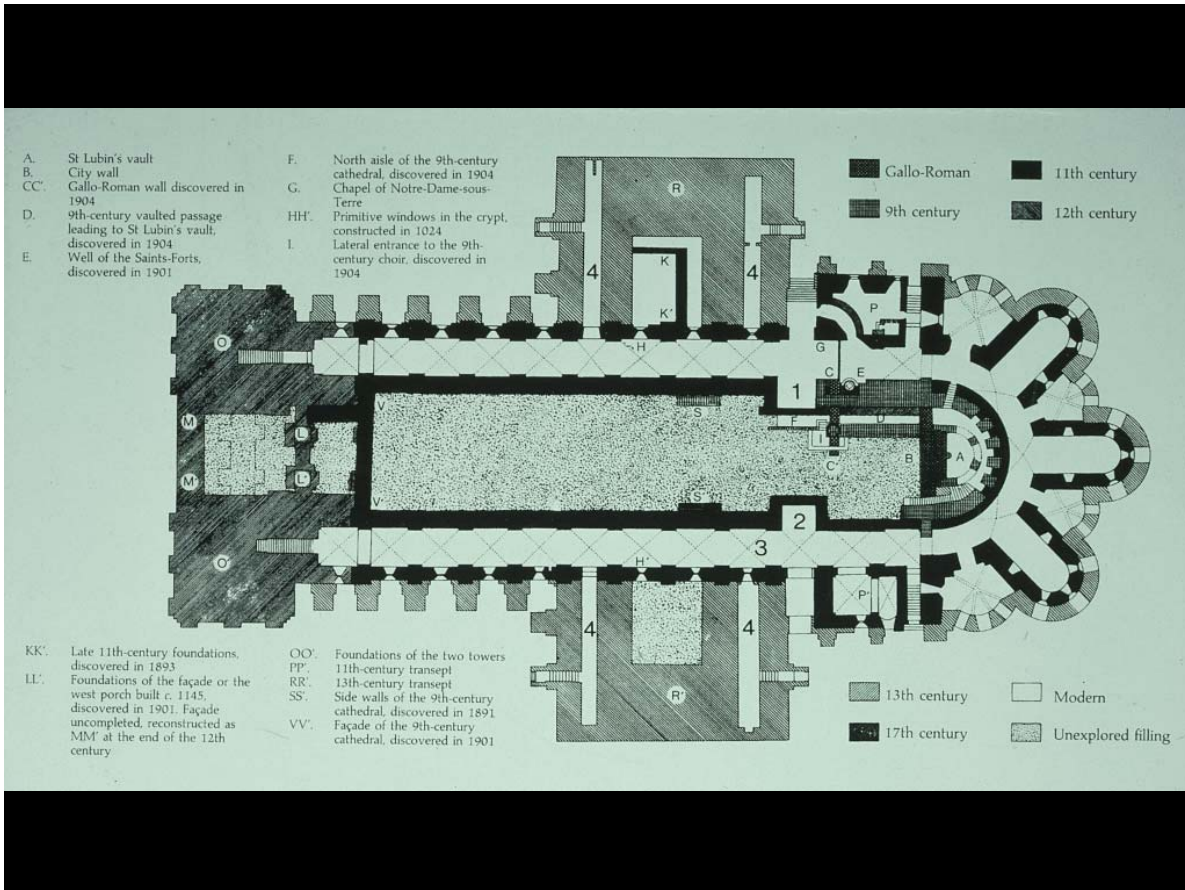
26,000 sf of Stained Glass

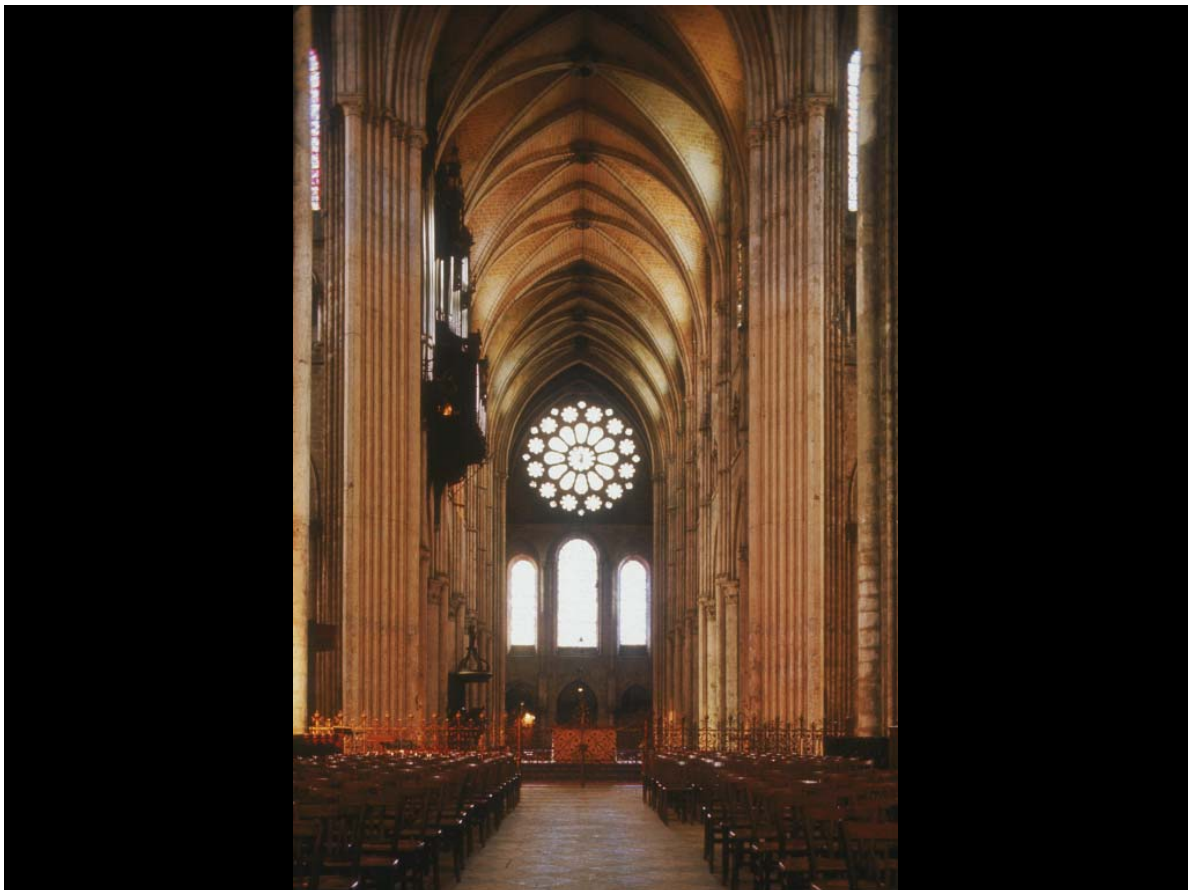


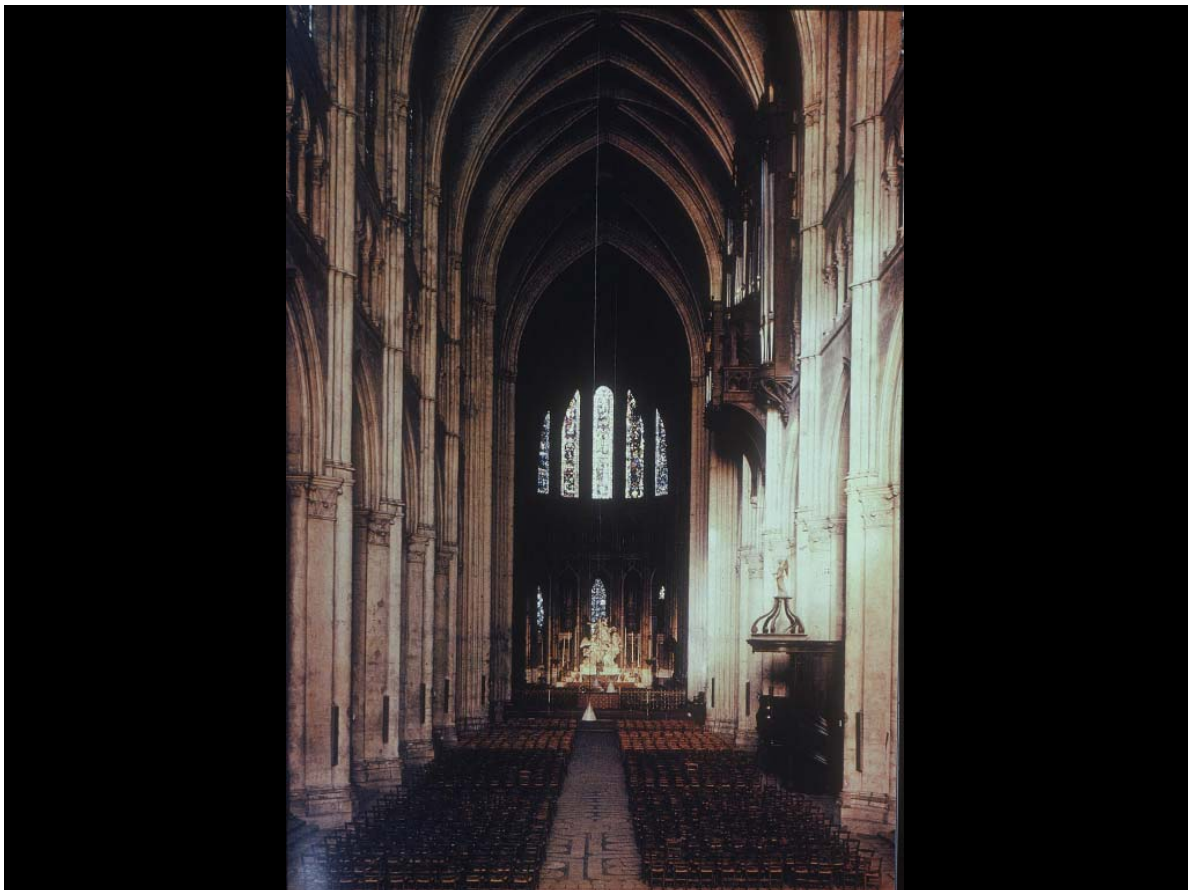
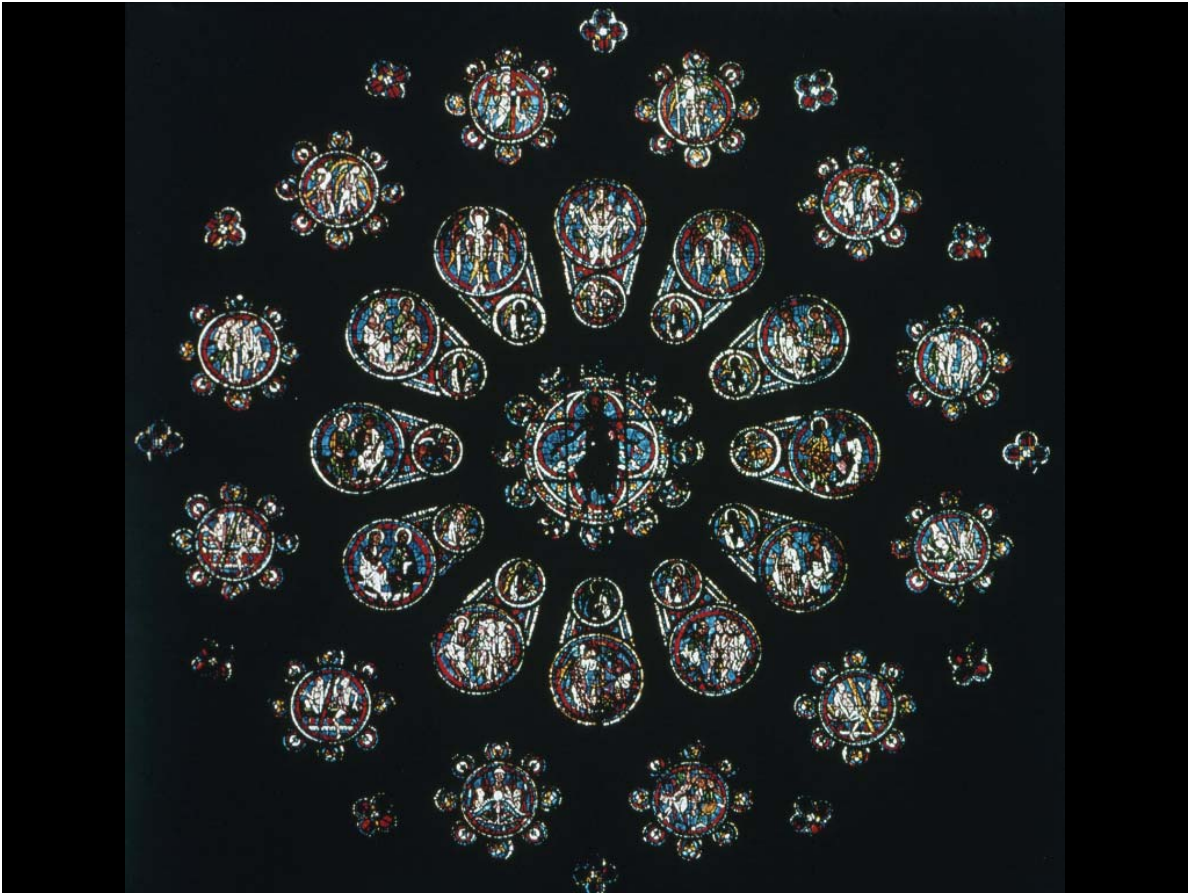


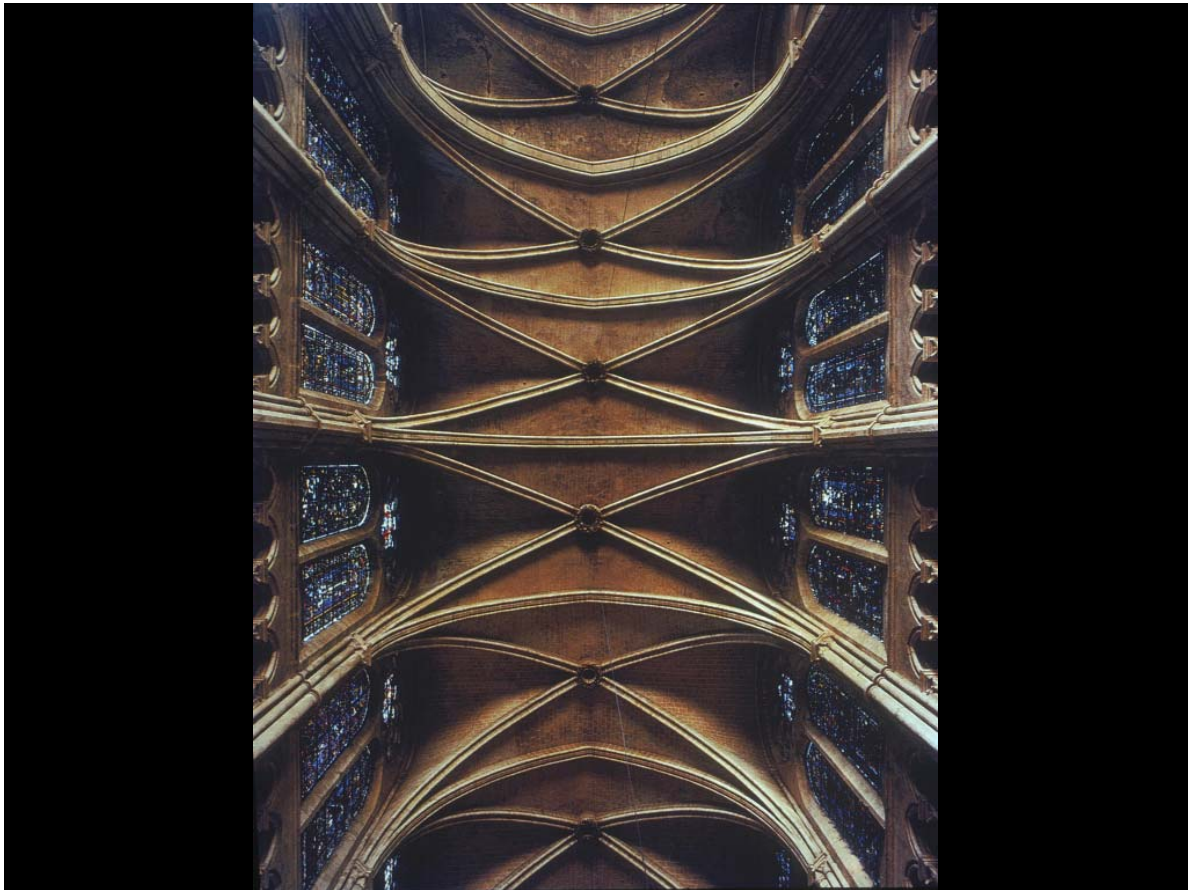
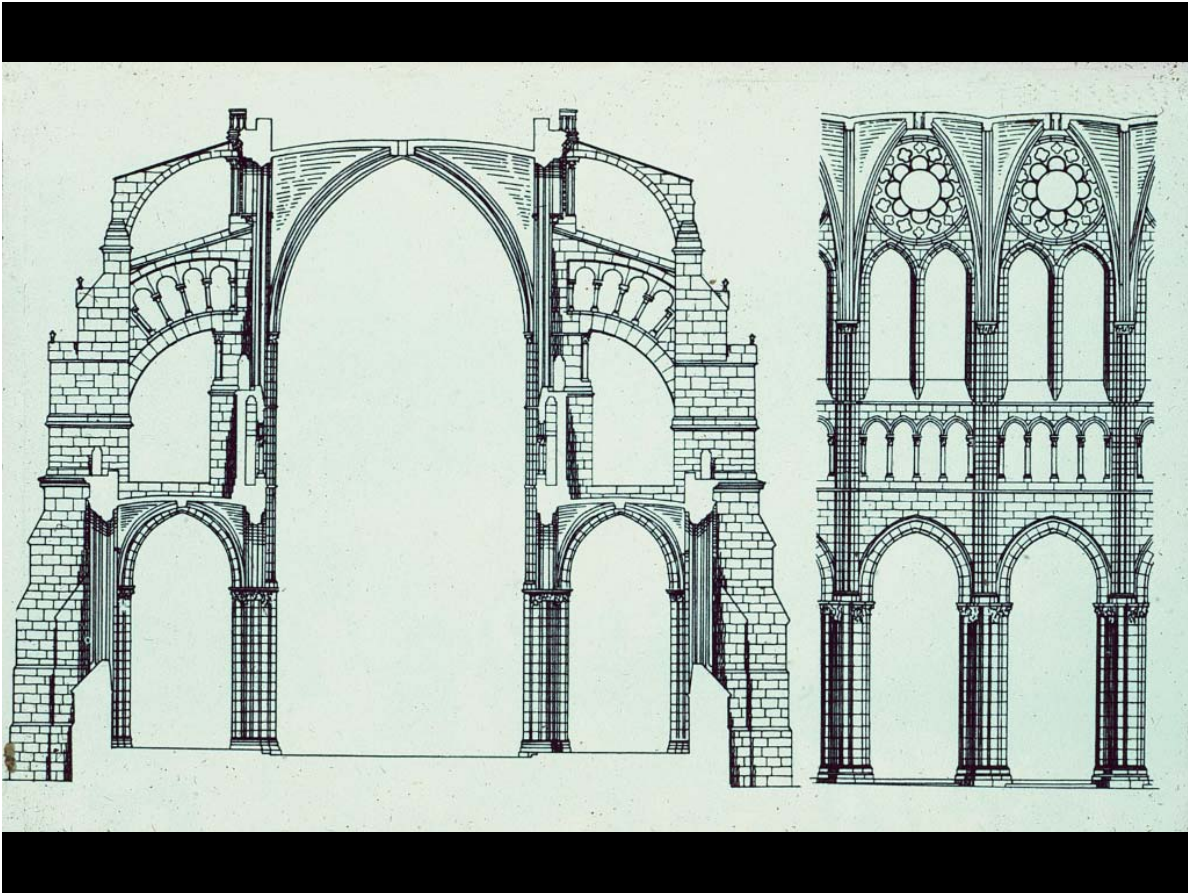


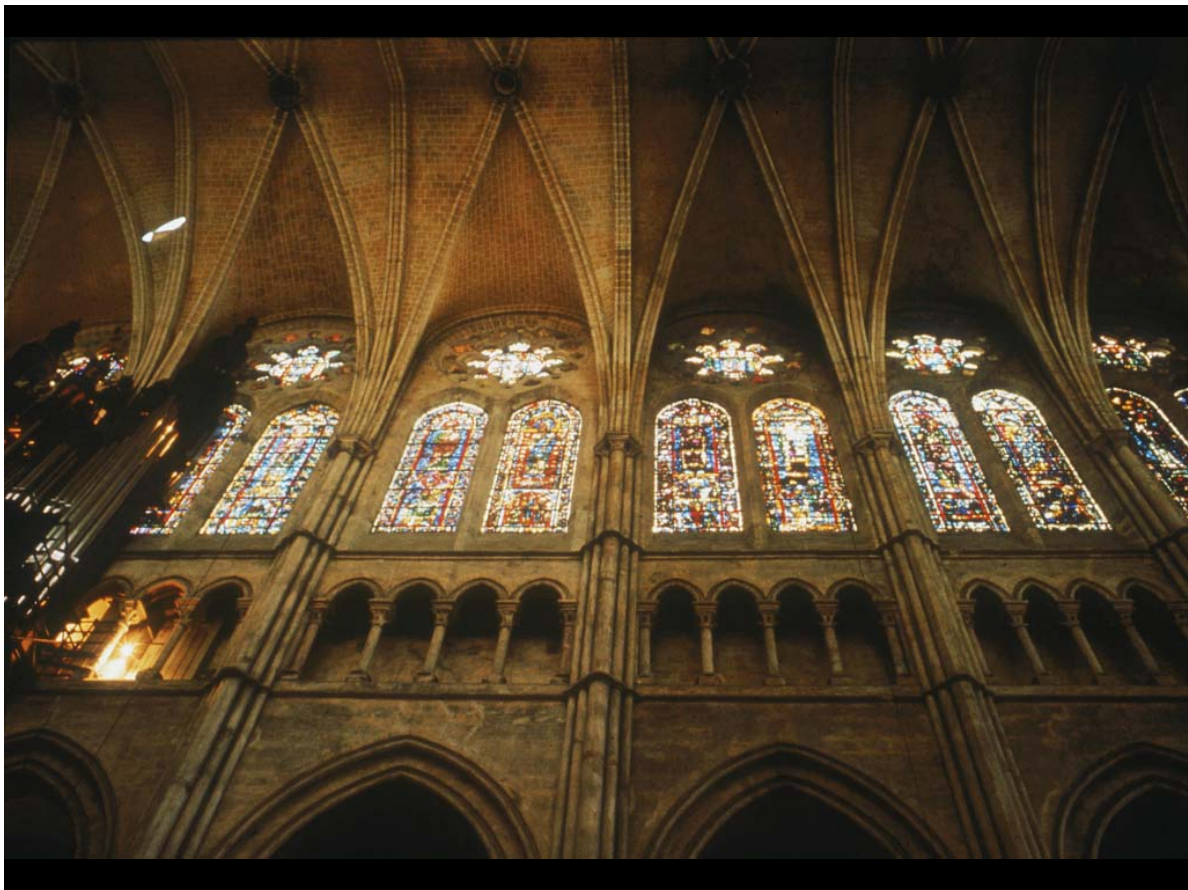


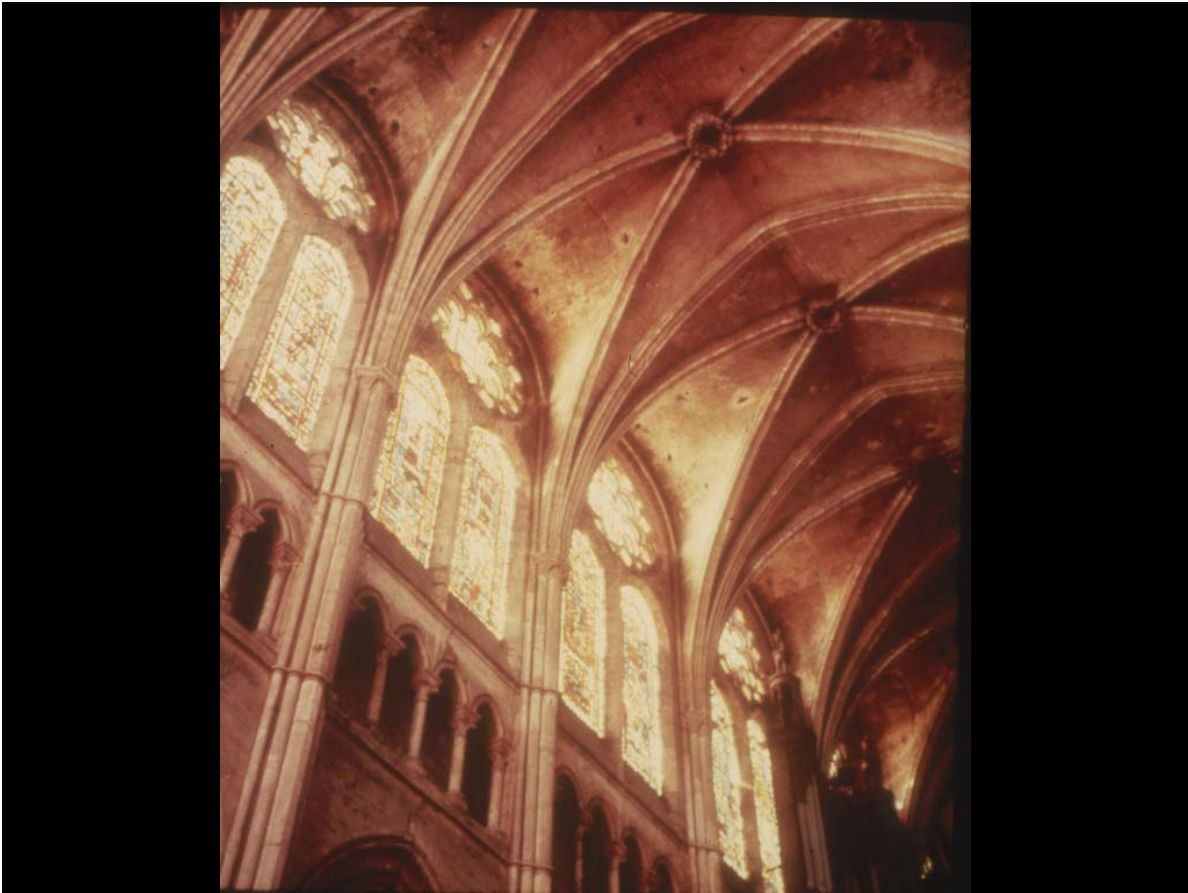














England:

Structural elements of the Gothic style were adopted earlier in England than anywhere else.

English Cathedrals were longer, narrow and lower than the French

Transepts were more pronounced

Apses were generally square

English Churches were more solemn

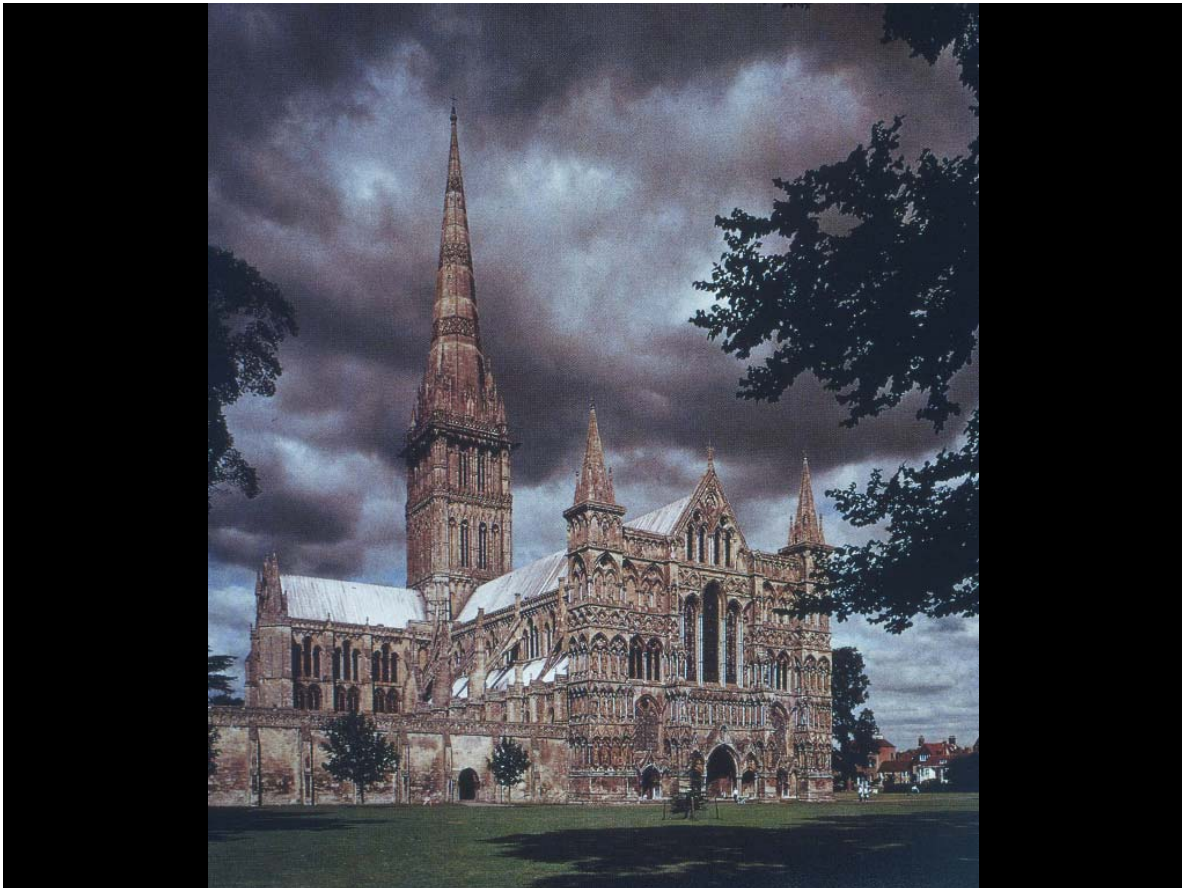
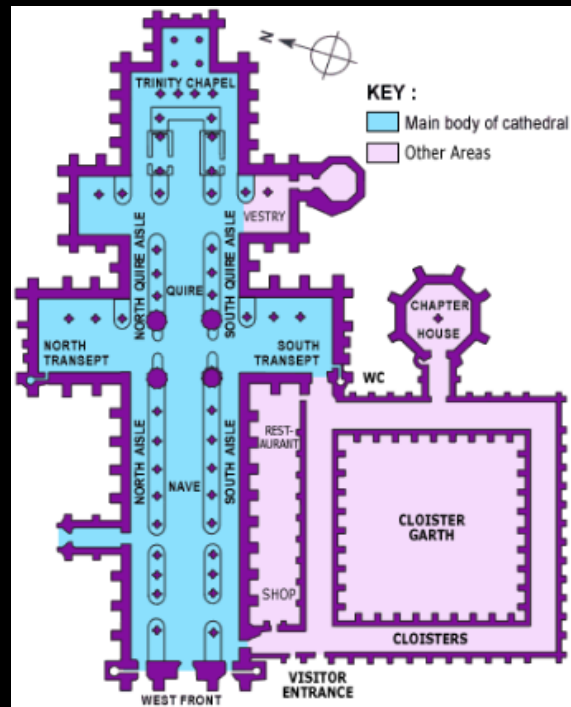
Salisbury Cathedral: 1220 - 1260

Completed in 40 years.

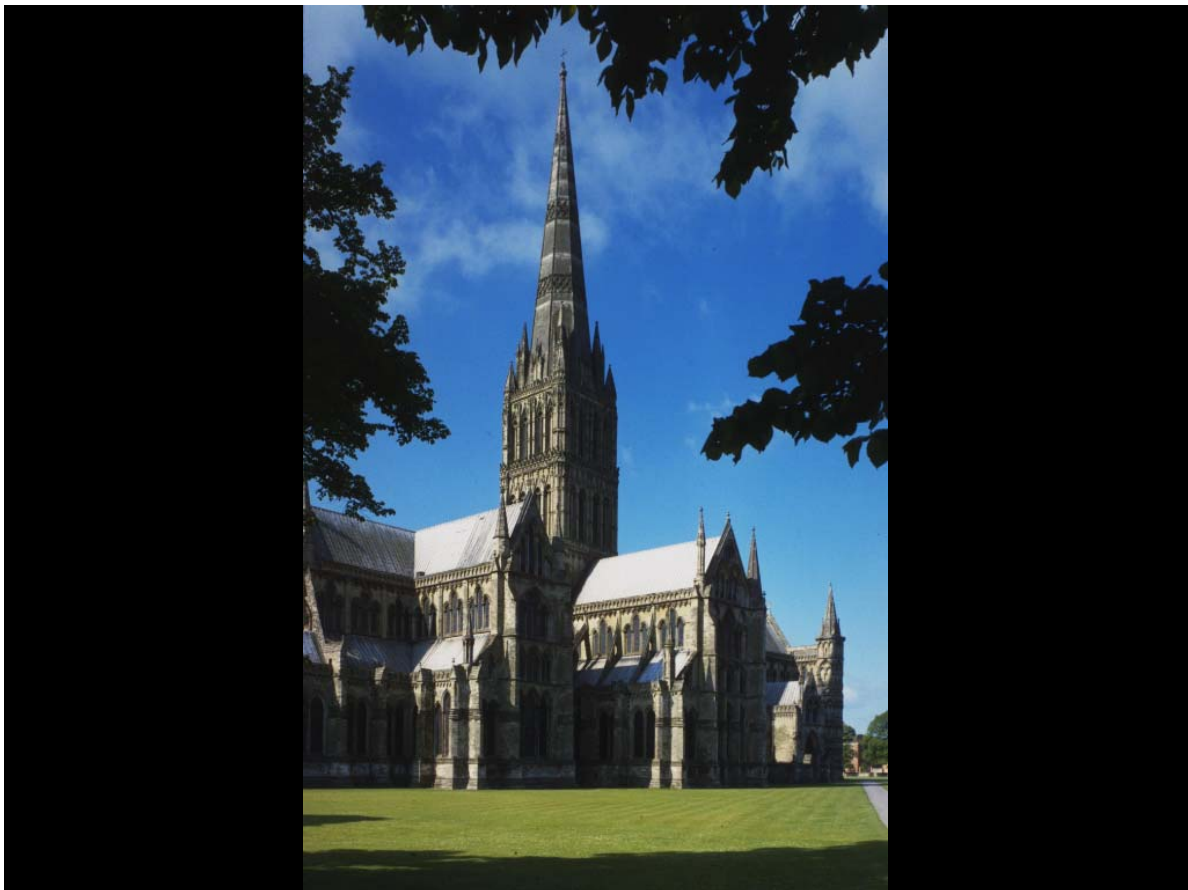
Double Transepts

Horizontal emphasis with Great Central tower over the crossing with spire was 400' tall

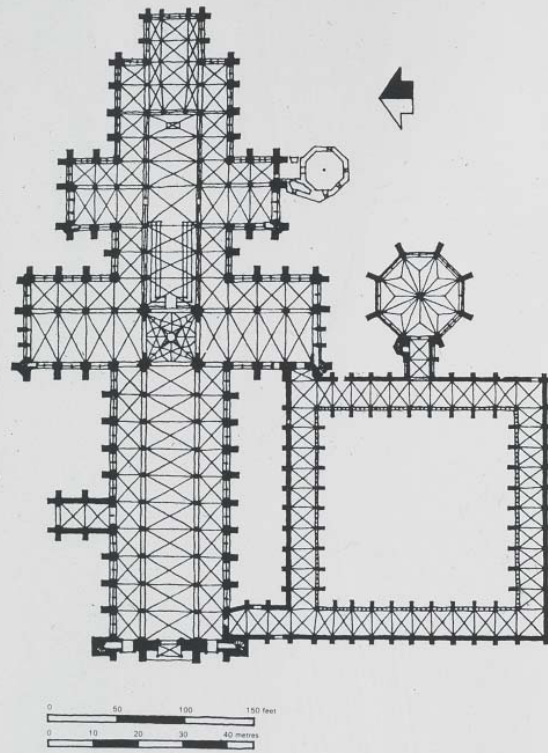
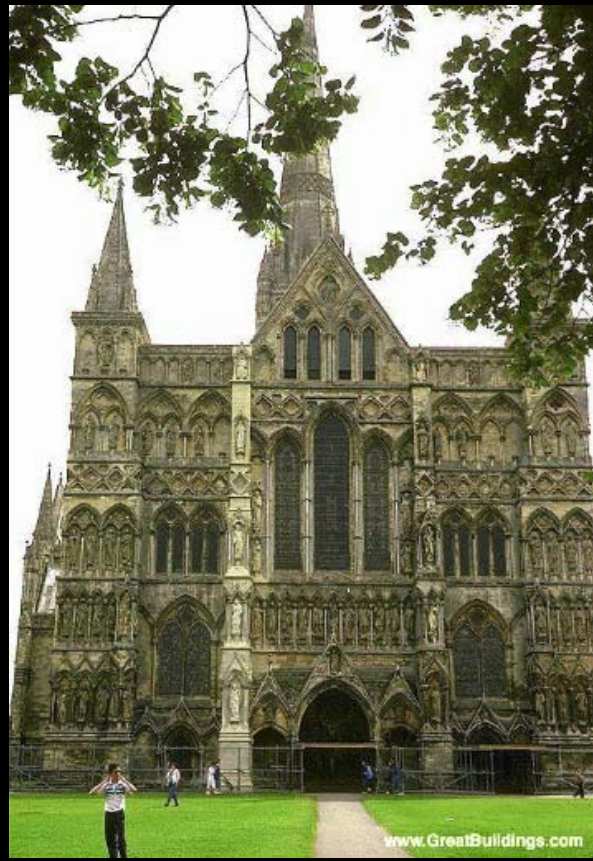
Nave is 84' tall

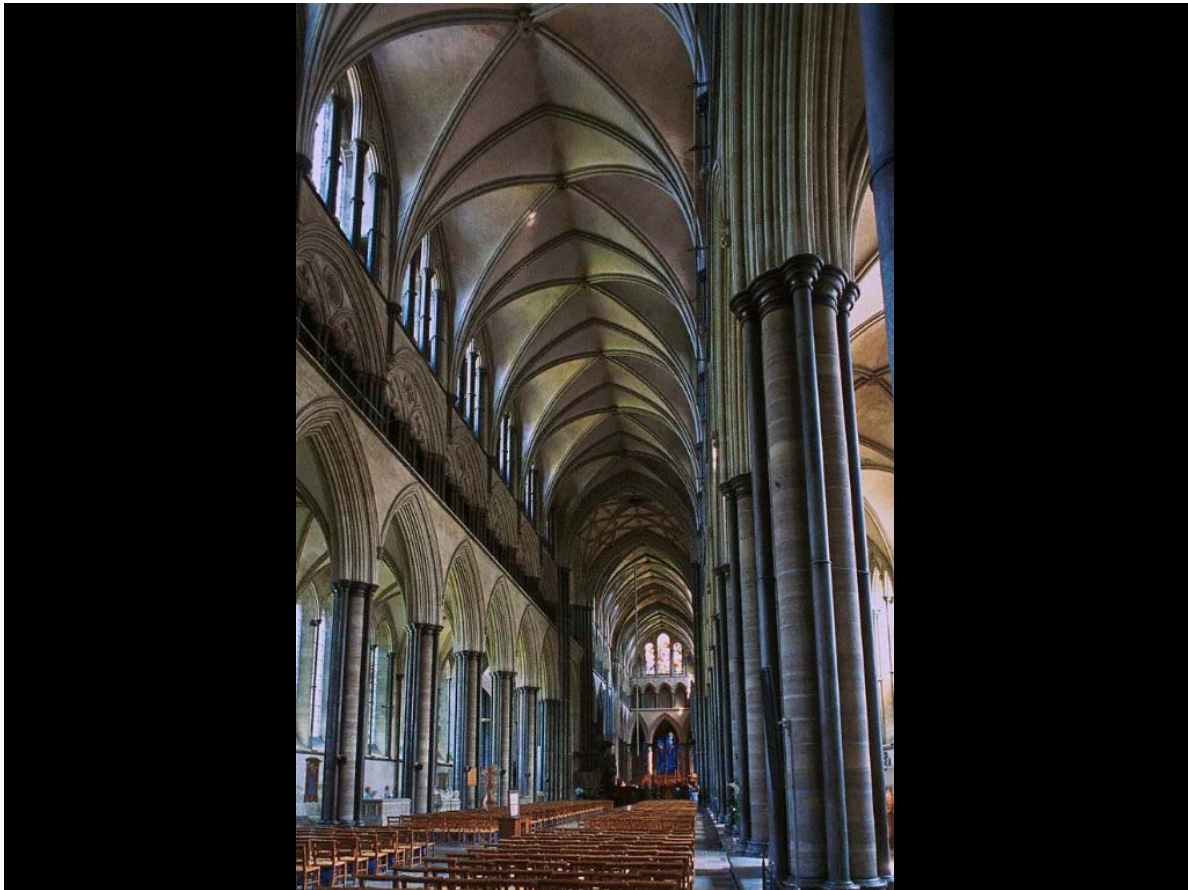
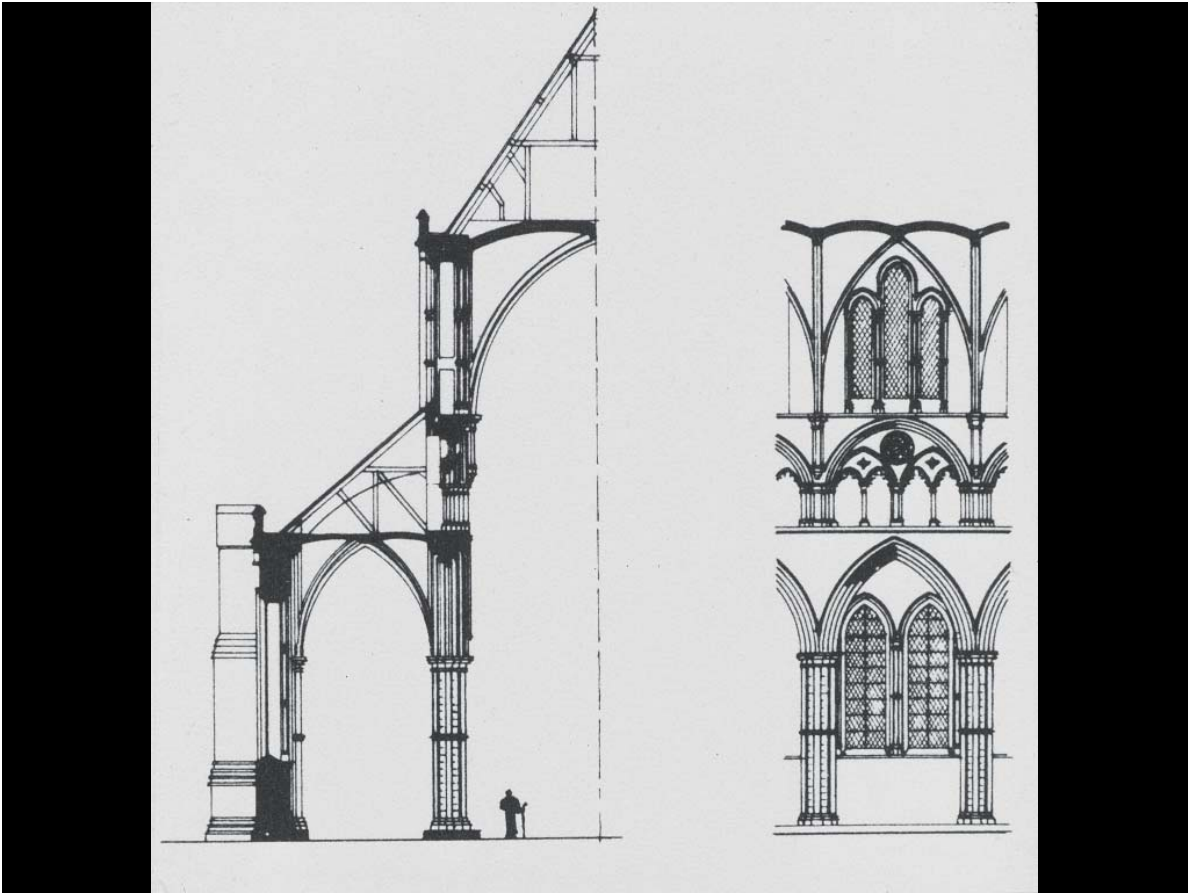


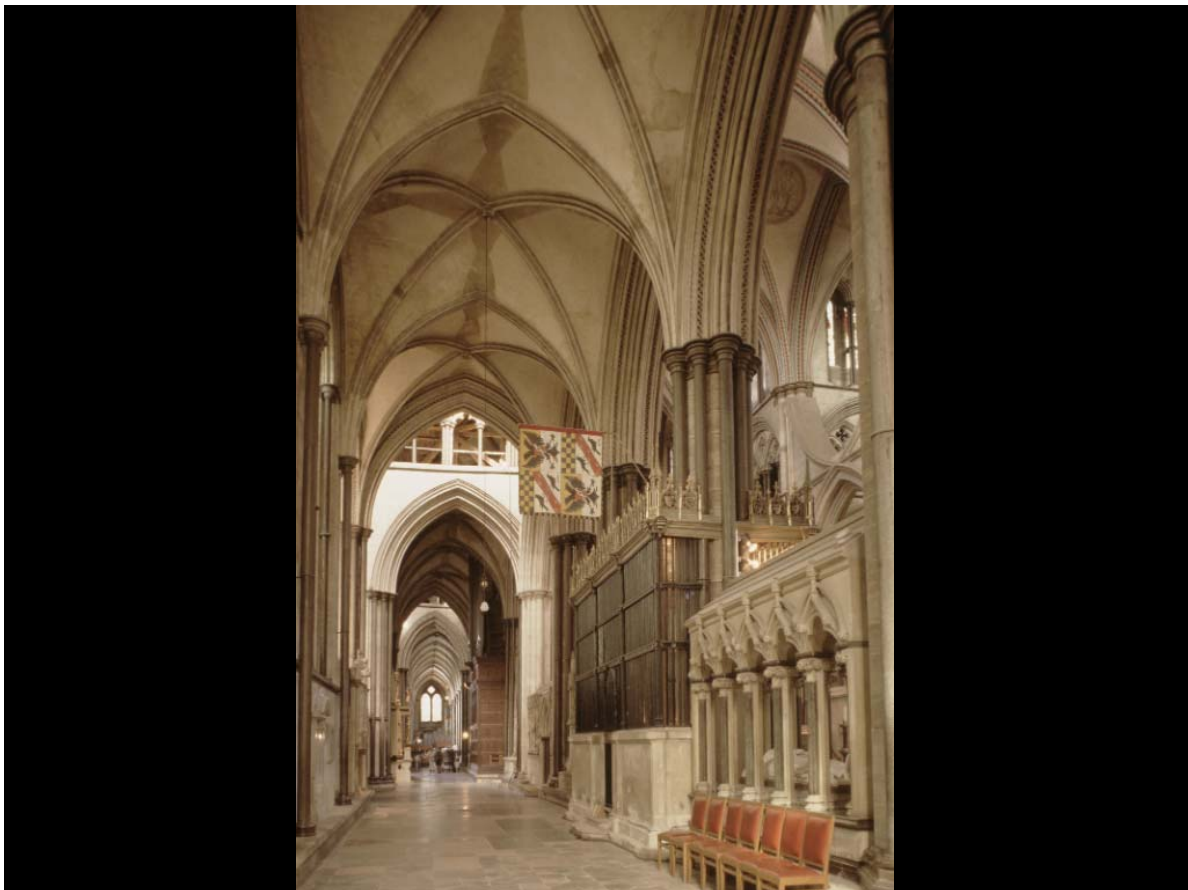
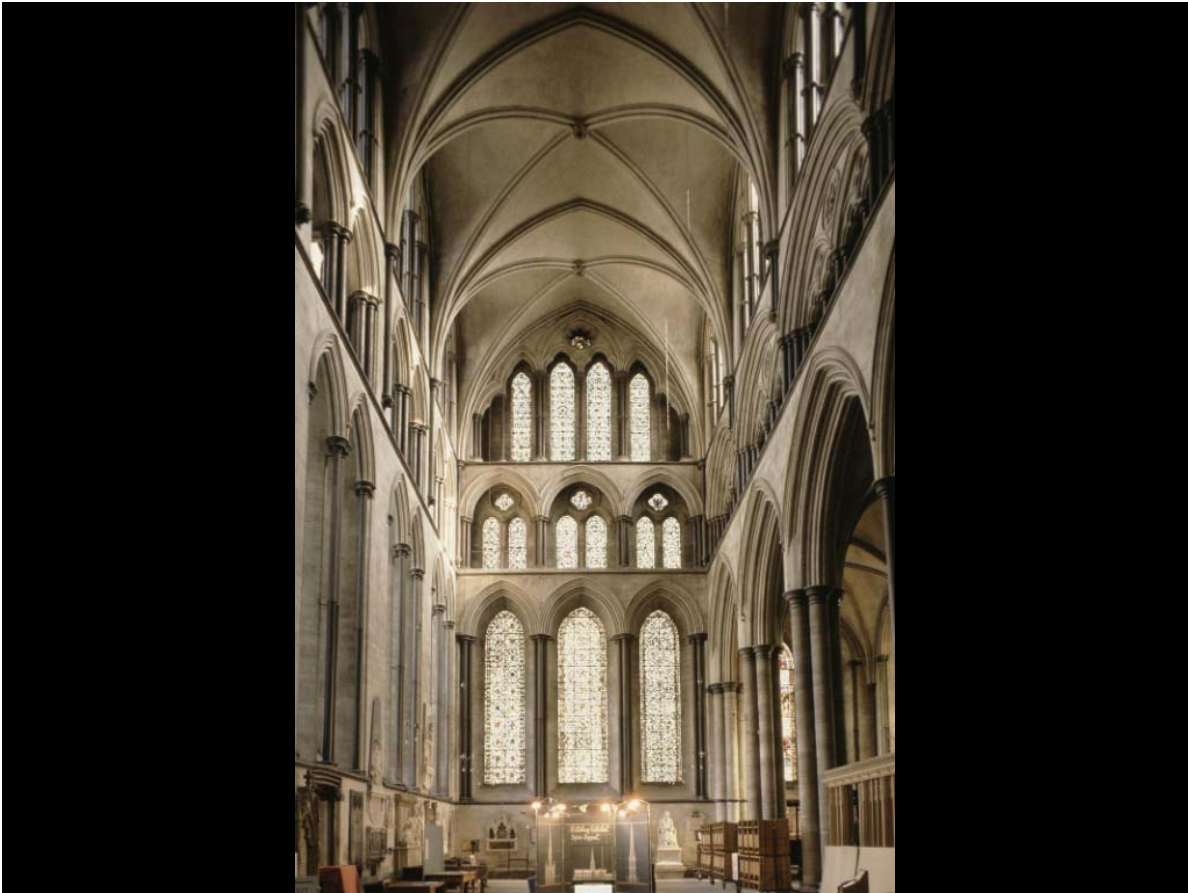


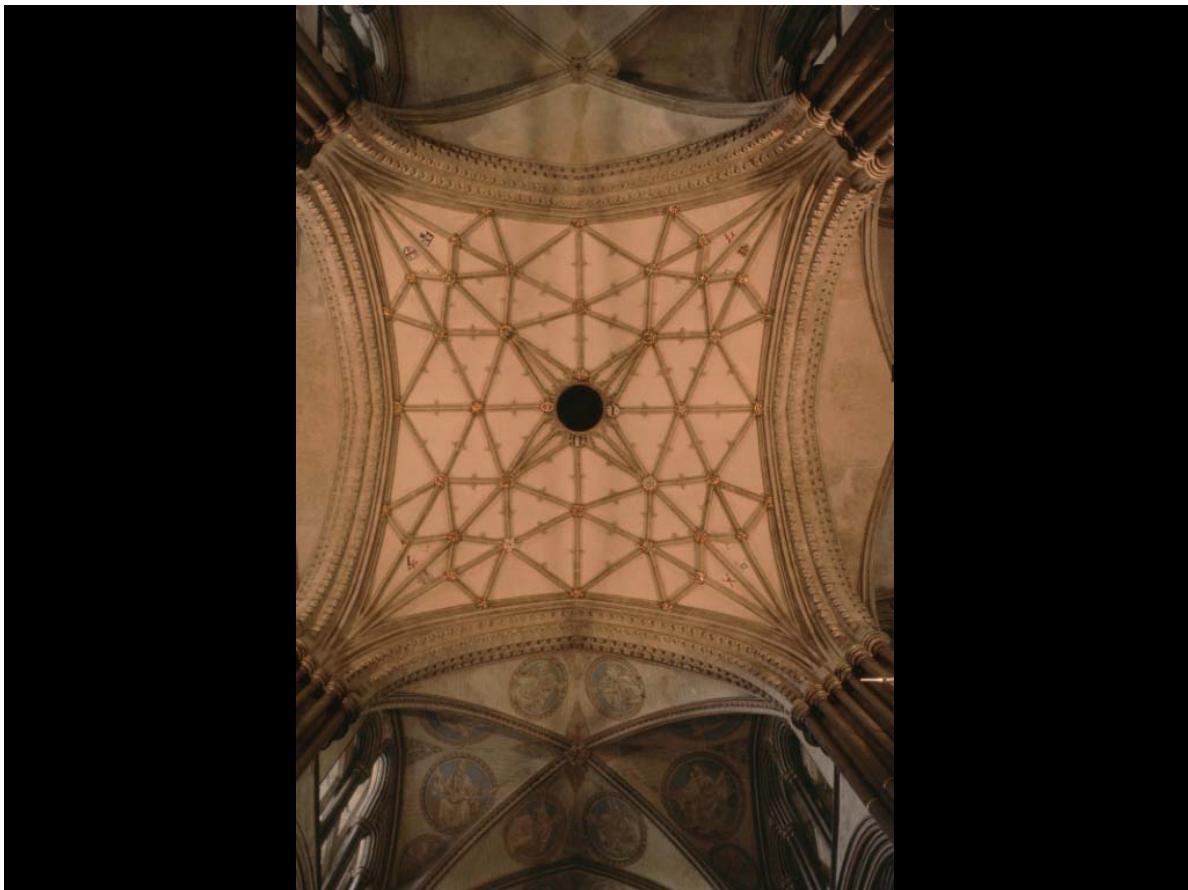
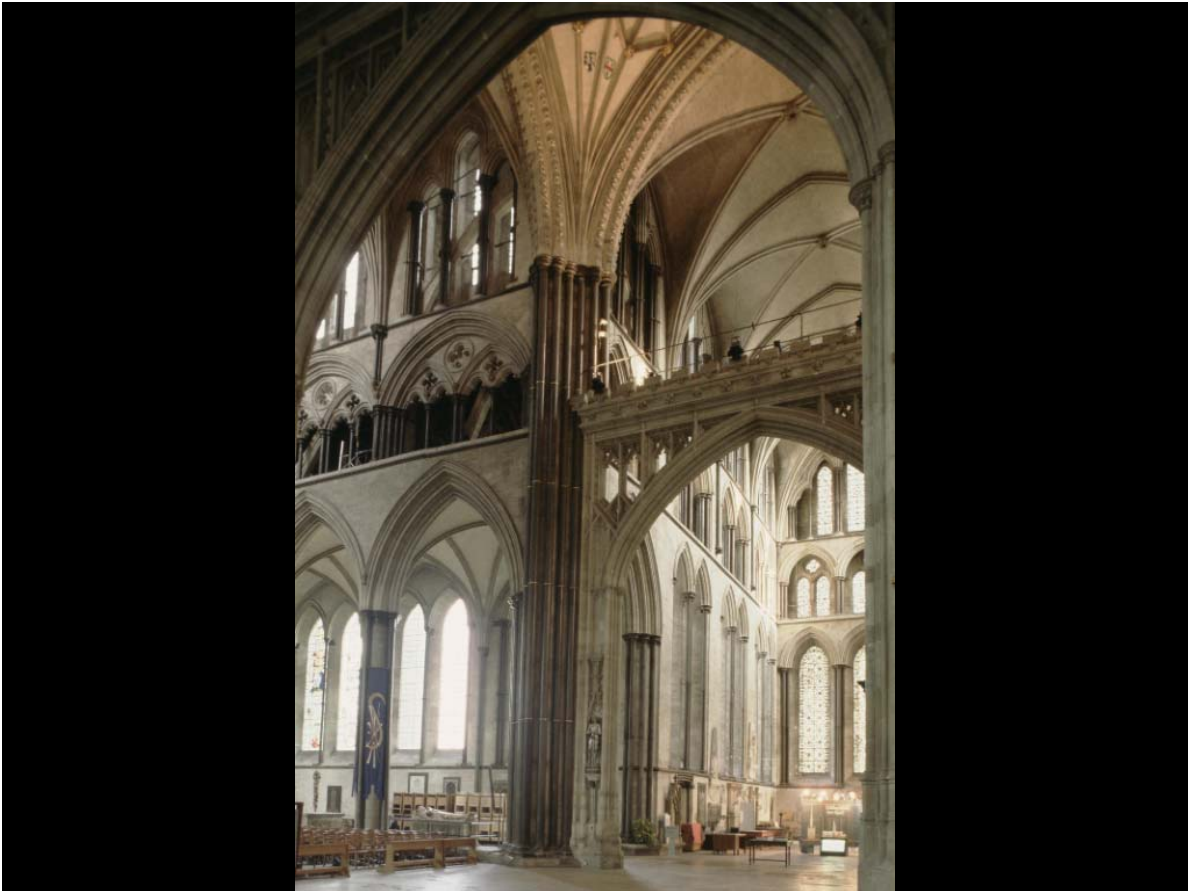


Salisbury Cathedral: 1220 - 1260

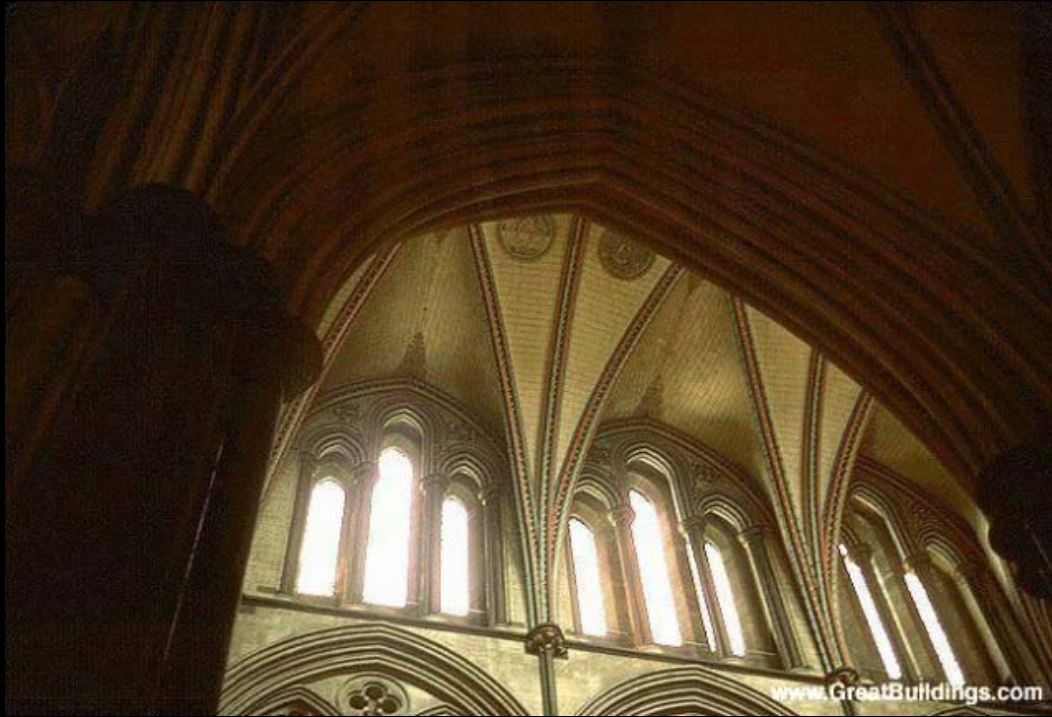








Salisbury Cathedral: 1220 - 1260



Italy:

Generally the character of the Architecture was still influenced by Rome

Internal tie beams were preferred to Flying Buttresses

Surface Decoration was preferred to structural articulation

Lower more horizontal manner

Flat pitched roofs

Small windows without tracery

Cathedral

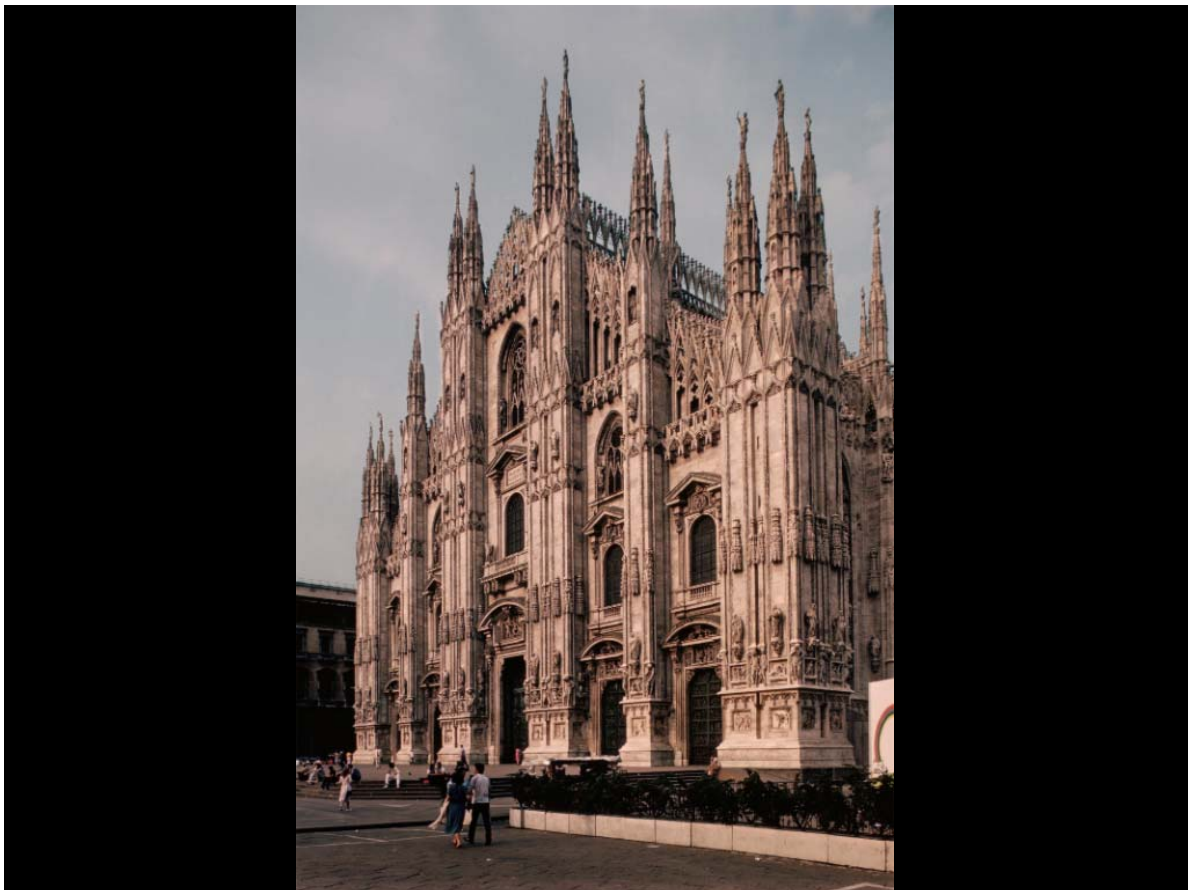
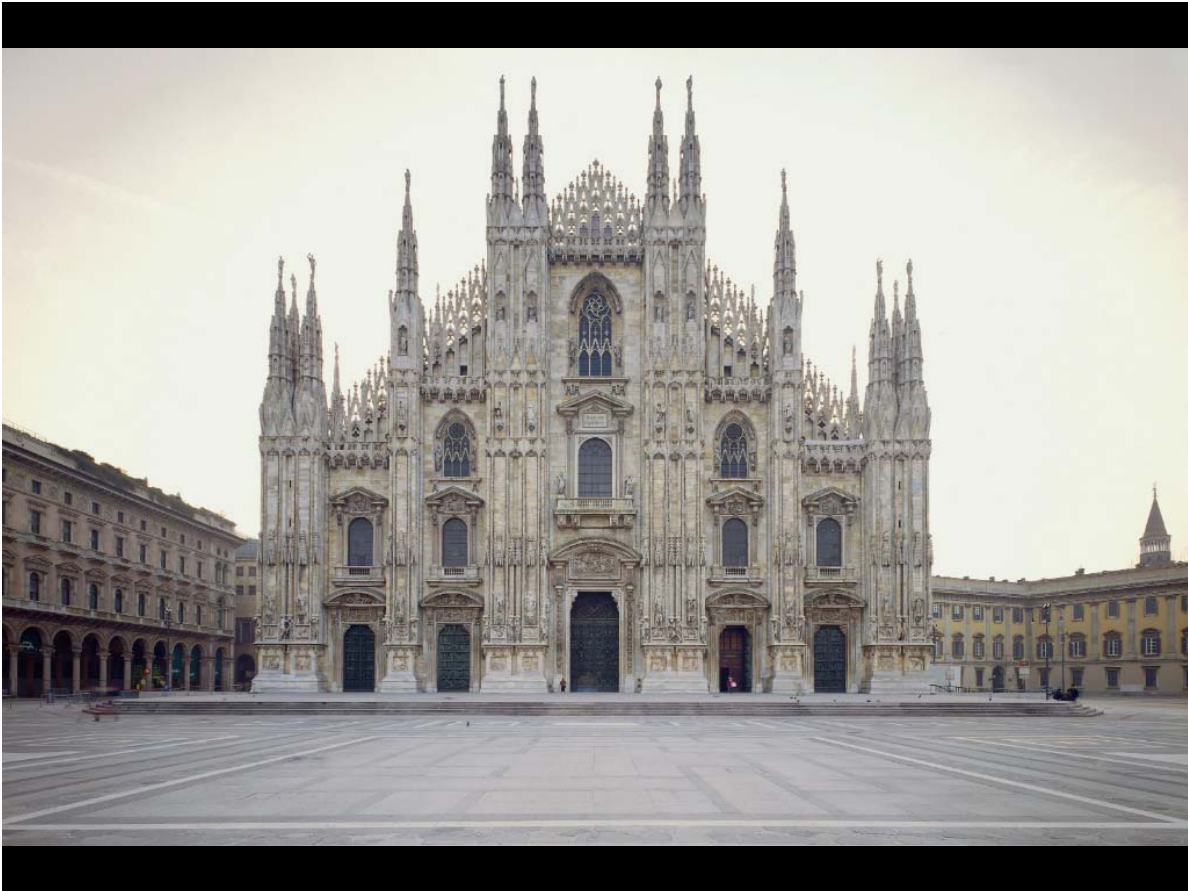
Milan: Begun at the end of the 13th Century

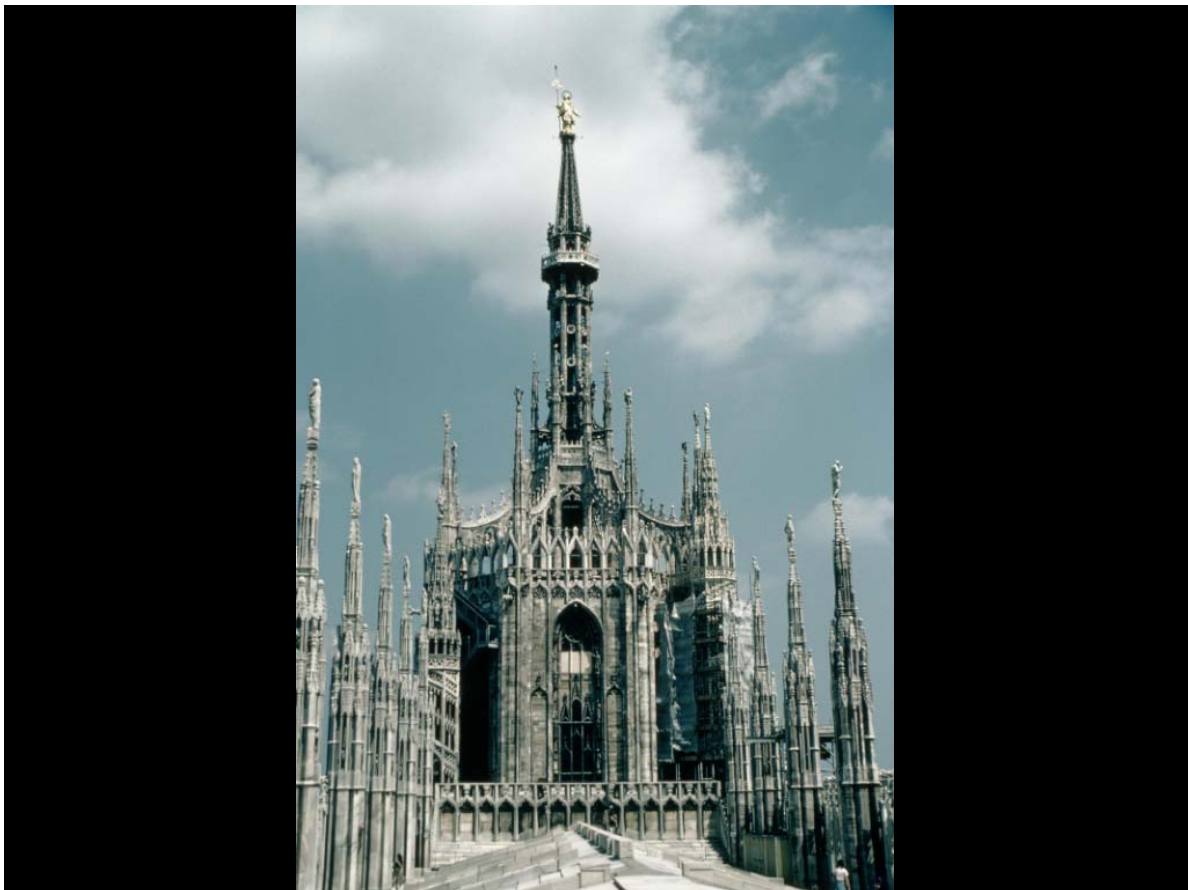
Extremely lofty – rising 150' at the nave and 100' at the side aisles

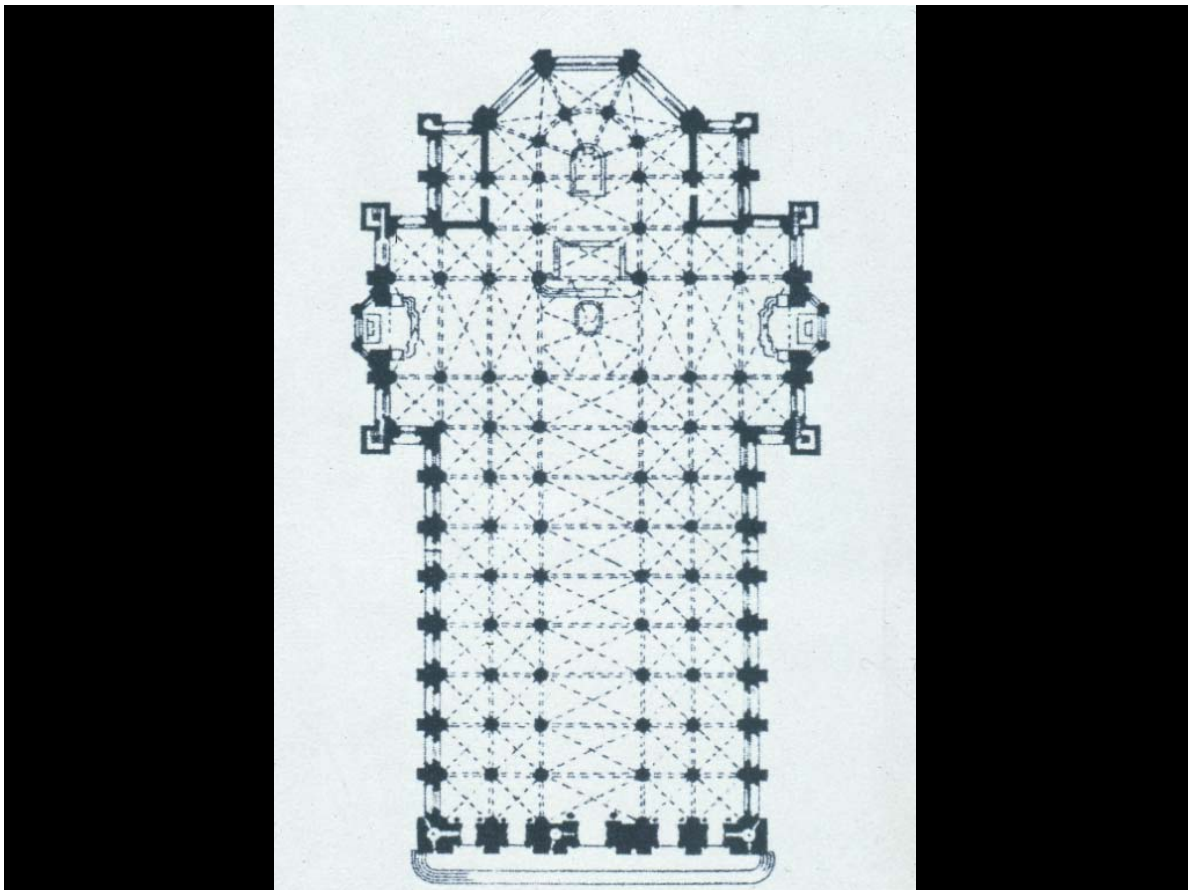
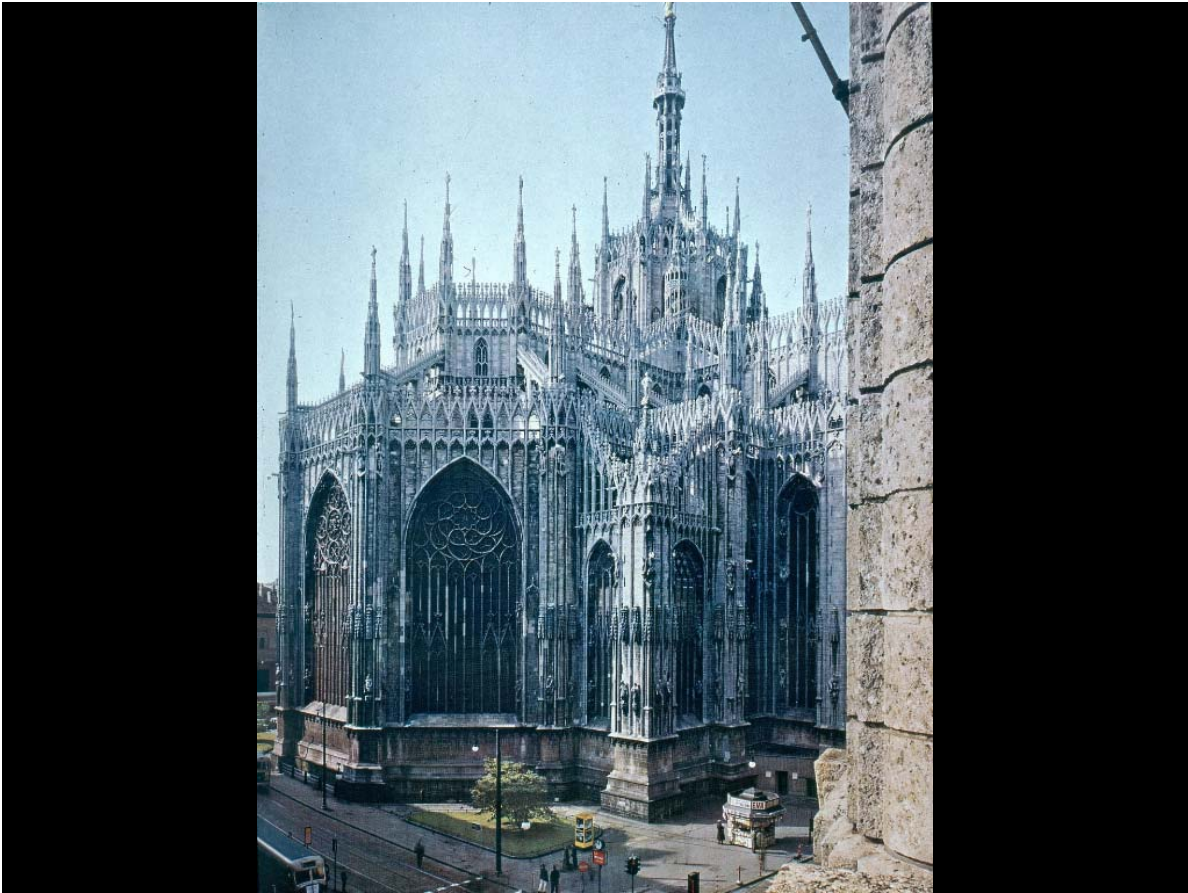
Known as "Church of the Hundred Spires"

Over 6000 individual sculptures









Doges Palace (Venice): Begun at the end of the
13th Century
Lacy network of arcades and open stonework
Marks the highlight of Italian Gothic
Non-Ecclesiastical Building

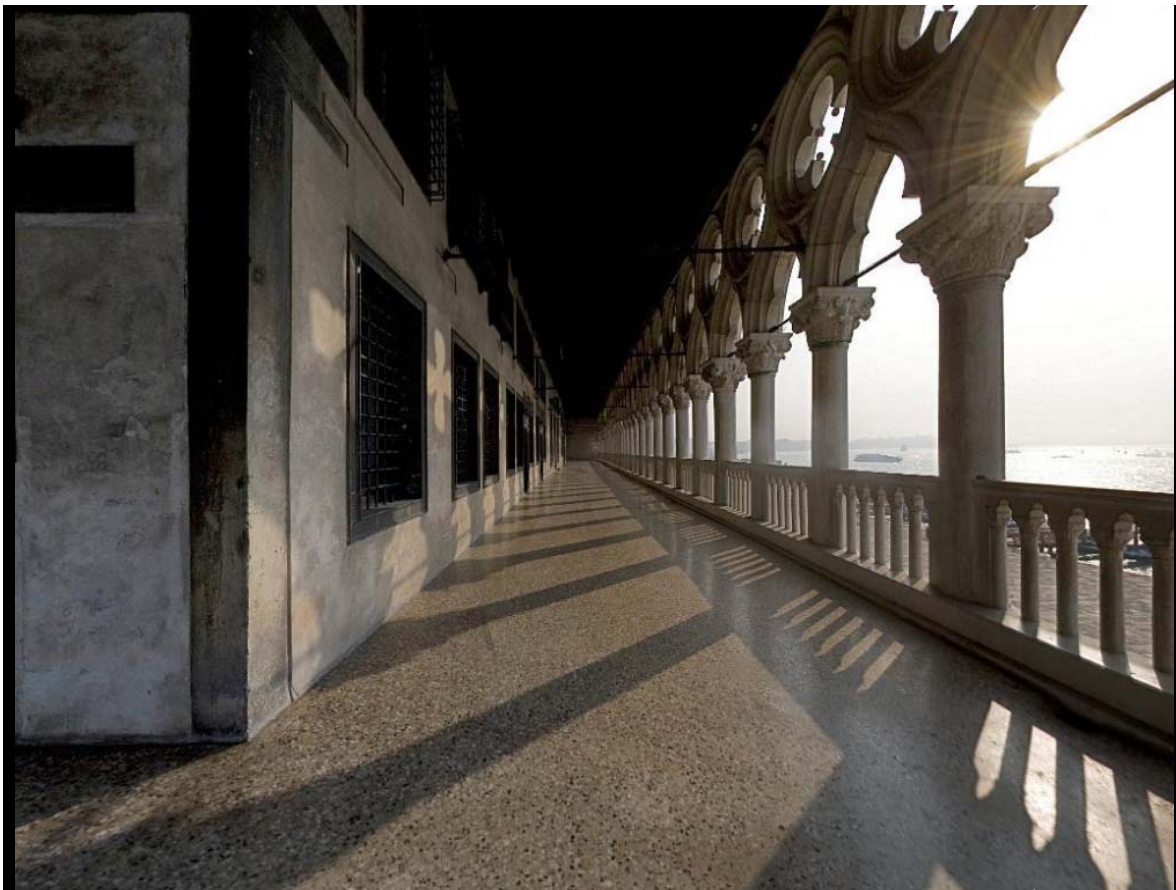














Doges Palace

(Venice): Begun at the end of the 13th Century

Designed by Giovanni and Bartolomeo Buon



www.GreatBuildings.com

Doges Palace (Venice): Begun at the end of the 13th Century



King's College Chapel, Cambridge, England: 1466-1515



Late Gothic Architecture: More geometric and machine-like than the more organic earlier Gothic works

