

GOTHIC ARCHITECTURE

ANATOMY OF FORM

Week 3

Early English period: 1175-1275

GOTHIC

- **Cathedral and Religious Buildings in Wales, the Marches and the South West from 1066 - 1500**

1066-1175 (Norman Romanesque Style)

- **Winchester Transept c1080**
- **Hereford South Transept c1100**
- **Gloucester Nave c1120**
- **Tewkesbury Tower c1150**

⦿ Later medieval dioceses
in England and Wales



Winchester Transept c1080

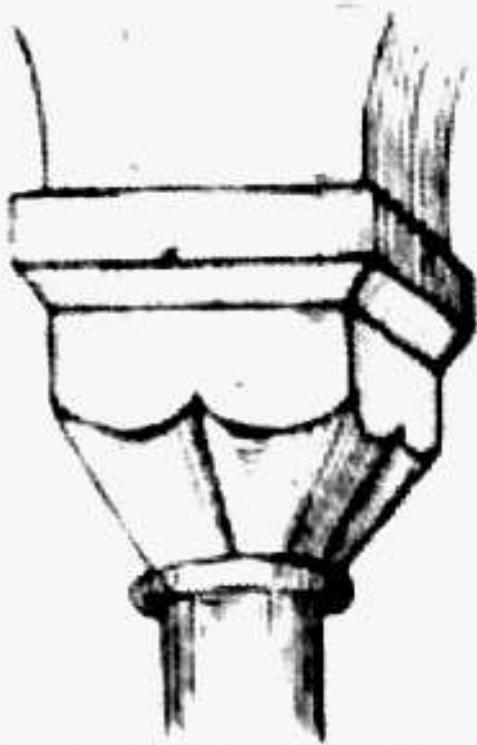


Hereford South Transept c1100

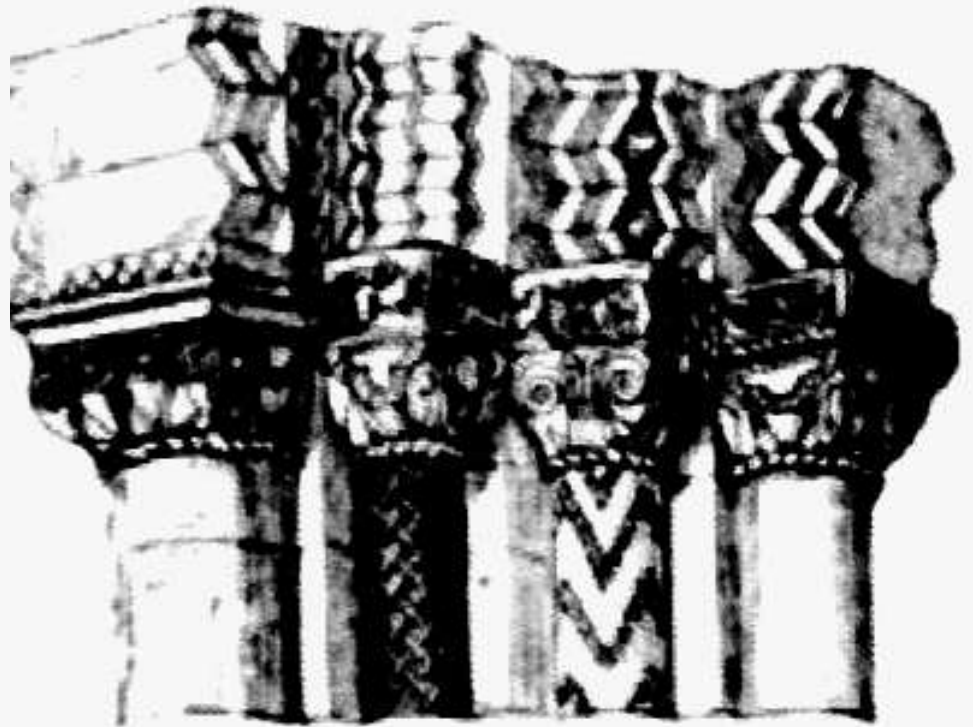


Gloucester Nave c1120

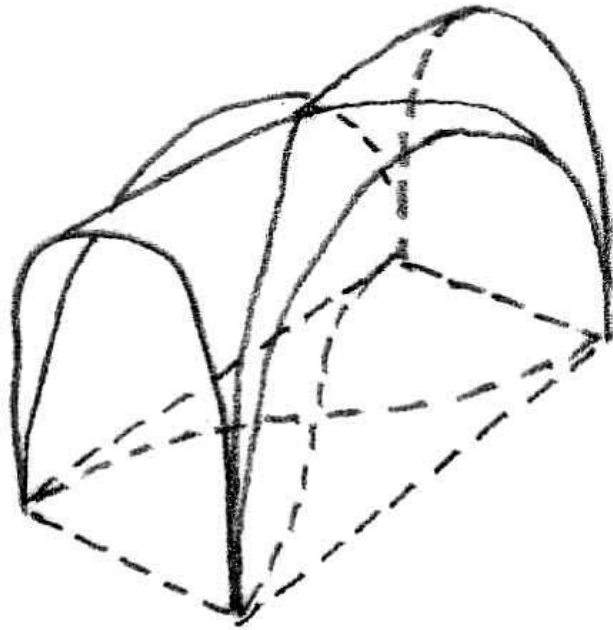




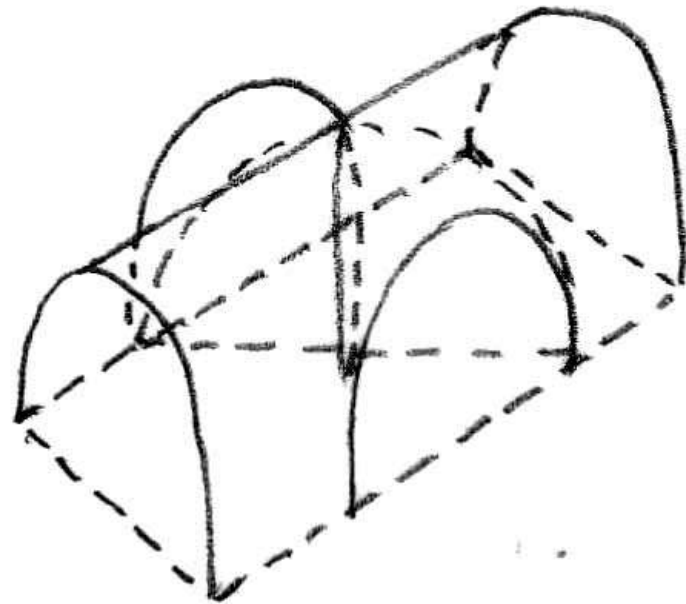
Early Norman Capital



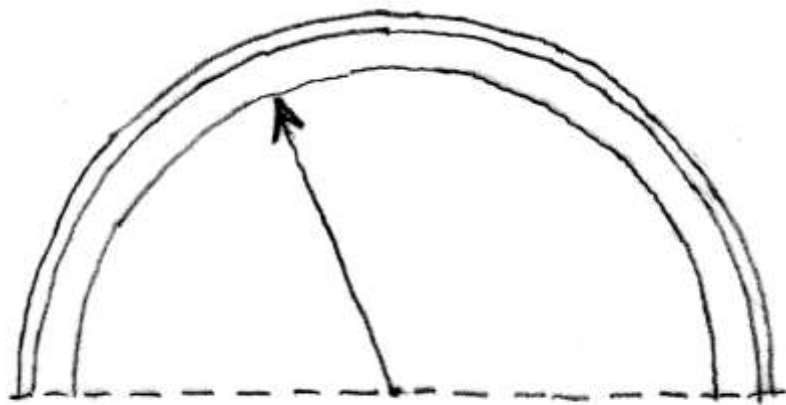
Late Norman Capital



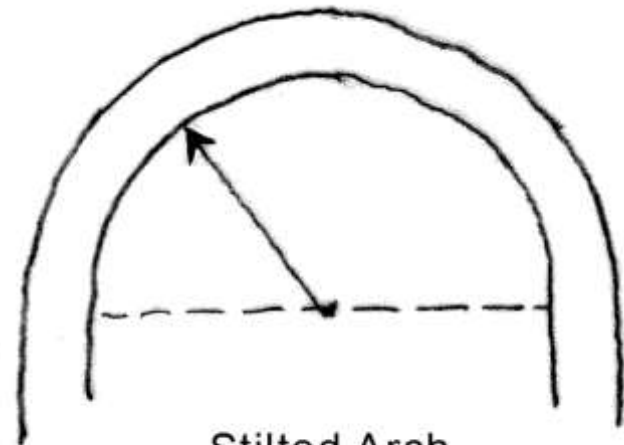
waggon-head vault



Barrel vault/ groin



Semi Circular Arch



Stilted Arch

Tewkesbury Tower c1150



GOTHIC AND MEDIEVAL

- So where did Gothic begin?
- At what point did all these influences, movements, become recognisably, distinctively Gothic?
- We can trace back to the Abbey of Saint Denis near Paris where a new choir built under the direction of Abbot Sugar completed in 1144 revolutionised architecture for the next 300 years.

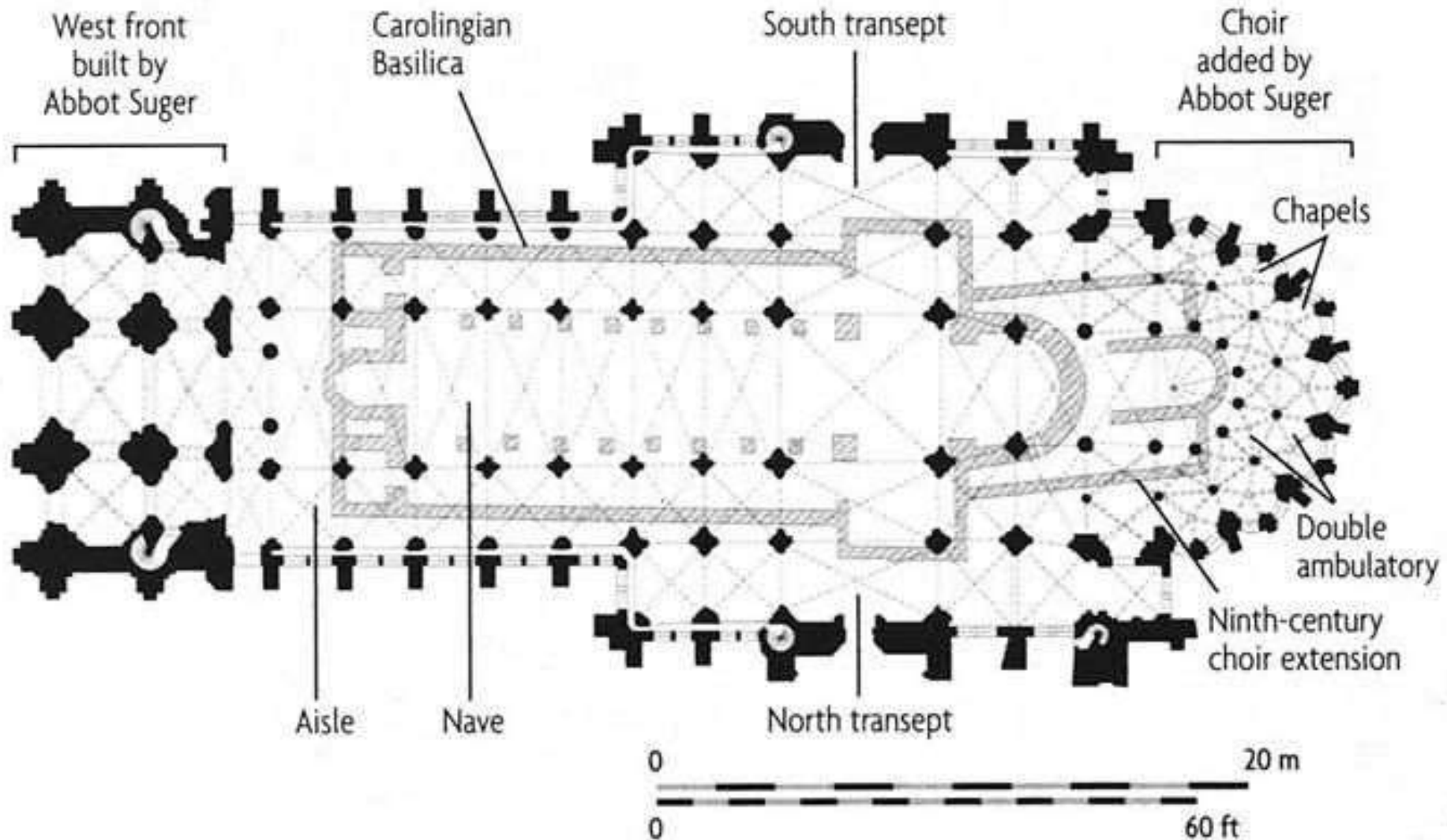
GOTHIC AND MEDIEVAL

- Before the term "Gothic" came into common use, it was known as the "French Style" (Opus Francigenum)
- The term "Early English" (short for Early English Gothic) applied to English 13th C architecture.

GOTHIC AND MEDIEVAL

- What features do we associate with Gothic Architecture?
 - The pointed Arch
 - The flying buttress
 - The ribbed vault
- 
- Great Mosque Cordoba 786 CE
- But we have seen that these were employed in various ways in the preceding Romanesque style too and didn't the pointed arch originate back with Islamic/ Byzantine Architecture?

St Denis, Paris, France 1144 CE



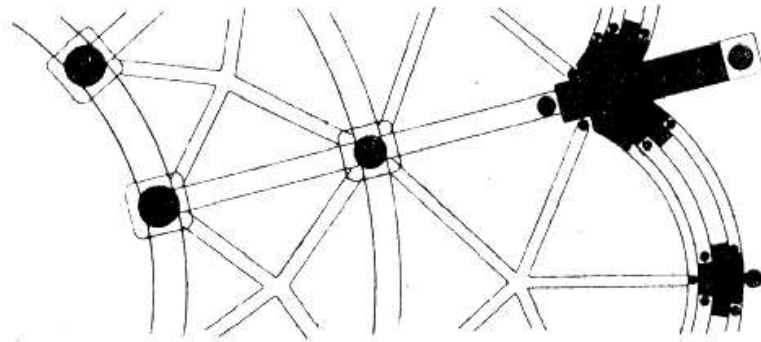
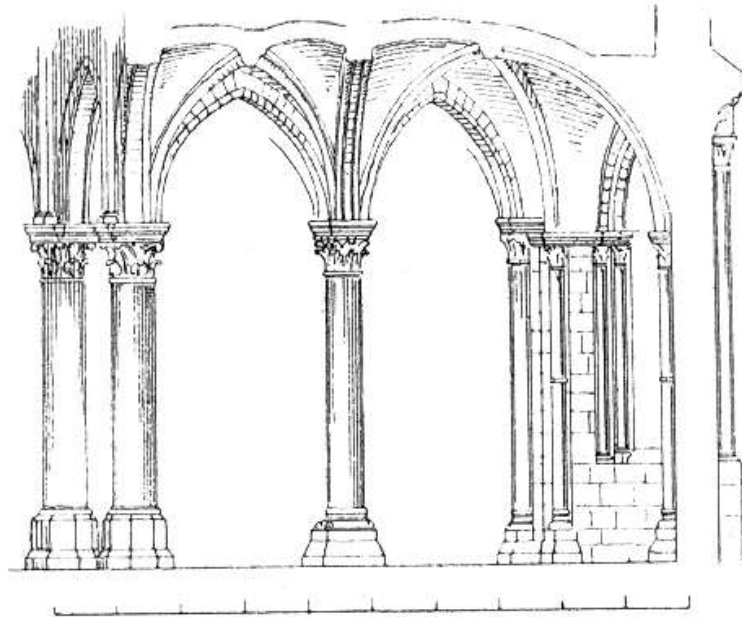
GOTHIC AND MEDIEVAL

- The difference now at St Denis, near Paris 1144 CE was how these key features combined to create an integral and coherent whole.

St Denis, Paris, France 1144 CE

- The choir, conforming in shape to the older crypt below, is generally considered to be the birthplace of Gothic architecture because of the innovative rib vaults resting on pointed arches in both the ambulatory and the chapels.
- Springing from slender columns in the ambulatory and from thin masonry walls framing the chapels, these light vaults allow for the elimination of the walls between the chapels as well as lessening the need for such weight-bearing outer walls so that they can now be filled with stained glass.

GOTHIC



5. S. DENIS: CHOR.

St Denis, Paris, France 1144 CE



St Denis, Paris, France 1144 CE

- **Ribbed vaulting**
- Easier to construct than the barrel or groin vault, the ribbed vault was also stronger and more flexible.
- The ribbed vault has crossed or diagonal arches under its groins which form the armature or skeletal framework for constructing the vault.
- Gothic vaults usually have more thinly vaulted webs between the arches than earlier Romanesque vaults.

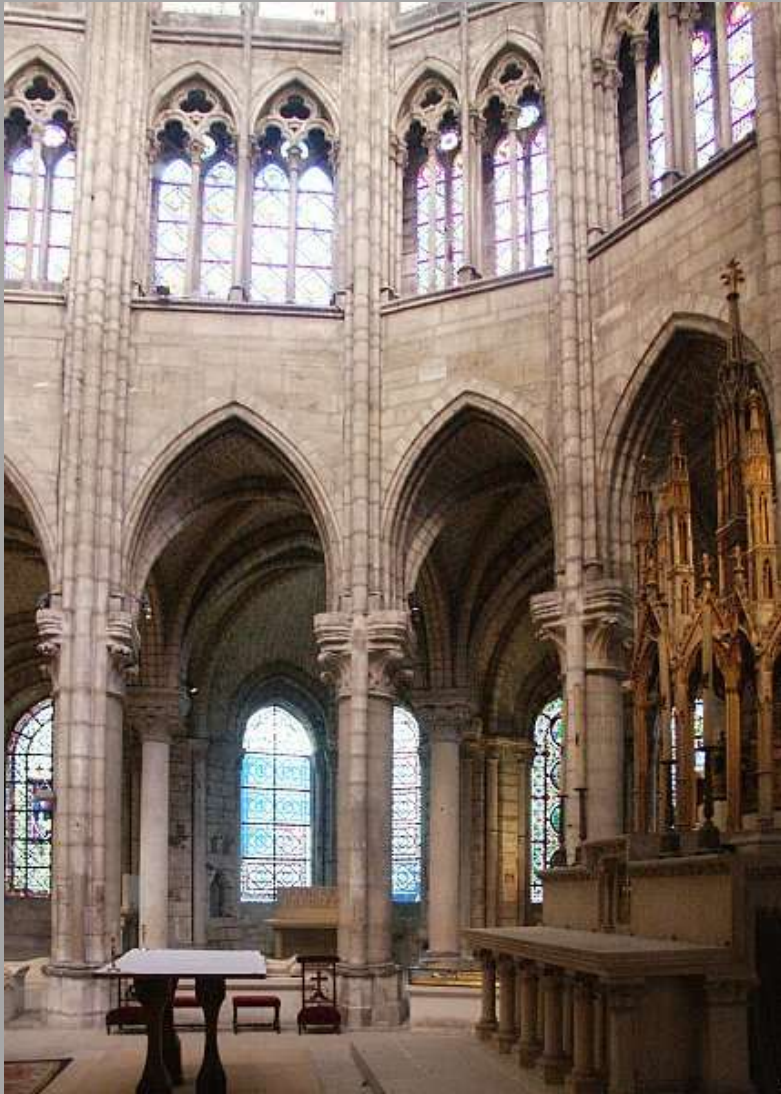
St Denis, Paris, France 1144 CE

- **Elegant monolithic columns support the ribbed vault as if it were weightless**
- The great advantage of the ribbed or arched vault is its flexibility which allows for the vaulting of compartments of different shapes. This is important especially in choirs and ambulatories where the aisles curve around the eastern end.
- Pointed arches also can be different widths to span different areas yet they still have the same height because the pointed arch can be made narrower or wider to fit the width at the base.
- Pointed arches also direct the weight of the vaults downward more than semi-circular vaults do and thus require less buttressing, which also allows for opening up the walls below with large windows. In addition, pointed arches appear taller than semi-circular arches because they lead the eye upward.

St Denis, Paris, France 1144 CE



St Denis, Paris, France 1144 CE



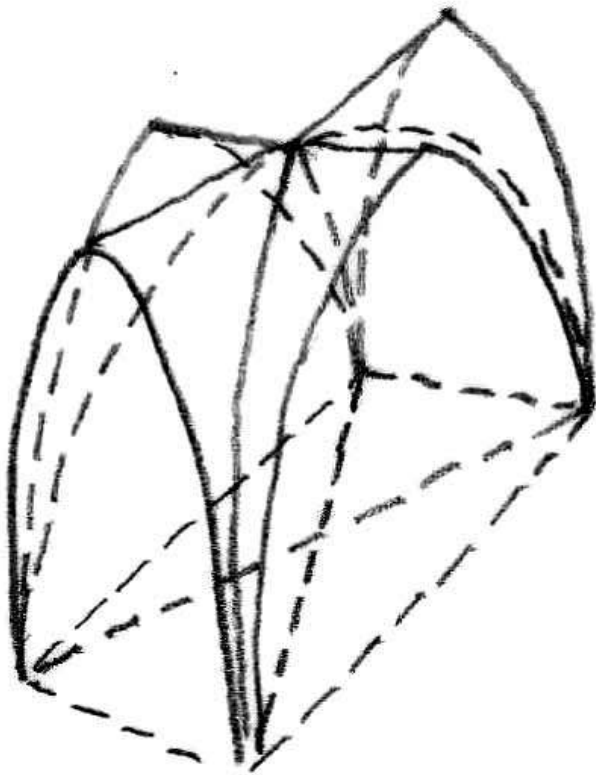
St Denis, Paris, France 1144 CE



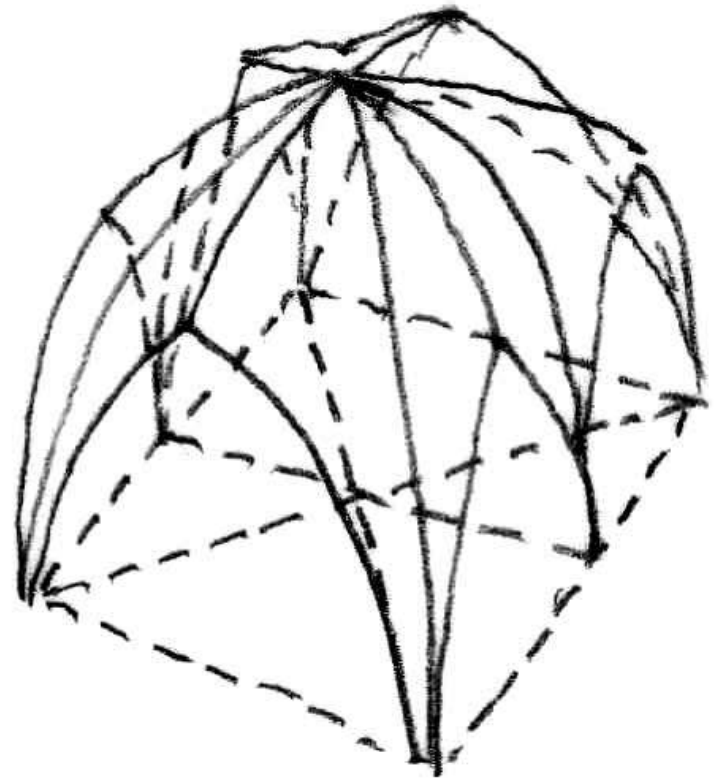
GOTHIC

- The pointed arch provided a number of structural advantages:
- Allowed cathedrals to be built higher
- Allowed the creation of oblong bays/ stronger than similar sized square bays determined by the round arch of the Romanesque
- Vaults were carried on ribs of projecting strips of masonry that supported the non-structural web or infill.

GOTHIC VAULTS



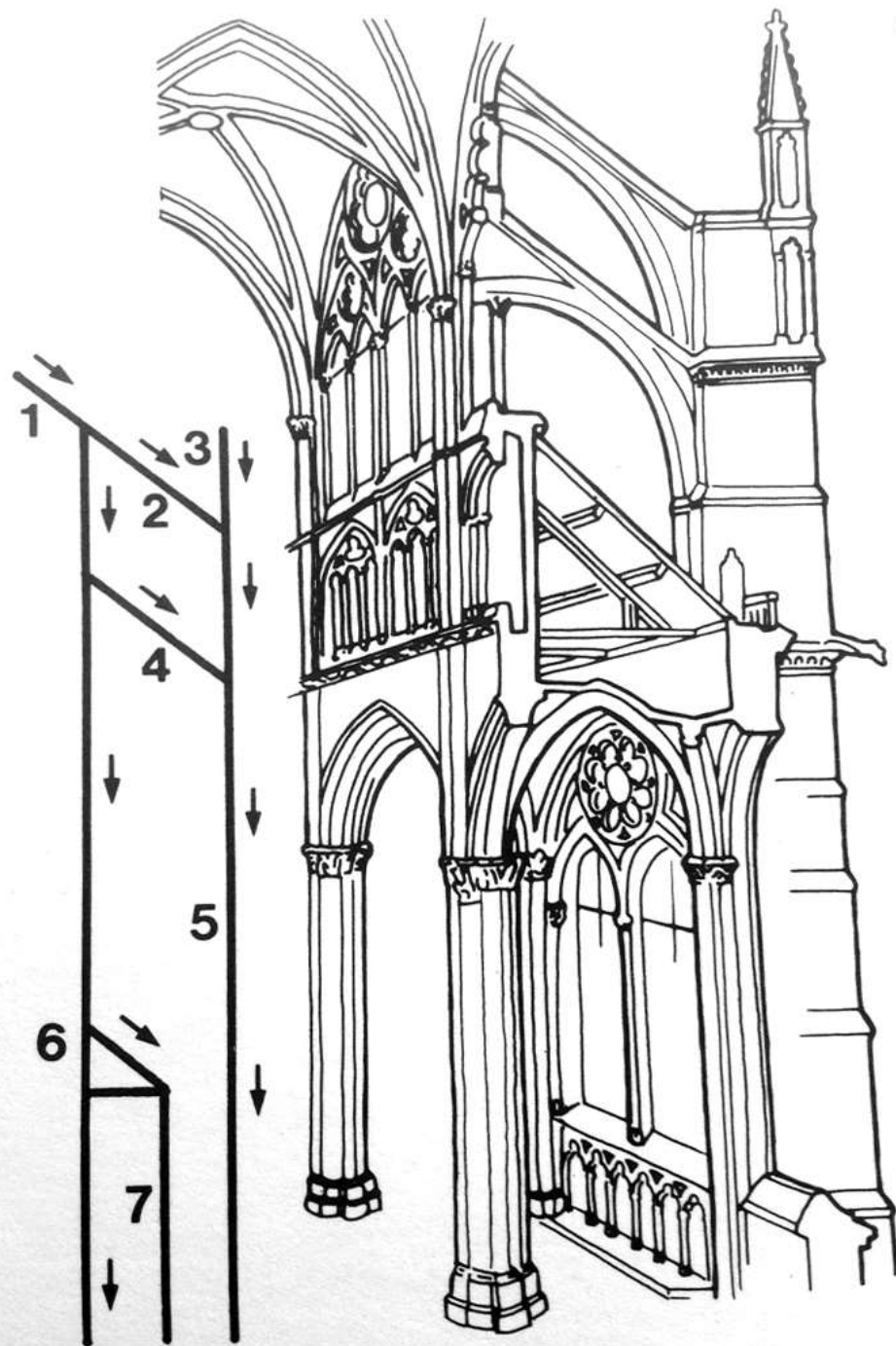
Pointed arch / groin



Sexpartite Gothic Vault

GOTHIC

- Flying buttresses - effectively half arch structures providing lateral support to transfer weight safely from the nave vault to the ground.
- Allowed verticality which the Romanesque style could not.
- Use of piers as opposed to thick masonry walls/more structurally efficient as load-bearing elements/allowed opening of interior space.



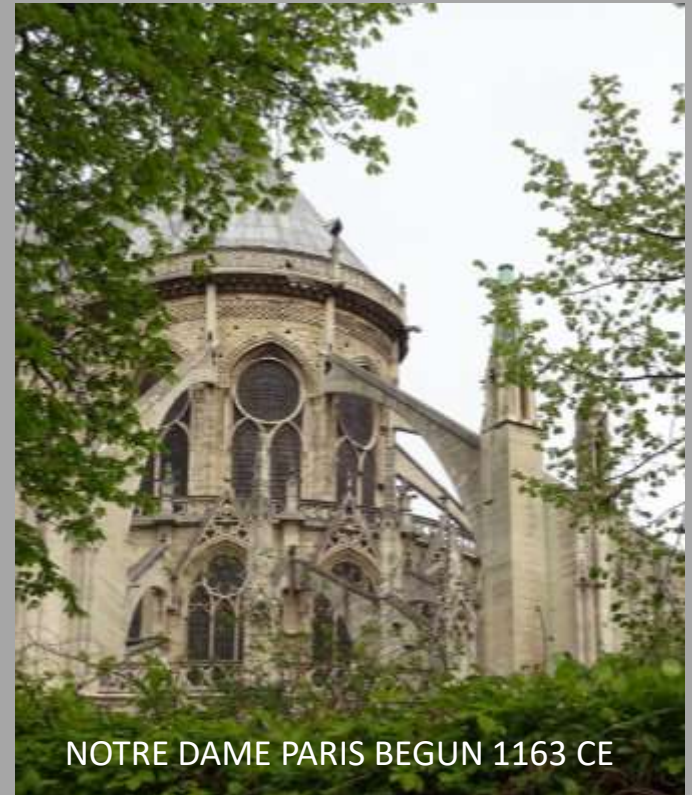
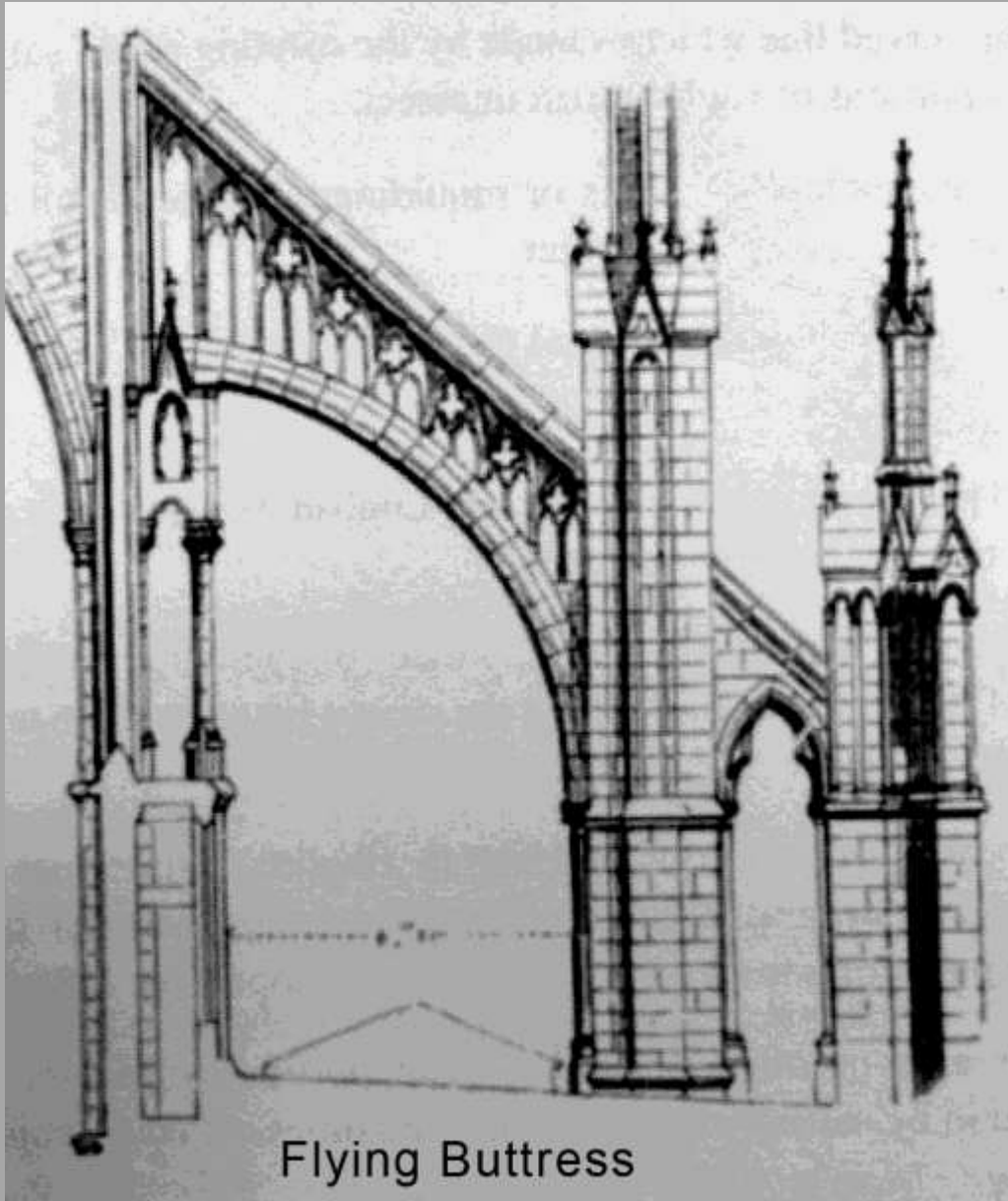
GOTHIC FLYING BUTTRESS

GOTHIC FLYING BUTTRESS



NOTRE DAME PARIS BEGUN 1163 CE

GOTHIC FLYING BUTTRESS



GOTHIC

- Ultimately it created a feeling of lightness within the structure.
- And more importantly allowed for light to enter the building via the stained-glass windows. It coincided with the development of glass technology.

GOTHIC

- The emerging plan forms supported scholastic thought-medieval theology and philosophy.
- An example was Summa Theologica 1265 to 74 by Thomas Aquinas where he sought to blend the doctrines of church with ancient Greek and Roman philosophy.
- At this time the church had a growing Authority, power and influence.
- And this was evident in relating the Christian story to a largely illiterate laity.
- It was perceived that Gothic churches straddled two worlds between heaven and earth.

GOTHIC

GOTHIC BUILDING PLANS

The main axis of the building was always east and west, the principal entrance being at the west end, usually under a grand porch or portal, and the high altar stood at the east end.

The plan (or main floor) of the building almost always displays the form of a cross.

The stem of the cross is the part from the west entrance to the crossing, and is called the nave.

The arms of the cross are called transepts, and point respectively north and south.

GOTHIC

GOTHIC BUILDING PLANS

The transepts crossing with the nave is often called the intersection. The remaining arm, which prolongs the stem eastwards, is ordinarily called the choir, but sometimes the presbytery, and sometimes the chancel.

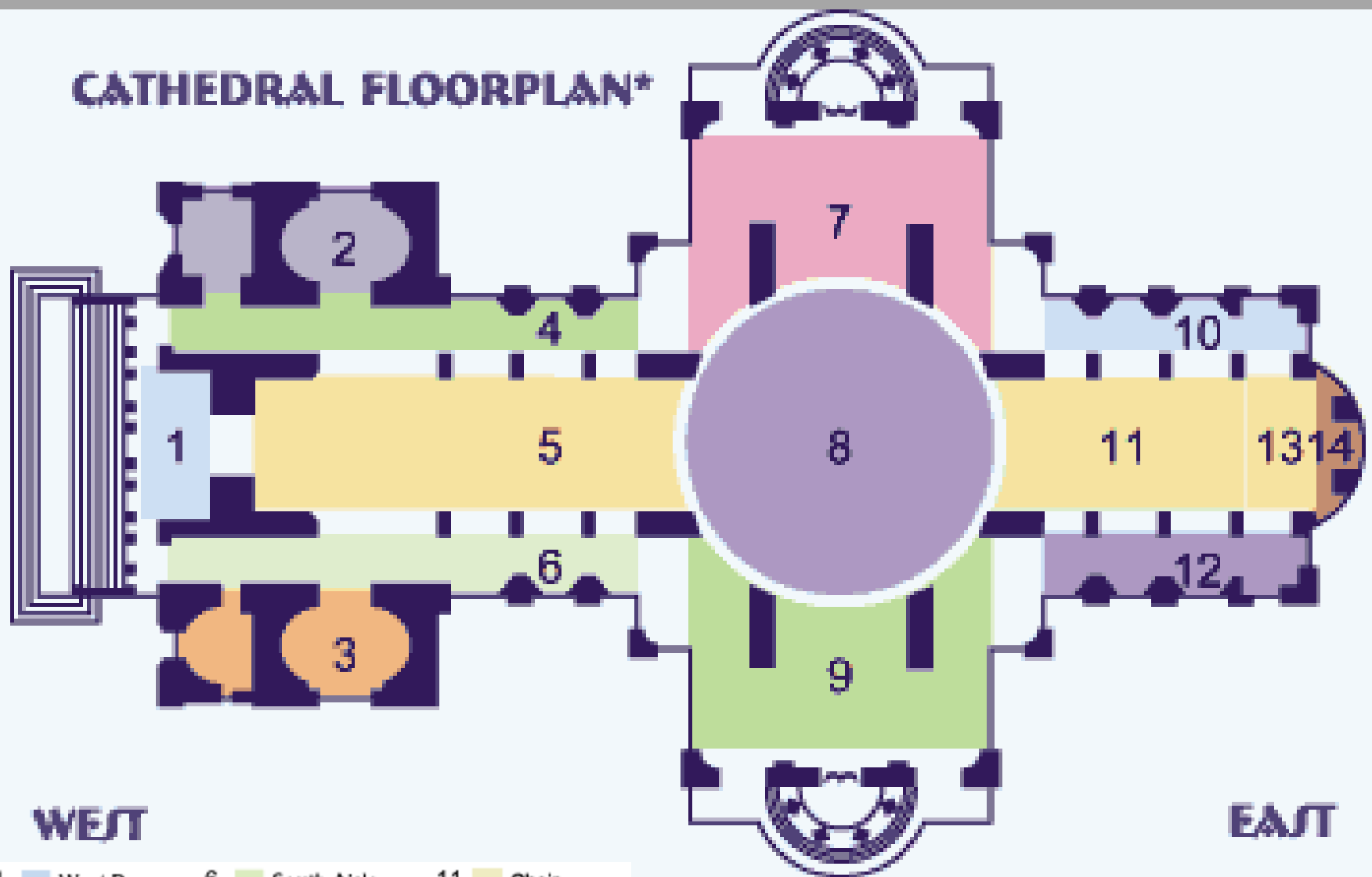
All these names really refer to the position of the internal fittings of the church, and it is often more accurate simply to employ the term eastern arm for this portion of a church.

GOTHIC

GOTHIC BUILDING PLANS

- The nave is flanked by two avenues running parallel to it, narrower and lower than itself, called aisles. They are separated from it by rows of columns or piers, connected together by arches.
- Thus the nave has an arcade on each side of it, and each aisle has an arcade on one side, and a main external wall on the other. The aisle walls are usually pierced by windows.

CATHEDRAL FLOORPLAN*



- | | | | | | |
|---|-------------|----|----------------|----|--------------|
| 1 | West Door | 6 | South Aisle | 11 | Choir |
| 2 | Chapel | 7 | North Transept | 12 | Dean's Aisle |
| 3 | Chapel | 8 | Dome | 13 | High Altar |
| 4 | North Aisle | 9 | South Transept | 14 | Chapel |
| 5 | Nave | 10 | Aisle | | |

GOTHIC ARCHITECTURE IN GREAT BRITAIN

- ENGLISH Gothic architecture has been usually subdivided into three periods or stages of advancement,
- the early stage known as '**Early English**', or sometimes as Lancet, occupying the thirteenth century and something more;
- the middle stage, known as '**Decorated**', occupying most of the fourteenth century; and
- the latest stage, known as '**Perpendicular**', occupying the fifteenth century and part of the sixteenth.

GOTHIC ARCHITECTURE IN GREAT BRITAIN

- The duration of each of these coincides approximately with the century.
- The transition from each phase to the next taking place chiefly in the last quarter of the century.
- Adding the periods of the English types of round arched Architecture, we obtain the following table:—
- Up to 1066 CE or up to middle of 11th C - **Saxon**
- 1066 to 1189 CE or up to end of 12th C - **Norman**
- 1189 to 1307 CE or up to end of 13th C - **Early English**
- 1307 to 1377 CE or up to end of 14th C - **Decorated**
- 1377 to 1546 CE or up to middle of 16th C - **Perpendicular**

⛶ Later medieval dioceses
in England and Wales

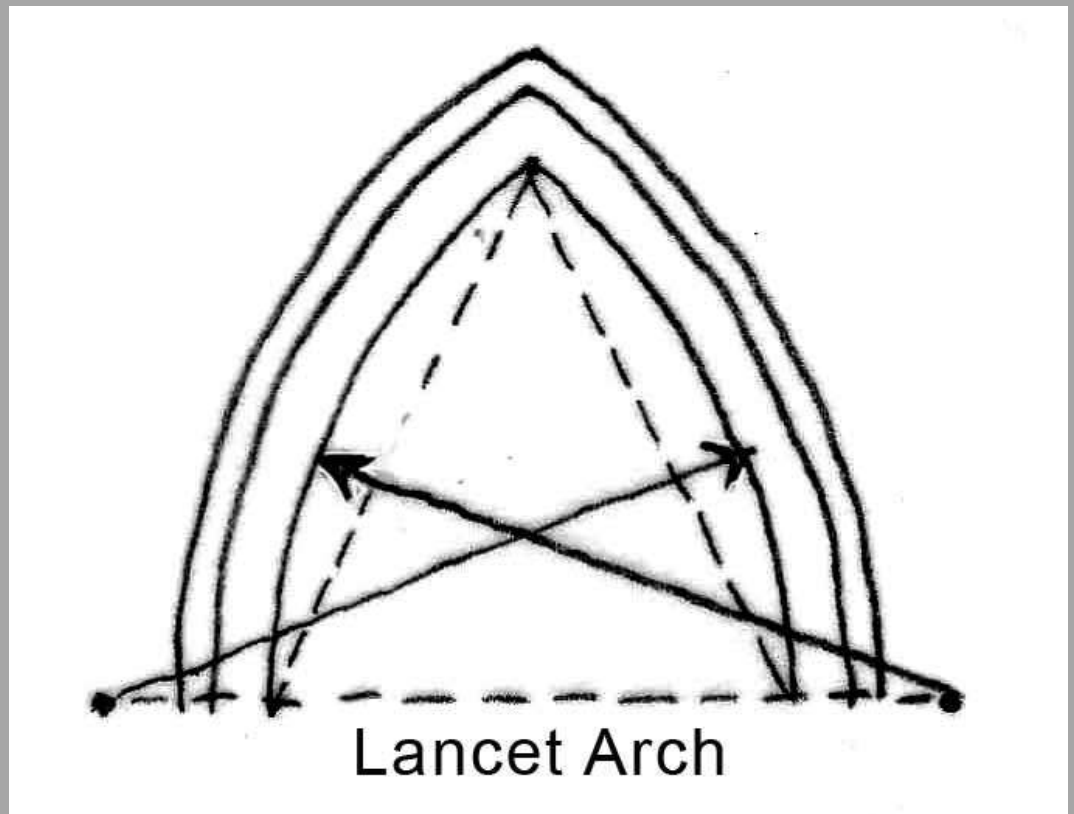


Early English period: 1175-1275

- **Wells Cathedral, North Porch 1215 CE**
- **Wells Cathedral, Nave 1220 CE**
- **Hereford Cathedral, Lady Chapel 1226CE**
- **Tintern Abbey 1250 CE**
- **Salisbury Cathedral 1260 CE**

Early English period: 1175-1275

- Early English or sometimes known as Lancet
- Lancet is derived from the shape of ordinary window heads, which resemble the point of a lancet in outline.

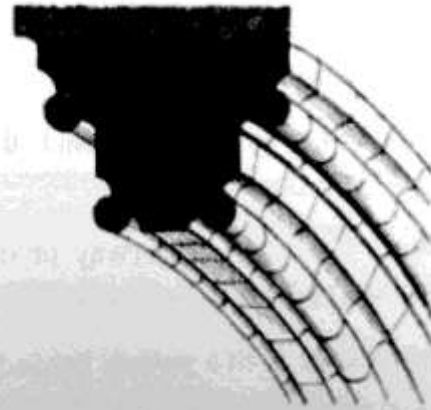


Early English period: 1175-1275

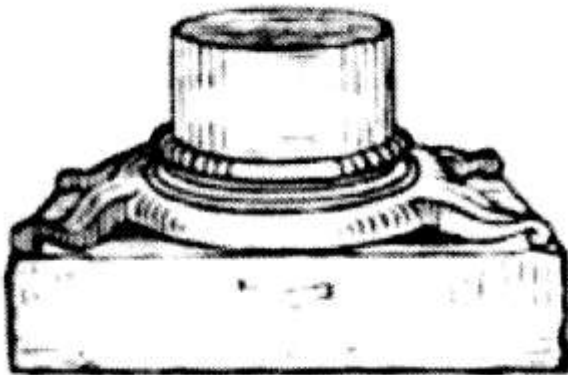
- 1189 CE *Transition*
- General proportions more slender, greater height of walls and columns.
- Lancet arches, pointed and richly moulded.
- Triforium arches and arcades open with trefoiled heads.
- Piers slender composed of central shaft with several smaller ones almost quite detached.
- Capitals concave in outline, moulded or carved with conventional foliage delicately executed and arranged vertically.



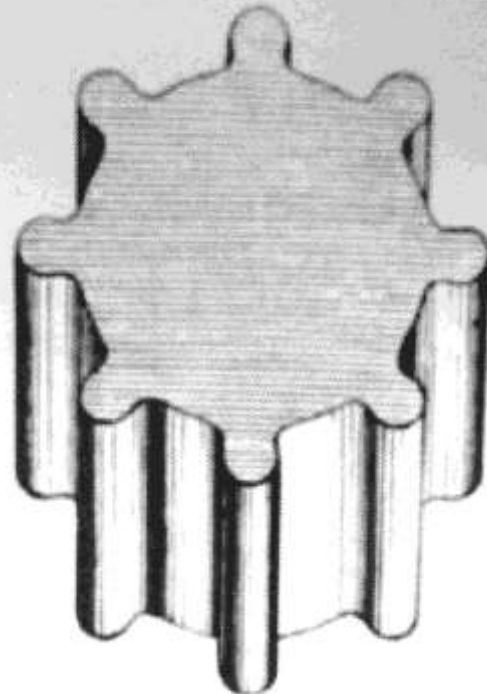
Early English Capital



Arch Moulding 12th C



Base of Early English Shaft



Early English Pier

Wells Cathedral, Nave 1220 CE

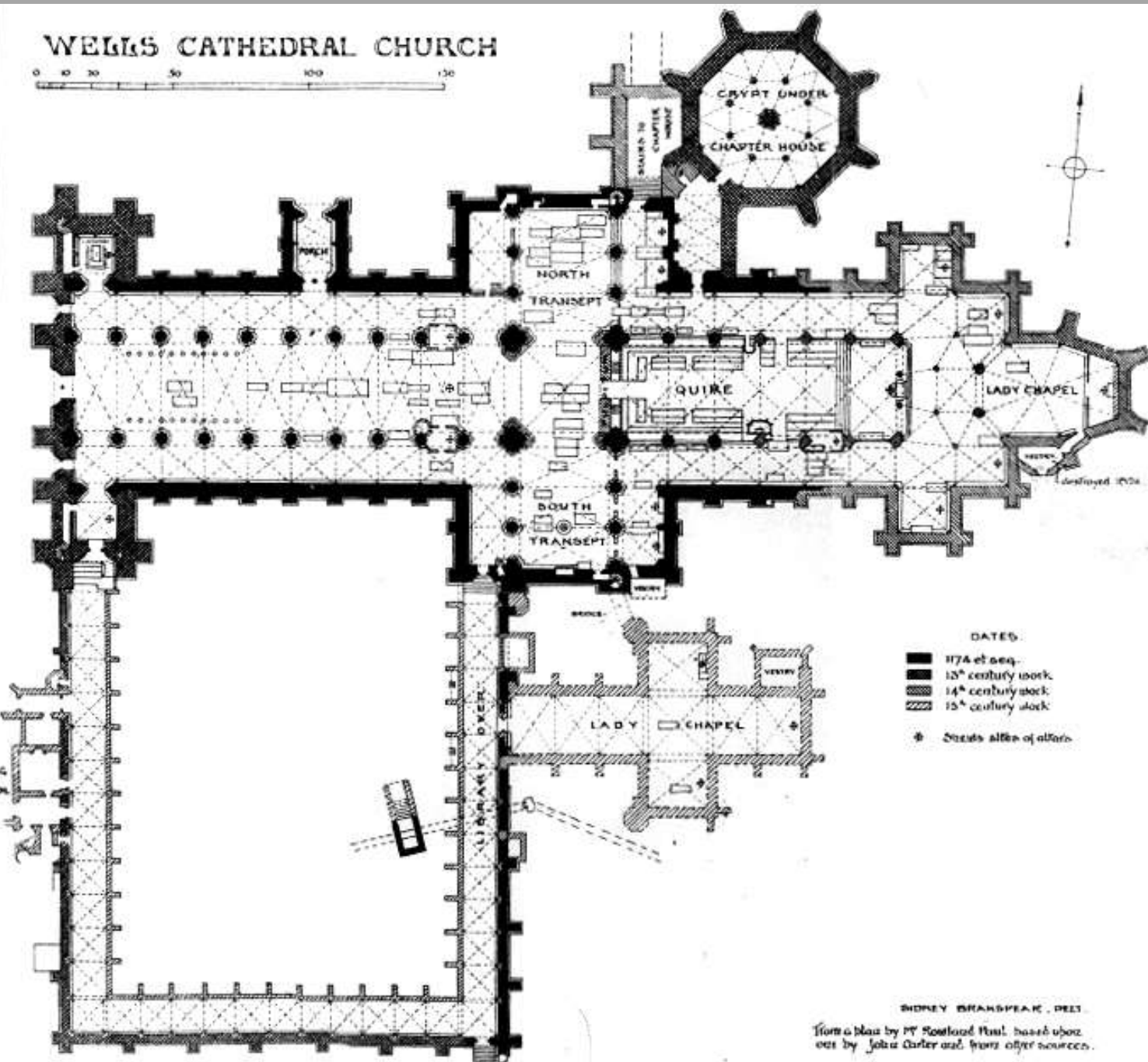


Wells Cathedral, Somerset



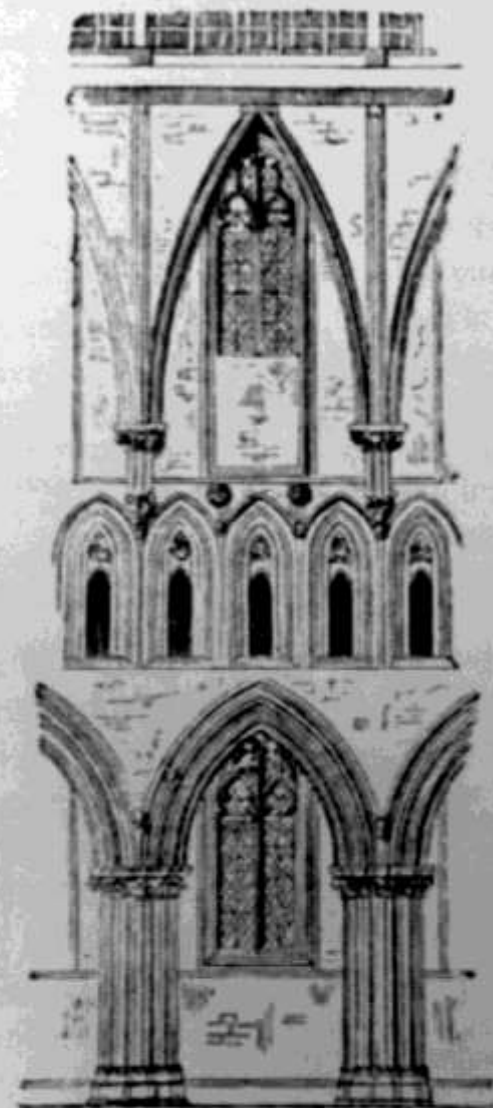
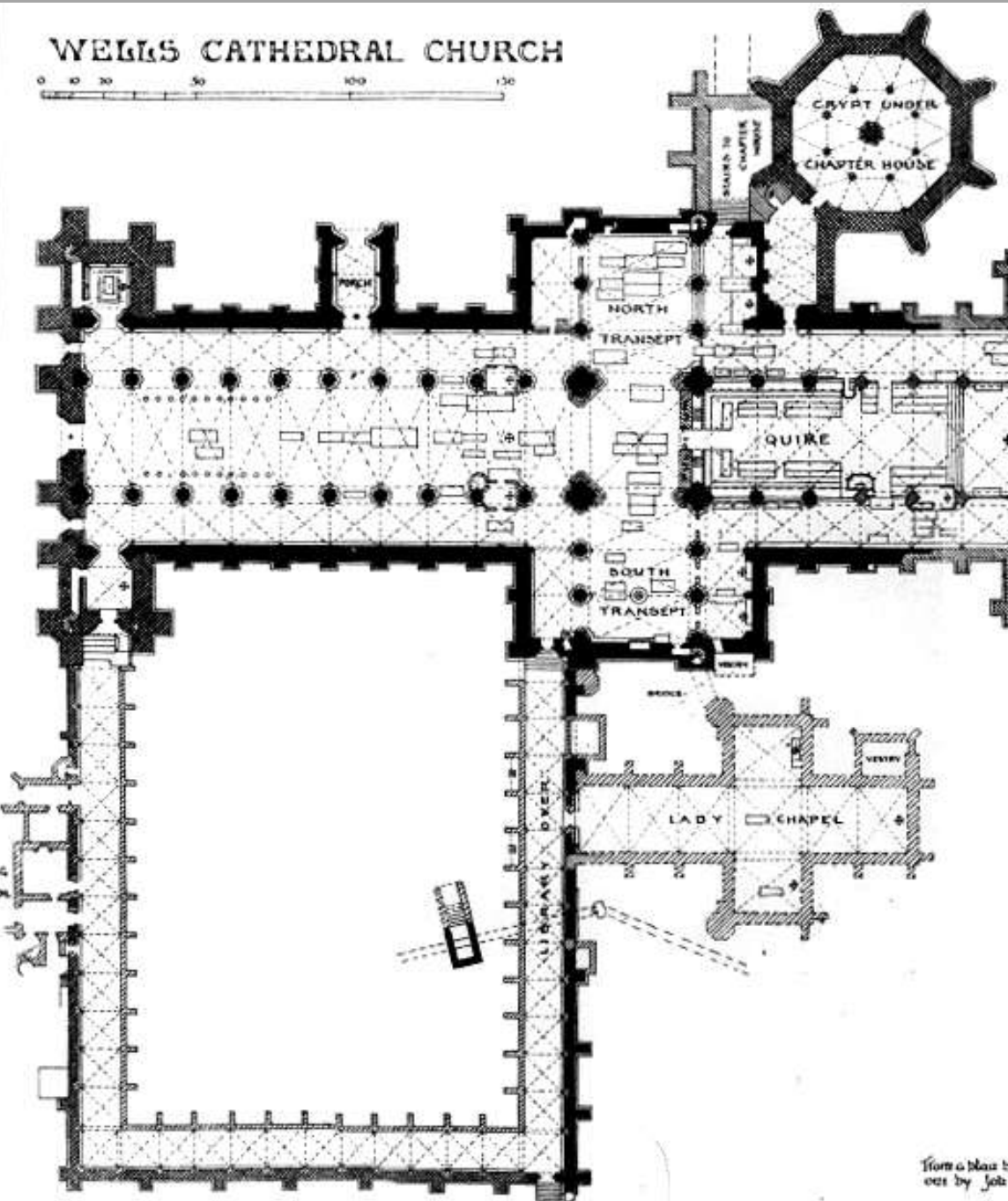
WELLS CATHEDRAL CHURCH

0 10 20 30 40 50 60 70 80 90 100 110 120 130



WELLS CATHEDRAL CHURCH

0 10 20 30 40 50 60 70 80 90 100 110 120 130



NAVE OF WELLS CATHEDRAL. (1206 TO 1242.)

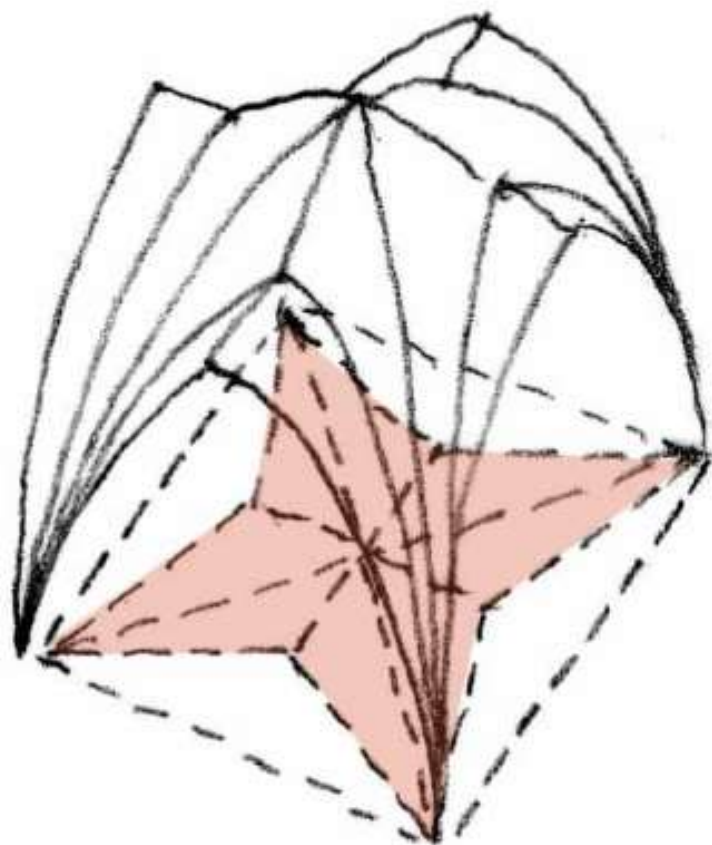
A. Nave Arcade. B. Triforium. C. Clerestory.

SIDNEY BRANSFORD, DELT.

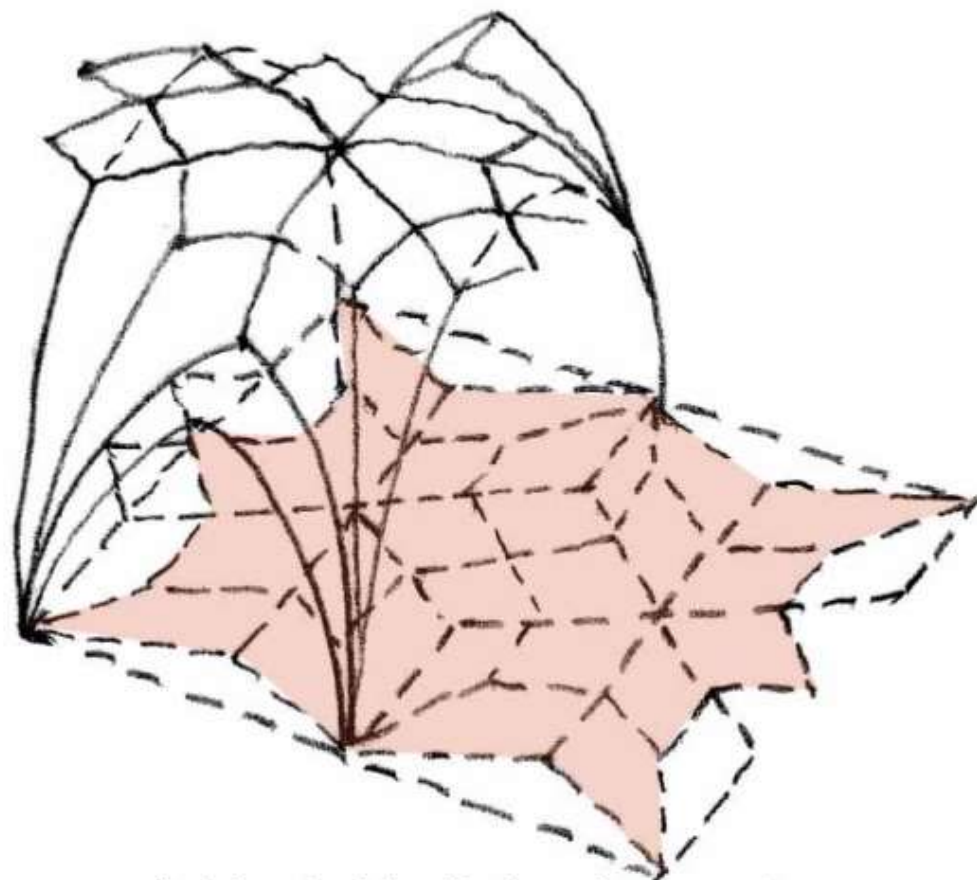
From a plan by P. R. Rostand, 1911, based upon
one by John Carter and from other sources.

Hereford Cathedral, Lady Chapel 1226 CE

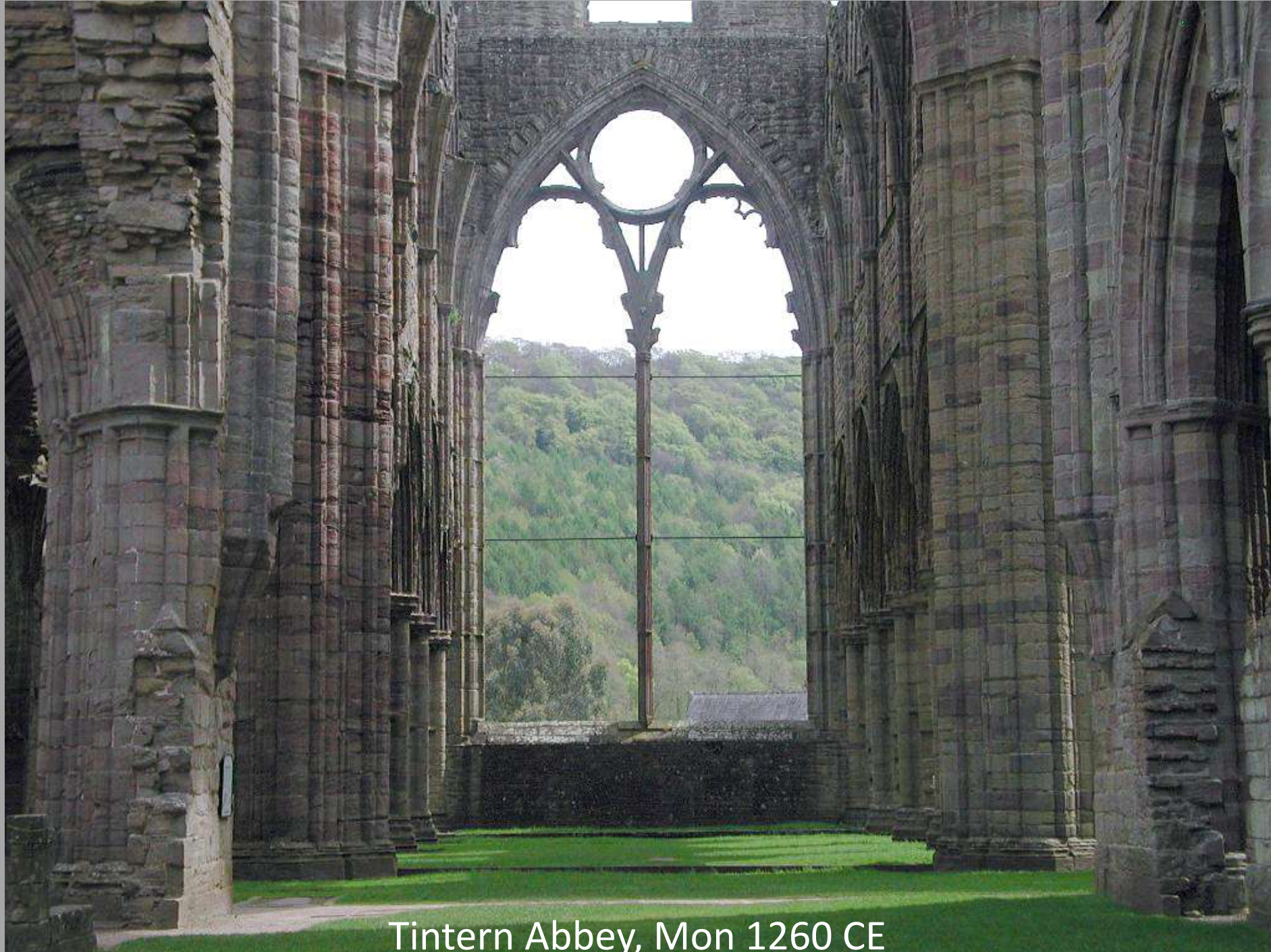




Lierne Ribbed Vault



Intricate Vault development



Tintern Abbey, Mon 1260 CE



Tintern Abbey, Mon 1260 CE

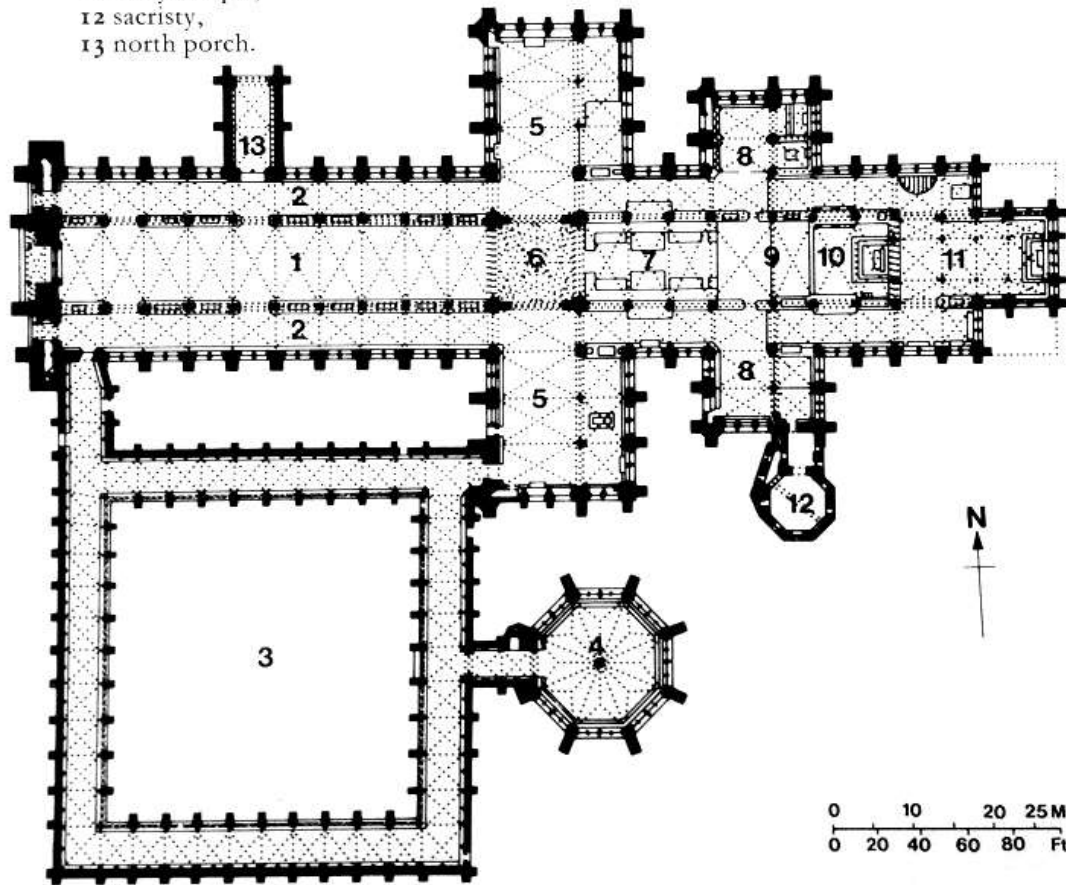
Salisbury Cathedral 1260 CE

Below:

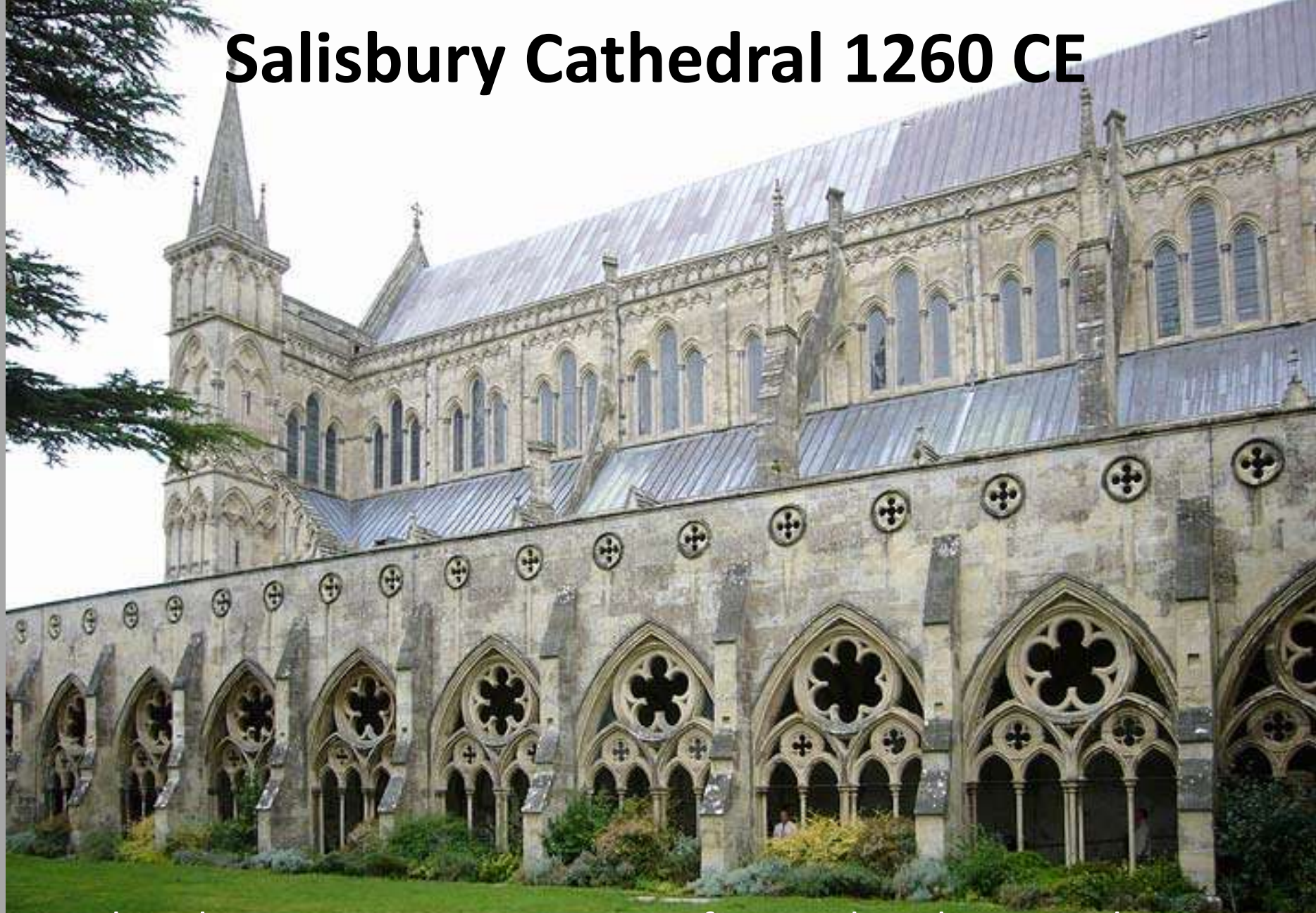
SALISBURY CATHEDRAL. Begun c. 1220.

Plan:

- 1 nave,
- 2 aisle,
- 3 cloisters,
- 4 Chapter House,
- 5 west transept,
- 6 crossing,
- 7 choir,
- 8 east transept,
- 9 presbytery,
- 10 altar,
- 11 Lady Chapel,
- 12 sacristy,
- 13 north porch.



Salisbury Cathedral 1260 CE

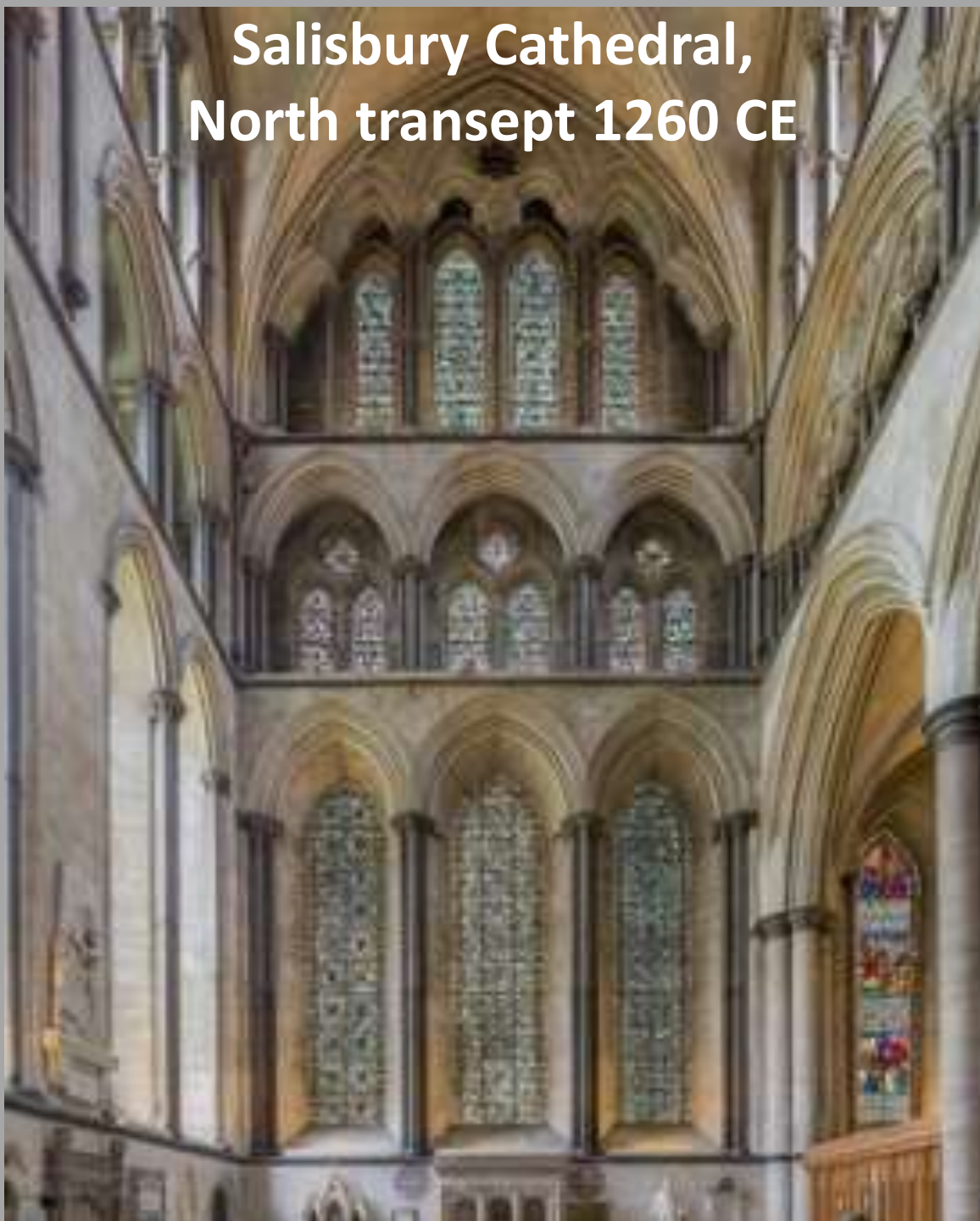


Gothic Plate Tracery – Geometric in form rather than overtly decorative in appearance

Salisbury Cathedral, Nave 1260 CE



**Salisbury Cathedral,
North transept 1260 CE**



Salisbury Cathedral, West front 1260 CE

