

Gothic

ARCHITECTURE

U3A Architecture Group  
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**G**othic

**ARCHITECTURE**

( The one with the POINTY arches )

**“ Most people forget that a style is not an aggregate of features, but an integrated whole”**

**Nikolaus Pevsner**

# What came before the Gothic – Romanesque or Norman

## FEATURES:

- ❖ **Rounded arches to doors and windows**
- ❖ Heavy pillars
- ❖ Small windows, less light
- ❖ Simple roof vaulting
- ❖ Massive appearance – externally and internally
- ❖ Derived from Classical and Mediterranean styles

# Features of GOTHIC architecture:

- Development of the **pointed** arch to doors and windows
- Larger windows, so less solid walls. Use of coloured stained glass
- Lighter interiors
- More understanding of load-bearing techniques (including buttresses)
- Development of stained glass
- Slender pillars
- Ribbed and complex vaulting, based on an oblong, rather than a square
- Less massive exteriors
- Mix of aesthetics with technical advances
- Originated and developed in Northern Europe
- NB – not only church architecture

# THREE main periods of British Gothic church building

Early English	1130 - 1250
Decorated	1250 - 1350
Perpendicular	1350 - 1530

Building in medieval times was as complex a process as it is today, involving an 'assembly line' of craftsmen. This image from a fourteenth-century French manuscript, (Folio 19 of Giuard des Moulin's *Grande Bible Historial*) illustrates that well.

© [National Library of the Netherlands](#)



# Individual Structural Features;

- ❖ **Arches** to doors and windows
- ❖ Tracery
- ❖ Light/windows/pillars
- ❖ Stained glass
- ❖ Roof supports
- ❖ Buttresses



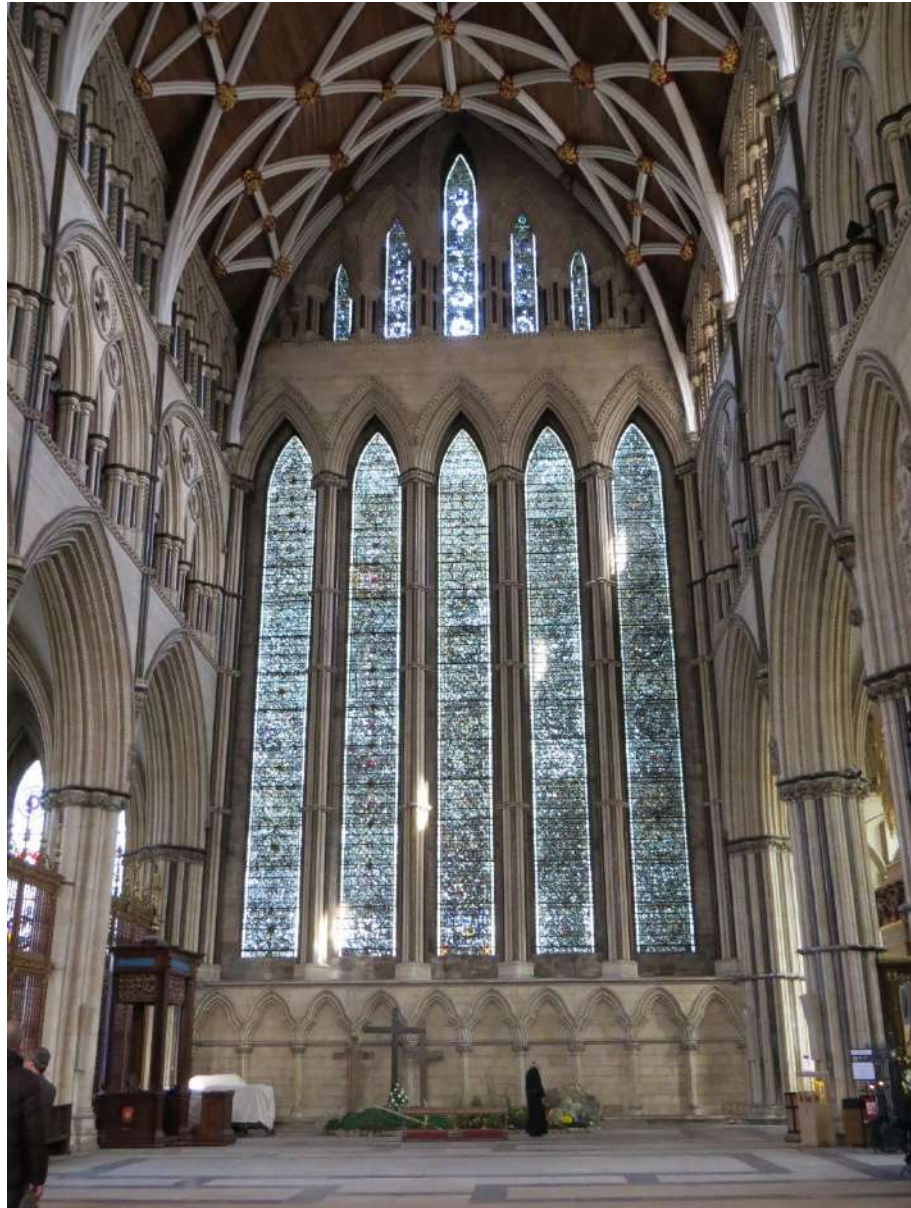
# The LANCET arch

(Early English cathedrals and churches)

The simplest shape is the long opening with a pointed arch known in England as the lancet. Lancet openings are often grouped, usually as a cluster of three or five. Lancet openings may be very narrow and steeply pointed. Lancet arches are typically defined as two-centered arches whose radii are usually double the arch's span



Ripon Cathedral – West front



## York Minster

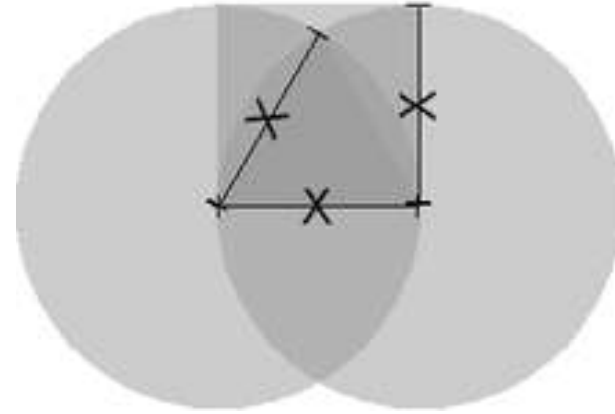
Five Sisters window in the North Transept

# The EQUILATERAL arch

## (Decorated period)

Many Gothic openings are based upon the equilateral form. In other words, when the arch is drafted, the radius is exactly the width of the opening and the centre of each arch coincides with the point from which the opposite arch springs. This makes the arch higher in relation to its width than a semi-circular arch which is exactly half as high as it is wide.

The Equilateral Arch gives a wide opening of satisfying proportion useful for doorways, decorative arcades and large windows.



York Minster  
The Chapter House



# The DEPRESSED arch (Perpendicular period)

The depressed or four-centred arch is much wider than its height and gives the visual effect of having been flattened under pressure.



St George's chapel, Windsor

# TRACERY

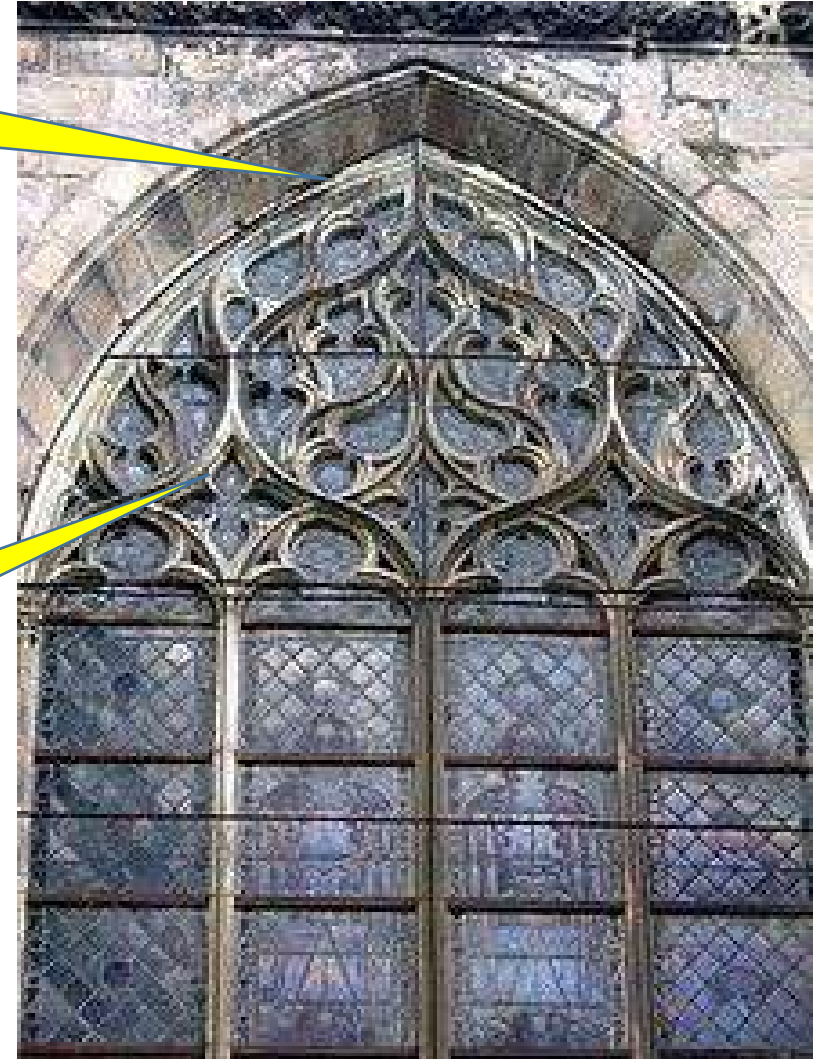
- Is both structural, to support the window, and decorative.
- Styles developed and became more complex through time
- Not found in Lancet windows

# The FLAMBOYANT arch

The Flamboyant (Ogee) Arch is one that is drafted from four points, the upper part of each main arc turning upwards into a smaller arc and meeting at a sharp, flame-like point. These arches create a rich and lively effect when used for window tracery and surface decoration. The form is structurally weak and has very rarely been used for large openings except when contained within a larger and more stable arch. It is not employed at all for vaulting.

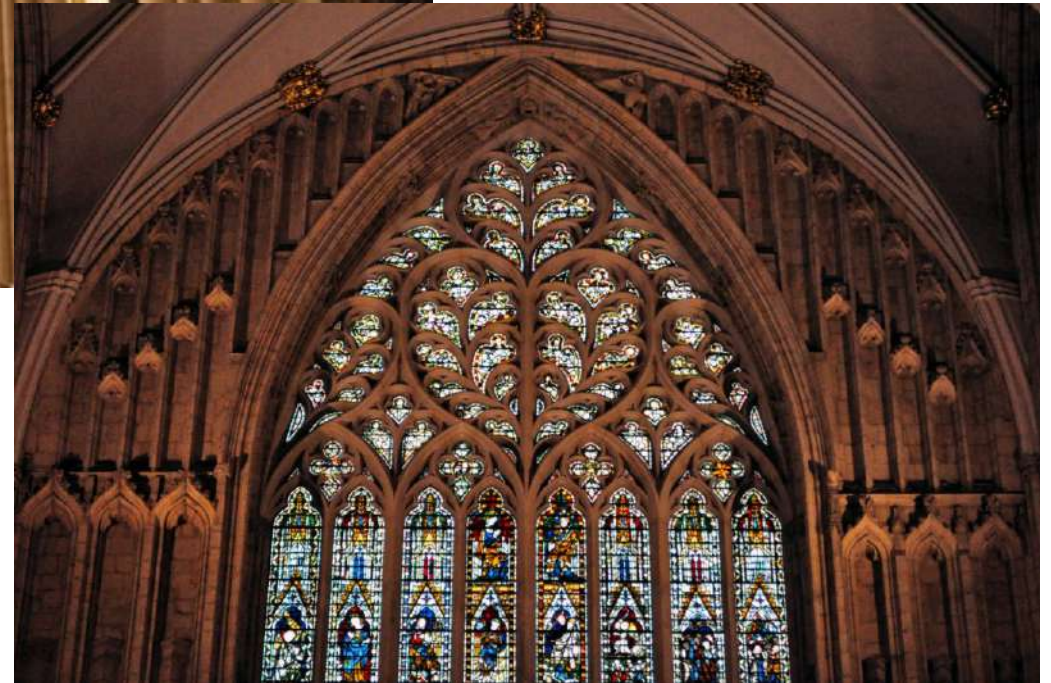
**Equilateral arch**

**Flamboyant arch within**

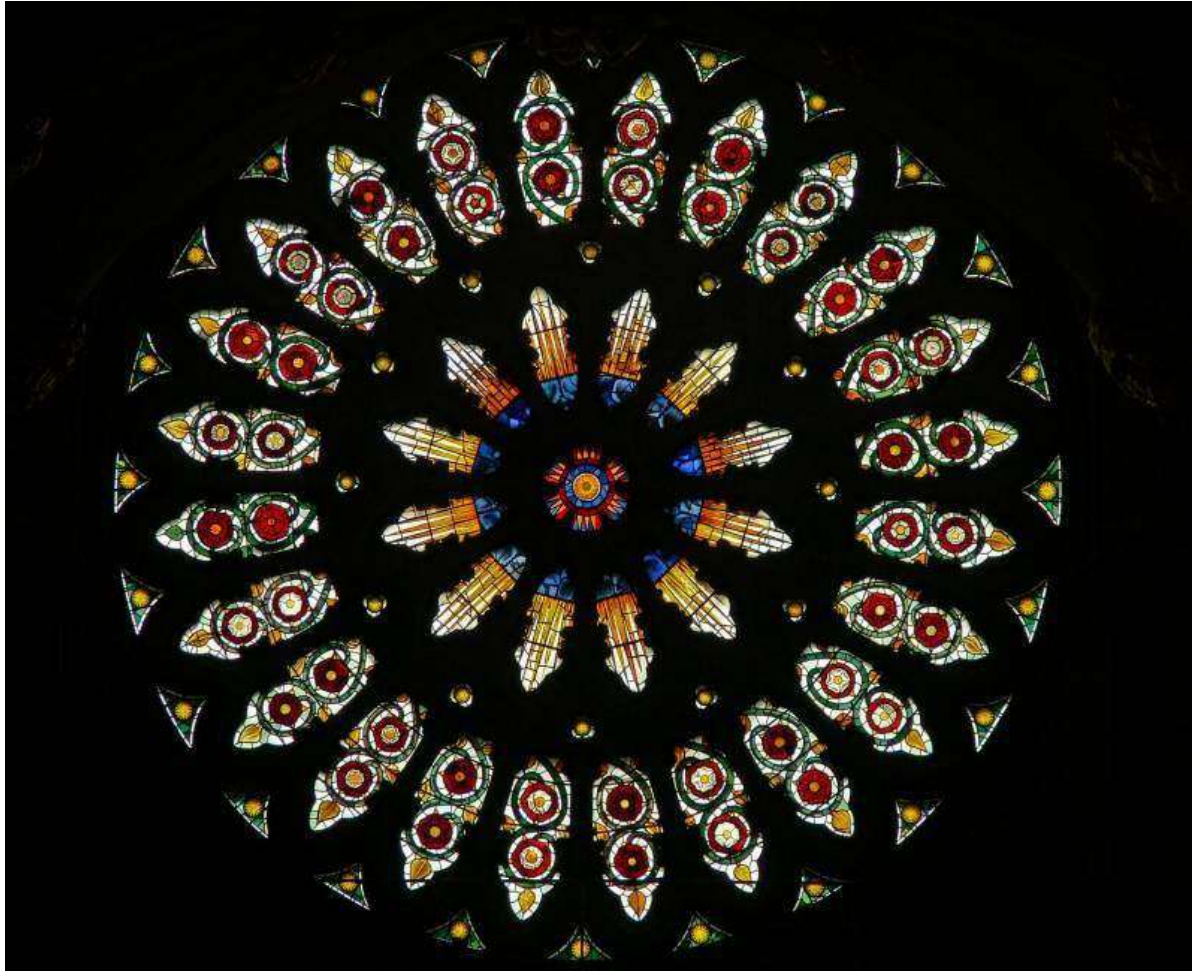


Limoges Cathedral – highly decorated

## The 'Heart of Yorkshire' – West window of York Minster

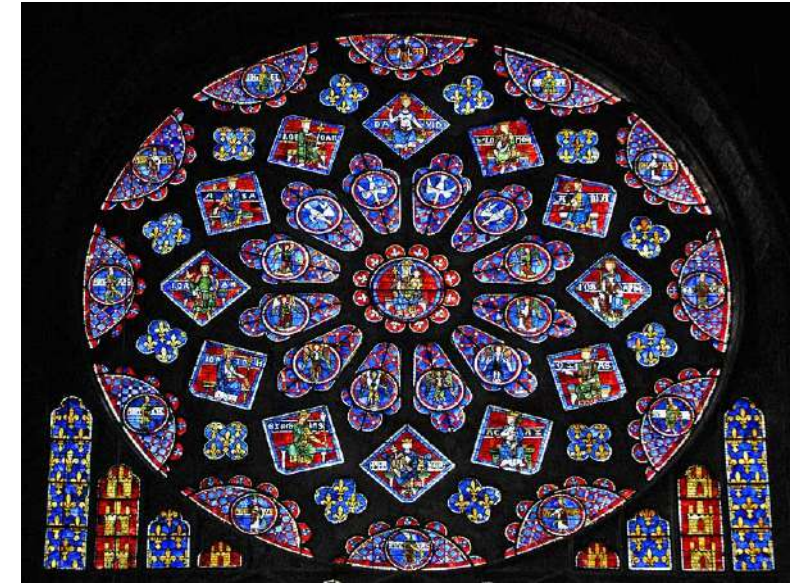


# Rose Windows



York Minster

Chartres Cathedral

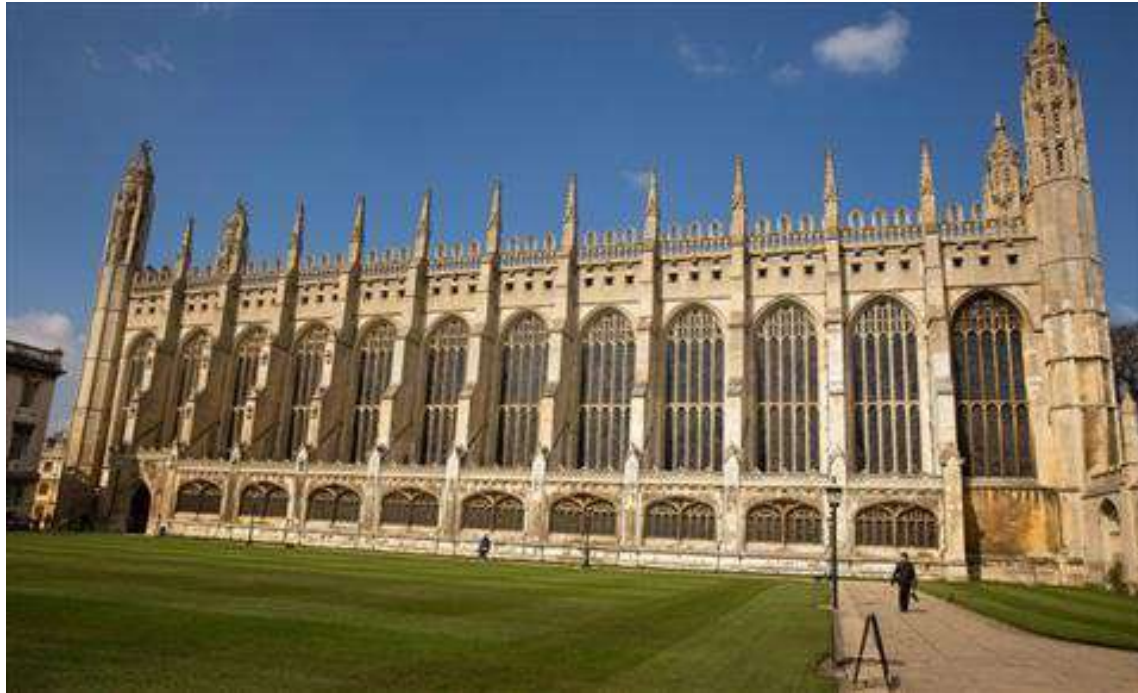


Strasbourg Cathedral



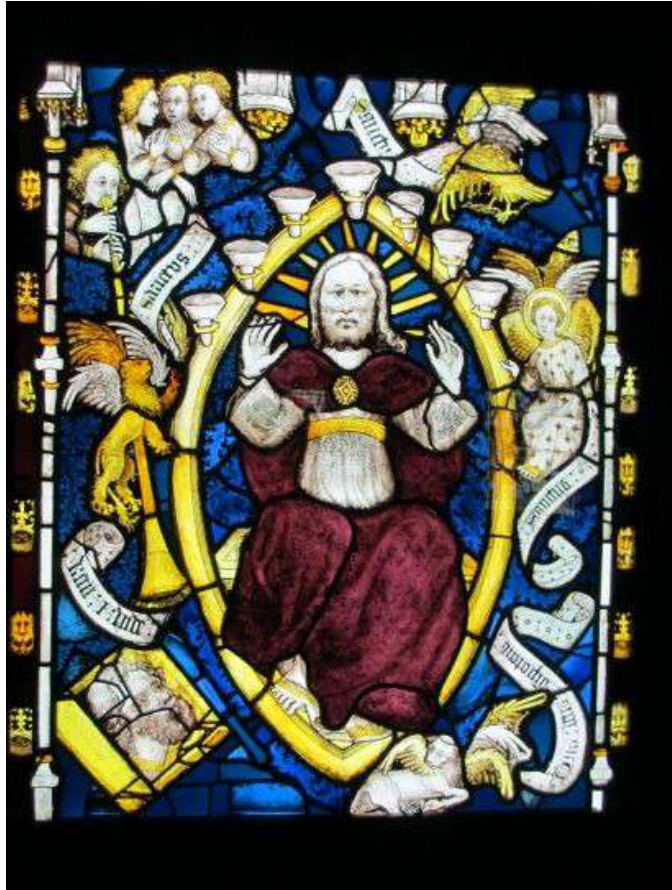


# Perpendicular tracery King's College, Cambridge

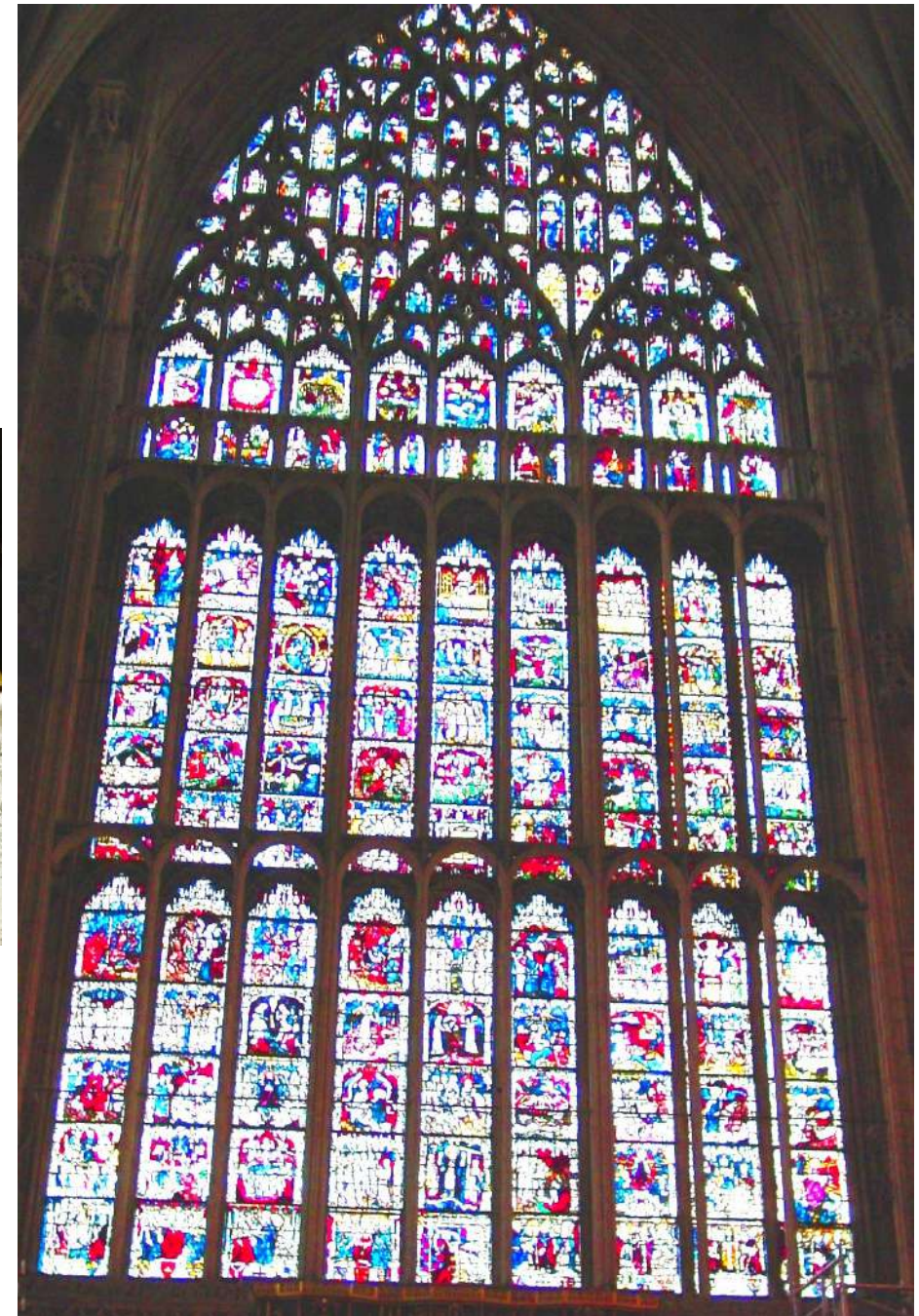


# STAINED GLASS

Informing the illiterate via pictures

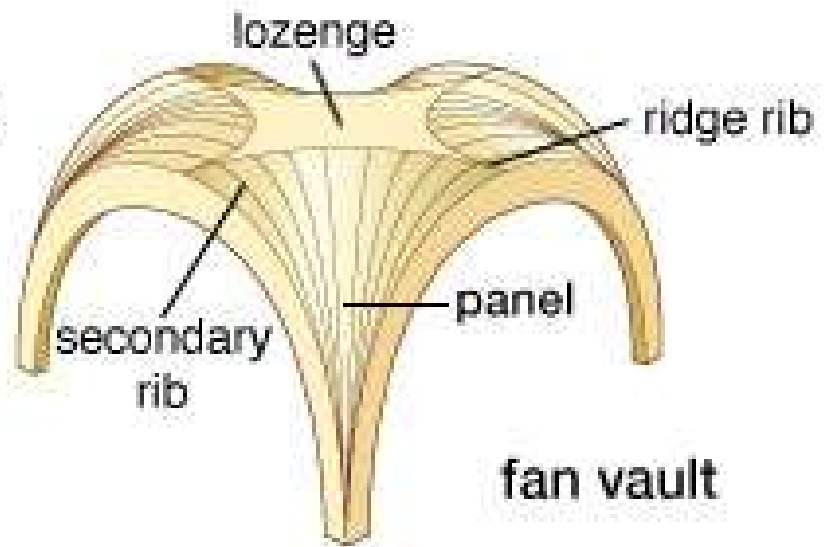
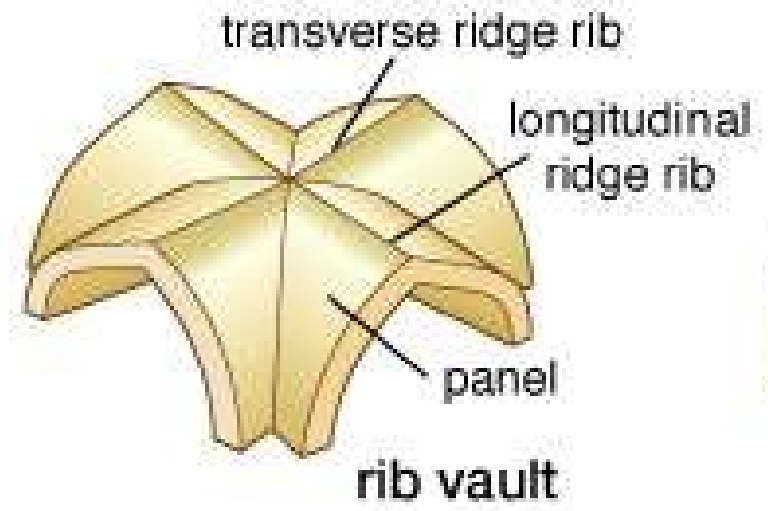
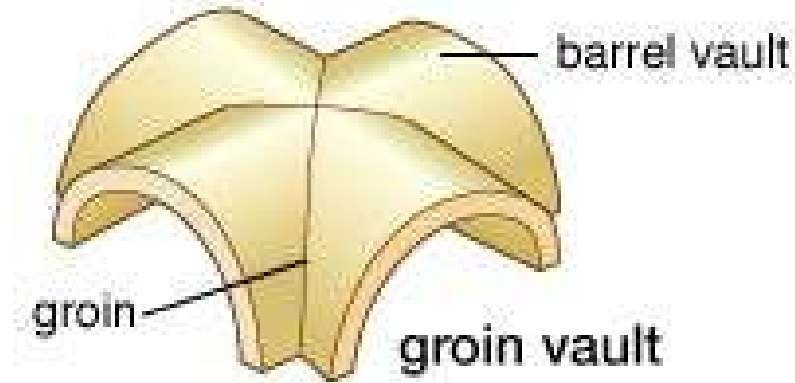
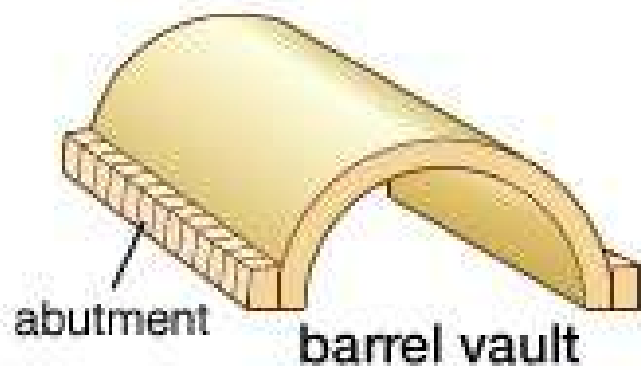


York's East window –  
newly repaired

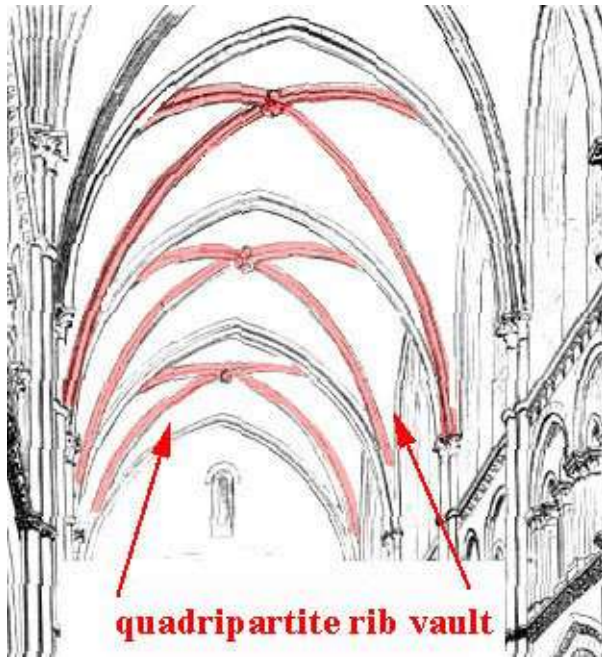


# VAULTING

- Using technology to hold up the roof
- Move from the Romanesque/Norman barrel vault
- From the prosaic to the beautiful



# Developed into the rib vault with increasing complexity



Fountains Abbey



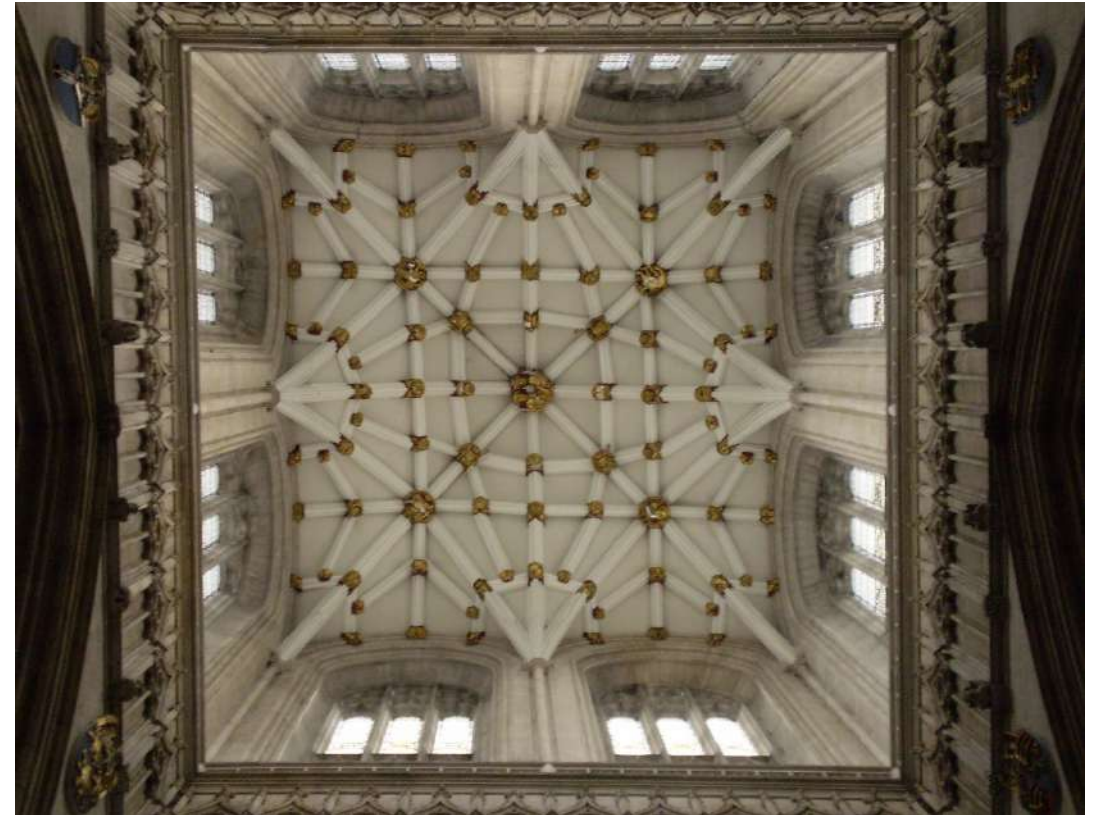
Sainte Chappelle, Paris



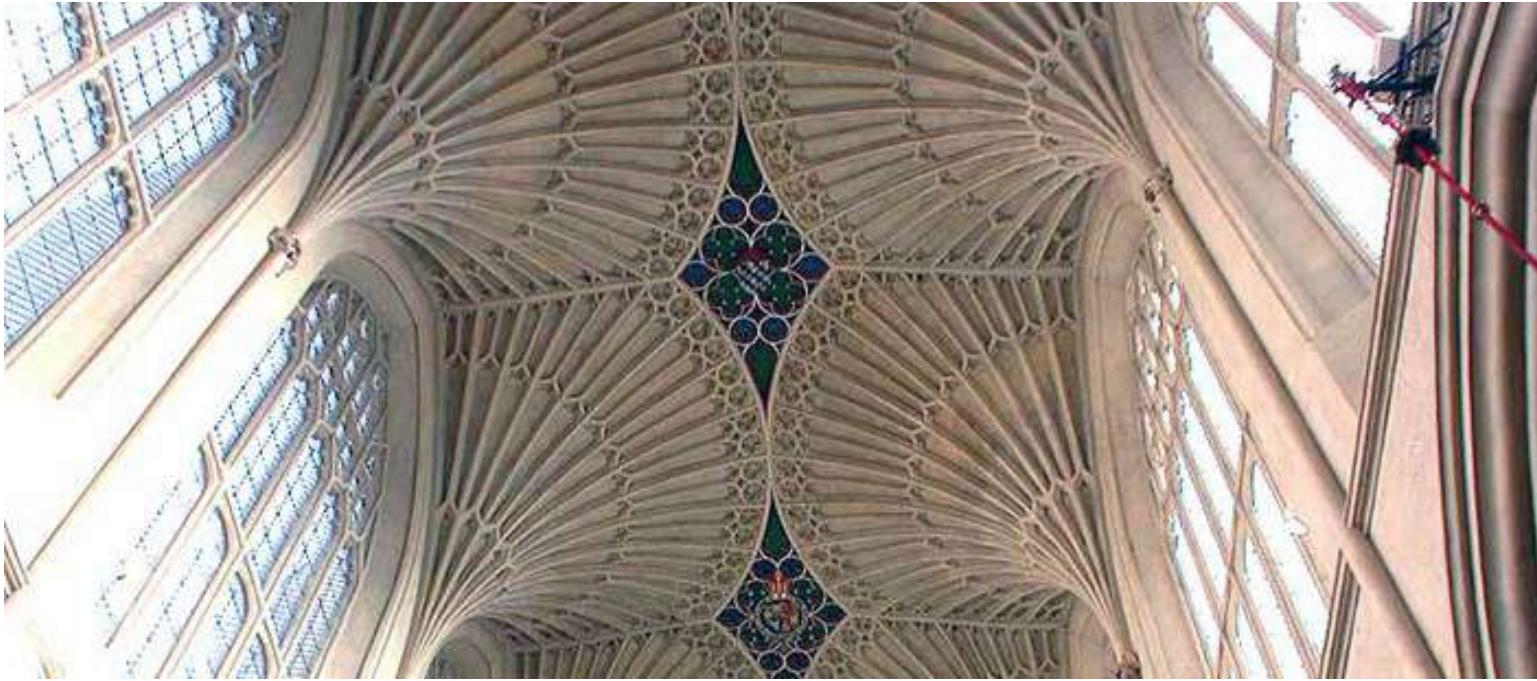
York Minster



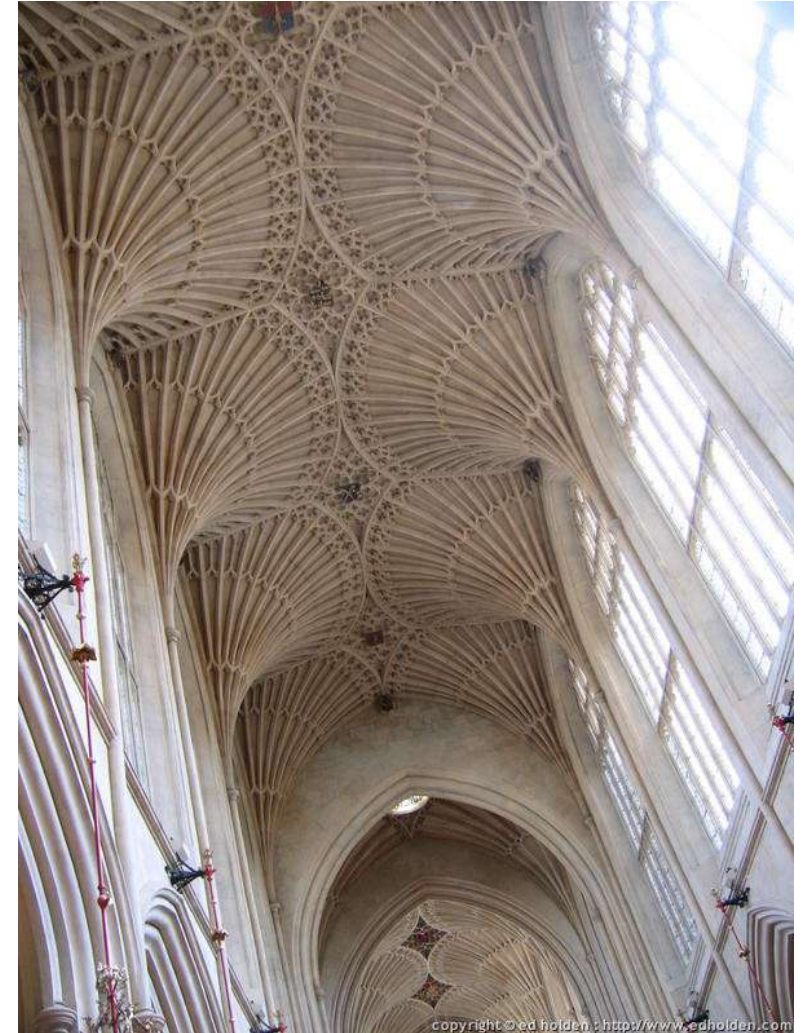
Rib vaulting in the  
Chapter House and the Tower,  
York Minster



# FAN VAULTING – Perpendicular Gothic



Durham Cathedral



Bath Abbey





King's College Chapel, Cambridge

King's Cross station

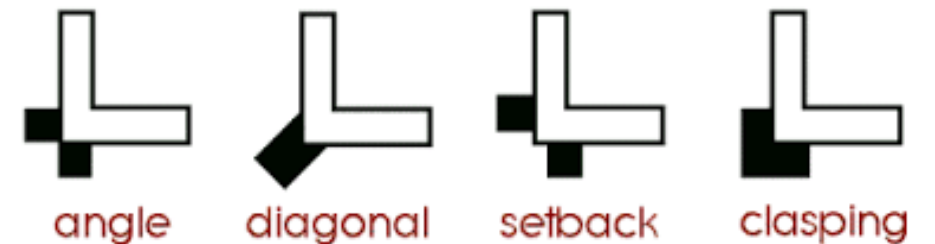
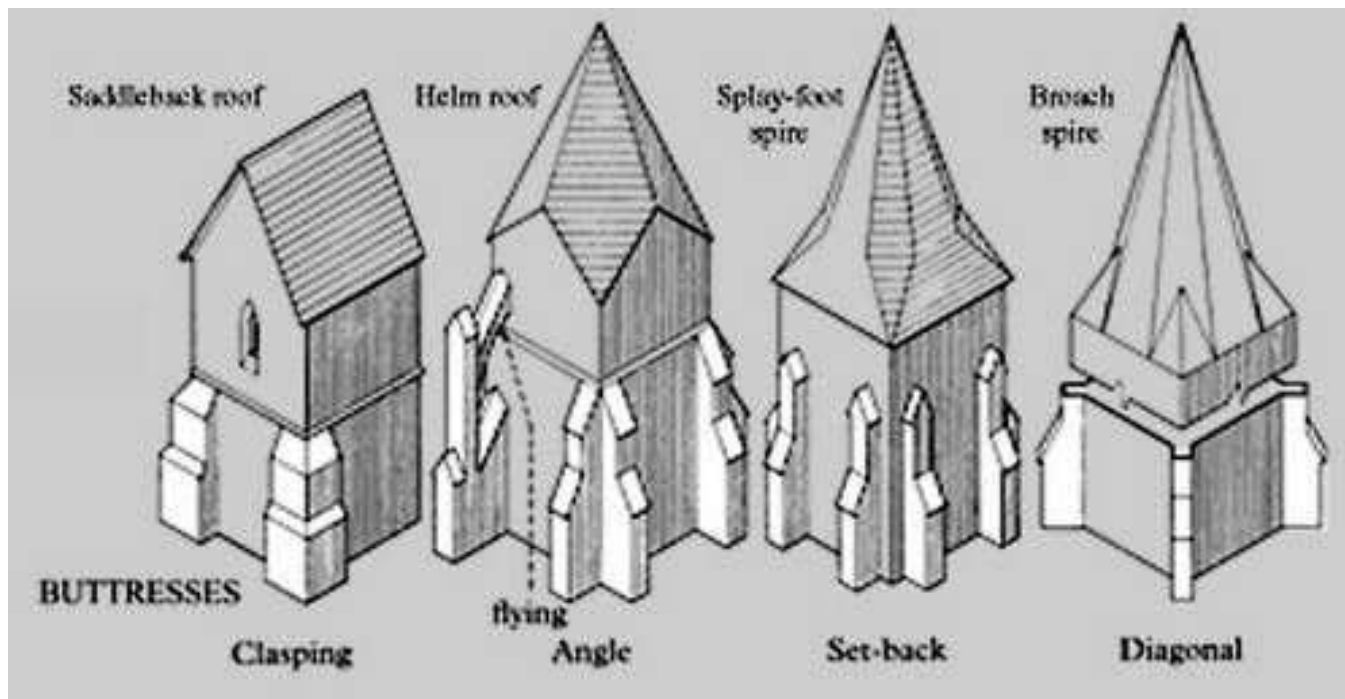




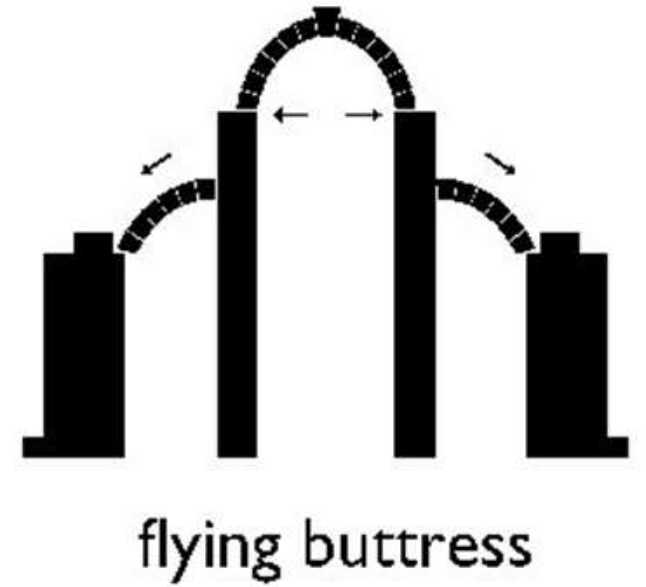
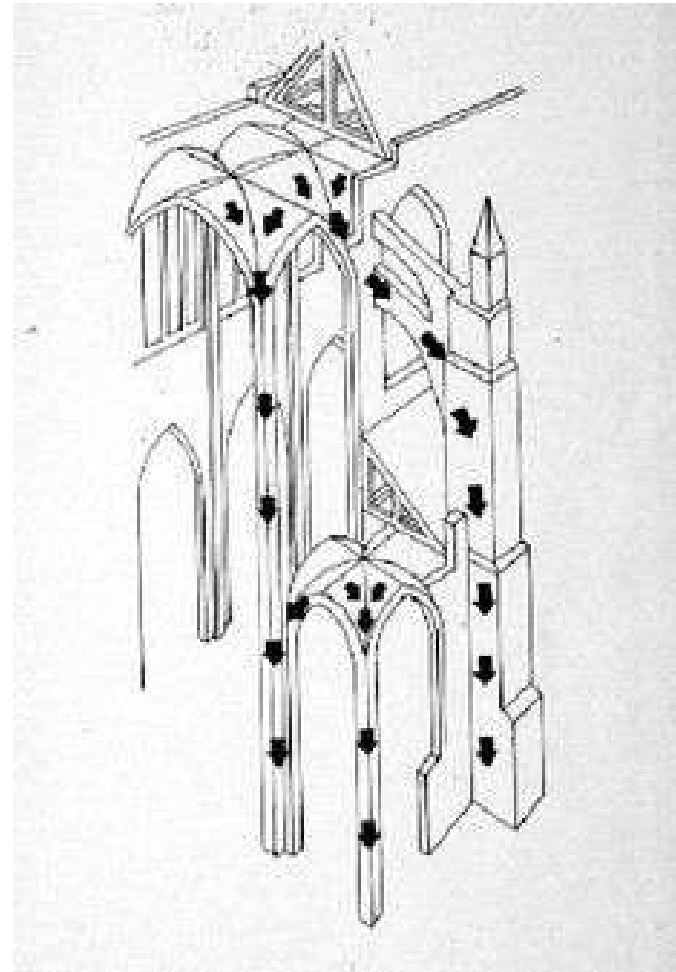
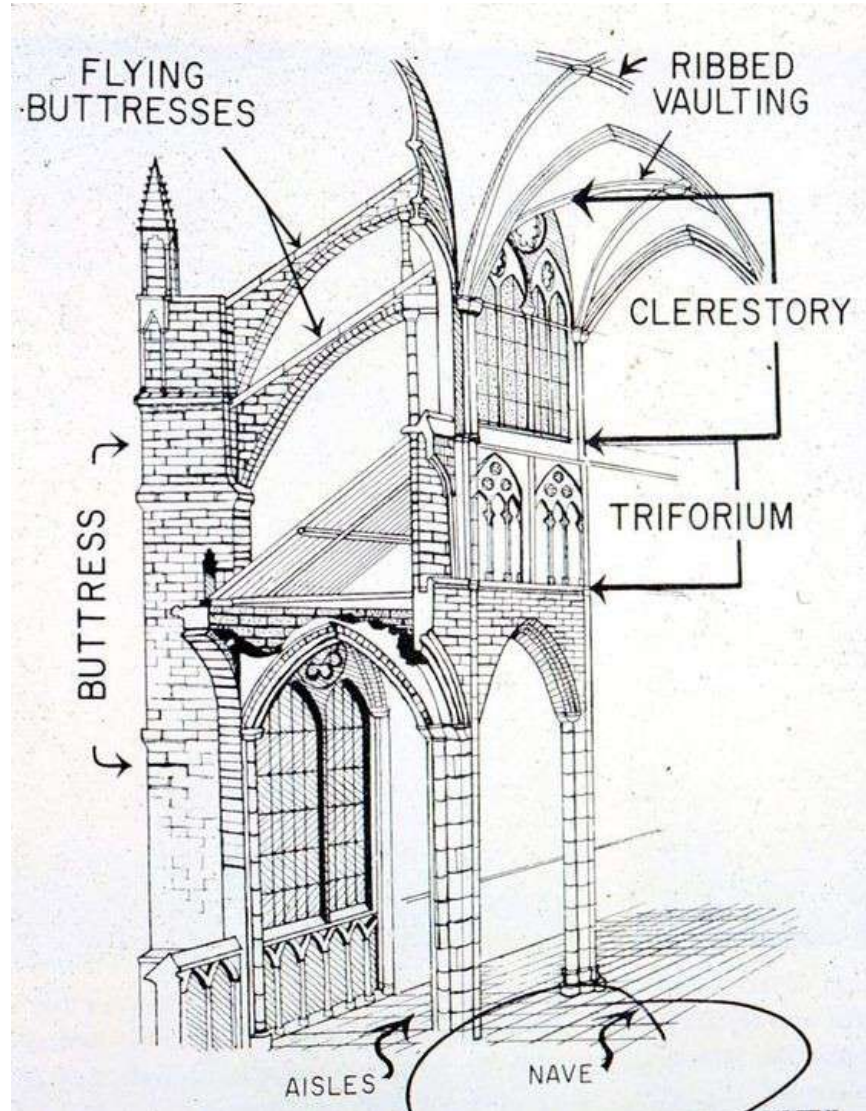
Pendant Fan Vault,  
Henry VII chapel,  
Westminster Abbey

# Buttresses (and Pinnacles)

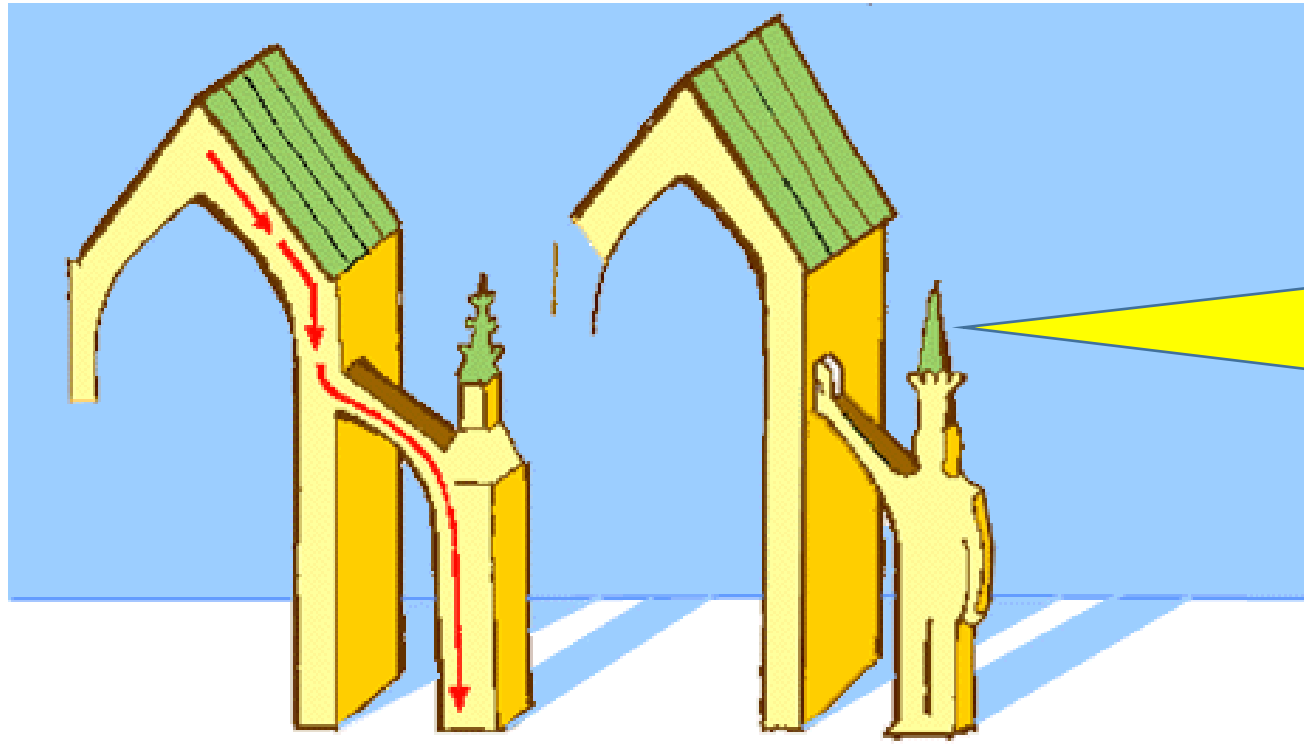
A **buttress** is built against or projecting from a wall and serves to support or reinforce the wall, as a means of providing support to act against the lateral (sideways) forces arising out of the roof structures that lack adequate bracing.



They became more complex and ornate through the Gothic period



Or – if you prefer.....



Note – the heavier the guy,  
the more weight he can  
support – hence the use of  
the ornamental pinnacle,  
to add downward weight  
to the buttress



# FLYING BUTTRESSES

Liverpool's RC Cathedral



# Westminster Abbey



# Ornamentation



Gargoyles



Notre Dame, Paris



Screen at York





# Secular Gothic



Westminster Hall

Stokesay castle



Caernarfon Castle



George Inn, Glastonbury



The tithe barn at  
Bradford on Avon



# Some European secular Gothic buildings



Ca d'oro and Doges Palace, Venice



Palazzo Pubblico, Siena



# Northern Europe



Holstenstor Gate, Lubeck



Carcassonne

Leuven town hall



Brussels town hall



Gothic

*Revival*

1800 - 1910

**or Neo-Gothic  
or New Medievalism**

# ORIGINS OF NEO-GOTHIC

- ❖ It emerged in Victorian Britain – new monarch, new mood
- ❖ Began as a literary movement – Sir Walter Scott, romantics
- ❖ Spread quickly across the British Empire, Europe and the USA
- ❖ Reaction against the industrial, ungodly world
- ❖ Adopted by the Church of England during a time of extensive church building, especially in newly-emerging/growing industrial towns
- ❖ Reflected in many arts – interior design, Arts and Crafts movement, pre-Raphaelites
- ❖ Broke away from the rules of Classicism – free-form, functional and ‘natural’
- ❖ Reaction against foreign influences
- ❖ Influence of John Ruskin
- ❖ Britain’s ‘Battle of the Styles’

# FEATURES OF NEO-GOTHIC ARCHITECTURE

- ❖ Lavishly decorated – inside and out
- ❖ Linked to Christianity – but also used for secular buildings
- ❖ Clock towers – based on medieval townhalls
- ❖ Spires – making their mark on the townscape
- ❖ Pointed arched doors and windows
- ❖ Polychrome brickwork – new, durable and colourful
- ❖ Stained glass – often with classical/medieval themes
- ❖ Conical roofs – modelled on turrets

# SOME KEY ARCHITECTS

- ❖ Augustus Pugin ( 1812 – 1852)
- ❖ Sir George Gilbert Scott (1811 – 1878)
- ❖ Sir Charles Barry (1795 – 1860)
- ❖ William Burges (1827 – 1881)



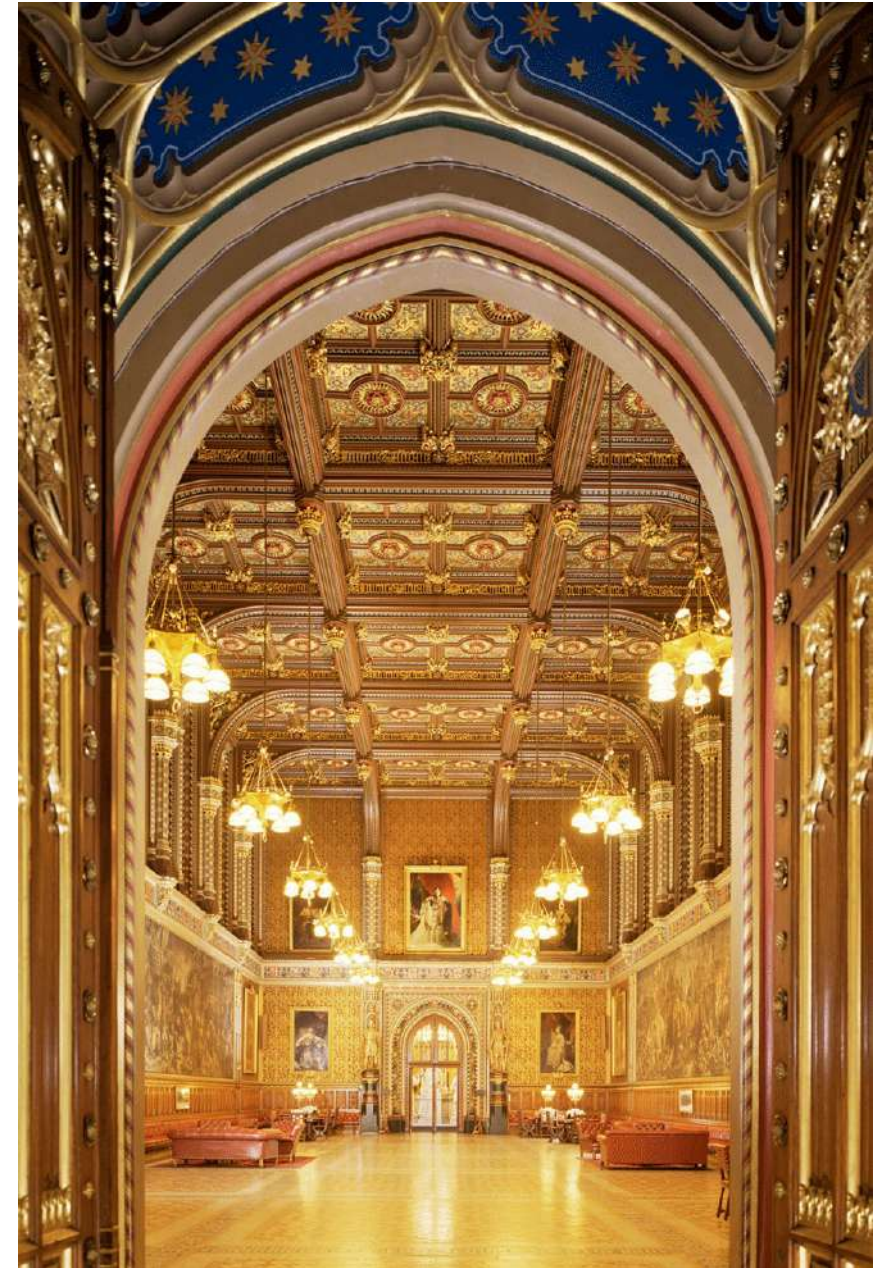
# The Palace of Westminster – rebuilding after 1834 fire

Architect – Sir Charles Barry

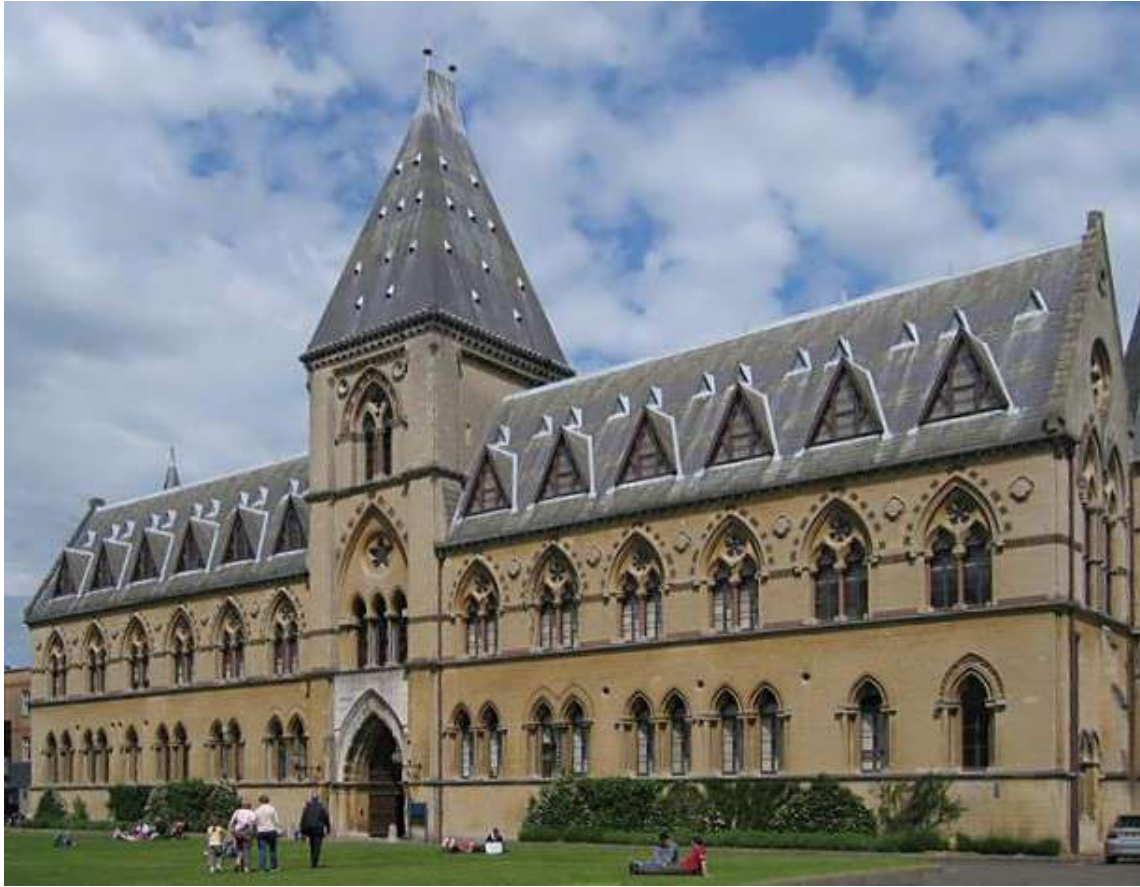
Interiors – Augustus Pugin



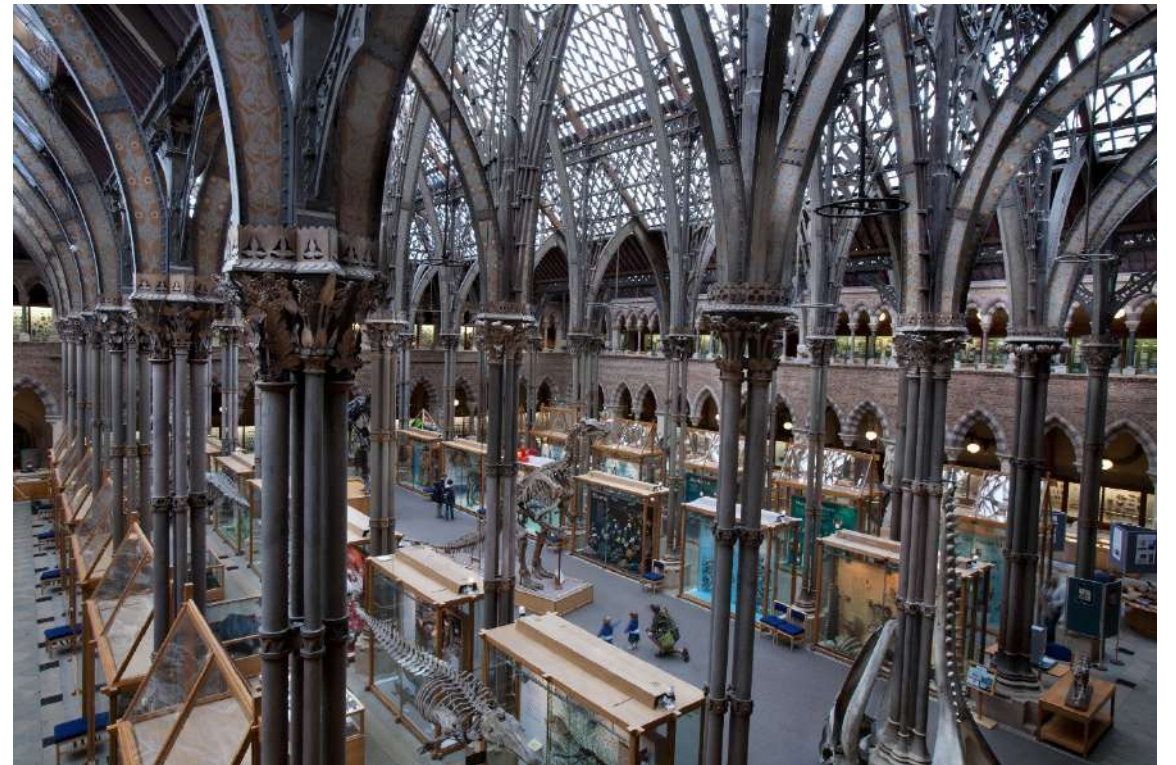
# PALACE OF WESTMINSTER – interiors



# PUBLIC BUILDINGS



Oxford –  
Natural History  
Museum



# MIDLAND GRAND HOTEL, St Pancras

Architect – Sir George Gilbert Scott



# MANCHESTER TOWN HALL –

Architect – Alfred Waterhouse



# CARDIFF CASTLE –

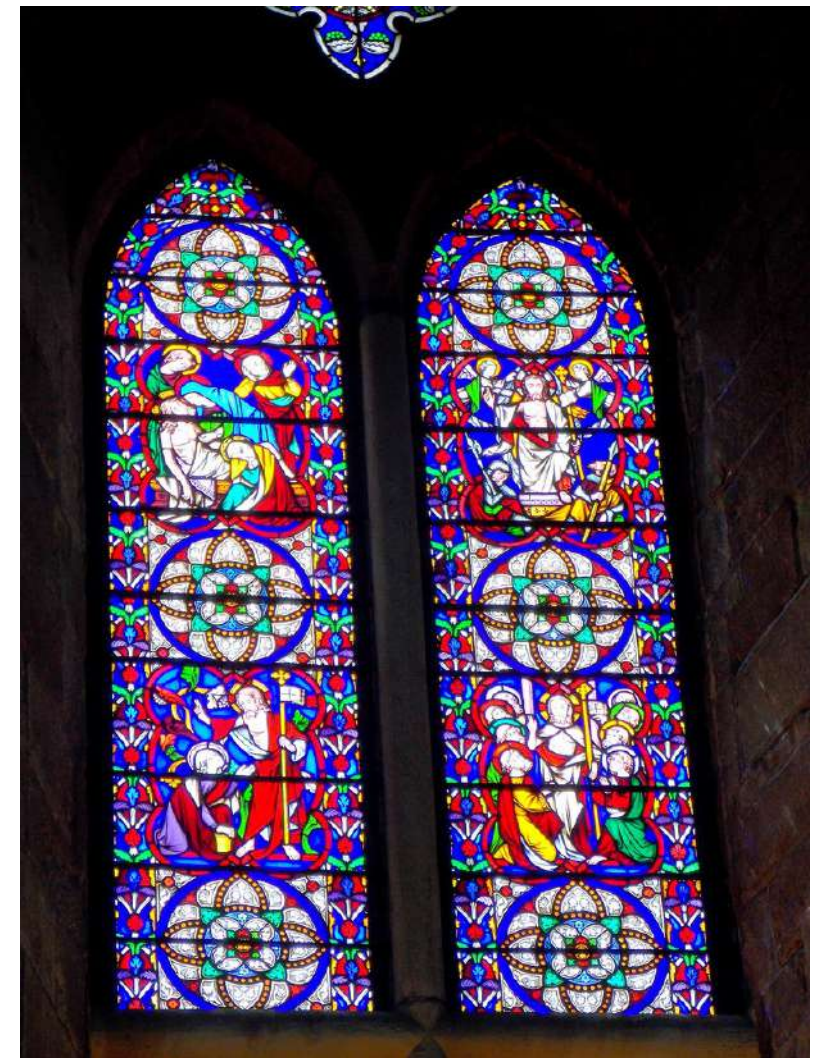
Architect – William Burgess for the Earl of Bute



Medievalism gone mad??



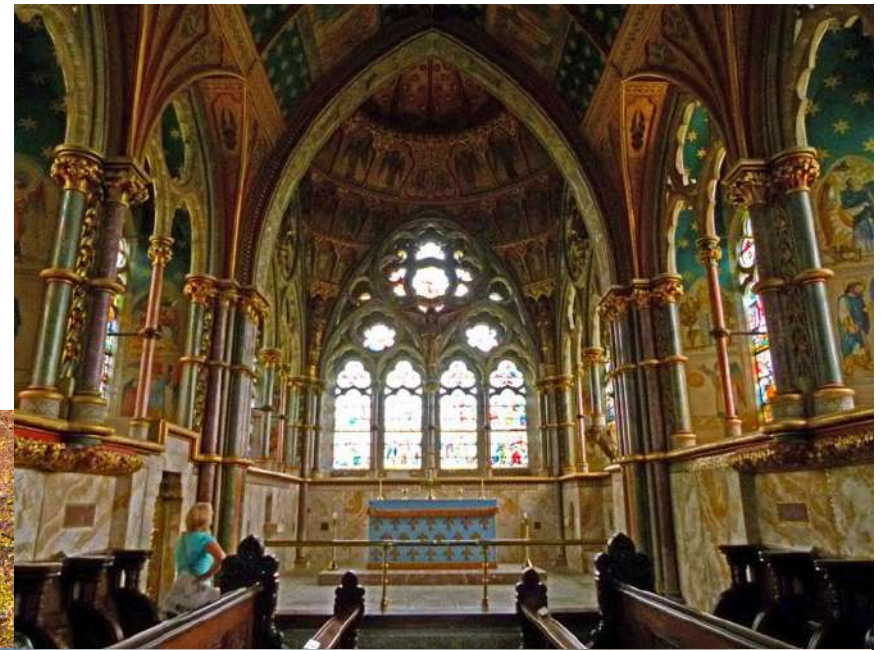
# NEO-GOTHIC - NEARBY



Bolton Priory  
Windows designed by Pugin

# St Mary's – Studley

William Burgess





# St Margaret's, Ilkley

Architect – Norman Shaw



*Questions?*

Angie Grain  
January 2017