HOA1

Pre Historic Architecture
Architectural styles and structures that were built before the written record of human history.

The six cradles of civilization
-Mesoamerica
-Andean region
-Nile valley
-mesopotamia
-indus river region
-huang ho river region

Direct human anscestors
Australopithecus, homo habilis, himo erectus, homo neander-thalensis, homo sapiens

Early dwellings
-Caves
-temporary shelters
-permanent housing structures
-formation of communities

Rock caves
Earliest form of human settlement, readily available, and don not require time and effort

Religion (pre historic)
The dead are treated with respect, burial rituals and monuments.

Architectural character (pre historic)
-Animal skin
-wood
-animal bones

Construction system

Existing or excavated caves
-megalithic is most evident in france, england, and ireland

Decoration
-Cave paintings in africa, france and spain
-sculpture

Three age system in cultural ages
-stone age
-bronze age
-iron age

Paleolithic
Old stone age roughly 2.5 million years ago - 10000 bc

Mesolithic
Middle Stone Age 9,000bc - 4,000 bc

Neolithic
New stone age ended 1900 bc

Three main characteristics of paleolithic
- the inhabitants were dependent on their environment. Men were hunters and women were gatherers
-use simple tools
-nomadic style of life was practiced
Mesolithic three main characteristics
-During this age, man had invented small tools like spearhead, arrow heads, etc.,
-The man had started taming dogs for the hunting purpose.

-man was still a food collector and not food producer.

Neolithic three main characteristics
-The practice of agriculture, domestication of animals in terms of economic life and grinding and polishing of stone tools, and also manufacture of pottery in terms of technology.

Bronze age
-People stopped using stone to make tools and weapons and used bronze instead
-wheels was first invented
-first form of writing started

Iron age
Final epoch of the three age division

Three stages of evolution of cave
1.natural cave
2.artificial cave
3.cave above the ground

Tents and huts
Made from tree barks, animal skins, and plant leaves

Huts
Usually made up of reeds, brushes and wattles

Wigwam
Covered with rush mats and an animal skin color

Tepee
Conical tent with wooden poles as framework

Hogan
Primitive indian structure of joined logs

Igloo
Innuit house constructed of hard packed snow blocks built spirally

Nigerian hut
Made with mud walls and roof of palm leaves

Iraqi mudhif
Covered with split reed mats, built on a reed platform to prevent settlement

Sumatran house
For several families, built of timber and palm leaves, the fenced pen underneath is for livestock

Monolith
Isolated single upright stone also known as menhir

Menhir
Memorial of victory of one tribe

Dolmen
Two or more upright stones supporting a horizontal slab

Cromlech
Three or more upright stones capped by an unchain flat stone and indicates place of religious rites.

Stone circle or stone row
Made up of 3000 stones spaced upright

Tumuli, tumulus, or barrows
Earthen mounds for burials of several to couple hundred of ordinary persons.

Mesopotamia
Area between the Tigris and Euphrates rivers. Near or middle east

Mesopotamia
Region that experienced heavy rains and floods which have resulted in building of ziggurats.

Mesopotamia
Region that possesses these architectural character
1. Massiveness
2. Monumentality
3. Grandeur

Sumerian architecture
Transition was made around 4500, invented the cuneiform system of writing.

Sumerian architecture
-Major cities consist of kish, uruk, ur
- Use mud as their building material

Sumerian city of ur
Cities were enclosed in walls with Ziggurat temples and palace as centers of the city

White temple of uruk
-Had population of 40,000 people with an area pf 2 sq.km.
-Placed n a ziggurat 12 meters above the ground

Great ziggurat of ur
-considered sacred to nnanna, the moon god
-located near the euphrates river

Oval temple - khafaje
-an example of second type of Sumerian temples
-Located in the city, emphasis in its organization is on eclosing space within courtyards

Assyrian architecture
-principal cities were nineveh, dun khorsabad, nimrud and assur.
-were great warriors and hunters.

City of khorsabad
-the royal capital of assyria
-The city was built on a flat land with an area of about a square mile and was enclosed by the double wall with seven city gates

Palace of sargon
- The palace is approached at ground level through a walled citadel.
- Within the citadel is found the main palace, two minor palaces and a temple dedicated to Nabu.

Babylonian architecture
-Old Sumerian cities were built

City of babylon
-The city was surrounded by a fortification of double walls

-shaped in form of quadrangle sitting across pierced by the euphrates

Ishtar Gate
All facades of gates and adjoining streets were faced with blue glazed bricks and ornamented with figures of heraldic animals-lions, bulls, and dragons.

Persian architecture
Darius 1 and Xerxes had conquered the entire civilized world from Indus to Danube River except for Greece.

Palace at persepolis
- It was constructed as a new capital for the Persian Empire
-It was surrounded by a fortification wall
- throne room

Throne room
-Hall of 100 columns (37 feet high, diameter of 3 feet)
-spaced 20 feet apart from axis to axis

Persepolis
The Magnificent Ancient Capital of the Persian Achaemenid Empire

Near east
- Clay was abundant material in this civilization
- wood was applied mainly for roofing
- glazed brick, which was used in the facade of their gates

Near east Construction
- mud bricks led to the development of construction methods appropriate for its properties
- to compensate for the weakness of mud bricks, wall were very thick and reinforced with buttresses.

Near east technology
- passive cooling and water supply
- courtyards were used for cooling to creative livable environment
-thick walls of houses may also serves as thermal storage

Aqueduct
A structure that carries water over long distances used by babylonians.

Three principles of architectural organization in near east
-Courtyard organization
-lifting of building on artificial mountains
-organic organization of city fabric

King sneferu
Who constructed the first pyramid of meidum, initiating the golden age of the old kingdom

Pharaoh khufu
Constructed the great pyramid of giza

Egyptian: new kingdom
The construction of temples, rock-cut tombs, and wall reliefs was the most dominant.

Egyptian architecture
-Characterized by absence of windows.
-The massive walls protected the interior from fierce desert sun.

Obelisk
-Rectangular pillar with tapered top forming a pyramidion.

Hieracosphinx
Body of a lion, head of a hawk

Androsphinx
Body of a lion, head of a man

Criosphinx
Body of a lion, head of a ram

Avenue of sphinx
- connects karnak temple with luxor temple having been uncovered in the ancient city of thebes
-aka ram's road

Mastaba
ancient egyptian tomb in the form of flat roofed, rectangular structure constructed out of mudbricks and limestone

Poor egyptians
Lived in simple one-room houses. which were often with woven straw mats. wooden furniture and a ladder.

Wealthy egyptian
- favored homes along the nile river that were painted white or adorned with sparking limestone

Nobleman
might have a master suite with a toilet and pipes leading to the garden

Evolution of pyramid
1. step pyramid (ZOSER)
2. bent pyramid
3. The great pyramid of giza (khufu/cheops)
4. the pyramid of khafre (chephren)
5. pyramid of menkaure (mykerinus)

Stepped pyramid
- imhotep built it in stages. it started as a square, solid mastaba, but a series of extensions made it into a six stepped pyramid with a rectangular ground plan

The bent pyramid
started at an angle of 52 degree. in the middle of construction, it was bent into 43.5 degrees.

The great pyramid of giza
Pyramid of khufu/cheops (481 ft)
-remaining limestone casing is still visible at the top
-the funerary boat is thought to have been used by the king during his lifetime and had carried the pharaohs body across the river nile to the pyramid, on his death

Pyramid of chephren/khafra (471 ft)
-remaining limestone casing is visible at the top
-it looks taller than the pyramid of khufu because it is built on higher ground

The pyramid of mykerinos/menkaure (213 ft)
-smallest of the three main pyramids
The great sphinx
-located NE of chephren's valley temle
- 200' long, 65' tall, 13' wide
-considered to be a depiction of royal power of the pharoah

Temples
were built for the official worship of the gods and in commemoration of the pharaohs in ancient egypt and region under egyptian control

The great temple of ammon karnak
-grandest of all egyptian temples and was built by many kings
-approached through an avenue of sphinxes with a pair of massive pylon serving as the entrance

Hypostyle hall
interior space whose roof rests on pillars and columns/ the word literally means "under pillars"

Abu simbel
-one of the most stupendous of egyptian rock cut tombs
-facade: 119' wide, 100' high
mortuary temple of queen hatshepsut
-consists of 3 terraced courts cut out of the rock and connected by a ramp.
-the upper court is flanked by 2 sacrificial halls, while on the central axis is the sanctuary, cut deep into the rock

The temple at edfu
-best preserved since it was built during the last period
-Dedicated to the god horus

Ptolemy 1
who moved the egyptian capital from memphis to the new greek-styled capital of alexandria, on the mediterranean coast.

Ptolemaic Architecture
In this architecture, the most important temples are at, Dendera, esna, edfu, kom ombo, and philae

Ptolemaic dynasty
In what dynasty did they not allow marriage with outsiders, but people married their own brother, sister, uncle, niece, etc.

Temple of Esna
Dedicated to khnum, the god creation of fertility

Temple of dendera
dedicated primarily to hathor, the goddess of love, music, and joy

Temple of Kom Ombo
Renowned for its well-preserved reliefs and inscriptions, depicting religious scenes and medical instruments

Temple of Philae
Primarily dedicated to the goddess of Isis

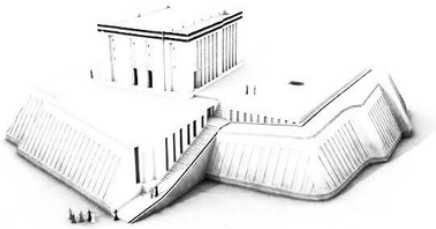
Lighthouse of alexandria

-A lighthouse built by the ptolemaic kingdom of ancient egypt, during the reign of ptolemy II of philadelphus.
- 100 meters in total height

Sumerian City of Ur

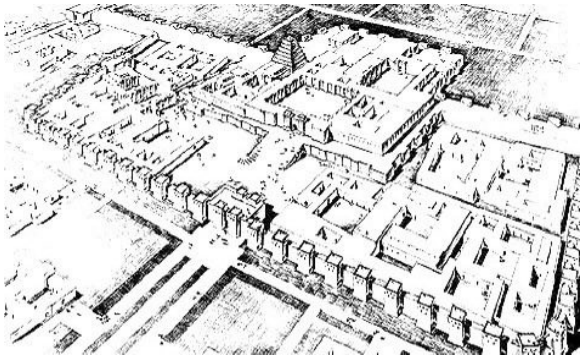
Oval Temple - Khafaje

White Temple of Uruk

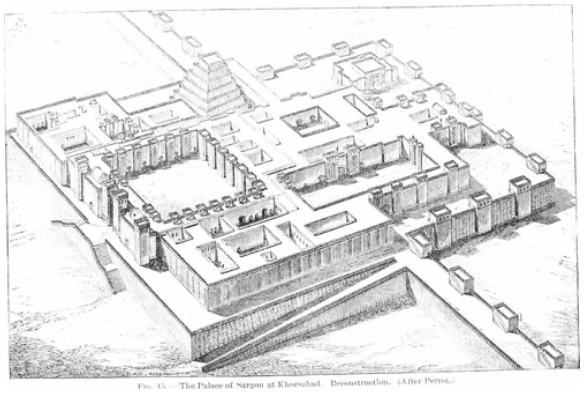


The Great Ziggurat of Ur

City of Khorsabad



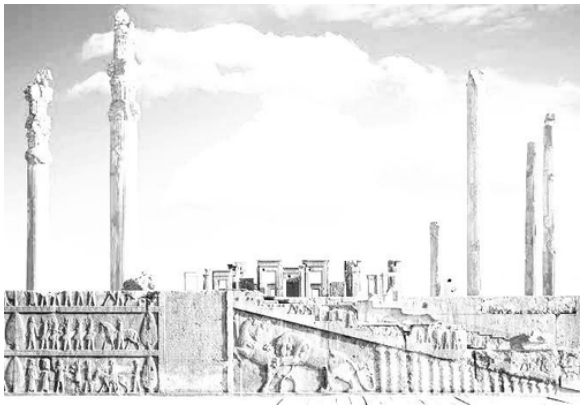
Palace of Sargon



City of Babylon

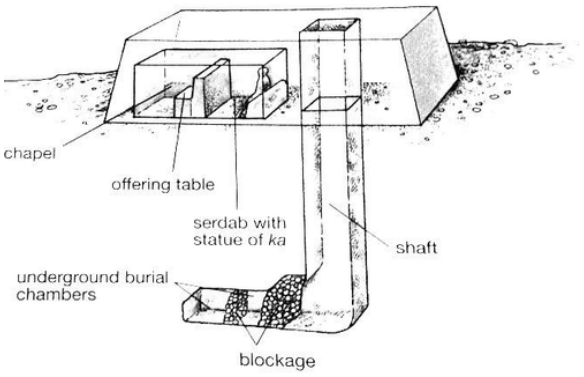
Ishtar Gate

Palace at Persepolis



Obelisk

Mastaba



Stepped Pyramid at Sakkara

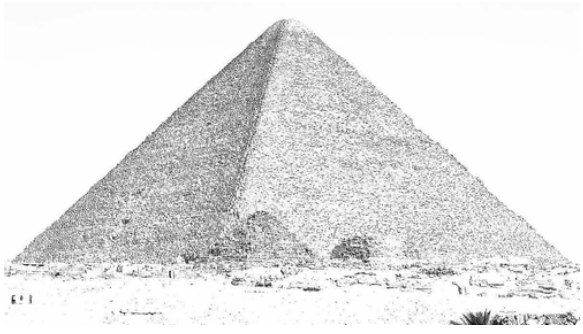
The Great Pyramid of Chephren/Khafre

The Bent Pyramid

The Pyramid of Menkaure

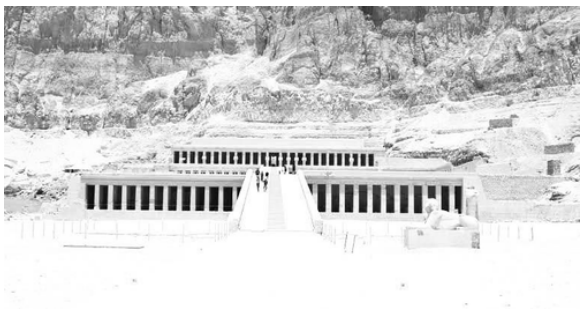
The Great Sphinx

The Great Pyramid of Cheops/Khufu



The Great Temple of Ammon Karnak

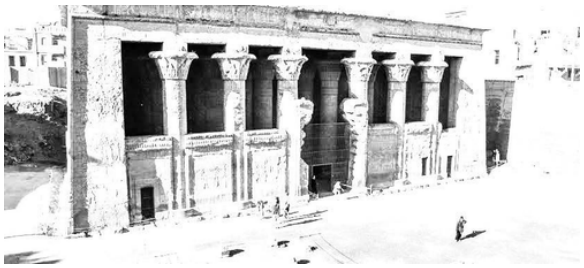
The Mortuary Temple of Queen Hatshepsut



Hypostyle Hall

The Temple at Edfu

Temple of Esna



The Great Temple of Abu Simbel

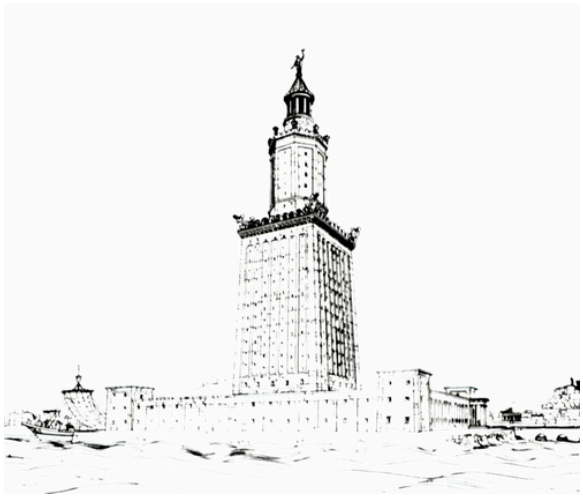
Temple of Dendera

Ptolemaic Kingdom
Founded by Ptolemy 1, one of alexander the great's most trusted officers

Temple of Kom Ombo

Temple of Philae

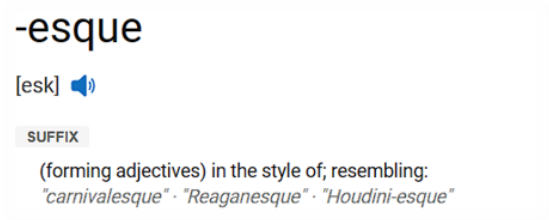
Lighthouse of Alexandria



HOA 2

ROMANESQUE ARCHITECTURE

ROMANESQUE MEANS "ROMAN-LIKE"



●**Romanesque architecture** is an architectural style of medieval Europe is characterized by semi-circular arches.
●There is no consensus for the beginning date of the Romanesque style, with proposals ranging from the 6th to the 11th century, this later date being the most commonly held.
● Examples of Romanesque architecture can be found across the continent, making it the **first pan-European architectural style since Imperial Roman architecture.**
● The Romanesque style in England is traditionally referred to as **Norman architecture.**

LOCATIONS

IT IS NOT CENTRALIZED TO A SINGLE REGION.
IT ROSE INDEPENDENTLY ON VARIETY OF LOCATIONS:
● ITALY
● CENTRAL ITALY
● NORTHERN ITALY
● SOUTHERN ITALY AND SICILY
FRANCE
● CENTRAL EUROPE SPAIN
● THE HOLY LAND
● BRITISH ISLE
● SCANDINAVIA

Romanesque Architecture: SOBER & DIGNIFIED

Characterized mainly by:
● Heavy articulated masonry construction
● With narrow openings.
● Introduction of Buttress
● the use of the round arch & the barrel vault
● the development of the vaulting rib and shaft
● introduction of central & western towers for
churches.
● Building Materials: Stone

CHARACTERISTIC FEATURES OF ROMANESQUE ARCHITECTURE

► The general impression given by Romanesque architecture, in both ecclesiastical and secular buildings, is one of massive solidity and strength.
► In contrast with both the preceding **Roman and later Gothic architecture**, in which the load-bearing structural members are, or appear to be, columns, pilasters and arches.
► Romanesque architecture, in common with **Byzantine architecture**, relies upon its walls, or sections of walls called piers

WALL

ARCH

COLUMN

PIERS

ARCADE

VAULT

BUTTRESS

WALL

● The walls of Romanesque buildings are often of massive thickness with few and comparatively small openings. They are often double shells, filled with rubble.

● The building material differs greatly across Europe, depending upon the local stone and building traditions.

● In Italy, Poland, much of Germany and parts of the Netherlands, **brick** is generally used. Other areas saw extensive use of **limestone, granite and flint.**

► The building stone was often used in comparatively **small and irregular pieces, bedded in thick mortar.**

► **Smooth ashlar masonry** was not a distinguishing feature of the style, particularly in the earlier part of the period, but occurred chiefly where easily worked **limestone** was available.

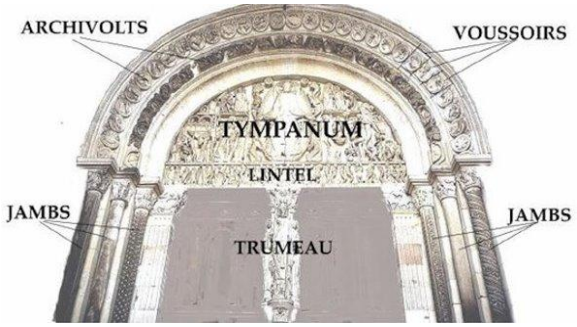
ARCHES AND OPENING

● The arches used in Romanesque architecture are nearly always semicircular, for openings such as doors and windows, for **vaults** and for arcades.

● Wide doorways are usually surmounted by a semi-circular arch, except where a door with a **lintel** is set into a large arched recess and surmounted by a semi-circular "lunette" with decorative carving.

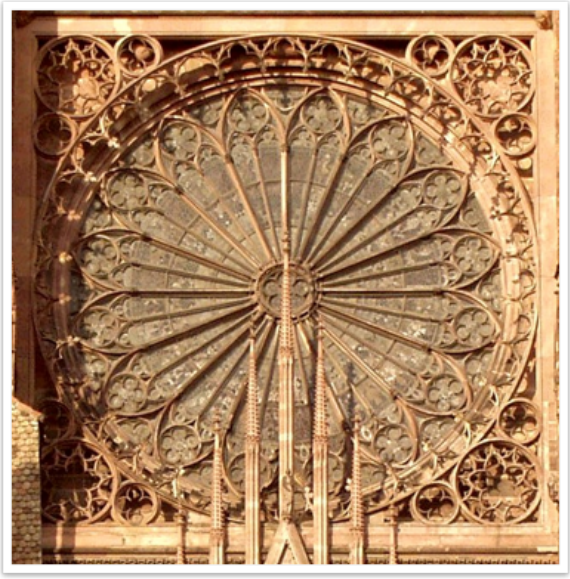
● Narrow doors and small windows might be surmounted by a solid stone lintel.

● Larger openings are nearly always arched.



● A characteristic feature of Romanesque architecture, both ecclesiastic and domestic, is the **pairing of two arched** windows or arcade openings, separated by a pillar or colonette and often set within a larger arch.

● Later Romanesque churches may have wheel windows or **rose windows with plate tracery.**



rose windows

Plate tracery.

COLUMNS

● Columns are an important structural feature of Romanesque architecture.
● **Colonnettes** and attached shafts are also used structurally and for decoration.
● A **colonnette** is a small slender column, usually decorative, which supports a beam or lintel.

● They were also used, particularly in Germany, when they alternated between more massive piers.
● Arcades of columns cut from single pieces are also common in structures that do not bear massive weights of masonry, such as cloisters, where they are sometimes paired.

CLOISTERS

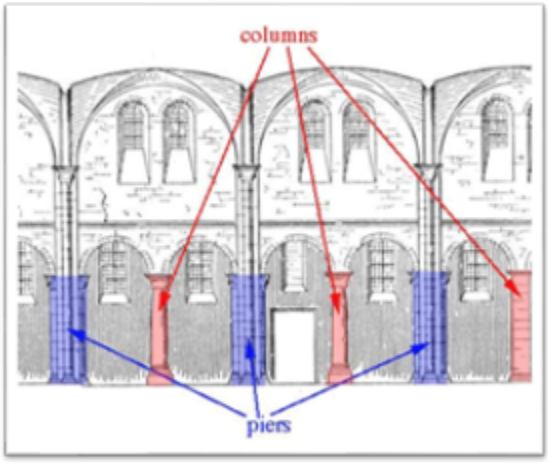
● A **Romanesque cloister** is a covered, arcaded walkway surrounding an open courtyard, typically found within a monastery. These cloisters served as peaceful areas for monastic life, facilitating walking, contemplation, and access to various monastic buildings. The architectural style is characterized by features like round arches, sturdy columns, and sometimes groin vaults.

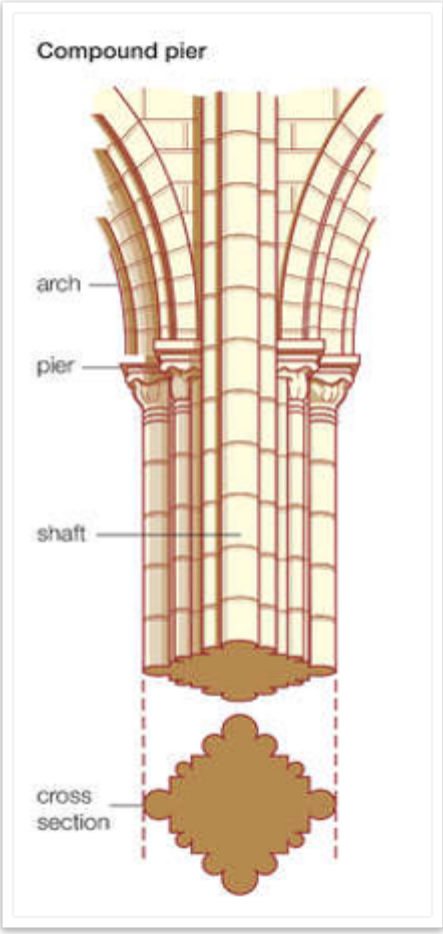
PIERS

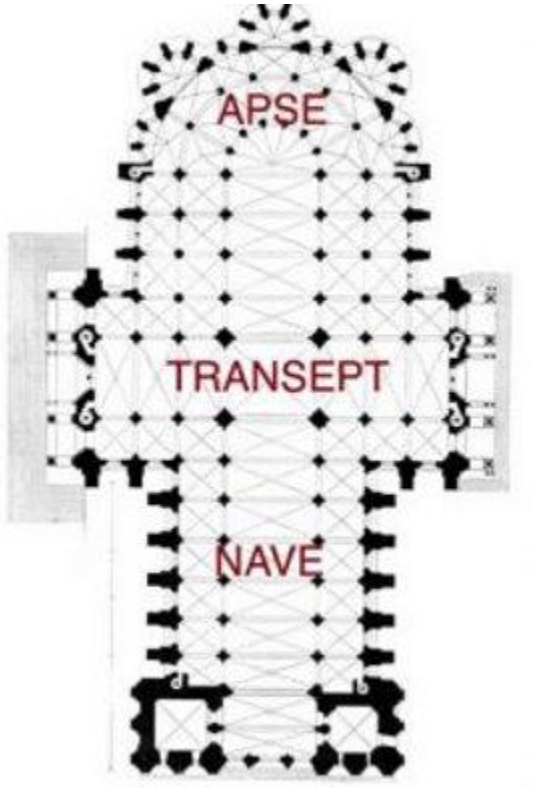
● In Romanesque architecture, piers were often employed to support arches.

● They were built of masonry and square or rectangular in section, generally having a horizontal moulding representing a capital at the springing of the arch.

● Sometimes piers have vertical shafts attached to them, and may also have horizontal mouldings at the level of the base.







● Although basically rectangular, piers can often be of highly complex form, with **half-segments of large hollow-core columns on the inner surface supporting the arch, or a clustered group of smaller shafts leading into the mouldings of the arch.**

● Piers that occur at the intersection of two large arches, such as those under the crossing of the nave and transept, are commonly **cruciform in shape**, each arch having its own supporting rectangular pier at right angles to the other.

ARCADE

● An arcade is a row of arches, supported on piers or columns.

● They occur in the interior of large churches, separating the nave from the aisles, and in large secular interiors spaces, such as the great hall of a castle, supporting the timbers of a roof or upper floor.

● Arcades also occur in cloisters and atriums, enclosing an open space.

● Arcades can occur in storeys or stages. While the arcade of a cloister is typically of a single stage.

● The arcade that divides the nave and aisles in a church is typically of two stages.

● The third stage of window openings known as the **clerestory** rising above them.

● Arcading on a large scale generally fulfils a structural purpose, but it is also used, generally on a smaller scale, as a decorative feature, both internally and externally where it is frequently **"blind arcading"** with only a wall or a narrow passage behind it.

VAULT AND ROOFS

● The majority of buildings have wooden roofs, generally of a simple truss, tie beam or king post form.

● In the case of trussed rafter roofs, they are sometimes lined with wooden ceilings in three sections like those that survive at **Ely and Peterborough** cathedrals in England

ELY CATHEDRAL
Ely, England, 1083

● The cathedral was expanded and adapted over hundreds of years but the **nave** is an important example of Romanesque architecture and sculpture.

PETERBOROUGH CATHEDRAL
Peterborough, England, 1238

● Peterborough Cathedral, originally founded as the monastery of Medeshamstede in 655, has a rich history marked by fires, rebuilding, and its eventual transition to a cathedral in 1541. It's known for its impressive Norman architecture, unique wooden ceiling, and as the burial place of Catherine of Aragon.

● In churches, typically the aisles are vaulted, but the nave is roofed with timber, as is the case at both Peterborough and Ely.

● In Italy where open wooden roofs are common, and tie beams frequently occur in conjunction with vaults, the Timbers have often been decorated as at **San Miniato al Monte, Florence.**

● Vaults of stone or brick took on several different forms and showed marked development during the

period, evolving into the pointed ribbed arch characteristic of **Gothic architecture.**

MAINLY FOUR TYPES OF VAULT WERE USED:

- **Barrel Vault**

The painted barrel vault at the Abbey Church of Saint-Savin-sur-Gartempe is supported on tall marbled columns.

The nave of Lisbon Cathedral is covered by a series of transverse barrel vaults separated by transverse arches and has an upper, arched

The nave of Lisbon Cathedral is covered by a series of transverse barrel vaults separated by transverse arches and has an upper, arched gallery.

The Church of St Philibert, Tournus, has a series of transverse barrel vaults supported on diaphragm arches.

● **Groin Vault**

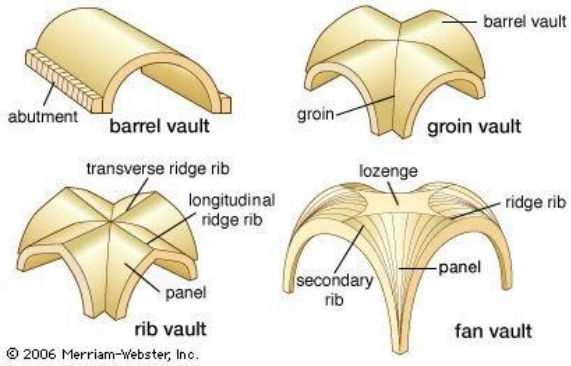
The aisle of the Abbey Church at Mozac has groin vaults supported on transverse arches.

● **Ribbed Vault**

The aisles at Peterborough Cathedral have quadripartite ribbed vaults. (The nave has an ancient painted wooden ceiling.)

The ribbed vaults at Saint-Étienne, Caen, are sexpartite and span two bays of the nave.

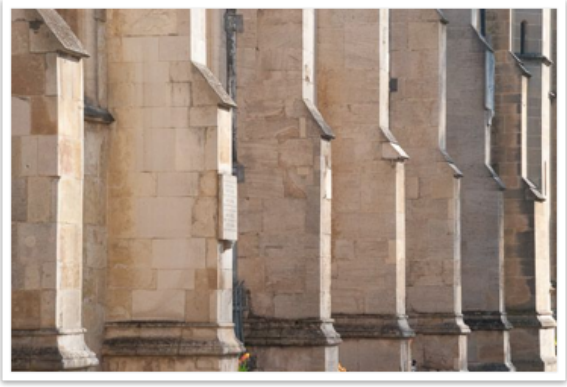
● **Pointed Arched Vault**



BUTTRESS

● Romanesque architecture, characterized by its robust, fortified appearance, utilized buttresses to **support its heavy walls and arched ceilings,** allowing for more open interior spaces compared to earlier styles. They played a crucial role in enabling the construction of larger and taller structures. These early buttresses were typically simple, square-shaped projections placed along the exterior walls, often at corners or perpendicular to them.

● Romanesque architects drew inspiration from Roman architecture, where buttresses were used to reinforce structures.



SOME IMPORTANT STRUCTURES OF ROMANESQUE ARCHITECTURE

●Baptistries

● In Christian architecture the **baptistery or baptistry** is the separate centrally planned structure surrounding the baptismal font.

● The baptistery may be incorporated within the body of a church or cathedral, and provided with an altar as a chapel.

● In the early Church, the catechumens were instructed and the sacrament of baptism was administered in the

Lateran Baptistery

Parma Baptistery

Florence Baptistery

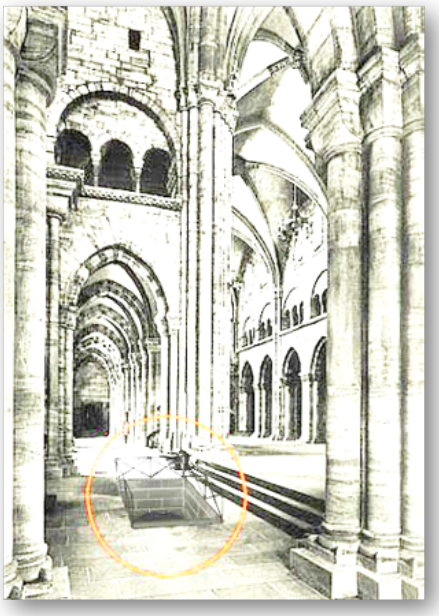
● **Cloisters**
● A cloister is a covered walk, open gallery, or open arcade running along the walls of buildings and forming a quadrangle or garth.
● The attachment of a cloister to a cathedral or church, commonly against a warm southern flank, usually indicates that it is part of a monastic foundation.
● It form a continuous and solid architectural barrier that effectively separates the world of the monks from that of the serfs and workmen, whose lives and works went forward outside and around the cloister.
● Cloistered life is also another name for the monastic life of a monk or nun.

●Porches
● Part of the church, vestibule located in front of the main entrance, sometimes also in front of the side entrance, into the aisles or sacristy.
● In Great Britain the projecting porch had come into common use in churches by early medieval times.

● They were usually built of stone but occasionally were of timber. Normally they were placed on the south side of the church, but also on the west and north sides, sometimes in multiple.

● The porches served to give cover to worshipers, but they also had a liturgical use.
● At a baptism, the priest would receive the sponsors, with the infant, in the porch and the service began there.
● In later medieval times, the porch sometimes had two storeys, with a room above the entrance which was used as a local school, meeting room, storeroom, or even armoury.

● **Crypts**
● **Crypt,** vault or subterranean chamber, usually under a church floor.
● Crypts designated any vaulted building partially or entirely below the ground level, such as sewers, the stalls for horses and chariots in a circus, farm storage cellars, or a long gallery known as a cryptoporticus, like that on the Palatine Hill in Rome



GOTHIC ARCHITECTURE

Gothic architecture
a prominent style from the **Late 12th to 16th century in Europe**, originated in northern France and evolved from Romanesque architecture. Medieval builders referred to it as opus Francigenum ("French work"). Renowned for its emphasis on **verticality and light,** it dramatically contrasted with the earlier Romanesque style.

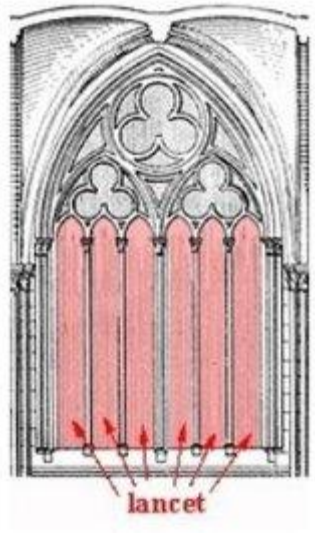
The term "**Gothic**" was a Renaissance-era insult coined by **Giorgio Vasari**, who preferred classical architecture and deemed Gothic "**barbarous Germanic**" due to its perceived deviation from classical ideals.

Despite the modern "**gothic = dark**" cliché, original designers aimed to flood spaces with light through vast stained-glass windows, creating a spiritual and aesthetic experience.

Comparison: Romanesque vs. Gothic Feature

Feature	**Romanesque**	**Gothic**
Arches	Round (semi-circular)	Pointed
Walls	Massive, thick	Very thin
Windows	Small	Large, often stained-glass
Appearance	Heavy, fortress-like, simple symmetry	Taller, lighter, emphasizes vertical lines and light-filled space
Vaults	Barrel or groin types	Ribbed vaults,

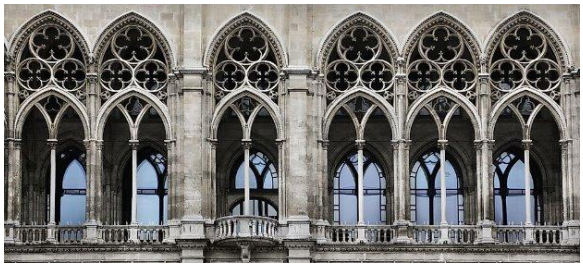
		allowing for greater height and flexibility
Support	Heavy walls	Flying buttresses

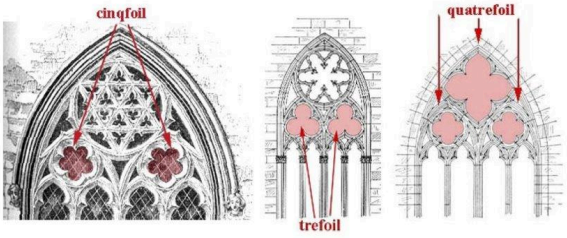


Characteristic Features of Gothic Architecture

Pointed Arches

Pointed arches are a cornerstone of Gothic design, enabling greater height and flexibility. They channel weight more efficiently than Romanesque round arches, serving as a core enabler for other Gothic innovations. They also carry symbolic meaning, directing the eye upwards towards heaven. Their origin might be influenced by Islamic architecture, with early Gothic France being the first to widely use them for taller, lighter spaces.

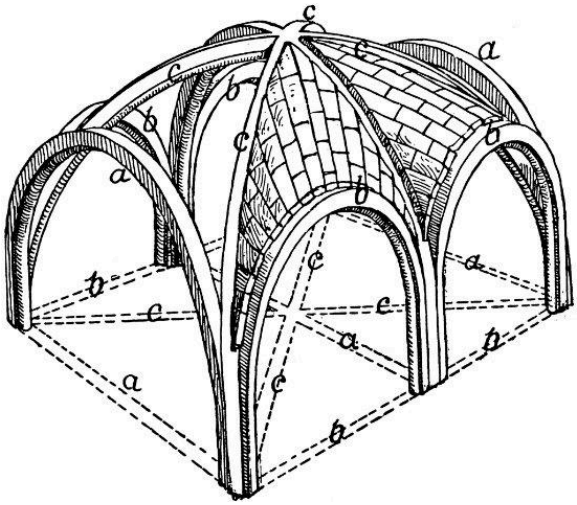


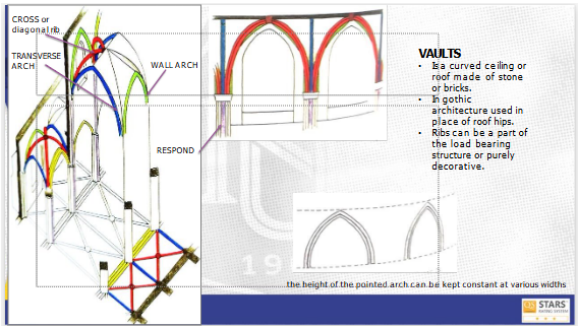


Ribbed Vaults

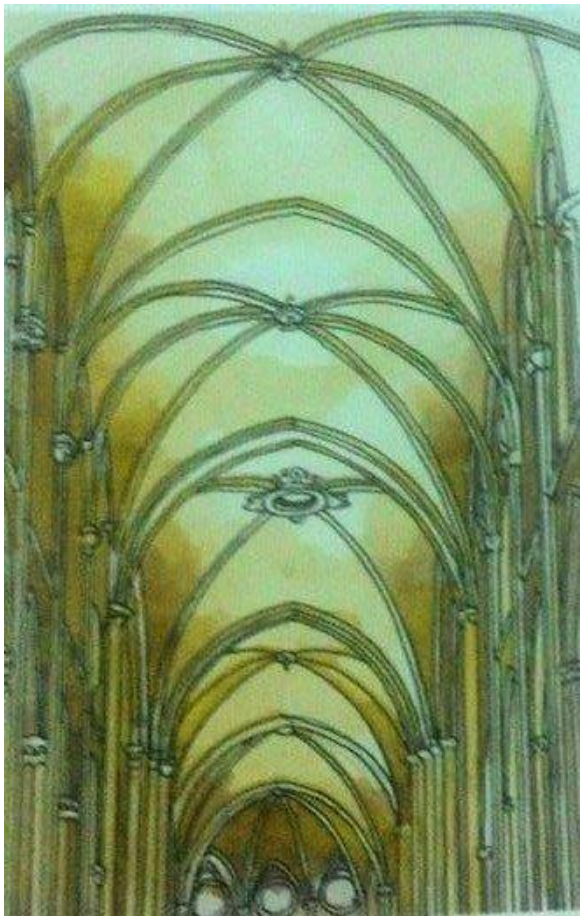
Intersecting stone ribs form the vault framework, transferring roof loads to columns. This innovation lightened the roof's weight and opened up the interior, making the ceiling appear "lighter and not as heavy."

Types of Ribbed Vaults:

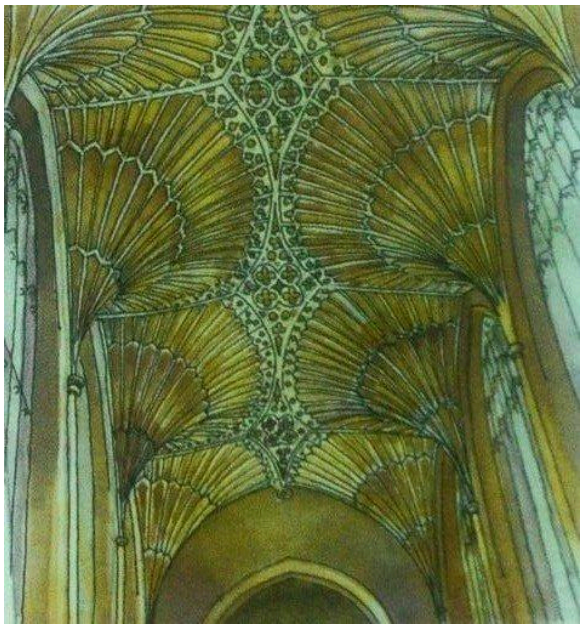




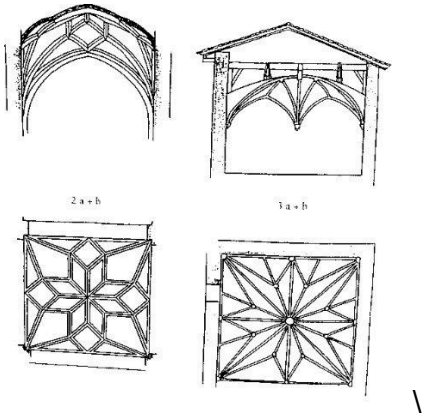
Quadripartite Vault: Divided into four bays by two diagonal ribs and three transverse ribs.
Sexpartite Vault: Divided into six bays by two diagonal ribs and three transverse ribs.



Fan Vault: Extremely decorative, late Gothic development where all ribs spread out like a fan.



Stellar Vault: Resembles stars or snowflakes.



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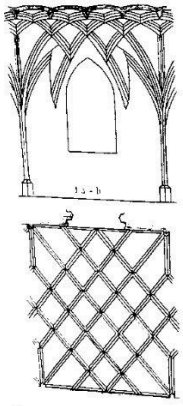
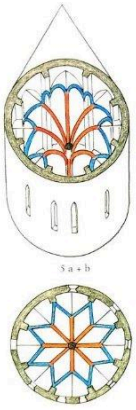
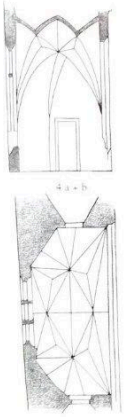
Left side - Stellar Vault
Right side - Stellar Vault (Wooden)
Reticulated Vault: A net-like pattern.



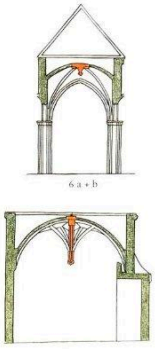
Umbrella Vault: Resembles an open umbrella.



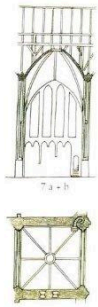
Cell Vault: Composed of small, interconnected cells.



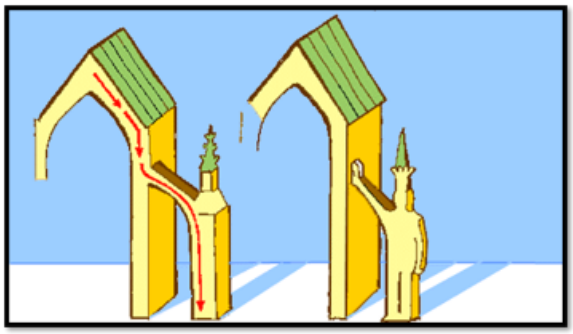
Hanging Keystone: A decorative keystone that projects downward.



Dome Vault: A curved roof structure.
Flying Buttresses

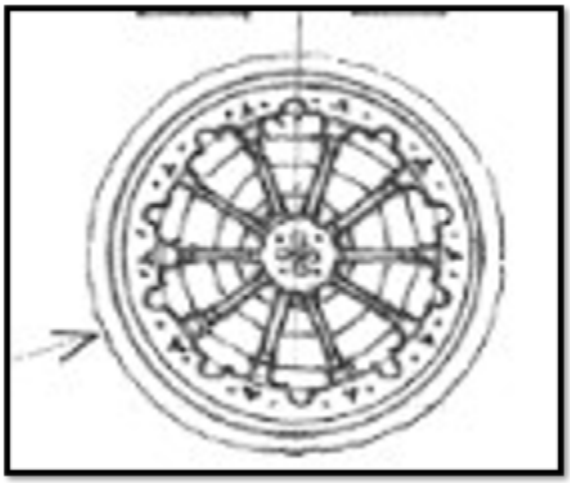


Flying Buttresses

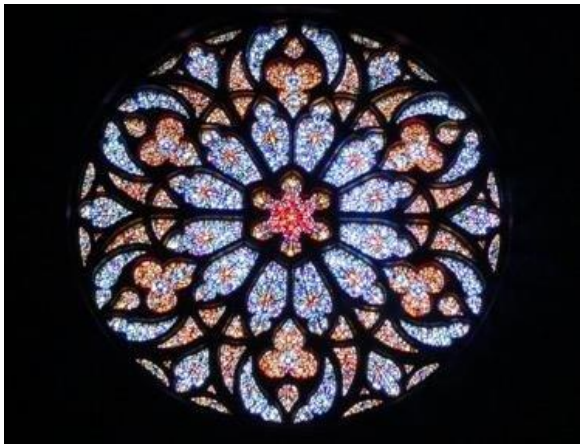


These are vertical or stepped support strips running up the face of the wall to reinforce it against load or lateral forces. They were crucial in making vaults higher, clerestory windows larger, and allowed for the thin walls and large windows characteristic of Gothic cathedrals. Considered one of the greatest structural innovations of Gothic Architecture.

Wheel Window: A rose window with distinctly radiating mullions or bars.

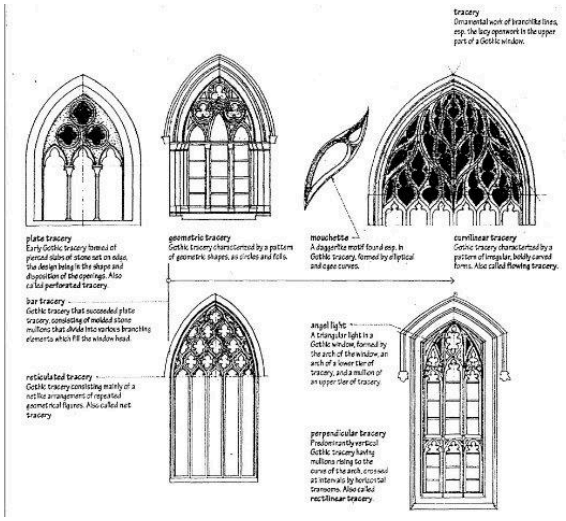


Rose Window: A circular window, usually of stained glass with symmetrical tracery at its center.



Lancet Window: Tall, narrow windows with a pointed arch at the top, resembling a lance blade.

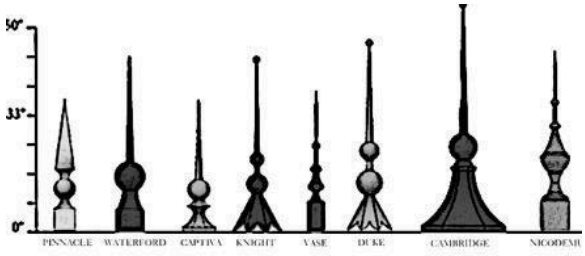
TYPE OF TRACERY

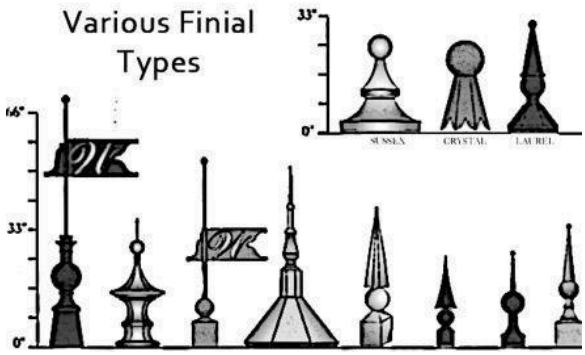


Ornamentation

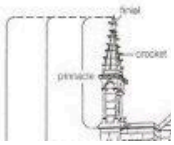
Spires: Steep, pointed roofs of towers, symbolizing an "urging toward verticality." They later developed into pinnacles.

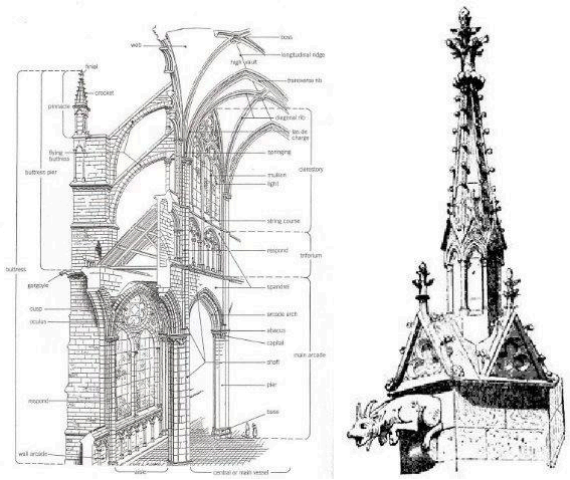
Finial: A small, foliated ornament crowning the peak of a spire or pinnacle.
Crocket: Projecting ornaments, usually curved foliage, used to decorate outer angles of pinnacles, spires, and gables.





Pinnacle: A slender spire, often highly decorated, used as a termination for a parapet or buttress.





Gargoyle: A grotesquely carved human or animal figure, often with an open mouth, serving as a waterspout to direct rainwater away from the building. They also acted as legendary evil warders.

Cultural Meaning

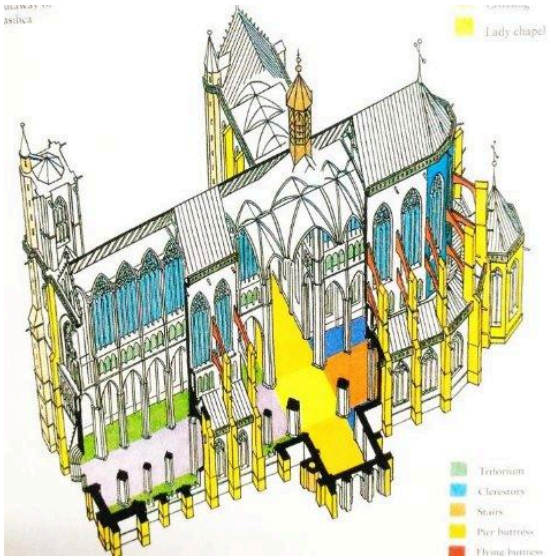
Gothic architecture was a profound symbol of **faith and civic pride.**

- **Light** was equated with divine presence.
- **Verticality** symbolized spiritual ascent.
- **Sculptures and windows** functioned as a "Bible for the illiterate," visually narrating religious stories.

Types of Gothic Churches

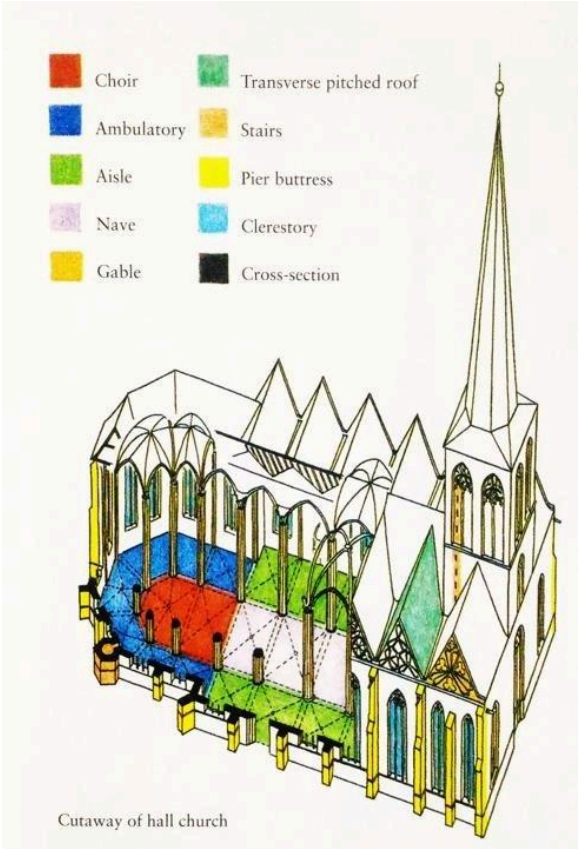
Basilica

Characterized by a nave and at least two side aisles, separated by arcades. The nave is higher than the aisles, allowing it to be lit by its own light source, the clerestory. A "pseudo-basilica" is one where the high nave is not directly lit by upper windows.

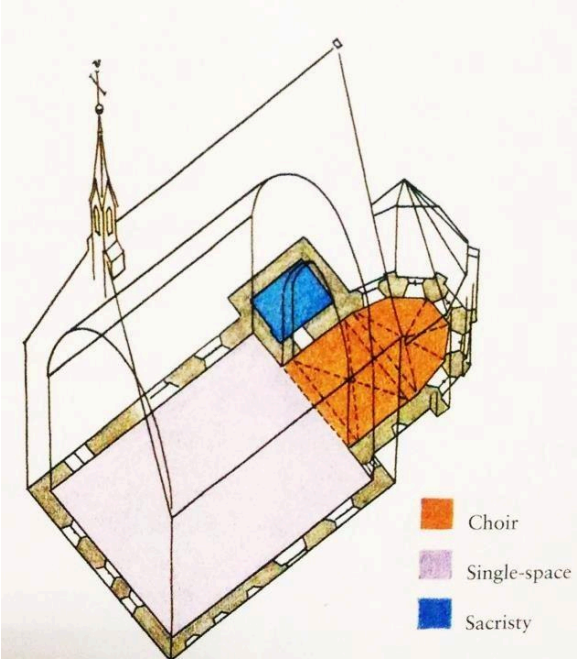


Hall Church

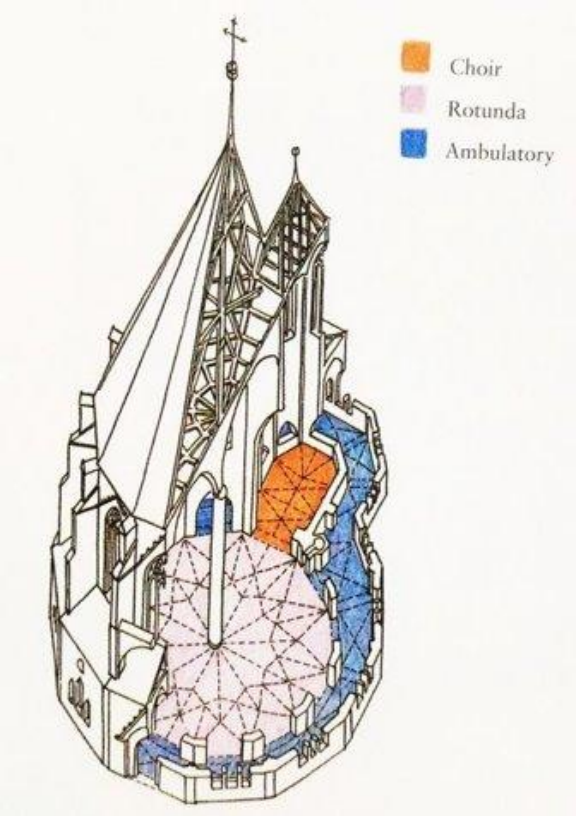
In this type, the aisles are as high, or nearly as high, as the nave. The nave receives light indirectly from large windows in the aisle walls. If the nave is higher than the side aisles, it's referred to as a **stepped hall church**. These churches can have multiple aisles on each side, and since the aisles support one another, external buttresses may not be needed.



Two-Celled Church
A single-aisle, non-centrally planned, single-spaced church.



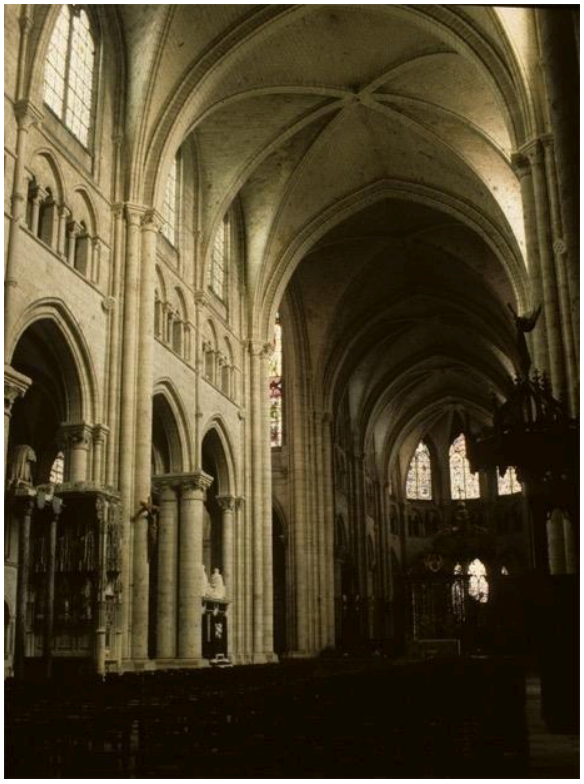
Centrally Planned Church
Designed around a single central point, contrasting with the horizontal axis of basilicas and hall churches. These are typically round or polygonal (hexagonal or any number of angles). A church with a Greek cross plan (four equal arms) is also considered centrally planned.



Notable Examples of Gothic Cathedrals

Abbey Church of St. Denis, Paris, France (1144): Considered the first major Gothic project.

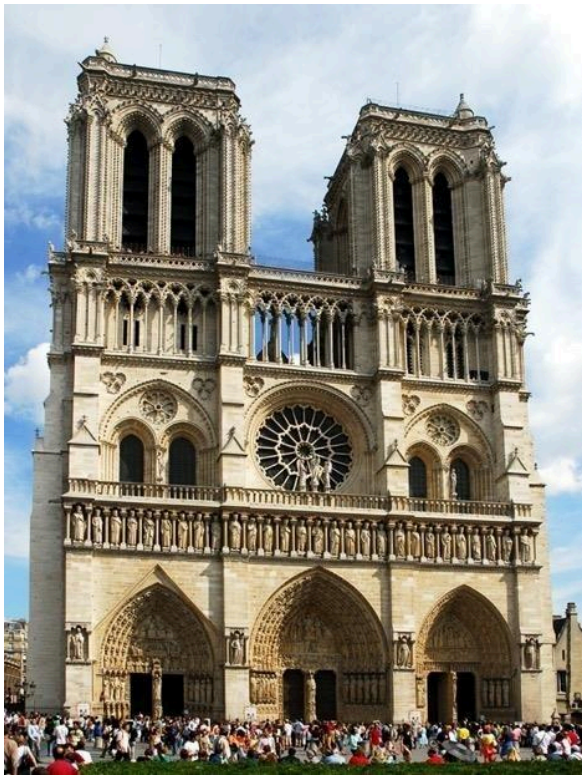
Sens Cathedral, Sens, France (1140)



Laon Cathedral, Laon, France (1230)

Soissons Cathedral, Soissons, France (1300)

Notre Dame Cathedral, Paris, France (1163): Also known as Notre Dame De Paris.



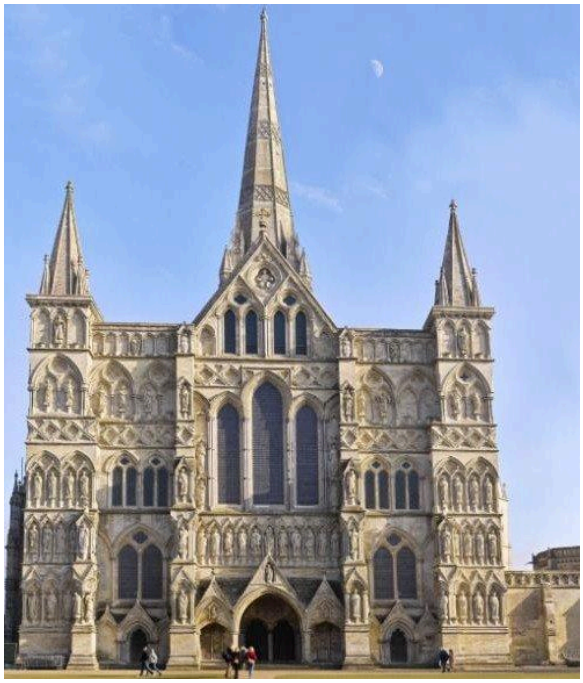
Chartres Cathedral, Chartres, France (1194)

Bourges Cathedral, Bourges, France (1190)

Reims Cathedral, Reims, France (1211)

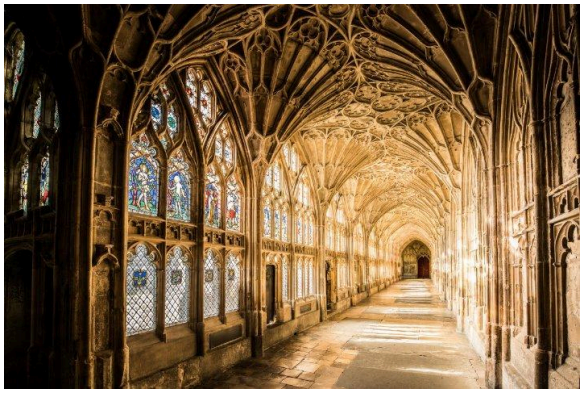
Amiens Cathedral, Amiens, France (1220)

Salisbury Cathedral, Salisbury, England (1220)



York Minster, York, England (1230)

Gloucester Cathedral, Gloucester, England (1482): Famously used as a filming location for the first three Harry Potter movies.



RENAISSANCE ARCHITECTURE

Origins & Historical Development
Renaissance architecture emerged after Gothic and before Baroque styles. It began in **Florence, Italy,** with **Filippo Brunelleschi** as a key innovator, rapidly spreading to other Italian cities and then across Europe, including Spain, France, Germany, England, and Russia, at varying times and with differing levels of impact.

Socio-Political, Demographic & Economic Background
The late Middle Ages saw European political structures evolve from small feudal territories into larger, more stable nation-states ruled by monarchies. In Italy, urban centers thrived, populated by merchant and trade classes who could defend themselves. Money gradually replaced land as the primary medium of exchange, and more serfs achieved freedom. These changes in Medieval Italy and the decline of feudalism set the stage for profound social, cultural, and economic transformations.

Who are the Medici Family?
The Medici were an influential Italian banking family and political dynasty that rose to prominence in the Republic of Florence during the first half of the 15th century, under **Cosimo de' Medici.**

- They owned the Medici Bank, the largest in Europe during the 15th century, which facilitated their ascent to political power in Florence.
- Despite their power, they officially remained citizens rather than monarchs until the 16th century.
- The Medici family produced four Popes of the Catholic Church:

1. Pope Leo X (1513–1521)

2. Pope Clement VII (1523–1534)

3. Pope Pius IV (1559–1565)

4. Pope Leo XI (1605)

- **They also produced two Queens of France:**
    - Catherine de' Medici (1547–1559)

    - Marie de' Medici (1600–1610)

"RENAISSANCE"

The term "Renaissance" (from Italian rinascita, meaning 'rebirth') was first used by Giorgio Vasari around 1550 in his Lives of the Artists and was Anglicized in the 1830s. It describes a cultural movement that significantly impacted European intellectual life during the early modern period.

Cultural Influence

Renaissance scholars utilized the humanist method of study, striving for realism and emotional depth in art. Its influence was widespread, touching:

- Art
- Architecture
- Philosophy
- Literature
- Music
- Science
- Technology
- Politics
- Religion
- And other areas of intellectual inquiry

Basis of the Renaissance & Its Inventions

The intellectual foundation of the Renaissance was its unique interpretation of **Humanism.**

- This concept originated from the Roman idea of **"humanitas"** and the renewed interest in classical Greek philosophy, particularly the teachings of **Protagoras**, who asserted that **"man is the measure of all things."**
- Early innovations included the development of **perspective in oil painting** and the re-acquisition of knowledge on how to produce concrete.

- The invention of **metal movable type** in the late 15th century greatly accelerated the spread of ideas.
- It's important to note that the changes brought by the Renaissance were not uniform across all parts of Europe.

Filippo Brunelleschi (1377 – 1446)

Also known as **"Pippo",** Brunelleschi is considered the **Founding Father of Renaissance architecture**. He was an Italian architect, designer, and sculptor, recognized as the first modern engineer, planner, and sole construction supervisor.

- In 1421, he received the first patent in the Western world.
- He initially trained as a master goldsmith.
- He is most renowned for designing the **dome of the Florence Cathedral**, an engineering marvel not seen since antiquity.
- He also developed the mathematical technique of **linear perspective in art**, which shaped pictorial representations of space until the late 19th century and influenced the rise of modern science.

The Holy Trinity by Masaccio (1425–1427) used Brunelleschi's system of perspective

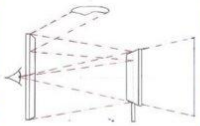


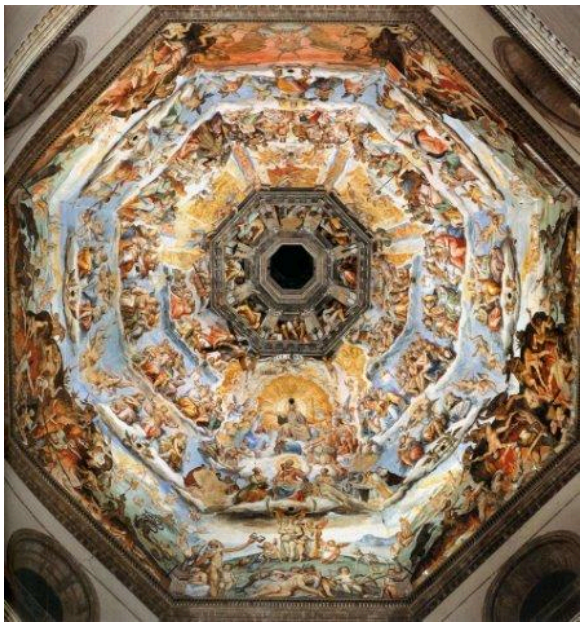
Diagram of Brunelleschi's experiment in perspective

The Delivery of the Keys fresco, 1481–1482, Sistine Chapel, by Perugino (1481–1482), features both linear perspective and Brunelleschi's architectural style

- His achievements also encompass other architectural works, sculpture, mathematics, engineering, and ship design.
- His major surviving works are primarily located in Florence, Italy.

The Dome of Santa Maria del Fiore

(The Mosaics of the Vault Baptistery Florence, Italy)



(The Last Judgement , Santa Maria Del Foire Florence, Italy)

This dome is a global masterpiece of art and a symbol of Florence, the Renaissance, and humanism.

- With a diameter of **45.5 meters and a height exceeding 116 meters,** it is the largest masonry vault in the world.
- It was constructed between 1420 and 1436 by Filippo Brunelleschi, based on his winning project from a competition launched in 1418.
- The Cathedral of Florence was consecrated by Pope Eugene IV on March 25, 1436.
- **Brunelleschi's major innovation** was building the Dome without a supporting structure.
- The Dome comprises two distinct shells:
    a. **Internal Dome**: Over 2.00m thick, with a deeper angle, composed of large arches held by ribs, and made of bricks arranged in a "herringbone" pattern.
    b. **External Dome:** Covered with terracotta tiles and marked by eight white marble ribs.
- The oculus of the Dome is capped by a 21-meter-high white marble lantern, built after Brunelleschi's death (1446) but according to his plans.
- A **golden copper ball with an apical cross**, crafted by Andrea del Verrocchio, was placed on top in 1471.

- Between 1572 and 1579, the internal vault of the Dome was painted by Giorgio Vasari and Federico Zuccari with an enormous "Last Judgment" fresco, partly inspired by the mosaics of the Baptistery, making it the largest mural in the world.

CHARACTERISTICS OF RENAISSANCE ARCHITECTURE

Renaissance architectural style emphasizes:

- Symmetry
- Proportion
- Geometry
- Regularity of Parts

These principles mirrored those found in classical antiquity, particularly ancient Roman architecture, many examples of which were still visible.

- Orderly arrangements of columns, pilasters, and lintels, along with the use of semicircular arches, hemispherical domes, niches, and aediculae, replaced the more complex proportional systems and irregular profiles characteristic of medieval buildings.
- **Columns, Pilasters, Lintels, Semicircular Arches, Hemispherical Domes, Niches, Aediculae** became fundamental elements.

ITALIAN RENAISSANCE

Italian architects consistently favored clearly defined forms and structural members that conveyed their purpose. This is evident in many Tuscan Romanesque buildings like the Florence Baptistery and Pisa Cathedral.

- Italy never fully adopted the Gothic architectural style. Apart from Milan Cathedral (which shows French Rayonnant Gothic influence), few Italian churches exhibit the vertical emphasis, clustered shafts, ornate tracery, and complex ribbed vaulting typical of Gothic architecture elsewhere in Europe.
- The abundance of ancient Roman architectural remains, especially in Rome, provided classical inspiration to artists when philosophy was also shifting towards classical ideals.

Principal Phases of Renaissance Architecture in Italy

1. Quattrocento: "Early Renaissance"
2. High Renaissance
3. Mannerism

Quattrocento: "Early Renaissance"

During the Quattrocento, architectural order concepts were explored and formalized. The study of classical antiquity notably led to the adoption of Classical details and ornamentation.

- This period is seen as the transition from the Medieval era to the Italian Renaissance, primarily in cities like Rome, Florence, Milan, Venice, and Naples.

- It also marked the fall of Constantinople to the Ottoman Empire.

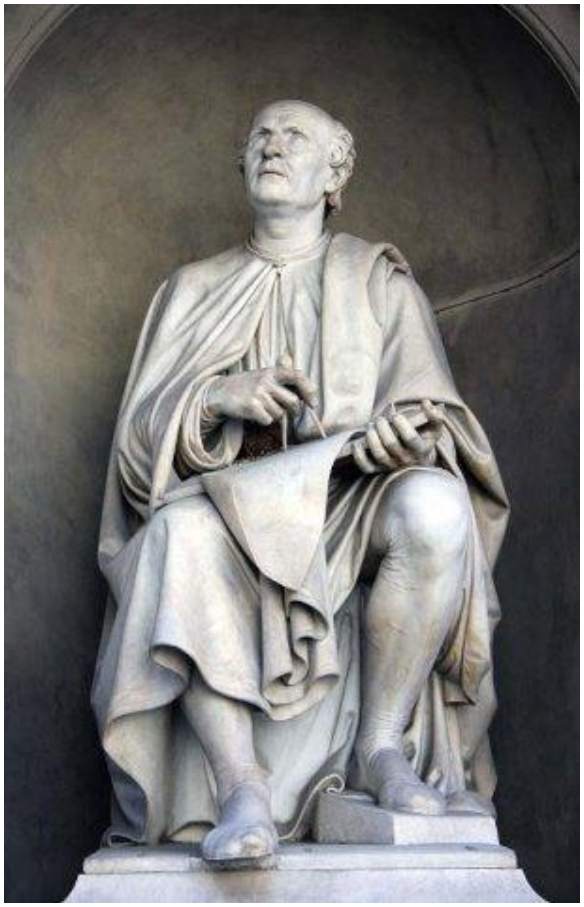
Space Planning (Difference of Romanesque & Gothic Architecture vs Renaissance)
Space, as an architectural element, was utilized differently than in the Middle Ages. Its organization was dictated by proportional logic and geometric principles, rather than the intuitive creation seen in Medieval buildings.

- A prime example is the Basilica di San Lorenzo in Florence by Filippo Brunelleschi.

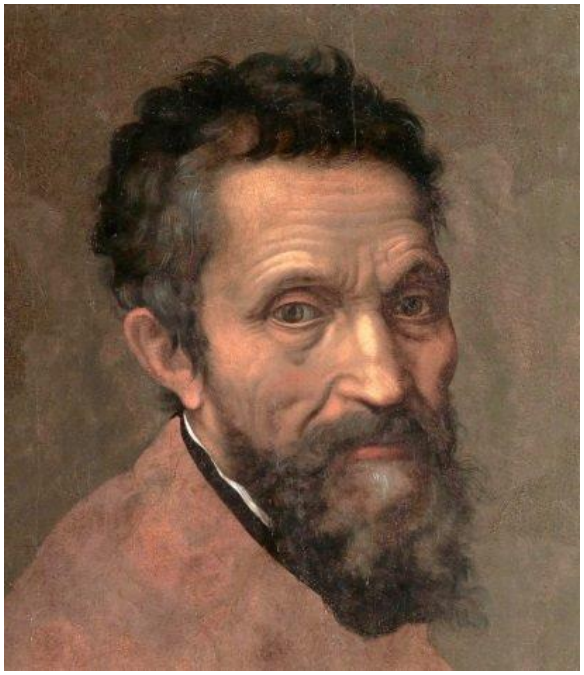
Basilica di San Lorenzo

One of Florence's largest churches, located in the city's main market district and serving as the burial place for key members of the Medici family.

First architect: Filippo Brunelleschi



Second architect (for façade reconstruction): Michelangelo



The Basilica demonstrates numerous innovative features of the developing Renaissance style:

- Simple mathematical proportional relationships, using a square aisle bay as a module and nave bays in a 2:1 ratio.
- An integrated system of columns, arches, and entablatures, based on Roman Classical models.
- Classical proportions for column heights.
- A clear relationship between columns and pilasters (seen as embedded piers).
- Use of spherical segments in the side aisle vaults.
- Articulation of the structure using **pietra serena (Italian: "serene stone")**.
- Features an interior with Corinthian arcades and flat ceiling panels, indicating **"a departure from the Gothic and a return to the Romanesque Proto-Renaissance."**
-

Lorenzo Ghiberti

A Florentine Italian artist of the Early Renaissance, most famous for crafting the bronze doors of the Florence Baptistery, which Michelangelo dubbed the **"Gates of Paradise."**

- Trained as a goldsmith and sculptor, he established a significant workshop for metal sculpture.
- His **Commentarii** contains important writings on art and what may be the earliest surviving autobiography by an artist.

Brunelleschi Vs Lorenzo Ghiberti:Florence Baptistery Doors Competition

The public decided that both Brunelleschi and Ghiberti should collaborate on the Florence Baptistery Doors project, as both were deemed winners.

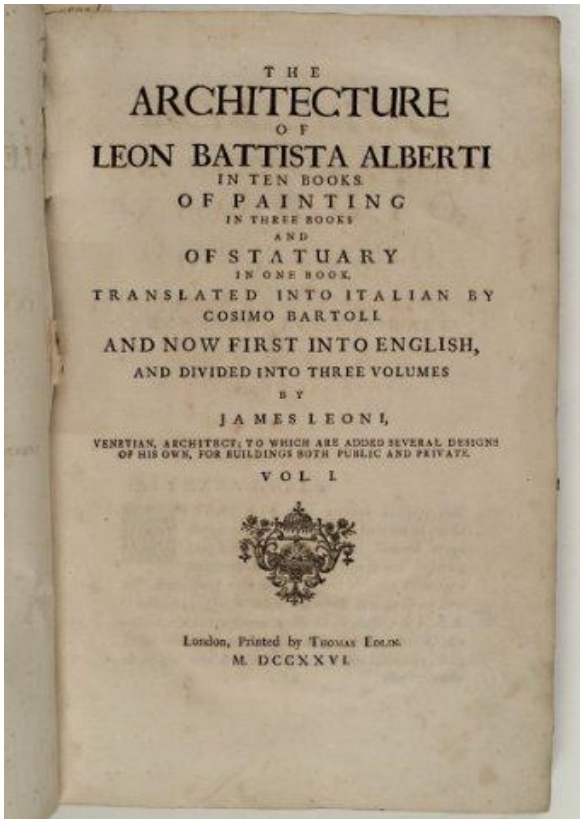
- Brunelleschi, however, withdrew from the project, leaving it entirely to Ghiberti.
- Ghiberti's career was largely defined by his two successive commissions for pairs of bronze doors for the Florence Baptistery

(Battistero di San Giovanni).

- These are recognized as major masterpieces of the Early Renaissance and were widely acclaimed and influential from their unveiling.

Other Architects during the Quattrocento

Leon Battista Alberti



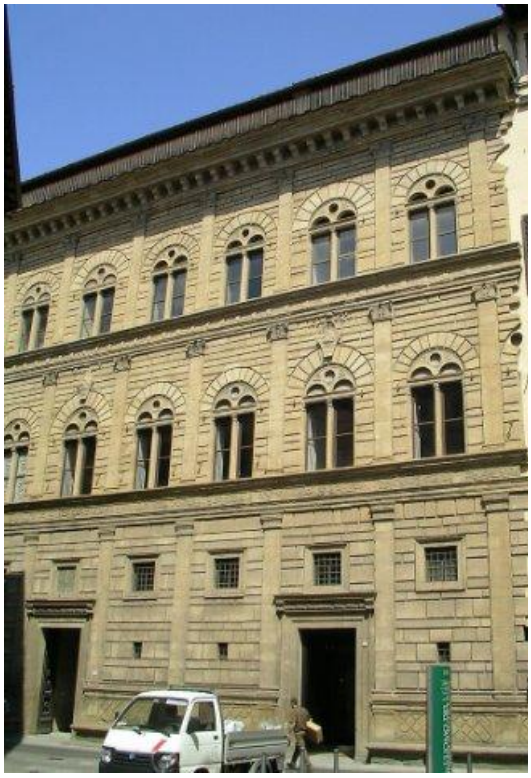
THE
ARCHITECTURE
OF
LEON BATTISTA ALBERTI
IN TEN BOOKS.
OF PAINTING
IN THREE BOOKS
AND
OF STATUARY
IN ONE BOOK.
TRANSLATED INTO ITALIAN BY
COSIMO BARTOLI.
AND NOW FIRST INTO ENGLISH,
AND DIVIDED INTO THREE VOLUMES
BY
JAMES LEONI,
VENETIAN, ARCHITECT; TO WHICH ARE ADDED SEVERAL DESIGNS
OF HIS OWN, FOR BUILDINGS BOTH PUBLIC AND PRIVATE.
VOL I.

London, Printed by THOMAS EDLIN.
M. DCCXXVI.

- As a designer and a scholar of Vitruvius and ancient Roman remains, Alberti grasped the essence of column and lintel architecture from a visual rather than purely structural perspective.
- He correctly employed the Classical orders, unlike Brunelleschi, who offered a freer interpretation of Classical columns and pilasters.

Notable works include:

- **Palazzo Rucellai**



- The dramatic facade of **Sant' Andrea, Mantua (1471)**, built to his design posthumously.

- The unfinished and altered facade of **San Sebastiano**, which has led to much speculation regarding Alberti's original

intentions.

Michelozzo Michelozzi (1396 – 1472)

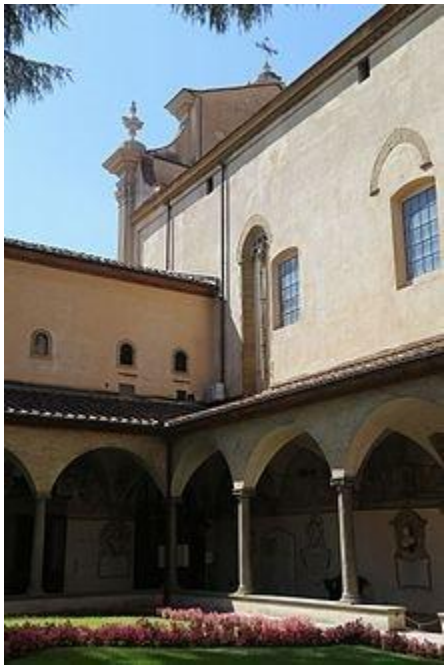
An Italian architect and sculptor, considered a key pioneer of Renaissance architecture.

- He was a pupil of Lorenzo Ghiberti in his early career and later collaborated with Donatello.

Notable works include:

- **Palazzo Medici**

- **Basilica di San Marco Convent,** one of his earliest and most influential architectural projects in Florence.



High Renaissance

During the High Renaissance, concepts derived from classical antiquity were refined and applied with greater confidence. **Donato Bramante (1444–1514)** is the most significant architect of this period.

- Bramante expanded the applicability of classical architecture to contemporary buildings.
- His **Tempietto di San Pietro in Montorio (1503)** was directly inspired by circular Roman temples.
- He was not, however, rigidly bound by classical forms, and his style would eventually dominate Italian architecture in the 16th century.

Donato Bramante

- An Italian architect and painter.
- He introduced Renaissance architecture to Milan and the High Renaissance style to Rome.
- His plan for **St. Peter's Basilica** in Rome became the foundation for the design executed by Michelangelo.
- Around 1474, Bramante moved to Milan, a city with a strong Gothic architectural tradition, and constructed several churches in the new Antique style.
- Duke Ludovico Sforza appointed him as virtually his court architect starting in 1476.

High Renaissance: Donato Bramante's Tempietto

The **Tempietto (Italian for 'small temple')** is a diminutive, commemorative tomb designed by **Donato Bramante**, possibly in 1502. Commissioned by Ferdinand and Isabella**,** it is located in the courtyard of San Pietro in Montorio and is considered a masterpiece of High Renaissance Italian architecture.

Tempietto Characteristics

The Tempietto is renowned for its **harmony** and construction from bearing masonry. This circular temple supports a classical entablature and was originally framed by the shadowy arch of the cloister. It represents the earliest-known Renaissance use of the **Tuscan order**, a form of the Doric order. The robust nature of the Tuscan order made it suitable for deities like Hercules, and

thus fitting for a structure associated with St. Peter.

This building marks the traditional site of St. Peter's martyrdom and served as an important precursor to Bramante's subsequent rebuilding of St. Peter's Basilica. Its perfectly proportioned design incorporates slender Tuscan columns, a Doric entablature (inspired by the ancient Theater of Marcellus), and a dome.

Mannerism: "Late Renaissance"
Mannerism, also known as the "Late Renaissance", saw architects experiment with architectural forms to emphasize **solid and spatial relationships.** The Renaissance ideal of harmony evolved into more free and imaginative rhythms. Mannerist Architecture is characterized by visual trickery and unexpected elements that challenged established Renaissance norms. While historically viewed negatively, **the term "Mannerism" now describes this period in a non-judgmental way.**

Michelangelo and the Piazza del Campidoglio

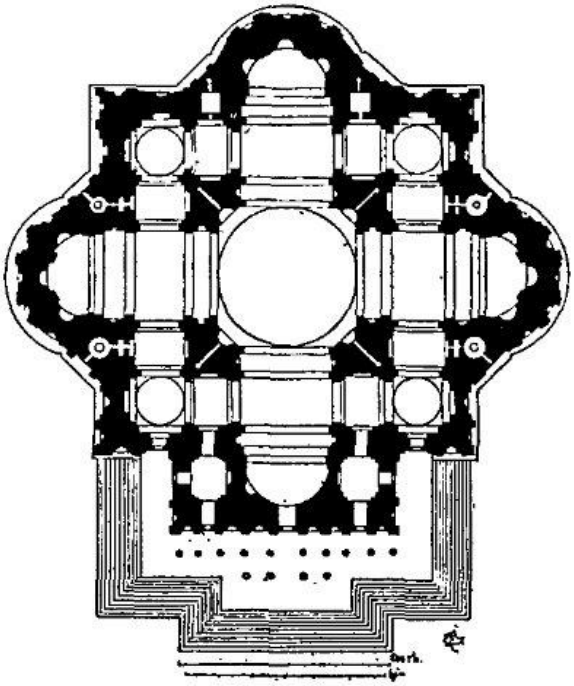
Michelangelo (1475–1564) was a key figure in the Mannerist style. He frequently employed the **giant order** in his architecture, which involves large pilasters extending from the base to the top of a façade. A prime example of this is his design for the **Piazza del Campidoglio in Rome**.

Michelangelo's redesign of the Piazza del Campidoglio and its surrounding palazzi was created between 1536 and 1546. Commissioned by Pope Paul III, it aimed to symbolize a new Rome and impress Emperor Charles V. This project allowed Michelangelo to create a monumental civic plaza and re-establish the grandeur of Rome.

His extensive plan
Michelangelo's initial designs for the piazza date from 1536. In a symbolic gesture, he reoriented Rome's civic center away from the ancient Roman Forum and towards Papal Rome and the Christian Church, specifically St. Peter's Basilica. This shift also indicated his desire to engage with the city's developing areas rather than its ancient ruins.

Michelangelo Buonarroti: Master of the High Renaissance

Michelangelo was an Italian sculptor, painter, architect, and poet from Florence who significantly influenced Western art. His remarkable versatility earned him recognition as an archetypal Renaissance man, often compared to his contemporary, Leonardo da Vinci. Many scholars consider him one of the greatest artists of all time.



Michelangelo's Key Architectural Accomplishments:

- Façade for Brunelleschi's Church of San Lorenzo in Florence
- Medici Chapel and the Tombs of Giuliano and Lorenzo Medici
- Laurentian Library
- Campidoglio
- Upper storey of Farnese Palace
- In 1547, he took over the completion of **St. Peter's Basilica.** He reverted to Bramante's original design, simplifying and strengthening it to create a more dynamic and unified structure.

Mannerism: "Late Renaissance" Villa Farnese

The **Villa Farnese**, also known as Villa Caprarola, is a pentagonal mansion located in Caprarola, Italy. It was

designed **by Giacomo Barozzi da Vignola.**

Giacomo Barozzi da Vignola

Vignola was a prominent Italian architect of 16th-century Mannerism. His two most famous works are:

- Villa Farnese at Caprarola

- The Jesuits' Church of the Gesù in Rome.

Vignola, alongside Serlio and Palladio, was instrumental in disseminating the Italian Renaissance style across Western Europe.

Vignola's Noteworthy Architectural Works:

- **Villa Giulia for Pope Julius III, Rome (1550–1553)**

- **Villa Farnese at Caprarola (1559–1573)**
- **Villa Lante at Bagnaia (1566 onwards)**

- **Chiesa del Gesù, Rome (which later influenced Baroque church facades)**
- **Basilica of Santa Maria degli Angeli, Assisi (with Galeazzo Alessi)**
- **Church of Sant'Andrea in Via Flaminia, Rome (first church with an oval dome, a Baroque signature)**
- **Palazzo dei Banchi, Bologna**
- **Palazzo Farnese, Piacenza**

Other Architects in Late

Renaissance: Andrea Palladio

Andrea Palladio (1508–1580) was an Italian Renaissance architect active in the Venetian Republic. Influenced by Roman and Greek architecture, particularly Vitruvius, he is considered one of the most influential figures in architectural history. While he designed churches and palaces, he was best known for his country houses and villas. His architectural treatise, The Four Books of Architecture, brought him widespread recognition.

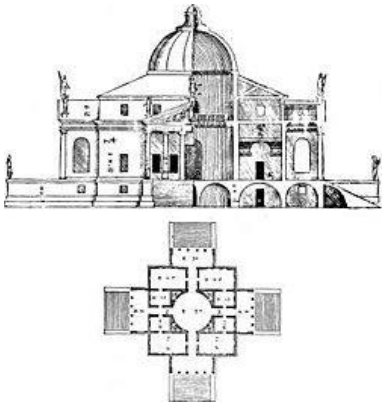
One of the first works by Palladio, Villa Godi (begun

Hall of the Muses of the Villa Godi (1537–1542)

Villa Pisani, Bagnolo (1542)

Palladio's Legacy:

- His churches are found within the **"Venice and its Lagoon"** UNESCO World Heritage Site.
- The **city of Vicenza** features 23 buildings designed by Palladio, and 24 Palladian villas in Veneto are UNESCO World Heritage Sites.
- **Villa Capra**, **also known as "La Rotonda,"** is a famous Renaissance villa near Vicenza designed by Palladio.



Palazzo Thiene (1542–1558), (begun by Giulio Romano, revised and completed by Palladio)

Facade of the Basilica Palladiana (begun 1546)

Ground floor and entrance stairway of the Basilica Palladiana

Upper level loggia of the Basilica Palladiana

Palladio & The Four Books of Architecture:

Palladio's first book outlined nine rule-sets that define architectural identity, based on parametric formulas and objects:

- Walls
- Ceilings
- Stairs
- Columns
- Doors
- Windows
- Frames
- Roof
- Details

Papal Basilica of Saint Peter in the Vatican

St. Peter's Basilica (Latin: Basilica Sancti Petri) is a Renaissance-style church located in Vatican City. Designed principally by **Donato Bramante, Michelangelo, Carlo Maderno, and Gian Lorenzo Bernini**, it is the most renowned work of Renaissance architecture and the largest church globally by interior measure.

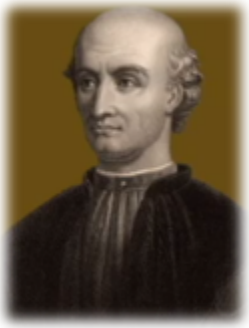
Historical Significance

St. Peter's tomb is traditionally believed to be directly beneath the basilica's high altar. Consequently, many popes have been buried there since the Early Christian period. A church has existed

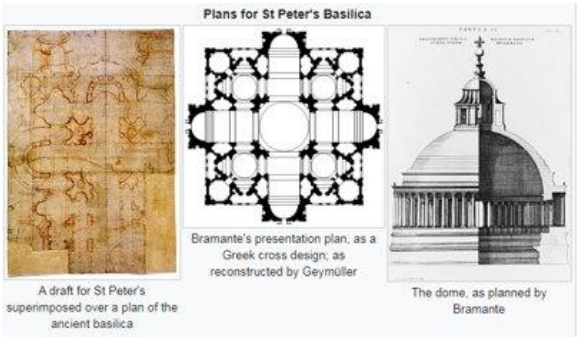
on this site since Emperor Constantine the Great's time. The **Old St. Peter's Basilica,** dating from the 4th century AD, was constructed over the Circus of Nero from wood during Constantine's reign and completed in 40 years. Construction of the present basilica began on April 18, 1506, and was completed on November 18, 1626.

Architects of St. Peter's Basilica
The construction of St. Peter's Basilica involved numerous influential architects over more than a century:

1. **Donato Bramante (1506):**

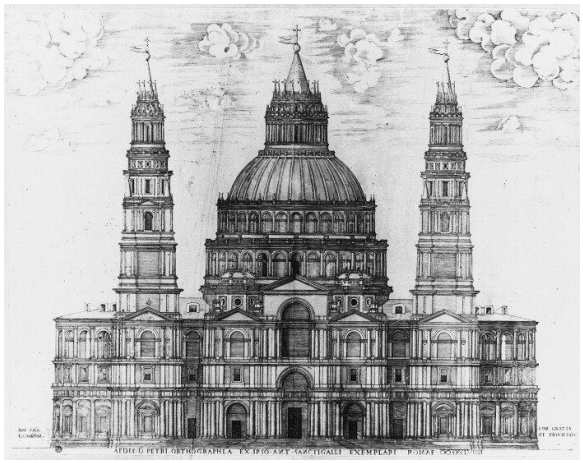


- The first architect, proposing a Greek cross plan and a dome slightly larger than the Pantheon.



2. **Giuliano da Sangallo (1513):**

- Strengthened and extended Bramante's peristyle into a series of arched and ordered openings around the base.

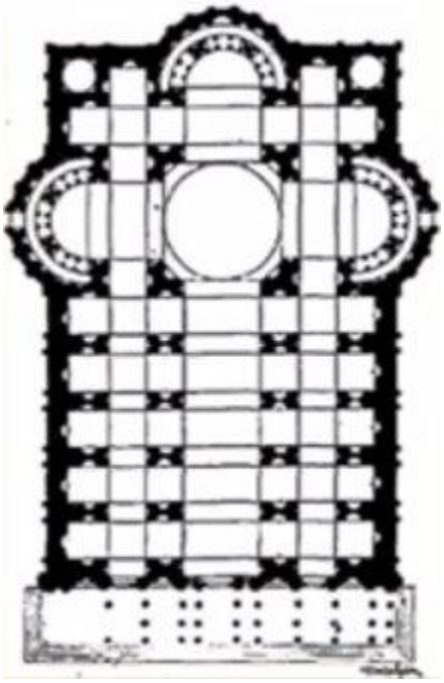


3. **Fra Giocondo (1513):**

- Co-architect with Giuliano da Sangallo, responsible for strengthening the building's foundation after Bramante.

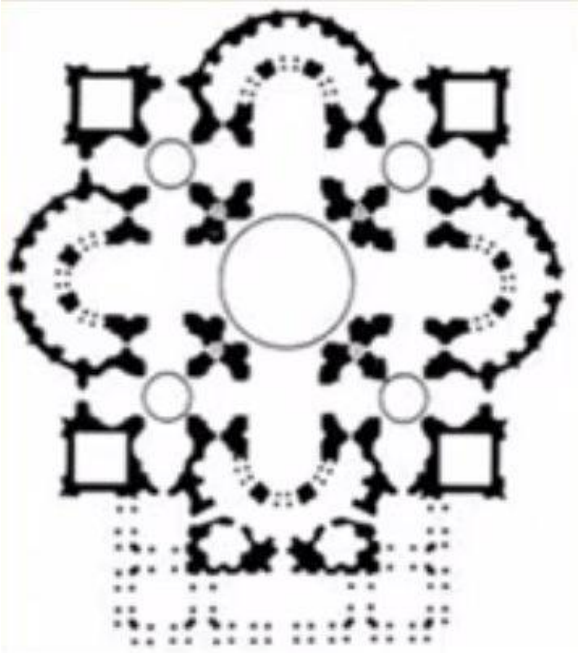
4. **Raphael Sanzio (1514):**

- Architect-in-chief after Bramante's death.
- Proposed a Latin cross plan with a short pronaos and façade.

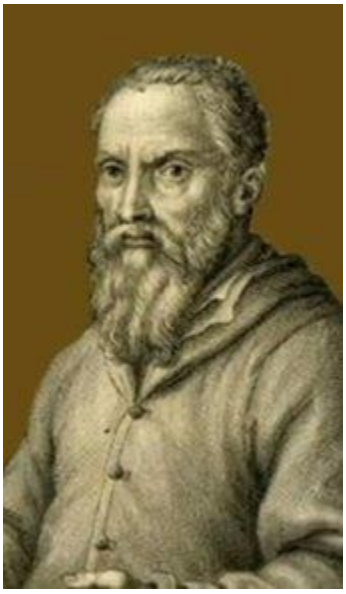


5. **Baldassare Peruzzi (1520):**

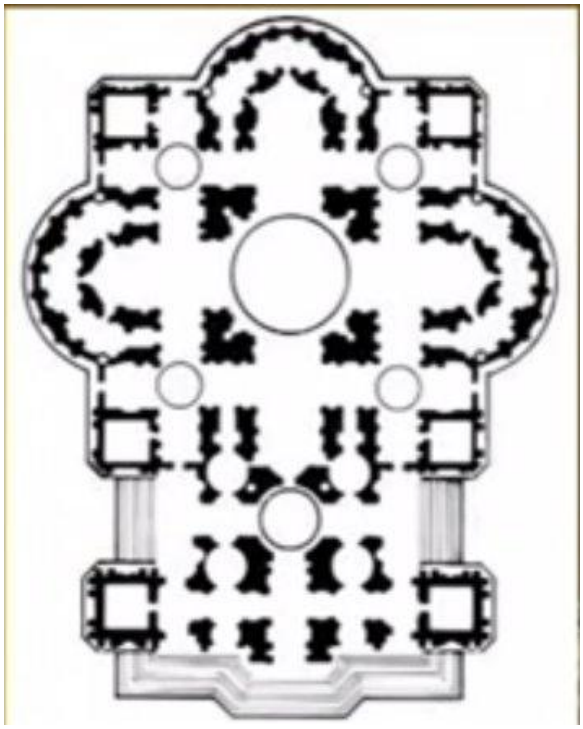
- Assistant to Antonio da Sangallo.
- Maintained Raphael's changes to the internal arrangement of the three main apses but largely reverted to Bramante's Greek cross plan.



6. **Antonio da Sangallo, the Younger (1520):**

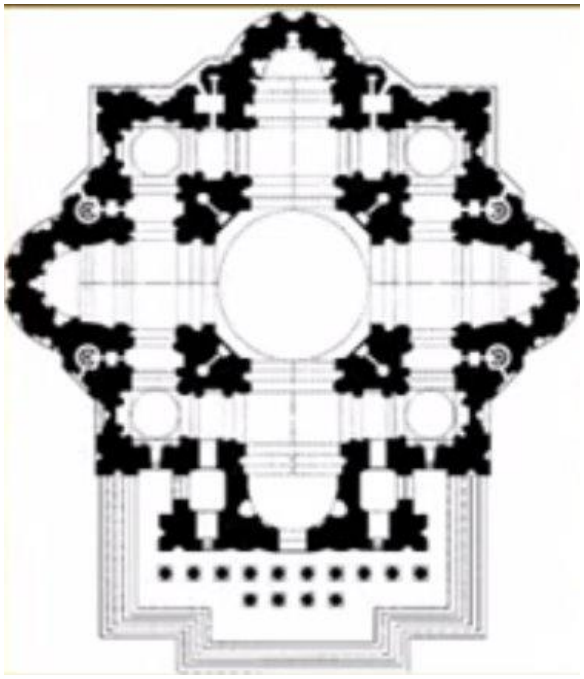


- Architect-in-chief after Raphael's death, with Baldassare Peruzzi as his assistant.
- Revised and expanded Raphael's design, combining features from Peruzzi, Raphael, and Bramante.
- Extended the building into a short nave with a wide facade and projecting portico.
- Crucially, he strengthened Bramante's piers, which had begun to crack.

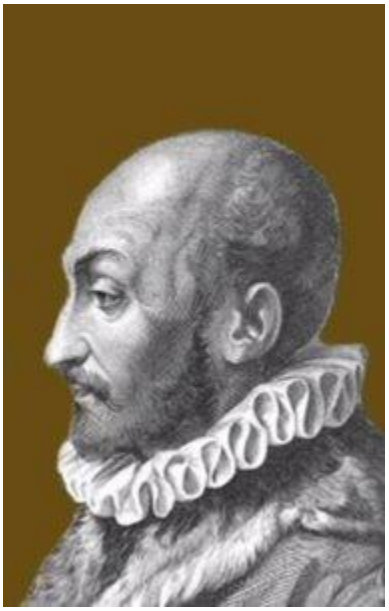


7. **Michelangelo Buonarotti (1546):**

- Appointed successor to Antonio da Sangallo.
- Reverted to Bramante's original Greek cross design, transforming its complexity into a massive, cohesive unity.
- Also designed the iconic dome and abolished Raphael's ambulatories.



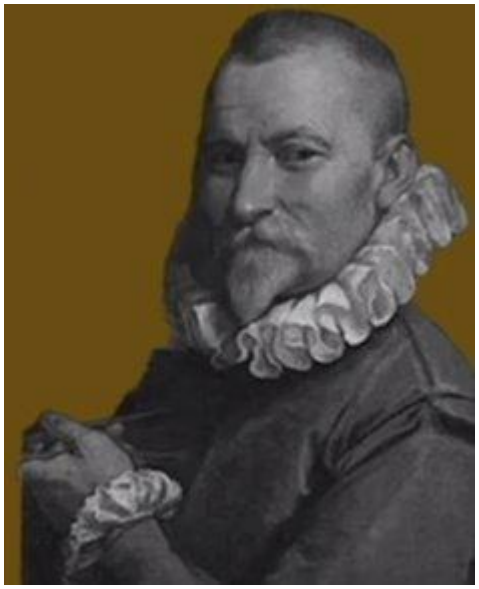
8. **Giacomo Della Porta (1572):**



- Altered Michelangelo's design by adding lion's masks over the swags on the drum (in honor of

Pope Sixtus) and a circlet of finials around the spire at the top of the lantern.
- Proposed raising the outer dome higher than the inner one.
- Actually built Michelangelo's dome.

9. Domenico Fontana (1585):

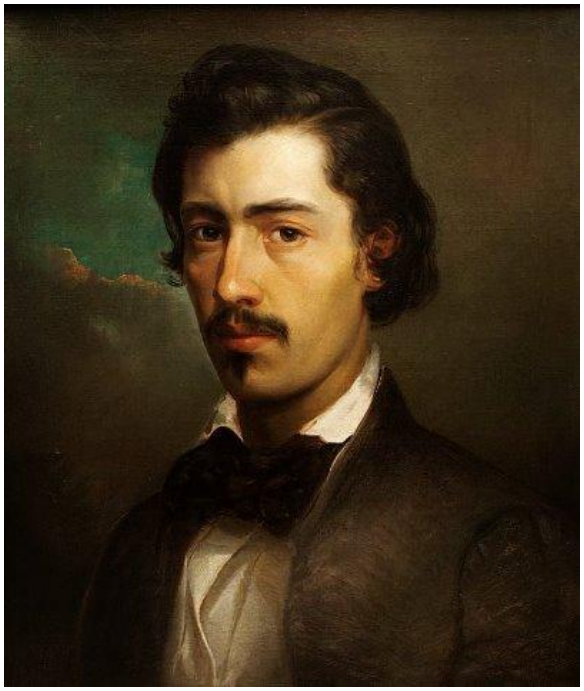


- Added a two-stage lantern with a spire to Michelangelo’s dome.

- **Jacopo Barozzi da Vignola:**

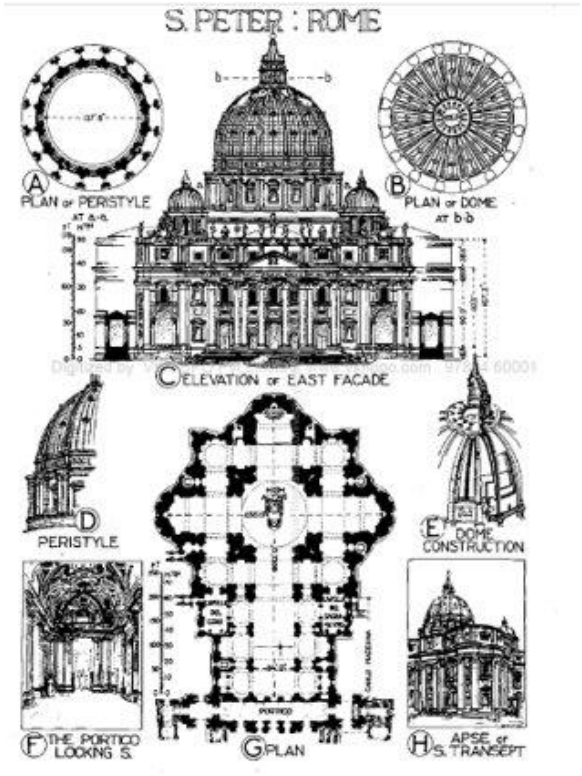
- Appointed by Pope Pius V to ensure Michelangelo's plans were executed precisely.
- Added side cupolas.

11. Carlo Maderno:

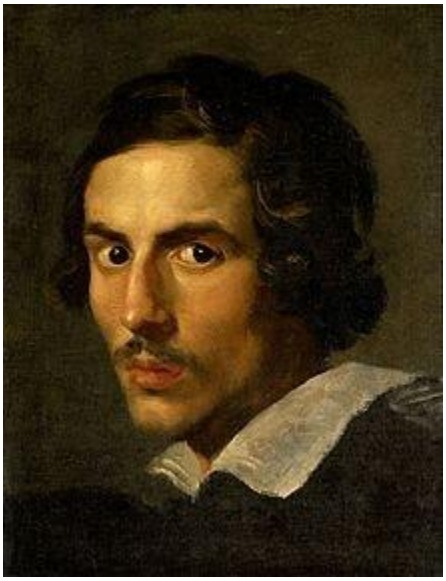


- Made a significant contribution by pulling down the remaining parts of Old St. Peter's.

- Transformed Michelangelo's centralized Greek Cross design into a **Latin cross** with a long nave.
- Designed the façade.



12 Gian Lorenzo Bernini (Baroque):



Responsible for numerous significant additions, including:
The Baldachin
Chapel of the Sacrament
Plan of niches
Loggias of the piers of the dome
Chair of St. Peter
The Colonnade outside the Basilica (St. Peter's Square)

BAROQUE ARCHITECTURE

Baroque architecture emerged in Italy in the early 17th century CE and was influential across Europe and the New World for about 150 years. This style is known for its free and sculptural use of classical forms, dynamic interplay of spaces, and the dramatic combination of architecture, sculpture, painting, and decorative arts.

Origins and Meaning
The Baroque style evolved in Rome between 1620 and 1660 as a powerful expression of the Catholic resurgence following the Counter-Reformation. Its theatrical and emotional qualities made it an effective tool for political propaganda, with its most celebrated examples found in churches in Rome, Austria, and Southern Germany.

The term "Baroque" originally meant "deformed" or "misshapen," coming from the French transliteration of the Portuguese phrase "pérola barroca," which signifies an "irregular pearl."

Characteristics of Baroque Architecture

Baroque architecture is distinguished by several key characteristics:

- **Movement and Form:** Features swirling designs, undulating facades, and plans often based on ovals, creating a sense of dynamic movement.
- **Elaborate Ornamentation:** Ornaments are sensuous and highly detailed, with a strong preference for materials like marble, gilt, and bronze.
- **Sculptural Integration:** Sculpture was frequently colored, used structurally, or employed to conceal structural elements.
- **Illusions and Deceptions:**

1. **False Perspectives:** Painted on walls to create an illusion of greater depth.
2. **Trompe L'oeil:** Wood was carved or painted to mimic draped fabric.

- **Architectural Elements:** Characterized by broken pediments, giant orders (columns or pilasters spanning two or more stories), and convex and concave walls. A broken pediment has its raking cornices interrupted at the crown, often filled with an urn, cartouche, or other ornament.
- **Visual and Theatrical Effects:** Designed to surprise and awe the viewer.

1. **Domes:** Often featured interiors painted with skies full of angels and sculpted sunbeams, suggesting glory or a vision of heaven.
2. **Quradatura:** Illusionistic ceiling painting that creates an impression of extended architectural space.

- **Decorative Elements:**

1. **Cartouches**: Elaborate forms and sculpted frames that break up surfaces and add three-dimensional effects.
2. **Mirrors:** Used to create an impression of depth and expanded space, notably seen in the Hall of Mirrors at the Palace of Versailles.
3. **Incomplete Architectural Elements:** Such as broken frontons, causing sections to merge and disorient the eye.

- **Chiaroscuro**: The use of strong contrasts between light and dark to create dramatic effects.
- **Overhead Sculpture:** Putti (cherubic figures) or other figures, often gilded wood, plaster, stucco, marble, or faux finishes, placed on or just below the ceiling to give the impression of floating.
- **Solomonic Columns:** Twisted columns that create an illusion of motion.
- **Elliptical or Oval Spaces:** Eliminating right angles. Sometimes, an oval nave was surrounded by radiating circular chapels, a distinctive feature of the Basilica of the Fourteen Holy Helpers by Balthasar Neumann.

Early Baroque Architecture
Early Baroque architecture was largely dominated by Roman architects.
Examples:

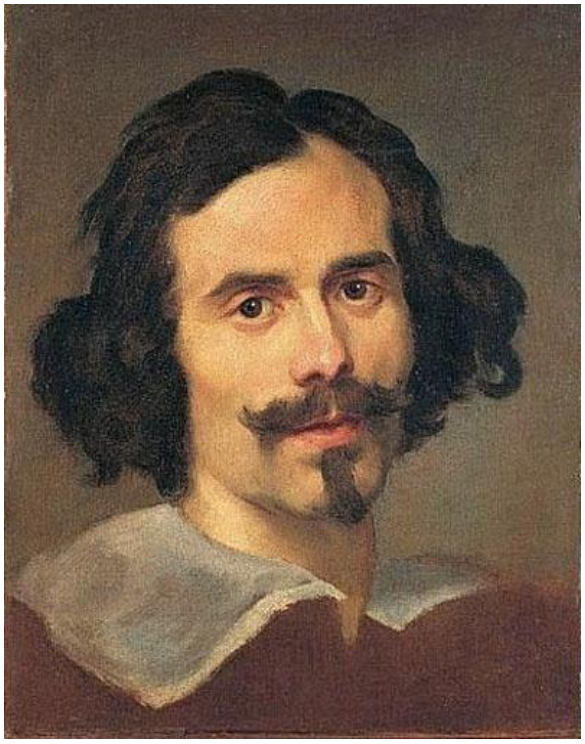
- **Church of the Gesù by Giacomo della Porta (consecrated 1584)**

- **Facade of St. Peter's Basilica by Carlo Maderno (completed 1612)**

- **Barberini Palace interiors by Pietro da Cortona (1633–1639)**
- **Santa Susanna (1603) by Carlo Maderno**

In France, a notable example is the **Luxembourg Palace (1615–45)**, built by Salomon de Brosse for Marie de Medici.

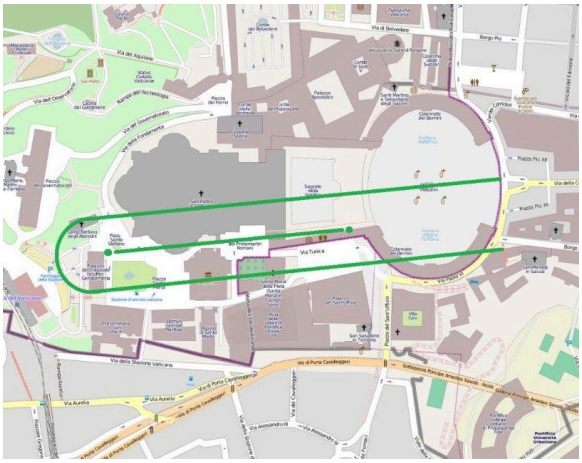
High Baroque Architecture
Gian Lorenzo Bernini (1598-1680)



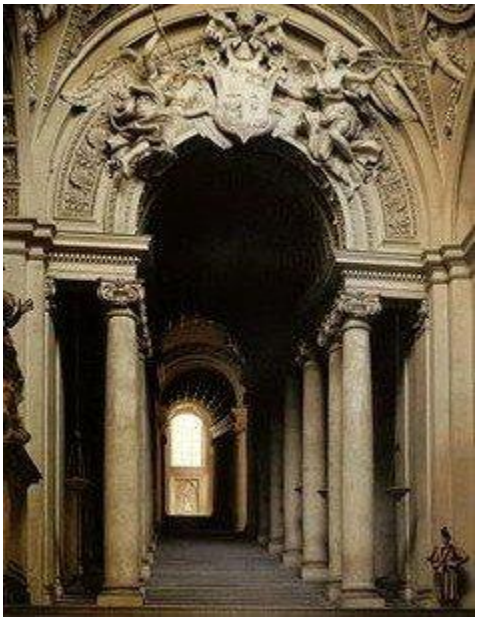
A pivotal figure, Bernini became a protégé of Pope Urban VIII in 1623. He was commissioned for the bronze baldacchino in St. Peter's and his works famously express the grandeur and flamboyance of the Counter-Reformation.

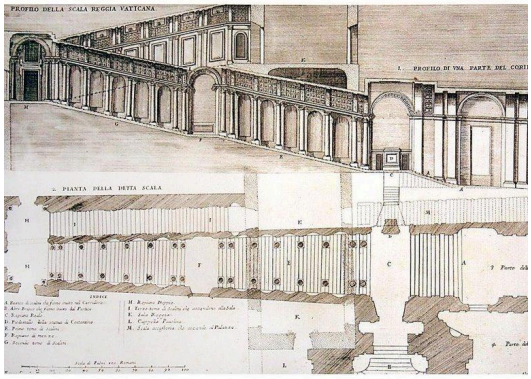
Notable Works by Bernini:

-
- **Palazzo Montecitorio**
- **St. Peter's Square**



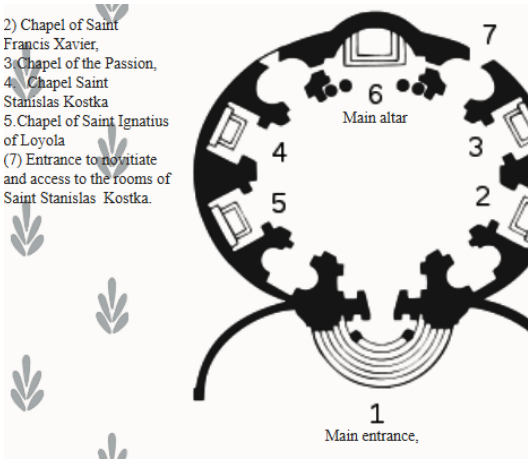
- **Scale Regia, Rome (1633-1666):** A monumental stairway connecting St. Peter's Basilica to the papal apartments.

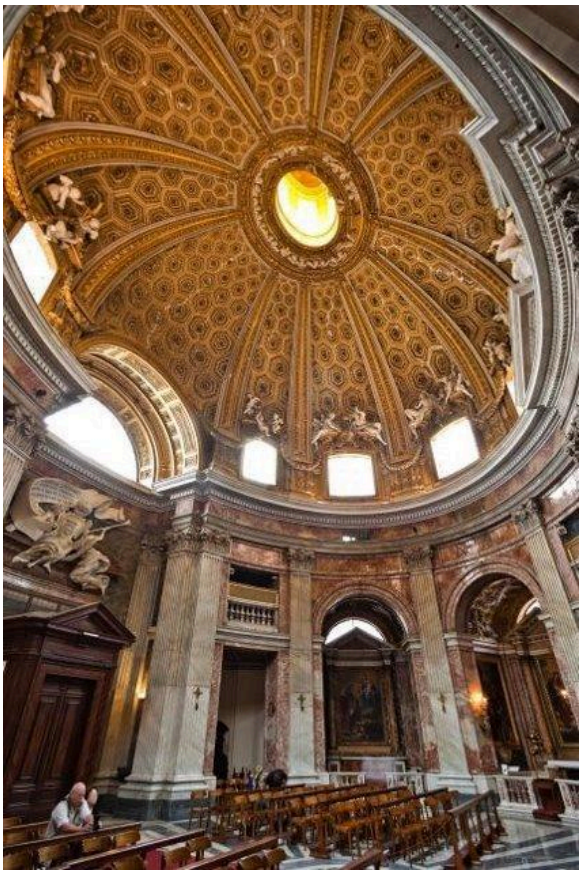




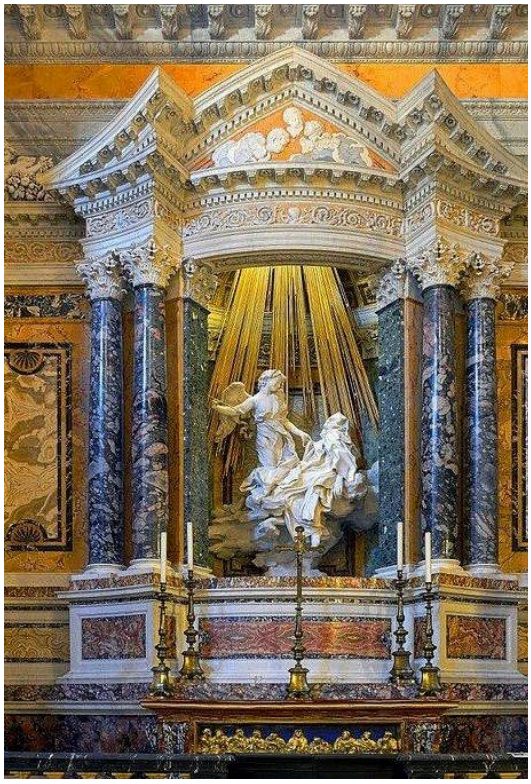
- **Baldacchino, St. Peter's**

- **Sant'Andrea al Quirinale, Rome (1658-1678)**: Features an oval plan with a prominent main altar and entrance. Key chapels include Saint Francis Xavier, the Passion, Saint Stanislas Kostka, and Saint Ignatius of Loyola.





- **Ecstasy of St. Theresa**: Located in the Cornaro family chapel in S. Maria della Vittorio, Rome, this sculpture is a masterpiece of the Baroque period. Bernini depicts St. Theresa in an ecstatic vision as an angel pierces her heart with a golden arrow, a moment described by St. Teresa of Avila was intensely painful yet overwhelmingly sweet and spiritual.

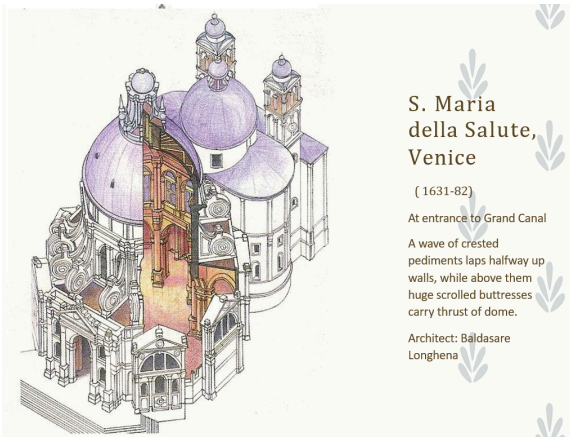


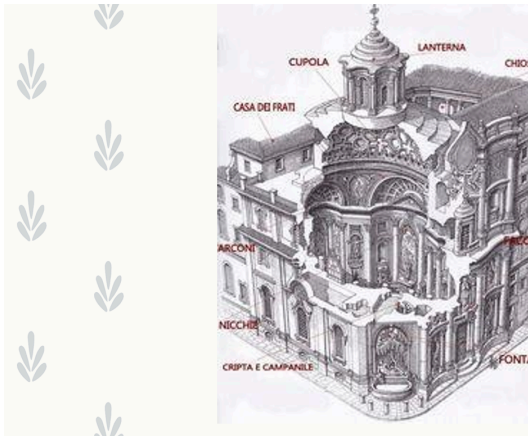
Francesco Borromini (1599-1667)

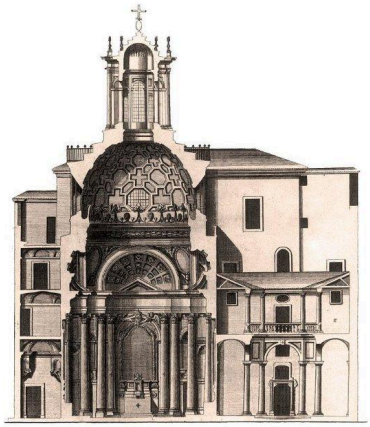
Born in Northern Italy, Borromini worked under Carlo Maderno and Gian Lorenzo Bernini. He is renowned for his mastery of spatial effects and structural innovations.

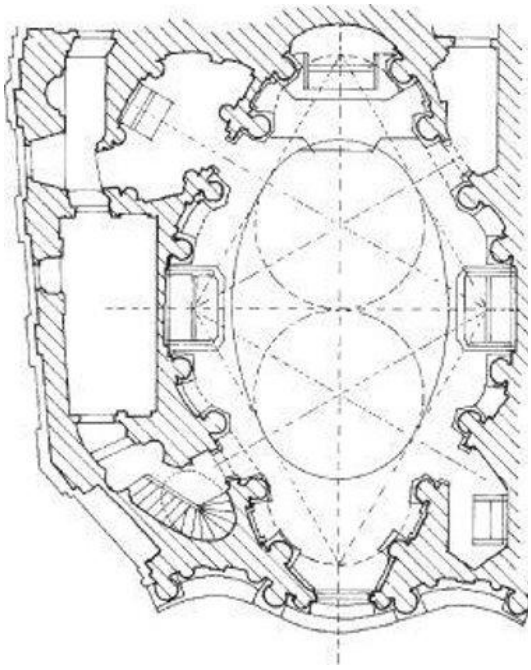
Notable Works by Borromini:

- **St, Carlo alle Quattro Fontane,** Rome: Known for its complex oval or oblong ground plan and undulating facade.







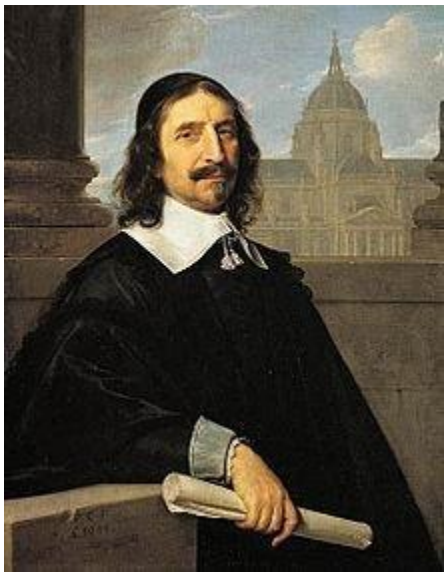


Other High Baroque Examples:

- **Santa Maria della Salute, Venice (1631-1682)**: Designed by Baldassare Longhena, this basilica stands prominently at the entrance to the Grand Canal. It features strong visual elements like crested pediments and large scrolled buttresses supporting the dome.

France:

- **Pavillon de l’Horloge ("Clock Pavilion") of the Louvre**: By Jacques Lemercier, one of the influential architects (alongside Louis Le Vau and François Mansart) who fused French traditions with Roman practices to define the French Baroque style under Cardinal Richelieu and Louis XIII.



Architect: Jacques Lemercier

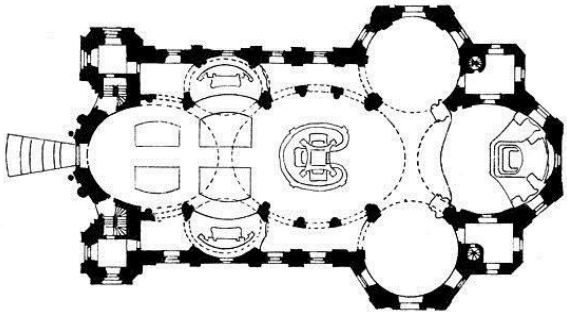
- **Sorbonne Chapel:** Also by Jacques Lemercier.

- **Château de Maisons:** By François Mansart, who introduced classicism to French Baroque architecture and popularized the mansard roof—a four-sided, double-sloped gambrel roof with windows in the steeper lower slope, creating habitable attic space.

Architect: François Mansart,

Late Baroque Architecture Examples:

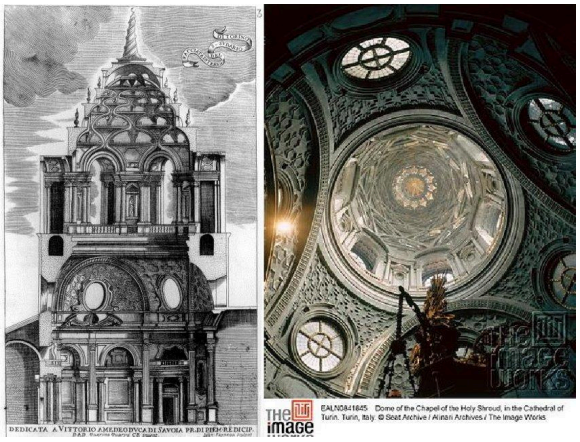
- **Basilica of the Fourteen Holy Helpers by Balthasar Neumann:** Constructed between 1743 and 1772, its plan features an altar centrally placed within an oval.



- **Chapel of the Holy Shroud**, **Turin (1667-1690):** An ingenious and extravagant Baroque experiment by the Theatine priest Guarino Guarini.

The Holy Shroud & Early Mentions

The Holy Shroud, believed to be the cloth that wrapped Christ's body after the crucifixion, is kept in a cask on the high altar of Guarini's chapel of the Sacra Sindone in San Lorenzo, Turin. It is only displayed to the public on special occasions.



San Lorenzo, Turin.

Rococo Architecture (1700s)
Rococo is a style of decorative art that developed from the Baroque, originating in France around 1720. It's characterized by:

- **Fanciful, curved spatial forms.**
- **Elaborate, profuse designs** of shellwork and foliage, aiming for a delicate overall effect.
- Considered **the last phase of Baroque,** lasting until the advent of Neo-Classicism.
- Especially popular in **France and Germany.**
- Invented to suit **Parisian taste**, drawing inspiration from nature (the term "Rococo" is a portmanteau of "roc" for rock and "coquille" for shell).
- Features **elegant, light-hearted décor,** a fondness for **pastel colors,** and an abandonment of Baroque's structural grandeur.

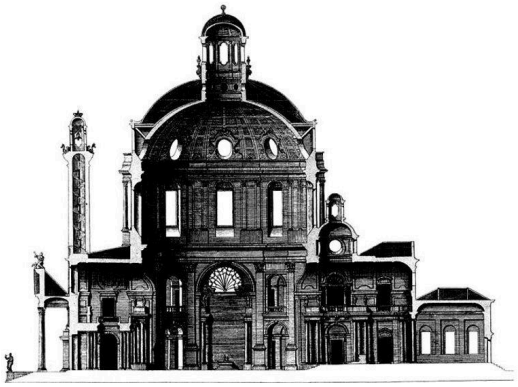
Rococo Examples

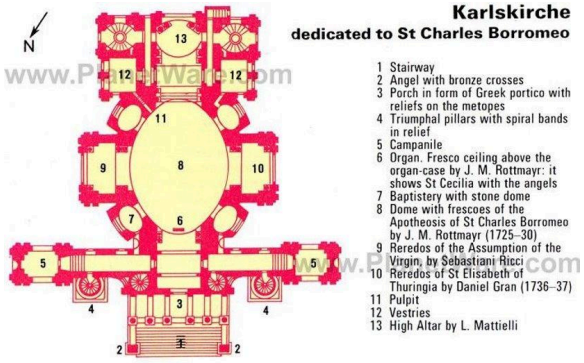
- **Vaux-le-Vicomte (begun 1657) by Le Vau:** Lavish interior with a central oval salon, capped by a dome and lantern by Andre le Notre (who also designed the gardens of Versailles).

- **Palace of Versailles: Contains the famous Hall of Mirrors.**

- **Hotel de Soubise (1738-40).**

- **Amalienburg Palace (1734)** in Nymphenburg Palace, Munich, Germany.



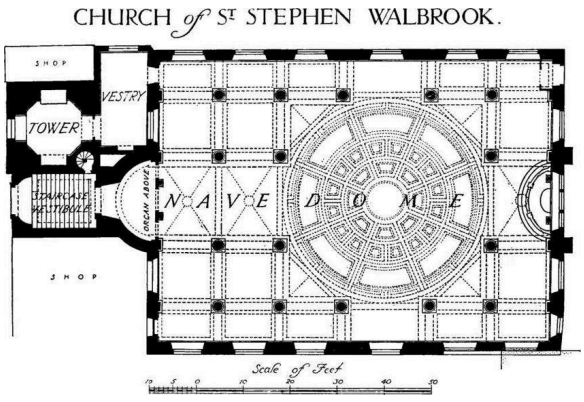


Austrio-Hungarian Empire Architecture

Karlskirche, Vienna (begun 1716): Its façade is a highly notable feature, almost twice the width of the building it screens. Similar to Maderno's façade for S. Peter's in Rome, arches through twin towers provide access. However, it notably features two huge columns, modeled on Trajan's and Marcus Aurelius's columns in Rome, that dominate the façade and frame the dome, representing an unusually historicist addition.

British Baroque Architecture
Leaders of the English Baroque included **Sir John Vanbrugh, Nicholas Hawksmoor, and James Gibbs,** following the influence of Christopher Wren.

St. Stephen Walbrook, London (1672-87)

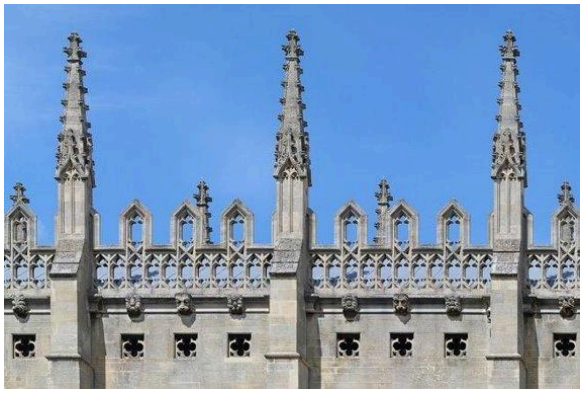


- Features one of Wren's most exciting interiors.
- **Rectangular in plan.**
- A **saucer-shaped dome** rests on eight arches, supported by 16 Corinthian columns arranged in a grid-like fashion.
- The entablature carried by these columns forms an elaborate Greek cross, demonstrating a highly complex use of space.

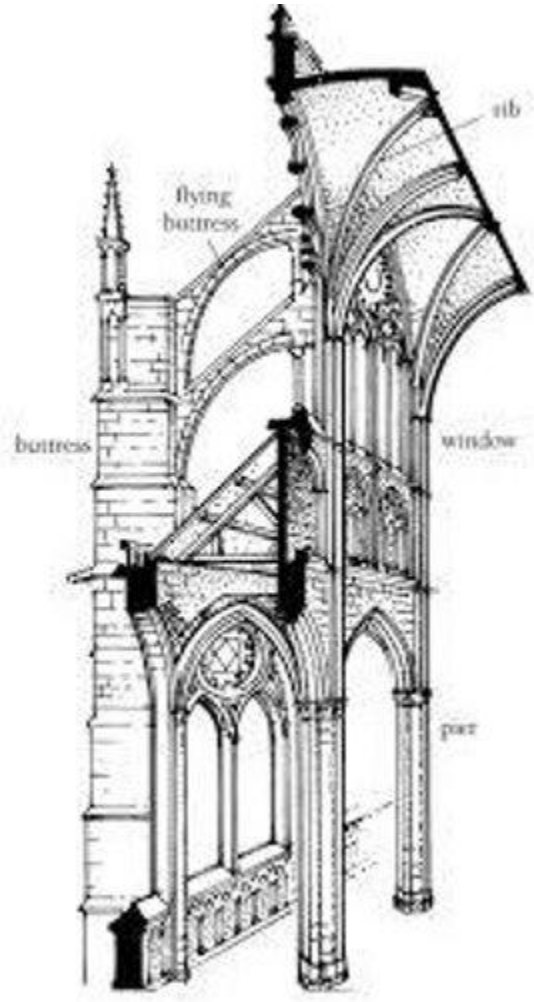
Architectural Terminology
SPIRE: A tall, acutely tapering pyramidal structure surmounting a steeple or tower.
STEEPLE: A tall ornamental structure, usually ending in a spire and surmounting the tower of a church or other buildings.

FLÈCHE: A slender spire rising from the ridge of a roof, especially one above the

crossing of a Gothic church.



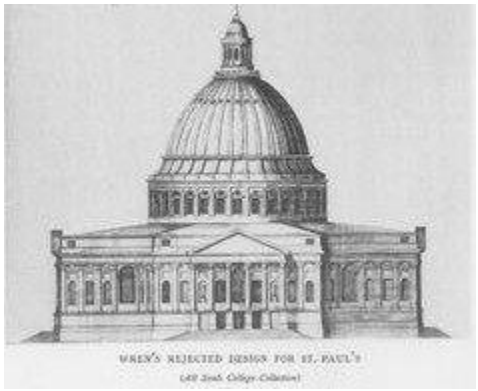
PINNACLE: A subordinate vertical structure terminating in a pyramid or spire, used especially in Gothic architecture to add weight to a buttress pier.

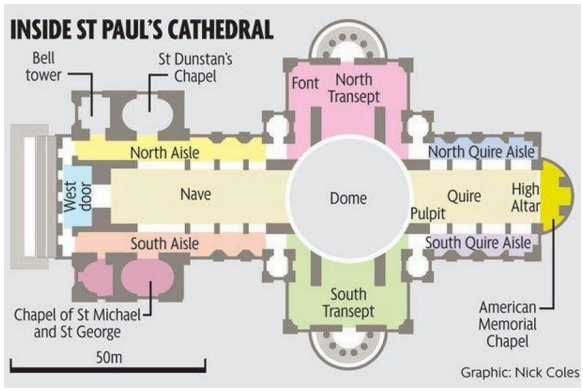


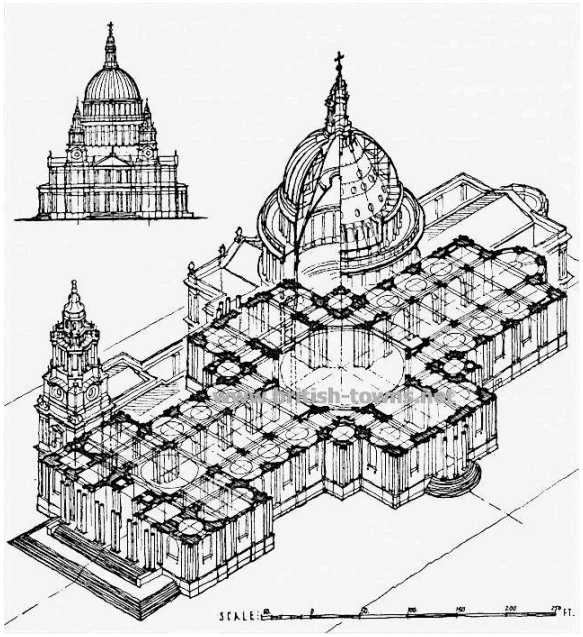
St. Paul's Cathedral, London (1675-1710)

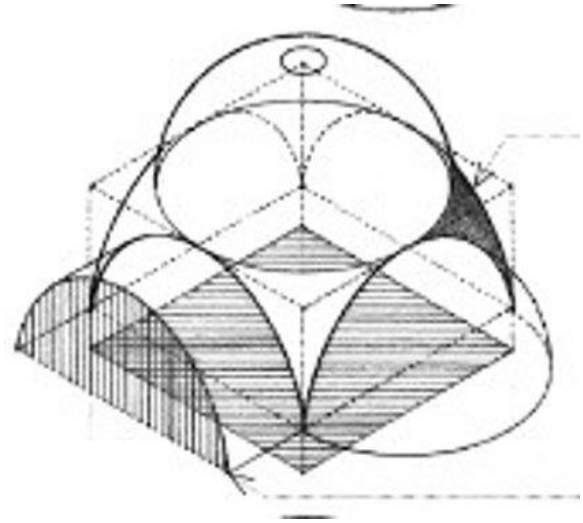
- The Gothic St. Paul's was not completely destroyed, leading to partial rebuilding before a complete reconstruction.
- England's **only classical cathedral.**
- Principal material: **white Portland stone.**

St. Paul's Cathedral Design History









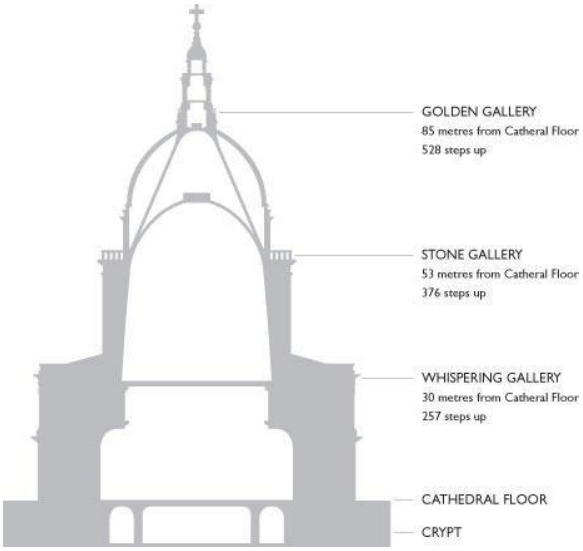
- **1672**: A domed vestibule design was discarded favoring a Greek cross layout.
- **1673-74:** The "**Great Model design"** was developed.
- **1675:** The **"warrant design"** emerged, returning to a Latin cross plan from which the final design evolved.

The Great Model Design

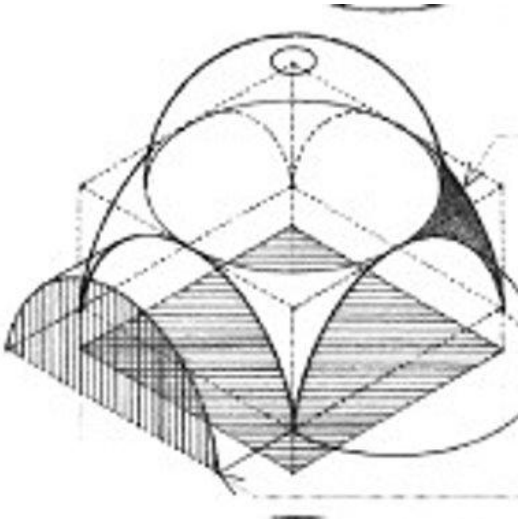
- Featured a large dome crossing and a smaller dome over the vestibule.
- Four arms were linked by concave quadrants.
- Unfavored at the time because it was seen as too different from typical English cathedrals and too similar to the "popish" St. Peter's in Rome.

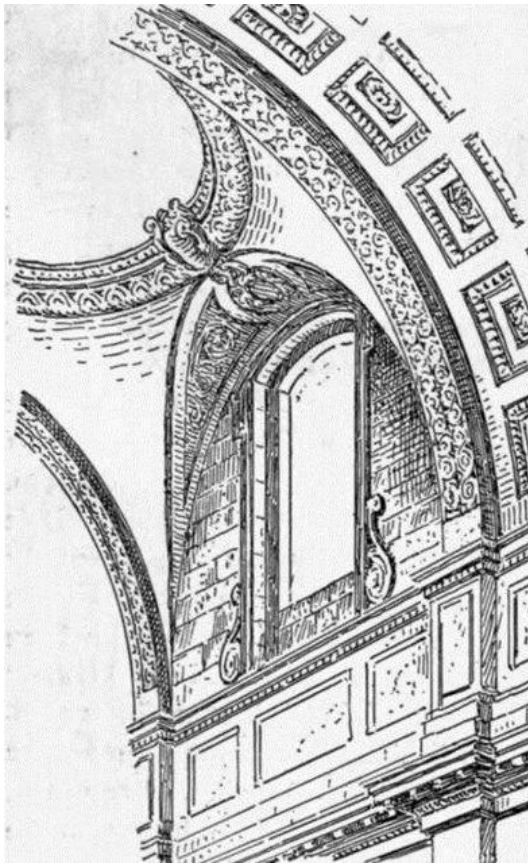
Architectural Audio & Light Elements

- A **whispering gallery** beneath a dome or vault allows slow sounds produced at certain points to be clearly audible at other distant points (e.g., right above the colonnade encircling a lantern's base, offering magnificent views).

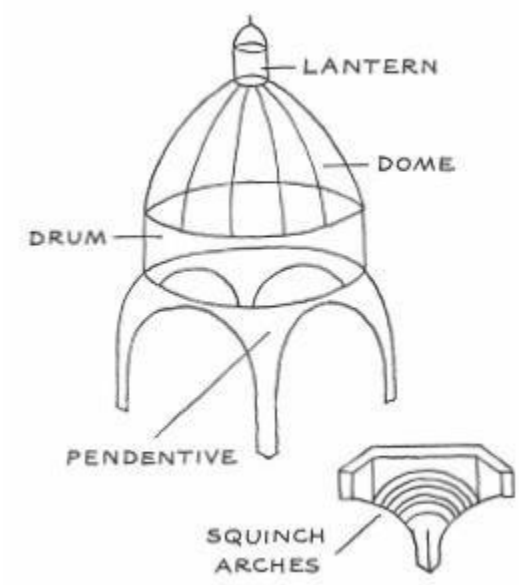


- **Lunette**: An area within a wall framed by an arch or vault, often containing a window, painting, or sculpture.





- **Pendentive**: A spherical triangle forming the transition from the circular plan of a dome to the polygonal plan of its supporting structure.



- **Drum**: A cylindrical or faceted construction, often pierced with windows, supporting a dome.
- **Lantern**: A superstructure crowning a roof or dome, with open or windowed walls to let in light and air.
- **CUPOLA**: A light structure on a dome or roof, serving as a belfry, lantern, or belvedere.
- **Squinch**: An arch or corbelling built across the upper side corner of a square tower to support the side of a superimposed octagonal structure.

Greenwich Hospital, London

- Considered Wren's most Baroque building.

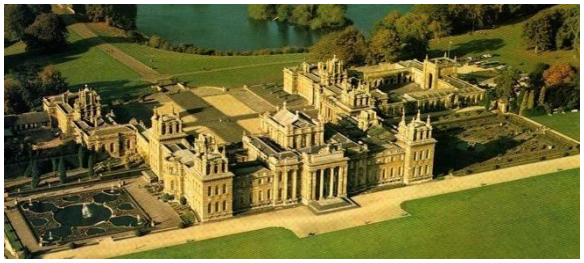
Sir John Vanbrugh (1664-1726)

- Born in London, he pursued architecture after careers as a soldier (imprisoned in the Bastille as a spy), author of Restoration comedies (The Provoked Wife, The Relapse), and traveler (spent time in India as a merchant).
- Notable works: **Castle Howard and Blenheim Palace.**

Castle Howard, Yorkshire (1699-1712)

- Vanbrugh's first country house.
- Built largely in collaboration with Hawksmoor.
- Resembles Wren's early project for Greenwich Hospital from 1695.

Blenheim Palace, Oxfordshire (1705-24)



- Features a kitchen wing and stable court each with their own courtyards.
- Linked to the main wing with colonnades.

Spanish 18th Century Architecture: Churrigueresque

- Named after the **Churriguera family of architects,** particularly José Benito Churriguera.
- Characterized by **profuse and indiscriminate surface ornamentation, a fondness for twisted columns (salomonicas), and pilasters shaped like inverted cones (estípite).**
- Evolved from the Herrerian Style of Juan de Herrera.
- The design involves a play of tectonic and decorative elements with little relation to structure and function.

Churrigueresque Examples

- **Palace of the Marquis of Dos Aguas, Valencia (1740-44):**

Features elaborate carvings around doors and windows, showcasing the Churrigueresque dissolution of form into decorative features.

- **Sacristy of the Cartuja (Carthusian monastery).**

- **The pilgrimage church of Bom Jesus, Portugal.**

- **Plaza Mayor in Salamanca.**

- **Royal Palace of Madrid.**

- **Santiago de Compostela**

(Western Façade, a.k.a. Fachada del Obradoiro) of the Cathedral of Santiago de Compostela (Fernando de Casas y Novoa, 1750).

In Summary
Baroque: Grand, dramatic, and theatrical. Designed to impress crowds and glorify God or monarchs.
Rococo: Elegant, playful, and intimate. Focused on private pleasure, aristocratic refinement, and decorative arts.
Together, these styles represent a shift from public spectacle (Baroque) to personal delight (Rococo), reflecting broader changes in society, politics, and taste during their respective periods.

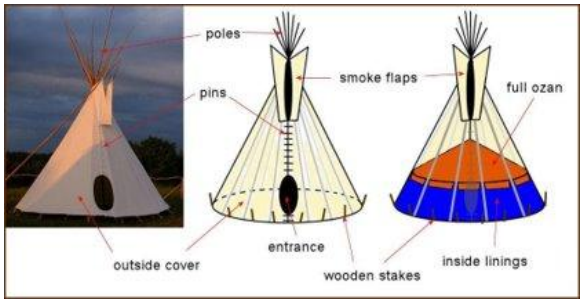
COLONIAL ARCHITECTURE

This section explores indigenous and colonial architectural styles, focusing on significant structures and the historical contexts that shaped them.

Indigenous Architecture

TIPI (Teepee/Tepee)
A conical tent, popularized by American Indians of the Great Plains, originally constructed from animal skins.
It comprises four main elements:

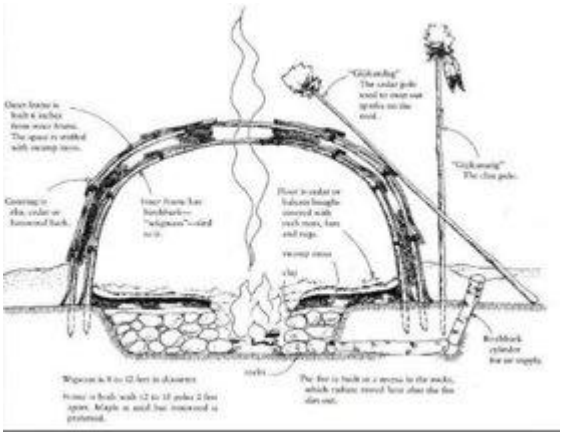
- A frame of 10 to 25 sapling poles.
- A canvas or skin cover.
- An inner canvas or skin lining.
- A canvas or skin door.



Wickiup

A domed, hut-like dwelling used by semi-nomadic Native American tribes in the arid southwestern United States (Arizona, New Mexico, Texas, Utah, etc.).

It is constructed with a frame of arched wooden poles, covered with roofing materials such as grass, bush, bark, reeds, or cloth. It is similar to a wigwam but found in different regions.



Cliff Palace

The largest cliff dwelling in North America, located in Colorado.

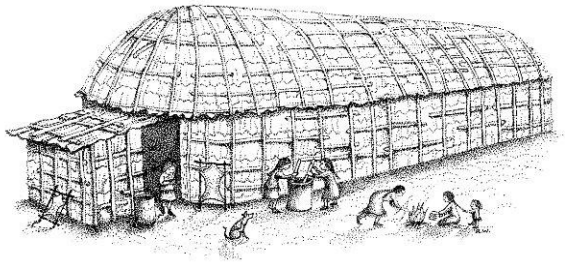
- Inhabited by about 100 residents at its peak in the 1200s.
- Built by the Ancestral Puebloans, also known as the Anasazi

JACAL (Adobe Style)
An adobe-style housing structure historically found in parts of the southwestern United States and Mexico.

- Used by Native Americans before European colonization.
- Consists of closely set poles tied together and filled with mud, clay, and grasses.
- The Anasazi specifically used sunbaked mud and sandstone.

LONGHOUSE
Built by Indigenous peoples in various parts of North America.

- Can reach up to 100 meters long, but typically 5 to 7 meters wide.
- Construction involves sharpened and fire-hardened poles (up to 1,000 saplings for a 50m house) driven into the ground. Their tops are bent over and tied to opposite wall poles.
- Strips of bark are woven horizontally through the poles to create weather-resistant walls, with doors usually at one end of the house.



Mesoamerican Architecture

The Aztecs: Tenochtitlan

Founded in 1344 CE, Tenochtitlan was the capital of the Aztec empire.

- Aztec architecture was eclectic, incorporating traditions from conquered areas, but developed a unique character under their distinct religion.
- Human sacrifice was central to the cult of the war god, which permeated life and art. Representations of skulls, hearts, hands, and sacrificial scenes were common.

The Incas

The Incas surpassed the Chan Chan in architectural and engineering prowess.

- They were excellent stone carvers and metalworkers.
- The empire fell to the Spaniards in 1538.
- Their agricultural terraces are still in use today, alongside an extensive network of roads and bridges that spanned their empire.
- Notable examples include Cuzco, Machu Picchu, Sacsahuaman, and Ollantaytambo.

Colonial Architecture
Socio-Political Background (Colonial Period)

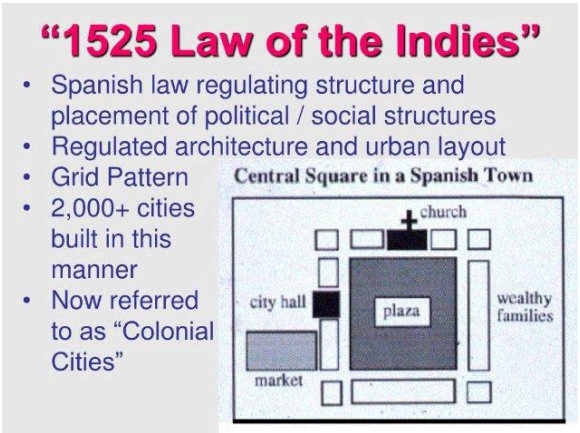
This era was marked by European territorial expansion and the establishment of vast colonial empires.

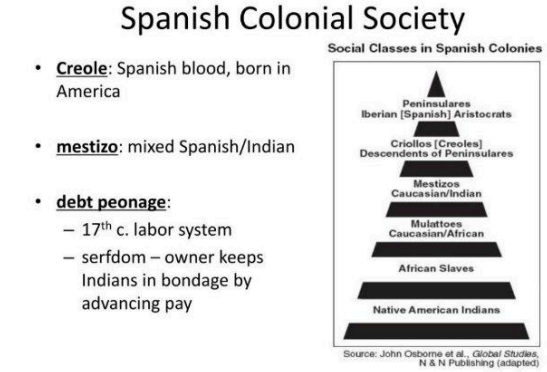
Spanish Territorial Expansion

- Spain led European global exploration and colonial expansion in the 15th and 16th centuries.

- Trade flourished across the Atlantic and Pacific.
- Spain toppled the Aztec and Inca civilizations, claiming vast territories in the Americas.
- The Spanish Empire became a dominant global power, financed by silver and gold from American mines.
- This period saw a cultural golden age in Spain, with thinkers developing ideas on natural law, sovereignty, international law, and economics, even questioning imperialism's legitimacy.

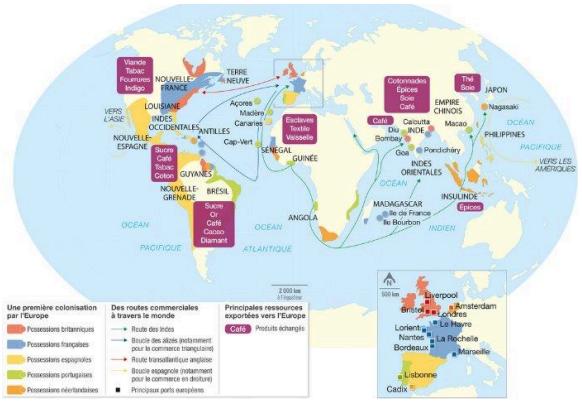
Santo Domingo (1496) in the Caribbean was the earliest permanent European settlement in America.
"Laws of the Indies" (1573) by Philip II established a loose grid plan for towns, featuring a central plaza for public buildings and churches, with plots for sale alongside streets, and early towns often included fortifications.



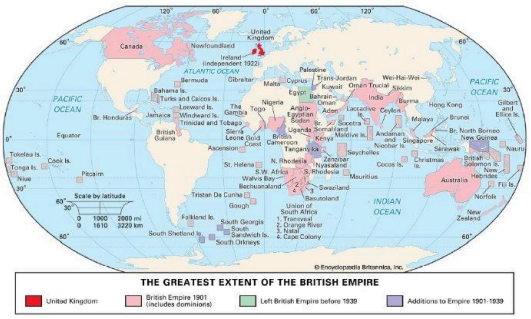


Portuguese Territorial Expansion

- The Treaty of Tordesillas (1494) divided the non-Christian world between Portugal and Spain with an imaginary line in the Atlantic. Portugal claimed lands to the east, Spain to the west.
- Portuguese rule in India, the East Indies, and Brazil was based on this treaty, their discoveries, and papal sanction.



- For nearly a century, Portugal operated in the East without significant European competition, facing mainly Oriental enemies, which they overcame with superior ships, gunnery, and seamanship.

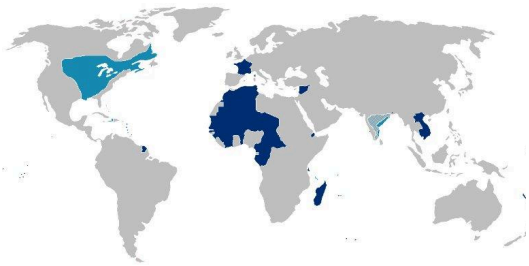


British Territorial Expansion

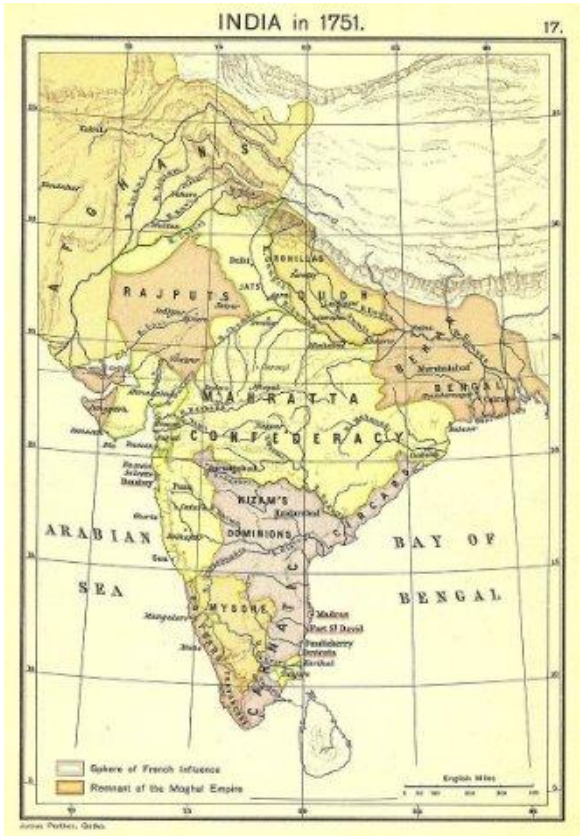
- Britain began establishing overseas settlements in the 16th century, accelerating in the 17th due to commercial ambitions and rivalry with France.
- This led to settlements in North America (New England, Virginia, Maryland) and the West Indies (Bermudas, Honduras, Antigua, Barbados, Nova Scotia).
- Jamaica was conquered in 1655, and the Hudson's Bay Company established itself in what is now northwestern Canada from the 1670s.

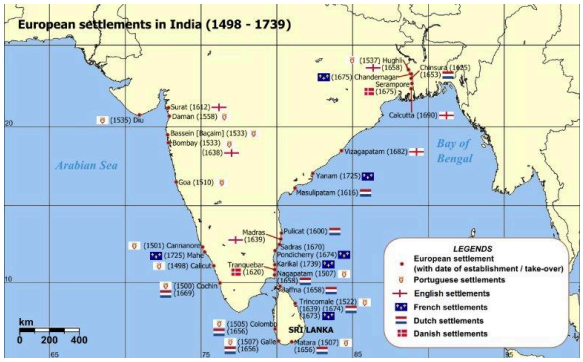
French Colonial Empire

- France began establishing colonies in the Americas, Caribbean, and India in the 16th century.



- Most possessions were lost after defeat in the Seven Years' War, with North American territories going to Britain and Spain (though Louisiana was briefly returned to France before being sold to the US).





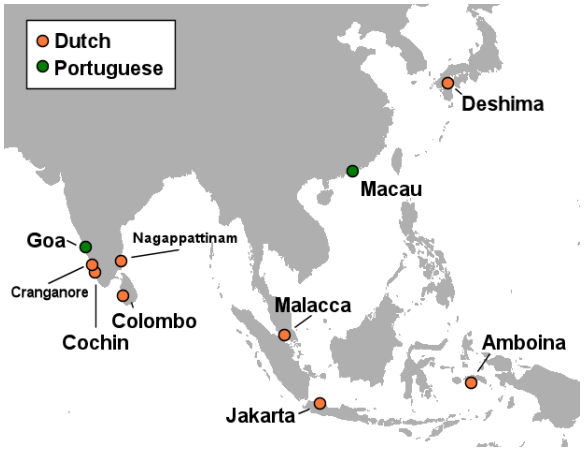
- France rebuilt a new empire after 1850, primarily in Africa, Indochina, and the South Pacific.

Dutch Colonial Empire

- Initially a trade-based system driven by merchant enterprise and control of international maritime shipping routes through strategic outposts.
- The States General chartered the Dutch West India Company and Dutch East India Company in the early 17th century to overcome limited capital and manpower.

- These companies' dominance contributed to a commercial revolution and the Dutch Golden Age.
- Dutch navigators explored and charted distant regions like Australia, New Zealand, Tasmania, and parts of North America's eastern coast.

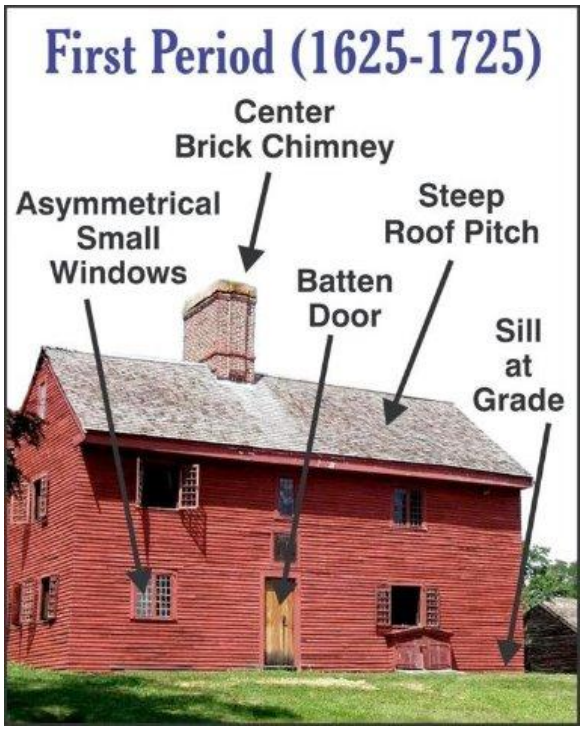
- During proto-industrialization, the empire received significant imports of textiles and silks from India's Mughal Empire.
- Primary Dutch and Portuguese settlements in Asia around 1665 show many were captured by the Dutch East India Company from Portugal.



Russian Empire

- A vast empire spanning most of northern Eurasia from 1721 to 1917.
- Its rise coincided with the decline of neighboring rival powers: the Swedish Empire, the Polish-Lithuanian Commonwealth, Qajar Iran, the Ottoman Empire, and Qing China.

Domestic Buildings (Colonial Architecture)

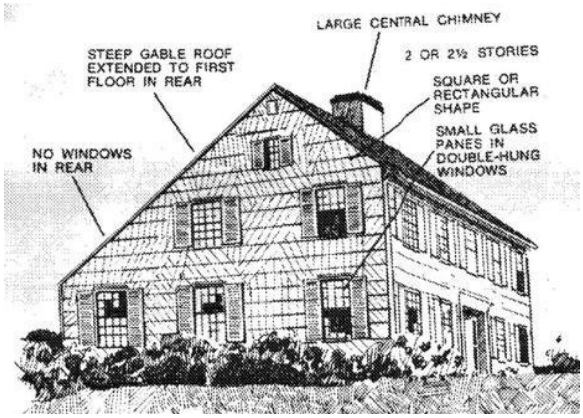


Early English Settler Homes (New England)

- These were the first permanent homes built by early English settlers.
- Characteristics adapted from post-medieval English building practices:

1. Steeply-pitched roofline.
2. Thick central chimney.
3. Asymmetrically-placed diamond-pane casement windows (earliest examples). Sliding sash windows with rectangular panes became common around 1700.

Saltbox House

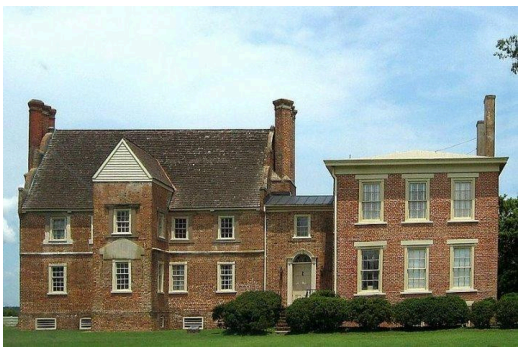


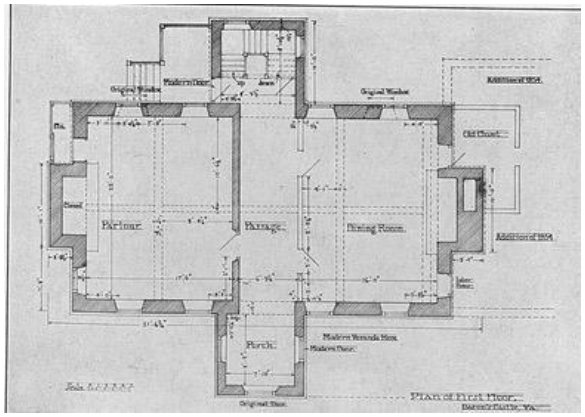
- A distinctive medieval English house style, common in colonial New England, known for its sloping back roofline.
- It features one story in the back and two stories in the front.
- Recognizable by a flat front and central chimney.
- Its asymmetry, unequal sides, and long, low rear roof line are its most distinctive features.

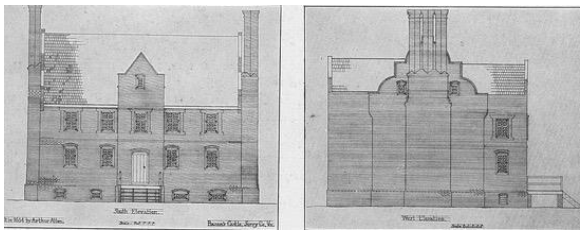
CAPEN HOUSE, TOPSFIELD, MASSACHUSETTS (1700)

- Features a wood shingle roof.
- Has a central clustered brick chimney.
- Built with heavy timber-frame construction.
- Clad in weatherboarding.
- Includes leaded casement windows.

BACON'S CASTLE, SURRY COUNTY, VIRGINIA (1655)







- Jacobean Inspired
- Constructed of brick.
- Features curved Flemish gables and high clustered chimneys.
- Showcases classical detail in the brickwork over the entrance.

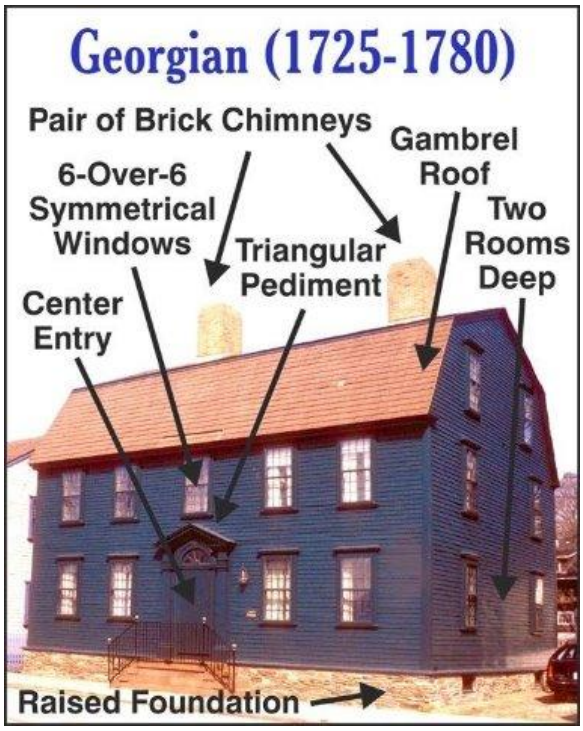
ABRAHAM ACKERMAN HOUSE, HACKENSACK, NEW JERSEY (1704)

- Dutch Influence
- Features a Gambrel or Mansard roof type.
- Has wide projecting eaves and wood shingle roofing.
- Includes gables and dormers.
- Rough ground floor walls.

PARLANGE POINTE COUPÉE PARISH, LOUISIANA (1750)

- Characterized by a high-pitched hipped shingle roof.
- The ground floor has a brick floor.
- Features an open colonnaded verandah around the house on both floors.
- The first floor is timber constructed.

American Georgian Architecture



Encompassed three distinct styles:

1. **Baroque Idiom**: Followed the style of Sir Christopher Wren (1632-1723) and his followers.
2. **Palladian Style:** Inspired by Renaissance architect Andrea Palladio (1508-80), which introduced the balanced and symmetrical features characteristic of Georgian designs.
3. **Neoclassical Style:** A reversion to Greek and Roman architectural principles.

Religious Buildings (Colonial Architecture)
MEXICO CATHEDRAL, MEXICO (1563-1667)

- Designed by Claudio de Arciniega.
- Styles mingle between Baroque but incorporate severely Classical features.
- Two towers were added in the Neoclassical style in 1768.

SS. SEBASTIAN Y SANTA PRISCA, MEXICO (1563-1667)

- Known for its florid west front.

Reviewer for hoa.

CAMBODIA

1.What is the capital of Cambodia?

Phnom Penh

2. What is the ancient name of Cambodia?

Kambuja

3. Which religion became dominant in Cambodia but shared significance with Hinduism in shaping architecture?

Buddhism

4. Khmer architecture primarily focused on building which type of structure?

Temples

5. Apsaras in Cambodian temple carvings are typically depicted as:

Dancing celestial maidens

6.Which material was mainly used for non-religious structures in ancient Cambodia?

Wood

7. The central sanctuary of Angkor Wat symbolizes:

Mount Meru

8. Angkor Wat was built during the reign of which king?

Suryavarman II

9. The Bayon Temple is most famous for its:

Serene smiling stone faces

10.Cambodian bronze-casting technology was influenced by:

China and India

BURMA/MYANMAR

11. The Bamar people established Pagan (Bagan) around what century?

9th century

12. What form of Buddhism was adopted in Burma from South India?

Theravada

13. Bayinnaung is known for:

Creating the largest empire in Southeast Asia

14. Burmese traditional architecture is most prominently represented by which structures?

Pagodas, stupas, and temples

15. Stucco in Burma is historically associated with which ethnic group?

Mon

16. The Lawkananda Pagoda was built during the reign of which king?

Anawrahta

17. The Shwedagon Pagoda is famous for being covered in:

Gold leaf

18. The Shwezigon Pagoda is believed to enshrine:

Buddha's tooth and bone

19. Which structure is known for its wooden architecture influenced by Chinese design?

Mandalay Palace

20. The Chaukhtatgyi Temple is known for housing:

A reclining Buddha

JAPANESE

21. Japan's geography is characterized mainly by which of the following?

Rugged hill country with 4/5 covered by forest

22. Which material is abundant in Japan and widely used in construction?

Bamboo

23. Which religion is considered Japan's main traditional belief?

Shinto

24. The Iramoya roof form is best described as:

Hip-and-gable roof

25. The Japanese measurement ken is based on:

Distance between columns

26. Which Japanese philosophy values beauty in imperfection?

Wabi-Sabi

27. Jomon period houses are known as:

Pit dwellings

28. Yayoi houses were primarily raised on stilts to:

Avoid rodents and pests

29. Gassho-zukuri houses have roofs shaped like:

Hands in prayer

30. Kigumi refers to:

Nail-free wooden joinery

31. Fusama are:

Sliding doors covered in washi

32. Tatami mats are traditionally made from:

Woven rice straw

33. The Genkan in a Japanese home is a:

Sunken footwear foyer

34. A Shachihoko is:

A mythical roof ornament protecting from fire

35. Shinden-zukuri houses were originally built for:

Aristocrats

KOREAN

36.Korean architecture is known for its strong adaptation to:

Mountainous topography

37. Which period is known for transmitting architectural culture to Japan?

Goguryeo

38. The Silla period is known for which pagoda type?

Brick-patterned stone pagodas

39. Goryeo pagodas were notable for:

Up to 11-story stone structures

40. Jusimpo refers to:

Column-head bracket

41. Dapo bracket systems are commonly used in:

Royal palaces and temples

42. Giwa are:

Curved roof tiles

43. Cheoma refers to:

Deep, curved eaves

44. Hanji is:

Traditional Korean paper

45. The Korean traditional house is called:

Hanok

46. Ondol is a:

Underfloor heating system

47. In Hanok, doors known as angojigi can be opened by:

Swinging upward or sliding sideways

48. Maru refers to:

Plank-finished wooden floor system

49. Ondol works by heating:

Stone floors through flue channels

50. The Gudeul system includes all EXCEPT:

Furnace
Chimney
Underfloor flue

Except:
Metal radiator

THAI

51. What material replaced sandstone as the preferred construction material around the 12th century in Thai architecture?

Brick

52. What mixture was used to create stucco in traditional Thai structures?

Sand, lime, glue

53. What is the distinct decorative curve at the ends of Central Plains house gables called?

Ngao

54. Which architectural element is a tall, finger-like spire often found in Rattanakosin architecture?

Prang

55. What is the function of a sala in Thai architecture?

An open pavilion for shelter and gatherings

56. The Thai-style house of the past was typically built using which materials?

Bamboo and thatch

57. Northern Thai houses feature a V-shaped roof ornament known as:

Kalae

58. What is the purpose of the rice barn in Northern Thai compounds?

Grain storage

59. Which architectural structure in a wat is used only for monk ordination rituals and houses the principal Buddha image?

Bot (Ubosot)

60. What marks the sacred boundary around the bot?

Bai Sema stones

61. Which architectural element symbolizes a stylized Garuda?

Chofa

62. Which Thai architectural structure contains sacred texts and is often built above water to protect from insects?

Ho Trai

63. The cloister in a wat complex is known for:

Enclosing the sacred area and sometimes containing Buddha images

64. What is'a mondop used for?

Housing relics or sacred objects

65. Which structure in a wat complex functions as the monks' living quarters?

Sanghawat

66.What is the purpose of the Ho Rakang?

Bell tower for summoning monks

67. A kuti is best described as:

A monk's small elevated dwelling

68.Which architectural characteristic is most associated with Thai temples?

Multi-tiered swooping rooflines

69. Which construction material was used for door parts, lintels, and rectangular windows?

Sandstone

70. Glass mosaic pieces in Thai architecture were primarily used to:

Highlight gables and pillars for decorative effect

HOA 4 REVIWER QUIZ

1. The Paleolithic Age is best described as a period when early humans were:

Hunter-gatherers

2. What type of shelter was primarily used during the Paleolithic period?

Caves and temporary shelters

3. Which archaeological site in Palawan served as a home for prehistoric Filipinos for up to 30,000 years?

Tabon Çave

4. The Mesolithic Age is characterized by:

Use of microliths

5. Neolithic Filipinos are associated with which major development?

Agriculture and permanent settlements

6. The Angono Petroglyphs are significant because they show early Filipinos' use of:

Rock art and symbolic carving

7. The idjang structures of Batanes primarily functioned as:

Defensive citadels

8. Which group typically used lean-to or windbreak shelters?

Nomadic Ita

9. Arboreal shelters were built mainly to protect inhabitants from:

Predators and enemy raids

10. Which material was MOST common in early temporary shelters?

Vegetative and natural materials

11, Treehouses were often built as high as 20 to 60 feet primarily to:

Enhance security and defense

12. Which period marked the transition from cave dwellings to more permanent shelters?

Mesolithic

13. Animal skins in early shelters were primarily used for:

Weather protection and insulation

14. The introduction of polished stone tools occurred during the:

Neolithic Age

15. Early Filipinos preferred settling near bodies of water mainly because water provided:

Food, transport, and daily necessities

16. Which material was most commonly used for walls and frames in pre-colonial houses?

Bamboo

17. The Ifugao house (fale) is composed of how many main structural levels?

Three

18. Which ethnic group constructed houses with an eight-sided plan?

Kalinga

19. The binuron house type is associated with which ethnic group?

Isneg (Apayao)

20. A defining feature of the Isneg house is:

Independent roof and floor framing Systems

21. Which vernacular dwelling is often referred to as the "original eco-house"?

Bahay kubo

22. The space beneath a bahay kubo used for storage or work is called the:

Silon

23. Which roofing material was widely used across many pre-colonial regions?

Cogon grass

24. Ivatan houses are distinguished by their use of:

Stone and lime (calicanto) masonry

25. The panpe of an Ivatan house functions as:

A roof-tying device for typhoon resistance

26. Which house type features a steep pyramidal thatched roof?

Ifugao house

27. The Badjao people are commonly known as:

Soa nomads

28. Which house type typically has thick timber walls and no windows?

Kalinga house

29. Austronesian houses are generally characterized as:

Raised wooden structures on posts

30. Why were many pre-colonial houses elevated on stilts?

To protect against floods and improve ventilation

31. Islam was first established in Sulu around the:

14th century

32. The large, permanent mosque for congregational worship is called a:

Masjid

33. A langgal is best described as a:

Semi-permanent rural prayer house

34. Early Philippine mosques visually resembled:

Multi-tiered, pagoda-like structures

35. A defining architectural feature of a masjid is the presence of:

Domes and minarets

36. Mosques were often built near bodies of water primarily to allow for:

Ritual ablution

37. The oldest standing mosque in the Philippines is located in:

Tawi-Tawi

38. The oldest Philippine mosque was built in 1380 by:

Shelkh Karim ul Mahdum

39. Okir refers to:

Curvilinear and plant-based decorative motifs

40. The panolong is a distinctive decorative feature of the:

Torogan

41. The torogan is the ancestral house of the:

Maranao

42. Torogan posts rest on rounded boulders mainly to:

Allow movement during earthquakes

43. Traditional Badjao houseboats typically last approximately:

10-15 years

44. Upon the death of the household head, a Badjao houseboat is traditionally:

Converted into a coffin

45. The Maranao decorative carving tradition featuring fern and naga motifs is called:

Okir