

Early Christian Architecture

Introduction

- The term early Christian architecture refers to the architecture of the early Christian churches of the roman era
- This is further divided into two types; the basilica church and the alternative church plans
- With Christianity accepted as a state religion in Rome and expanding in influence, it became necessary for architecture to respond to the space demands of the new religion
- A building used for Christian worship had to provide a path for the processional entry and exit of the clergy, an altar area, where the clergy celebrated mass, a space for the segregation of the clergy from congregation during the procession and communion

Early Christian Architecture

Alternative Church Form

- The rectangular basilica was not the only form adopted for the early church Eg.St.Peter's Rome and St.Clemente, Rome
- Alternative more centralized plans, with a focus on a central vertical axis rather than a longitudinal horizontal one were also adopted occasionally
- The reasons for their adoption is not very clear
- The centralized churches were of two broad types
- There were the completely circular churches
- These had a circular or octagonal space surrounded by an ambulatory
- Examples of these include Saint Marks Venice, St.Vitale Ravenna and Hagia Sophia Constantinople.

Early Christian Architecture

Basilica Church Type

- Apart from administering to the spiritual needs of the living, some churches also provided burial spaces for the dead
- The early churches were generally simple and functional in their design
- The emphasis was centered on the act of Christian worship
- The architecture of the church that developed was not a completely new style, but the use of available Roman forms to satisfy a new program need
- The form chosen for the early church was the Roman basilica

Early Christian Architecture

Basilica Church Type

- It was suitable for use as a church with no serious modification and it could be easily and rapidly be built at low cost
- The Basilica was also preferred because of the emphasis on participation in mass.
- The most common form of the early churches had a rectangular hall with a timber trussed roof
- It also had one or two aisles on each side of a central nave and an apse at one end facing the principal entrance located at the other end

Early Christian Architecture

Basilica Church Type

- The apse of the basilica was used as a location for the alter
- The nave was used as a sitting for the clergy
- Common people sat in the isles
- The early churches may have a courtyard or atrium in front of it
- A fountain is usually located in the center of such an atrium; This was used for baptism

Early Christian Architecture

Basilica Church Type

- Most of the early churches had clerestory lighting
- Clerestory windows were developed to give light to the central part of the interior
- Gradually, the clerestory windows became a symbol of the transcendence and grace of god
- Variations in the character of the early church reflected differences in local resources and traditions

Old St. Peter's Basilica was a prototype for developments in Christian architecture

The plan was initially adapted from the Roman **basilica, which was usually entered on its long side, but the Christian church was entered through an atrium and narthex (entrance hall) on its short side. This narthex was usually on the west, and the altar was toward the east,** an orientation followed in most later medieval churches.

The interior division of space, with a **nave flanked by side aisles, is similar to certain Roman basilicas. Old St. Peter's has transepts (from the Middle Latin *transseptum*, "*transverse enclosure*"), a feature that would become traditional in** Christian churches. These architectural spaces, extensions to the north and south, meet the nave at the **crossing.**

Transepts create cross shape; the term *cruciform (cross-like) basilica* designates **Early Christian churches with transepts. At St. Peter's,** as in many Roman basilicas, wooden beams supported a **gable roof, and clerestory windows allowed light to** illuminate the nave.

Many of the columns used in building Old St. Peter's were taken from earlier Roman buildings; materials thus reused are known as *spolia (Latin, "spoils"). The group of spiral columns that decorated the altar area at* Old St. Peter's had a special significance, for they were thought to have been taken from the Temple of Solomon in Jerusalem.

The size of Old St. Peter's mirrors the triumphant attitude of Christianity following the Edict of Milan in 313, which granted religious freedom to the Christians. Constantine realized the unifying strength that the newly recognized religion could bring to his reign. Many privileges, including tax exemptions and donations of land and money, were granted the Church.

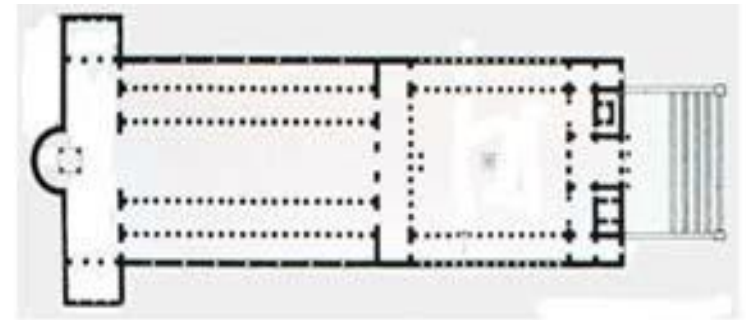
Constantine's support was further evidenced by his decision to build Old St. Peter's, which was both a martyrium (built over the grave site of Saint Peter, it marked and commemorated his martyrdom) and a basilica used for worship. It is believed that the development of the transept at St. Peter's derived from the need for additional space for worshipers and pilgrims around the shrine and a desire to separate Peter's grave from other tombs in the nave.

Old St. Peter's had a rather plain brick exterior, but the interior was adorned with precious materials, including marble Roman columns, mosaics, and frescoes. The decorated interior contrasted with the exterior, subtly reminding the visitor that the beauty of the inner spirit was more important than external, physical adornment. From the entrance, one's attention was focused on the high altar, set below an enormous arch on which a mosaic depicted Christ, Saint Peter, and the emperor Constantine .

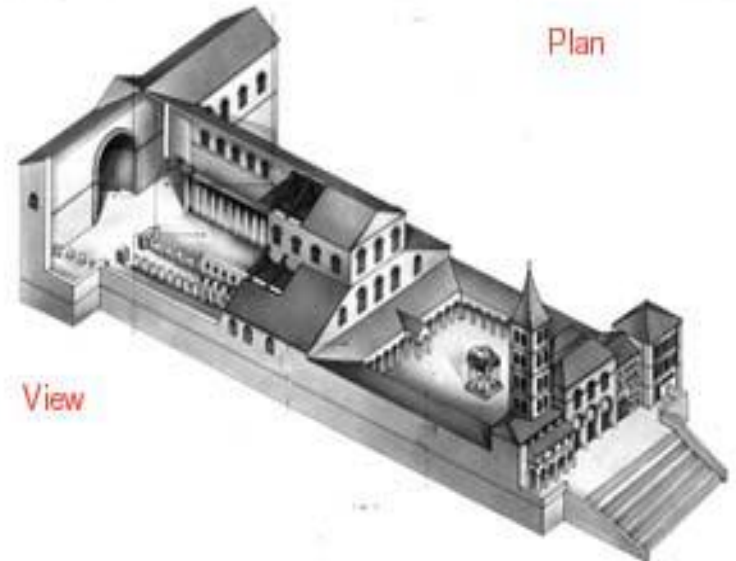
Early Christian Architecture

S. Peters, Rome AD 333

- St Peter was the most important of the basilica churches built by Constantine
- The church has a triple entrance gate leading to an atrium
- The Basilica had a wooden roof of interlocking rafters
- The nave did not lead directly to the apse but instead ends in a transverse space that is as high as the nave called the transept



Plan



View

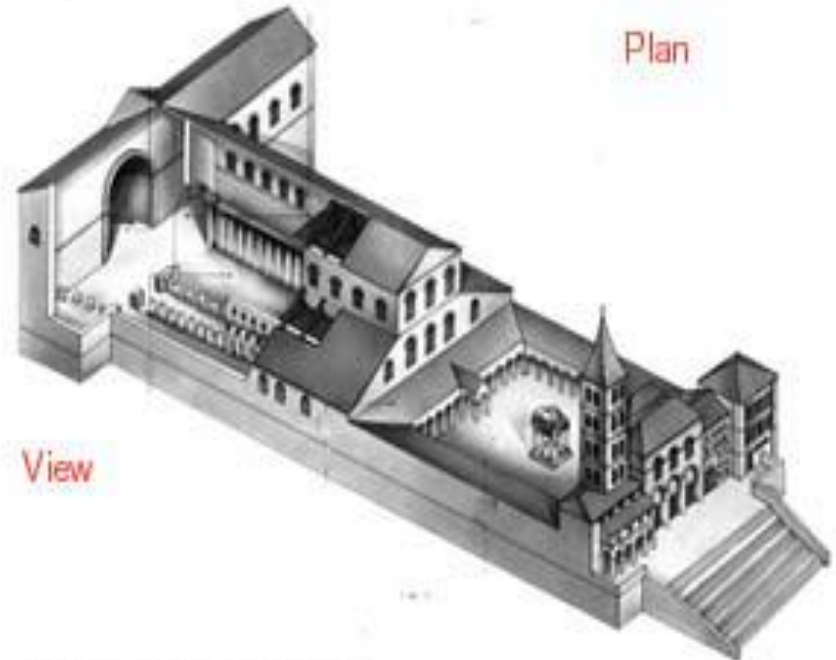
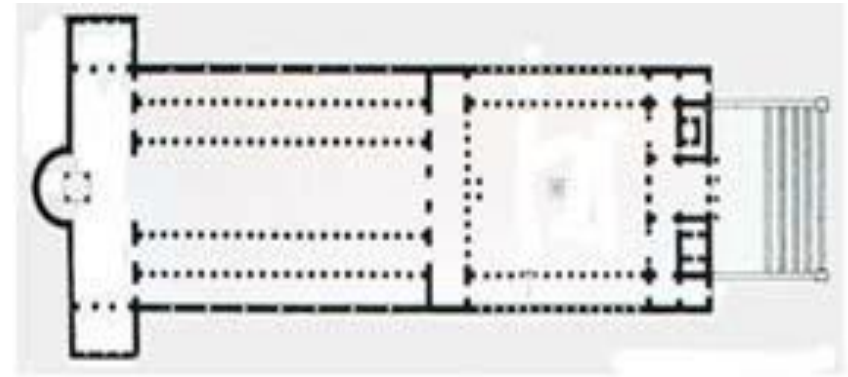
Old St. Peter A. D. 333

Source: Sir Barnister Fletcher; Great Architecture

Early Christian Architecture

S. Peters, Rome AD 333

- The nave terminated in a triumphal arch that framed the curve of the apse
- Some of the early churches were built over the tomb of martyrs and are known as martyrium
- St Peters is one of the earliest and most important of the martyrium churches
- It was built over what was believed to be the tomb of Saint Peter who was a disciple of Jesus

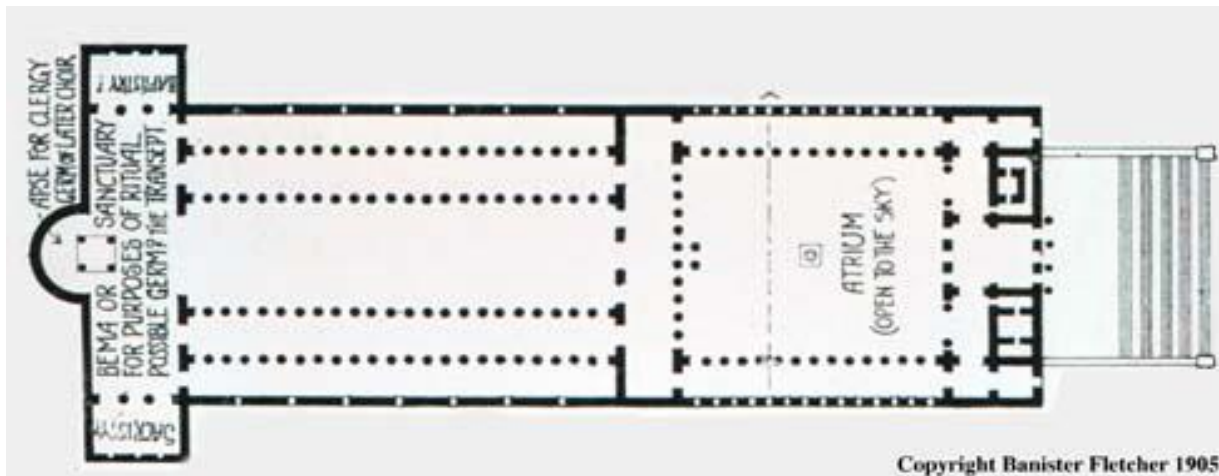
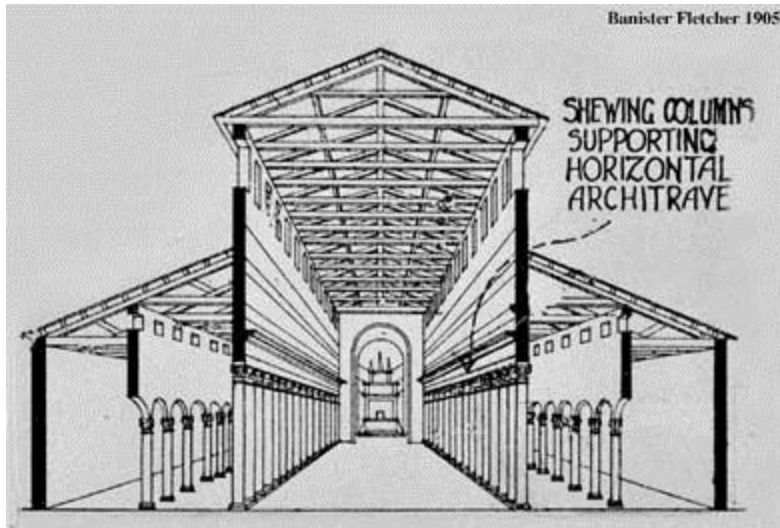


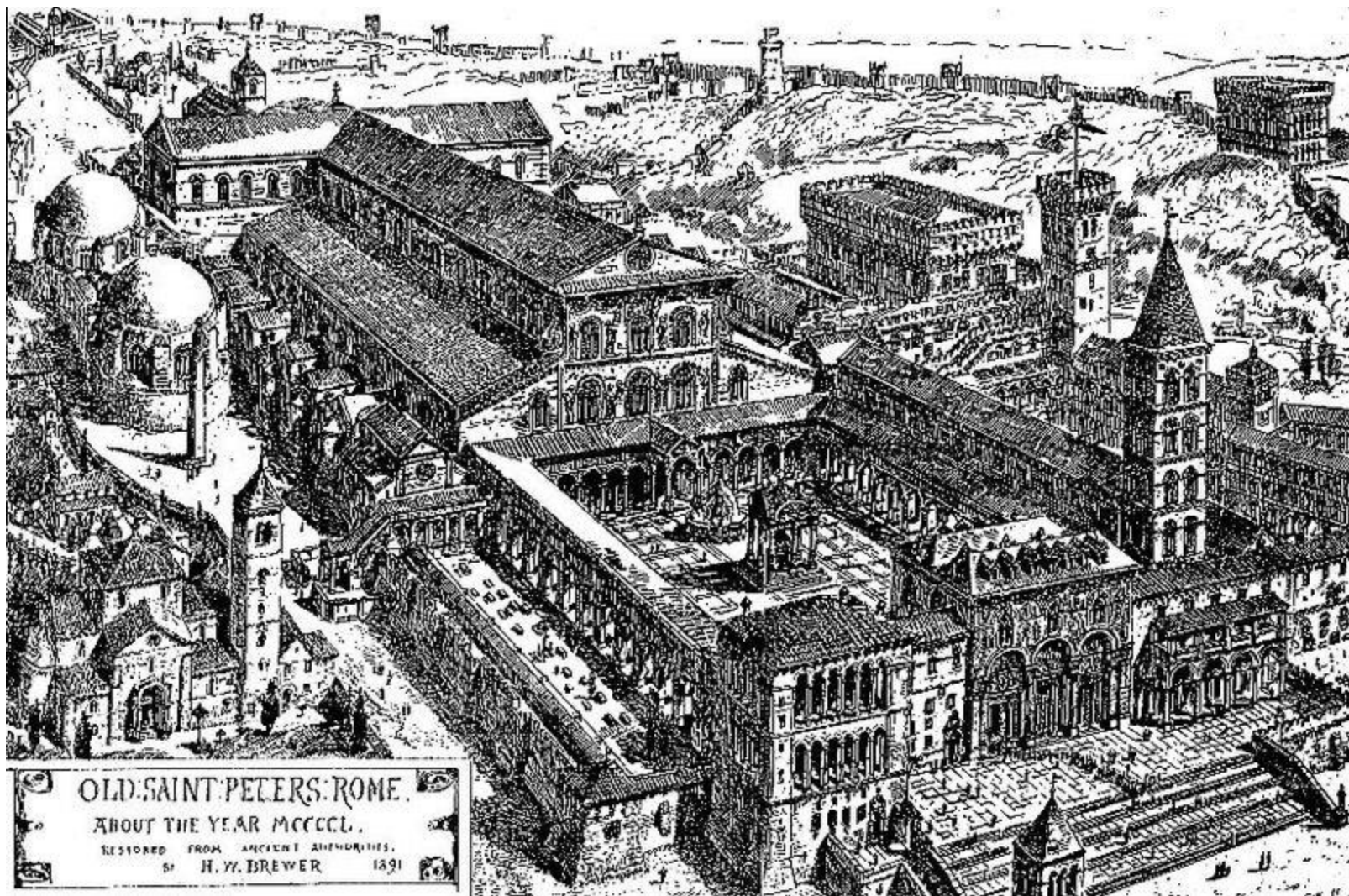
Old St. Peter A. D. 333

Source: Sir Barnister Fletcher; Great Architecture

Old St. Peter's

The early Christian basilicas did not last through the years. Old St. Peter's floor plan has actually been reconstructed. The design of these basilicas have the altar as the main focus. The altar was located on the eastern end and the narthex was at the western entrance. The altar being placed here was symbolic. The crucifix with Christ faced the congregation. It was tradition for the cross on the altar to face the western entrance of the church. The Roman basilicas used to contain apses containing statues of emperors, but Christian apses contained ones of Christ.





OLD SAINT PETERS ROME.

ABOUT THE YEAR MCCCCL.

RESTORED FROM ANCIENT AUTHORITIES.

BY H. W. BREWER

1891

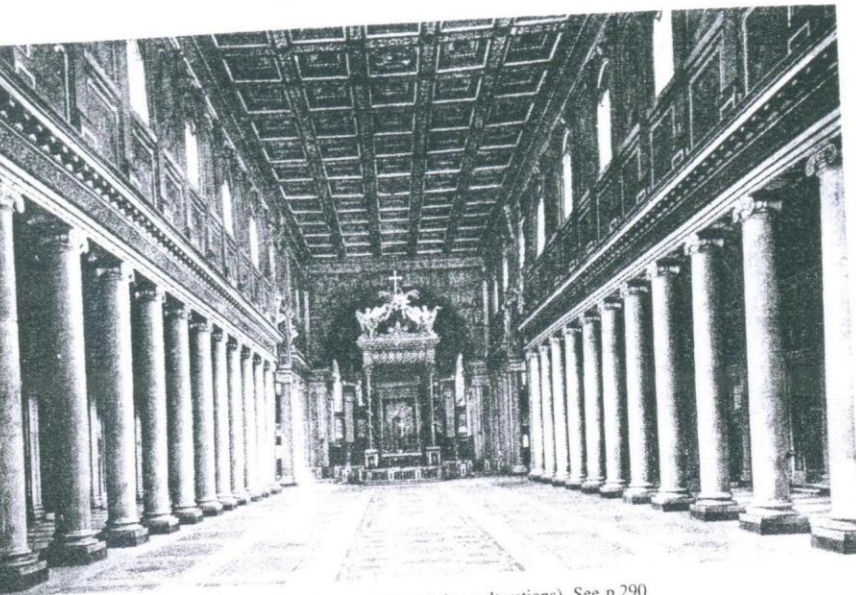
A visit to Rome's Basilica of San Clemente is more like a journey backwards in time, across centuries where history mingles with legend and phantoms and mysteries accompany the voyager every step of the way. In fact, San Clemente is not one, but three churches constructed one above the other, resting on the remains of earlier Roman habitations. Each of these strata evokes its own historical fantasy.



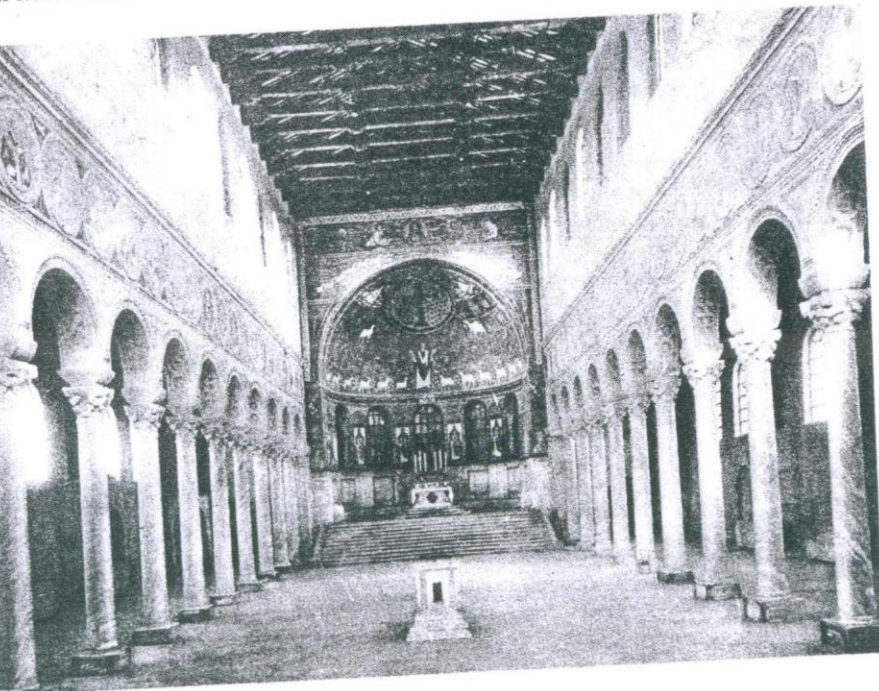
A trinity of churches with 12th century frescoes

The *Basilica di San Clemente* combines 3 churches that were built upon each other as time went by. The upper church is of the 12th century, displaying The Triumph of the Cross mosaic. Journey down further and find the 4th-century lower basilica. Take a stairway even further to find the mitreo.

The mitreo was the first to be built on this location as a pagan temple dedicated to Mithras, the god of the sun. Most people will be amazed by the Basilica di San Clemente's frescoes created by Masolino da Panicale. They were painted between 1428 and 1431, in honor of St. Catherine, and can be found in what is known as the chapel of St. Catherine.

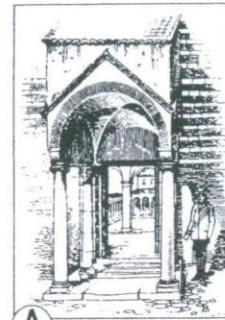


the basilican church of S. Maria Maggiore, Rome (432, with later alterations). See p.290



S. Apollinare in Classe, Ravenna: nave looking east. See p.295

S. CLEMENTE : ROME



A PORCH TO ATRIUM



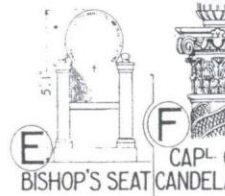
B ATRIUM LOOKING N.



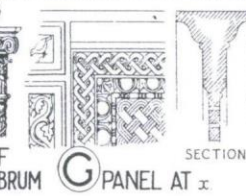
C THE GOSPEL AMBO



D BALUSTRADE BETWEEN CHOIR AND SANCTUARY



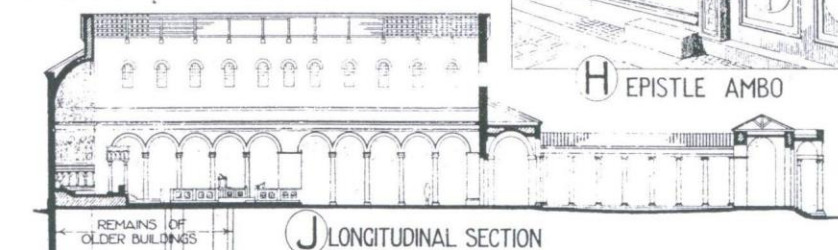
E CAPL. OF BISHOP'S SEAT



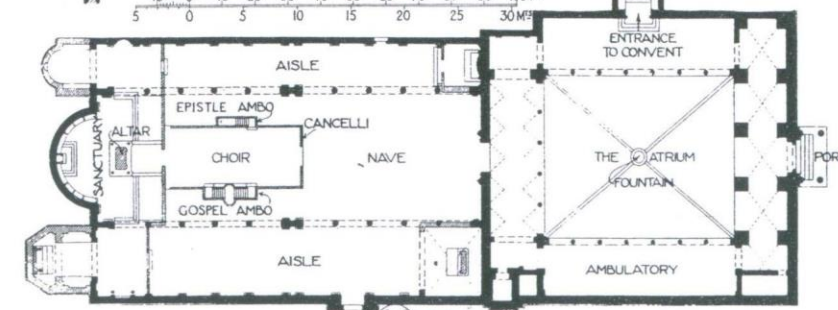
F CANCEL



G PANEL AT x



H EPISTLE AMBO



I LONGITUDINAL SECTION



J PLAN



Thick tufa walls alternate with lateral surfaces of square bricks in network patterns and the floors are composed of herringbone tiles.

On this third level there are two buildings separated by a narrow passageway: on one side a brick *insula* or apartment complex, and on the other a more imposing rectangular structure of tufa blocks, travertine, brick and stone. This second building consisted of the ground-floor rooms of a first-century villa, surrounding a great open space or courtyard.

Historical records suggest that the large building raised on the ravages of Nero's fire in the late first century belonged to the consul-martyr Titus Flavius Clemens. The church built here centuries later was identified as the "Titulus Clemens" (titular churches in early Rome were so-called after original title holders whose private homes had been used for Christian worship), and named after Pope St. Clement I (88-97), who according to legend had served as a slave in the first-century household.



In fact, a small Mithraic temple dated to the end of the second or early third century A.D. was built into the first-century *insula* described above. Exploring the area, we first come upon the temple antechamber, with stone seating, thick pilasters supporting the vestibule arches, and a stucco ceiling with geometric and floral patterns. Across, the *triclinium*, or banquet hall, is an artificial cave with stone benches on two sides. What was probably the altar, a marble block between the benches, has a classical bas-relief portraying Mithra in his Phrygian cap, plunging his dagger into a bull. (In Mithraic dogma the bull was thought to give birth to all living things, and Mithra, its slayer, was worshipped as a creative force. The ritual banquet commemorated Mithras' feast with Apollo, before he ascended into heaven.) At the end of a corridor leading from the *triclinium* and vestibule another room has been identified as the probable instruction room. There are seven niches here, taken to represent the seven-stage Mithraic initiation, a black and white mosaic floor, and the faded wall portrait of a bearded and scarlet-cloaked Roman.

For this is a fourth-century church, which was filled in, abandoned and forgotten for eight long centuries, until an amateur nineteenth-century archeologist dug his way through hundreds of years of rubble and refuse.

Four long, shadowy hallways of varying widths stretch, separated by thick walls and square pilasters supporting the more recent basilica above.

Here and there wide-eyed Byzantine figures peer out from the crumbling frescoed walls.

A modern stone altar at the end of the largest corridor reminds us that we are, in fact, looking on the nave, narthex, and north and south aisles of an early Christian church.

History

This ancient church was transformed over the centuries from a private home that was the site of clandestine Christian worship in the 1st century to a grand public basilica by the 6th century, reflecting the emerging Catholic Church's growing legitimacy and power.

Before the 4th century

The lowest levels of the present basilica are remnants of the foundation of a republican era building that was destroyed in the Great Fire of 64.

A new house was built on those foundations shortly thereafter. At this time, the home was owned by the family of Roman consul and martyr Titus Flavius Clemens, who was one of the first among the Roman senatorial class to convert to Christianity.

Clemens allowed his house to be used as a secret gathering place for fellow Christians, the religion being outlawed at the time.

An *insula*, or apartment complex, in the basement of the same building was used around 180-220 as part of a [mithraeum](#), that is, as part of a sanctuary of the cult of Mithras.

The *exedra*, the shallow apse at the far end of the low vaulted space, was trimmed with pumice to render it more cave-like. Ventilation was provided by seven holes in the ceiling.

A central cult relief of Mithras slaying the bull was not found, but an altar of Parian marble has the tauroctony scene on its front face.

At some time in the 4th century, the former home of the Clemens family was extended and converted into a church, acquiring the adjoining *insula* and other nearby buildings.

The central nave lay over the former home, with the apse approximately over the former mithraeum. This "first basilica" is known to have existed in 392, when St. Jerome wrote of the church dedicated to St. Clement, i.e. Pope Clement I, a 1st century AD Christian convert.

Byzantine Architecture Introduction

- By the end of the 5th century AD, Rome had completely declined
- It had been sacked twice and was then under occupation
- Its influence was significantly reduced and the Impetus for architectural innovation shifted to the Byzantine Empire
- This shift also marks the movement from early Christian civilization to the Byzantine civilization
- Under the Byzantine Emperor Justinian, the Byzantine style of architecture evolved
- His interest in church building led to the discovery of the groin vault and the evolution of the Byzantine style

Byzantine Arch. in Other Places

Introduction

- Byzantine churches, each with a central dome opening into surrounding semi domes and other vault forms and accompanied by the characteristic iconography proliferated throughout the Byzantine Empire Greece, Balkans, Asia minor, part of north Africa and Italy
- It also influenced the design of churches in western Christendom
- The later churches however lacked the power and vigor of the Hagia Sophia and were of a smaller scale compared to it

Byzantine Architecture

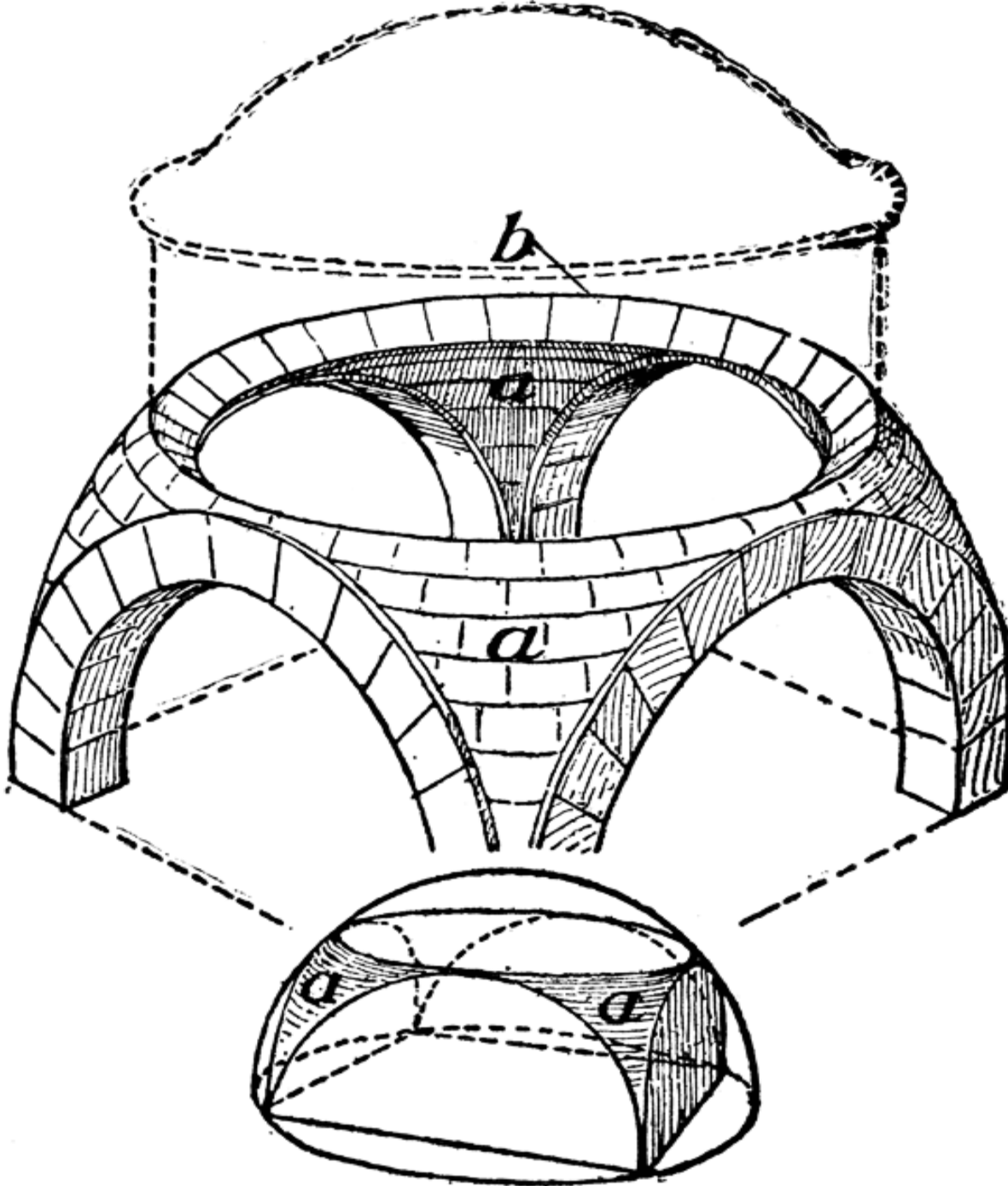
Introduction

- Although it is impossible to identify two similar Byzantine churches, it is still possible to identify the basic characteristics of an ideal Byzantine church
- The attributes of the ideal church included:
 - The use of a centralized church plan
 - The use of surrounding aisles
 - The use of pendentives and dome on pendentives
 - And the use of a complex program of interior structure, lighting and decoration to create fascinating interiors

Byzantine Architecture

Domes and Domes on Pedentives

- Byzantine architecture gave us the pedentive domes and the dome on pedentives
- The pedentive dome and the dome on pedentives provided the Byzantine architects with a unique way of adjusting the circular form of a dome roof to a square or polygonal plan
- This type of dome was invented by the Romans but was seldom used by them
- It was the Byzantine builders who used it to create dramatic interiors
- In the Pantheon in Rome, the Dome roof had to be supported by a circular plan
- The walls of the plan had to be thick to counterbalance the forces from the Dome

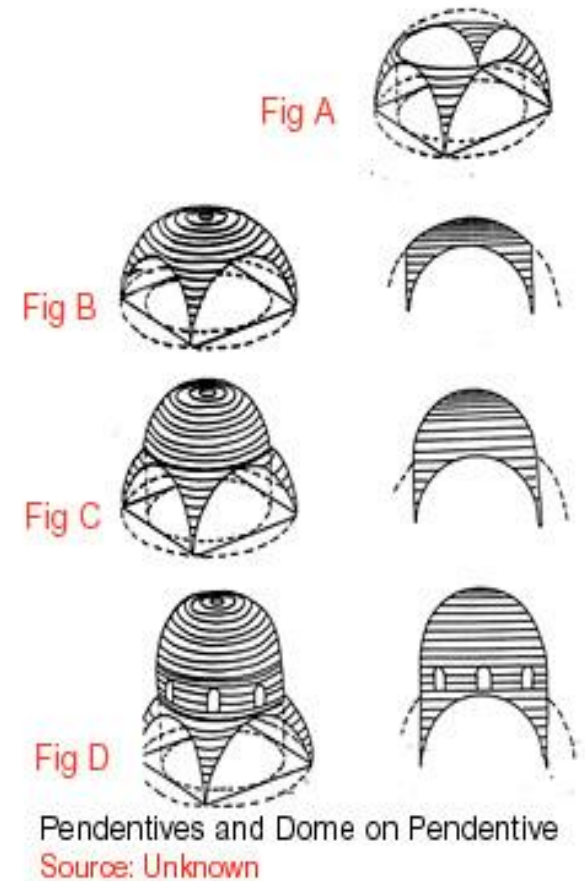


Description: A pendentive is a constructive device permitting the placing of a circular dome over a square room or an elliptical dome over a rectangular room. The pendentives, which are triangular segments of a sphere, taper to points at the bottom and spread at the top to establish the continuous circular or elliptical base needed for the dome. In masonry the pendentives thus receive the weight of the dome, concentrating it at the four corners where it can be received by the piers beneath.

Byzantine Architecture

Domes and Domes on Pedentives

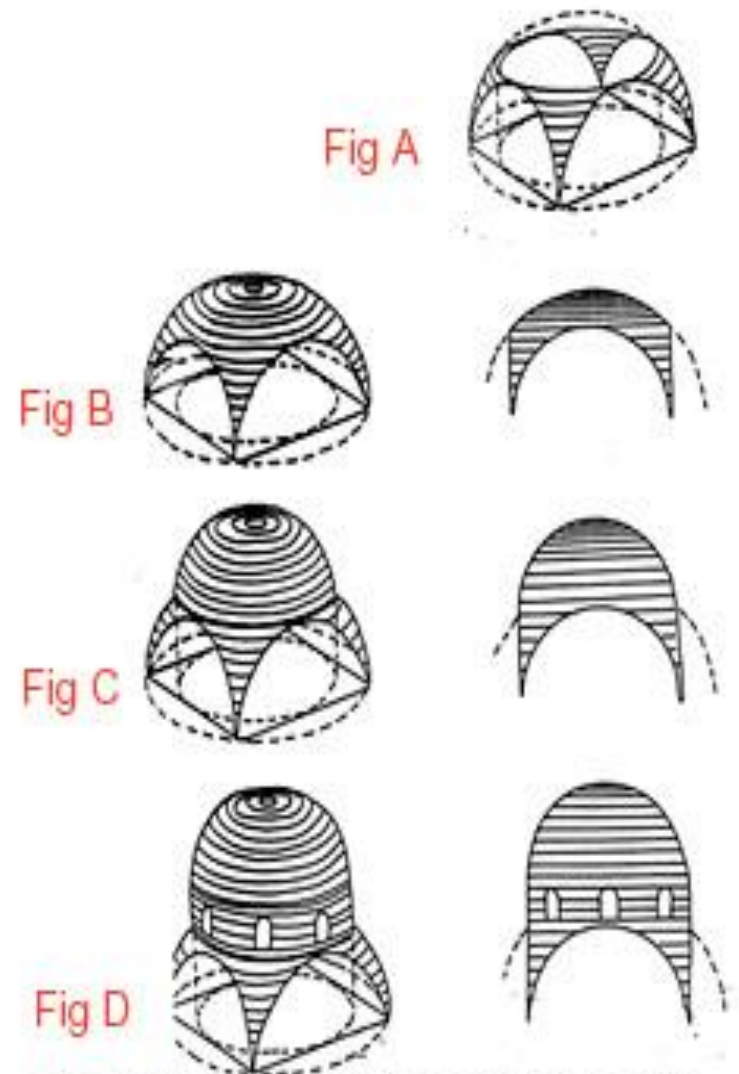
- The pendentive dome is derived by trimming the sides of a regular dome over a square plan as shown in A.
- The pendentive dome enables the transfer the total load of the dome to the four corners of a building, meaning that only the four corners need to be reinforced
- This allows the dome roof to be adapted for a square building as shown in B



Byzantine Architecture

Domes and Domes on Pendentives

- Additionally, the top of the pendentive dome can be trimmed to introduce another dome on top of it as shown in C
- The additional dome can further be raised to introduce a cylinder between the pendentive dome and the additional dome as in D
- Windows can then be introduced in the cylinder enabling architects to creating dazzling interior light effects



Pendentives and Dome on Pendentive
Source: Unknown

Early Prototypes

St Vitale Ravenna AD 526-547

- Byzantine architecture has its early prototypes in two churches, San Vitale (526-47), Ravenna and in Saint Sergius and Saint Bacchus in Constantinople
- Ravenna once served as the seat of the Roman Empire
- The church is among the most important monuments of Byzantine architecture
- It was also the prototype for the Hagia Sophia which was built 10 years later



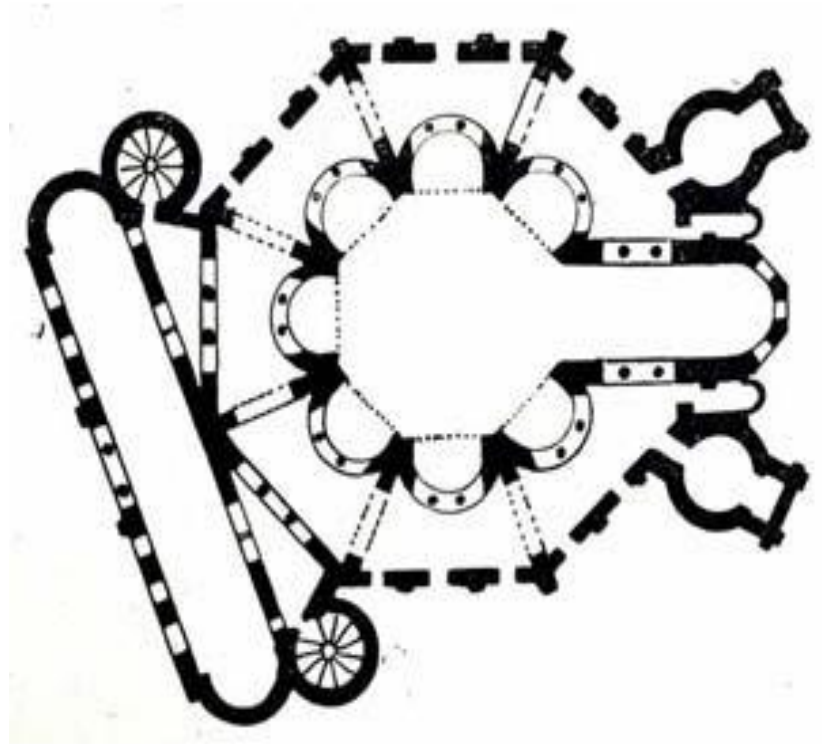
San Vitale Ravenna, view

Source: Trachtenberg & Hyman (1986)

Early Prototypes

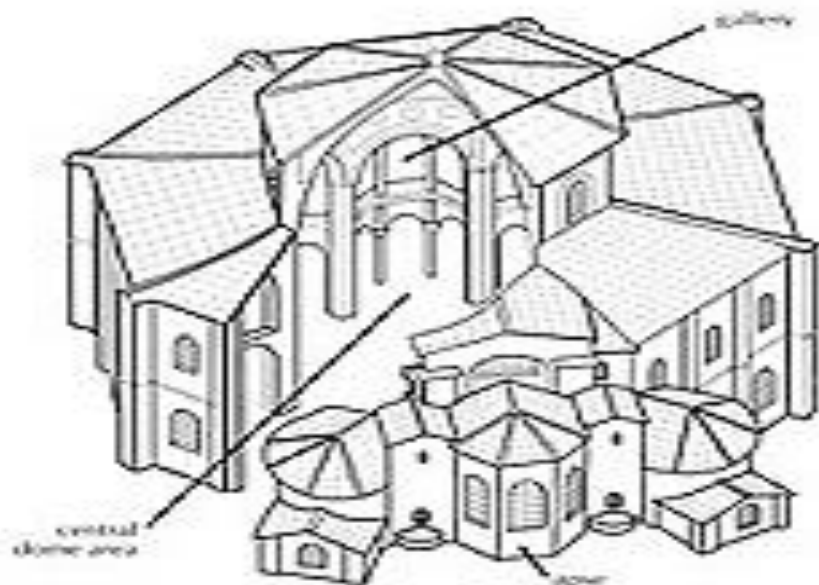
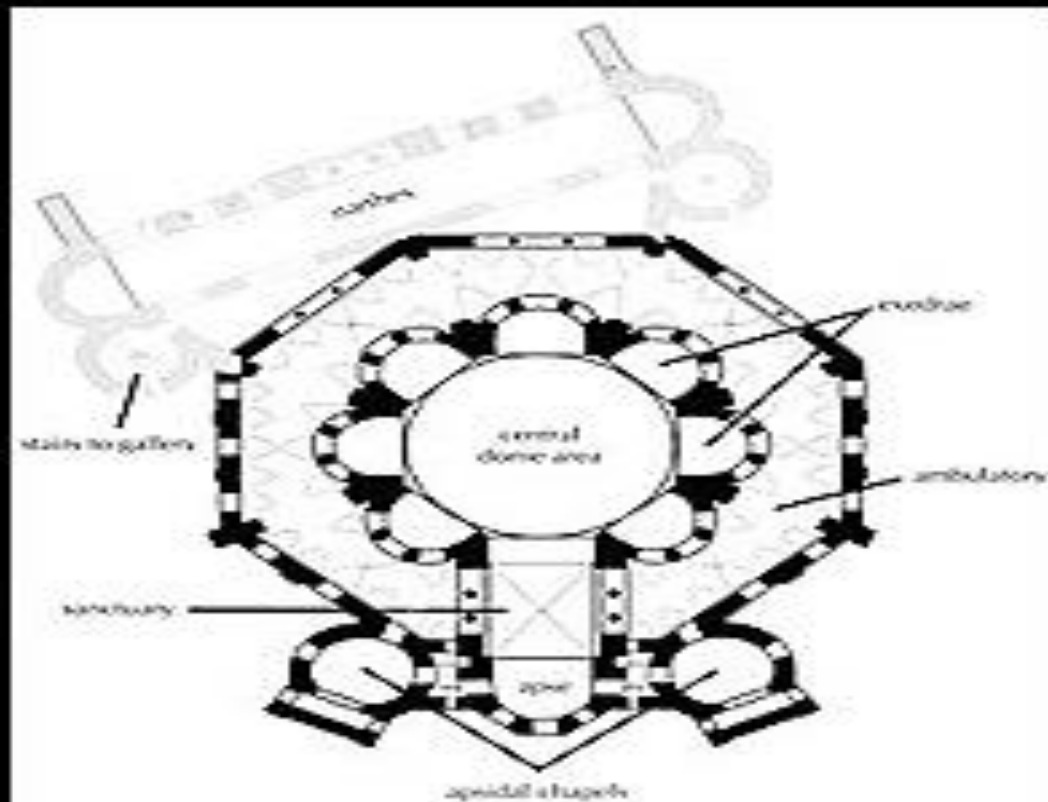
St Vitale Ravenna AD 526-547

- The church is octagonal in plan
- It has a domed octagonal core surrounded by ground level ambulatory with a gallery above it
- The outer wall of the ambulatory is also octagonal
- It has an apse which extends from the central core to one of the 8 sides of the outer octagon



San Vitale Ravenna, Plan

Source: K. Cohen, San Jose State Univ.



* San Vitale's exterior consists of plain unbroken brick, except in cases for buttresses and windows. The building is centrally planned, rather than having an east-west orientation, with the altar in the east, opposite the entrance. The round central space takes the place of naves of western churches. Eight pillars circle the central ring, and support eight arches. Past the arches are seven niches and the cross vault, containing the altar. Ambulatories (aisles surrounding the end of the choir) surround the niches on the lower level, and a gallery on the second floor. The galleries are assumed to have been solely for women, because women were segregated from men in worshipping. Arched windows are on every floor of San Vitale to let sunlight shine through. The three stories consist of the ground floor, the gallery, and the clerestory.



Figure 5 Detail of a capital, San Vitale, Ravenna, c. 540. Marble.

EARLY PROTOTYPES

St Vitale Ravenna AD 526-547

- The domed roof of the church is raised on a drum allowing it greater height and lighting
- The dome has a diameter of 17 meters and a height of 30 meters
- The **Byzantine characteristics** of the church include:
 - Its central planning
 - The structural arrangement of its central dome
 - The use of surrounding aisles
 - And the way structure, lighting and decoration have been integrated in the interior of the church



San Vitale, Ravenna - Interior
Source: K. Cohen San Jose St. Univ.



Dome carried on a Drum.



Impost capital in Sta. Sophia, Constantinople.



MOSAIC WORK.

ST. HAGIA SOPHIA, Constantinople

- Constantine the Great erected a Christian church on this site. It was burnt down, a second suffered the same fate.
- In A.D. 532 the Emperor Justinian laid the foundation of a new style of Architecture—Byzantine.
- In Byzantine Art the architecture of the round arch and the dome rose to its fullest beauty. Sta. Sophia was converted into a Mohammedan mosque in 1453.
- The Turks are responsible for the minarets and various adjuncts in the foreground.



JUSTINIAN'S HAGIA SOPHIA AND ITS IMPACT ON BYZANTINE ARCHITECTURE



Hagia Sophia

- Two Greek mathematicians, Anthemius and Isidoros, were commissioned by Justinian to design Hagia Sophia.
- They were highly interested in circles and parabolas, which were incorporated into the structure.

Figure 11 Exterior of Hagia Sophia, Constantinople, completed 537.

Byzantine Architecture Hagia Sophia

- Hagia Sophia or the church of the holy wisdom is the most accomplished master piece in the history of architecture
- The church was constructed in 532 A.D. by Emperor Justinian in Constantinople now Istanbul
- Hagia Sophia was the greatest vaulted space without intermediate supports that has ever been built and it remained so throughout the history of the Byzantine Empire



Hagia Sophia, Istanbul - exterior view
Source: Eugene Webb 1960

Byzantine Architecture

Hagia Sophia

- Its architects were Isidore of Miletus and Anthemius of Tralles, professors of geometry at the University of Constantinople
- The church provides an expert solution to the problem of how to place a dome on a square base
- The solution was to use pendentives



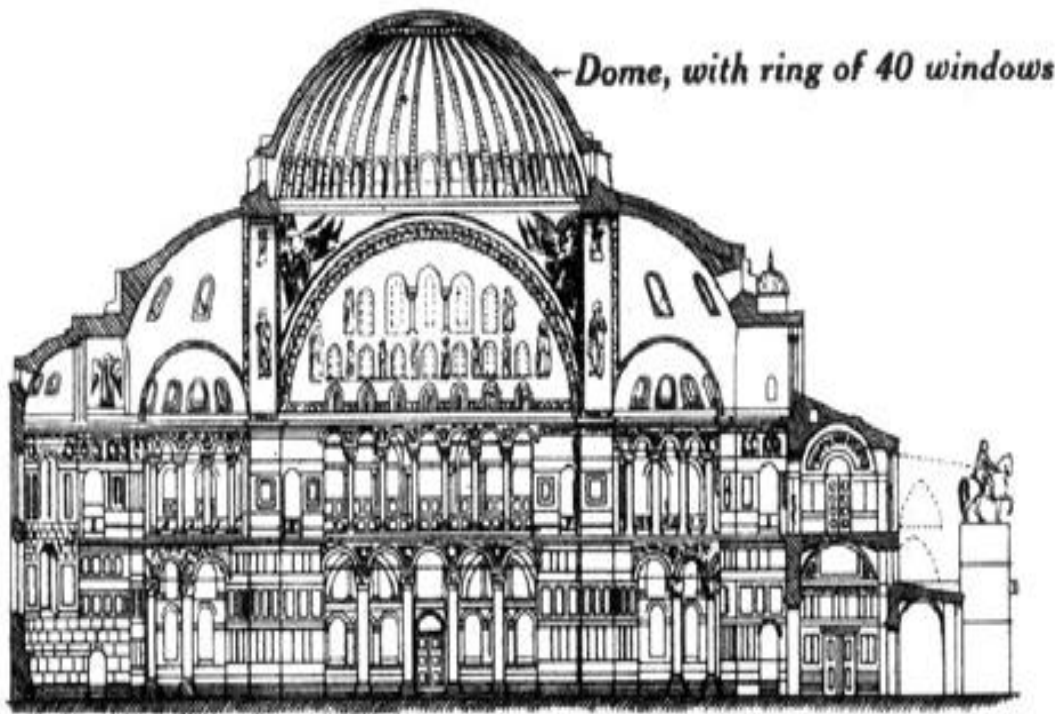
Hagia Sophia, Istanbul - exterior view

Source: Eugene Webb 1960

Section of Sta. Sophia

The opening left in the centre of the dome by Roman builders for admission of light also let in rain.

Byzantine architects placed windows in the curve of the dome and later introduced the drum, grouping the windows round the dwarf tower and placing a dome over it.



Section of Sta. Sophia, Constantinople, from E. to W.

Byzantine Architecture

HagiaSophia

- HagiaSophia is covered by a central dome 102 feet (31 m) across, slightly smaller than the Pantheon's
- The dome seems rendered weightless by the unbroken arcade of arched windows under it, which help flood the colorful interior with light
- The dome is carried on pendentives
- The weight of the dome passes through the pendentives to four massive piers at the corners

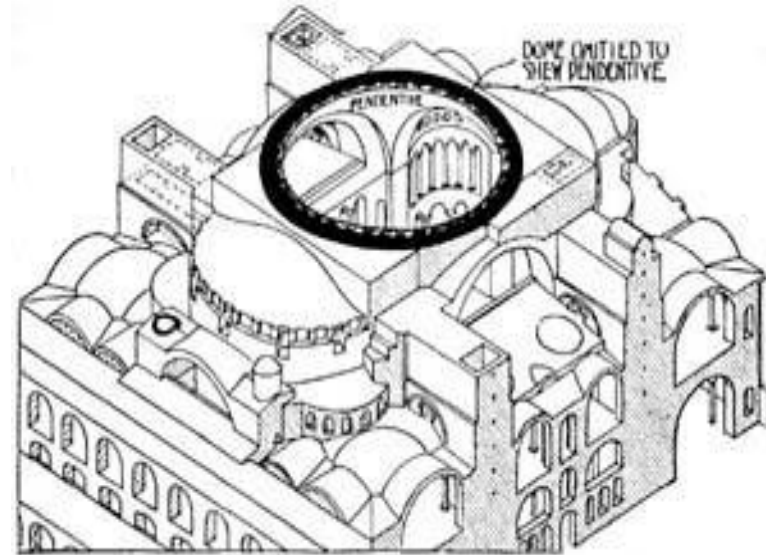


Hagia Sophia, Istanbul - Central Dome
Source: Great Architecture of the World

Byzantine Architecture

HagiaSophia

- Between them the dome seems to float upon four great arches
- These four concave triangular sections of masonry solved the problem of setting the circular base of a dome on a rectangular base
- The church form is a combination of centralized and longitudinal structure
- Longitudinal direction is defined by domes to the east and west

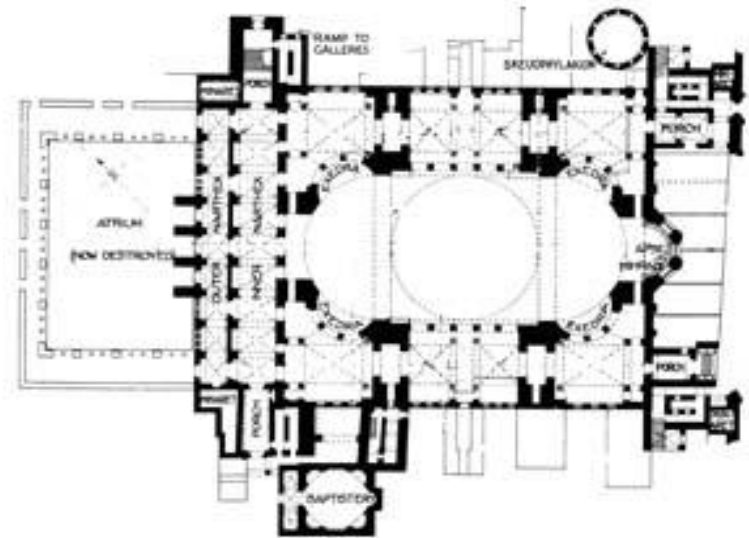


Hagia Sophia, Istanbul - Pendentive
Source: Sir Barnister Fletcher (1905)

Byzantine Architecture

Hagia Sophia

- At Hagia Sophia, two opposing arches on the central square open into semi domes, each pierced by 3 smaller radial semi-domes
- At the west (entrance) and east (liturgical) ends, the arched openings are extended and by great half domes carried on smaller semi-domed exedras



Santa Sophia, Istanbul - Plan
Source: Sir Barnister Fletcher (1996)

Byzantine Architecture

HagiaSophia

- Thus a hierarchy of dome-headed elements build up to create a vast oblong interior crowned by the main dome, a sequence never seen before in antiquity
- Of great artistic importance was its decorated interior with mosaics and marble pillars and coverings
- The combination of interior decoration with lights flooding from its domes creates a glittering internal environment



Santa Sophia, Interior Detail
Source: Jacob Albert 1988

Byzantine Architecture

HagiaSophia

- Hagia sophia dominated church architecture after the 6th century AD
- For over 900 years it was the seat of the Orthodox patriarch of Constantinople and a principal setting for imperial ceremonies
- HagiaSophia was converted to a mosque at the Fall of Constantinople to the Ottoman Turks under Sultan Mohammad II in 1453
- Its rich figurative mosaics were covered with plaster and replaced by Islamic motifs



Hagia Sophia, Istanbul - exterior view

Source: Daniel C. Waugh

Byzantine Architecture

Hagia Sophia

- It was for almost 500 years the principal mosque of Istanbul
- Hagia Sophia served as model for many of the great Ottoman mosques of Constantinople such as the Shehzade Mosque, the Suleiman Mosque, and the Rustem Pasha Mosque
- After continuing as a mosque for many years, it was in 1934 turned by Turkish authorities into the Hagia Sophia Museum



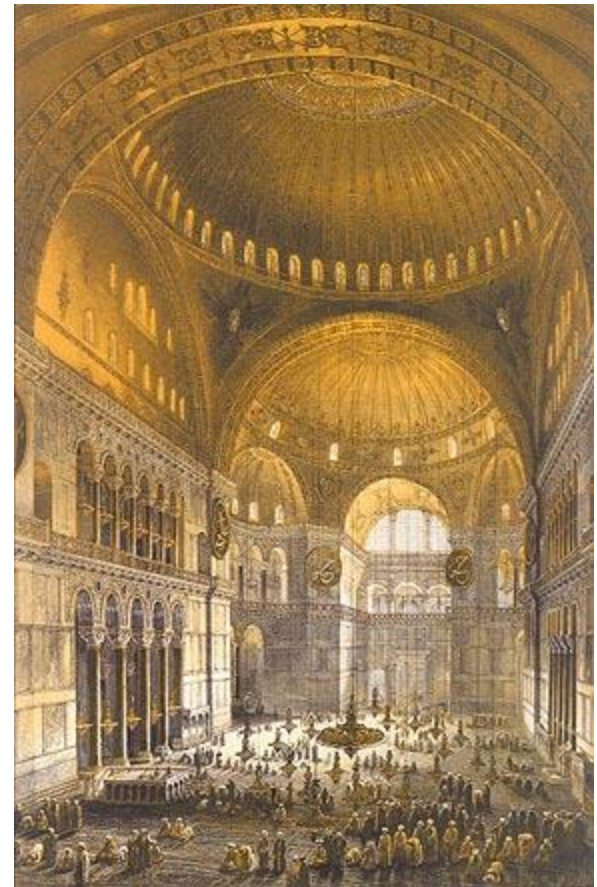
Hagia Sophia, Istanbul - exterior view

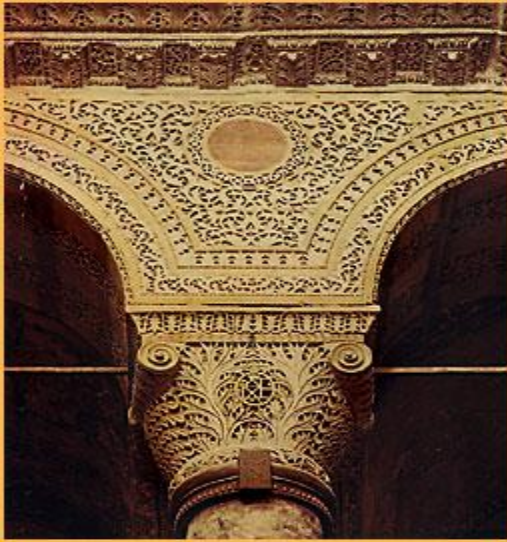
Source: Daniel C. Waugh



Interior of Hagia Sophia

The dome was made of one layer of brick, and lightened by the weight held by the pendentives. Due to the intensely large size of the dome, it needed buttressing. A buttress brilliantly surrounds each small window at the base, and ultimately shifts the dome's weight downward.





Detail of arcade spandrels and capital, Hagia Sophia.

The north and south sides of the nave are able to have arcades and windows because of the four load-bearing piers. The intense amount of windows and arcades make the structure very open and well lit. Five arches, supported by decorated capitals, connect the side aisles with the nave at the ground level. Galleries contain seven arches at the second level. There are two rows of windows at the lunettes (the areas enframed by arches), five windows over seven windows. Smaller windows circle the lower edge of the dome. Because of the overwhelming amount of windows in the Hagia Sophia, the interior of the building seems to glow due to reflections.



Byzantine Arch. in Other Places

St Marks, Venice

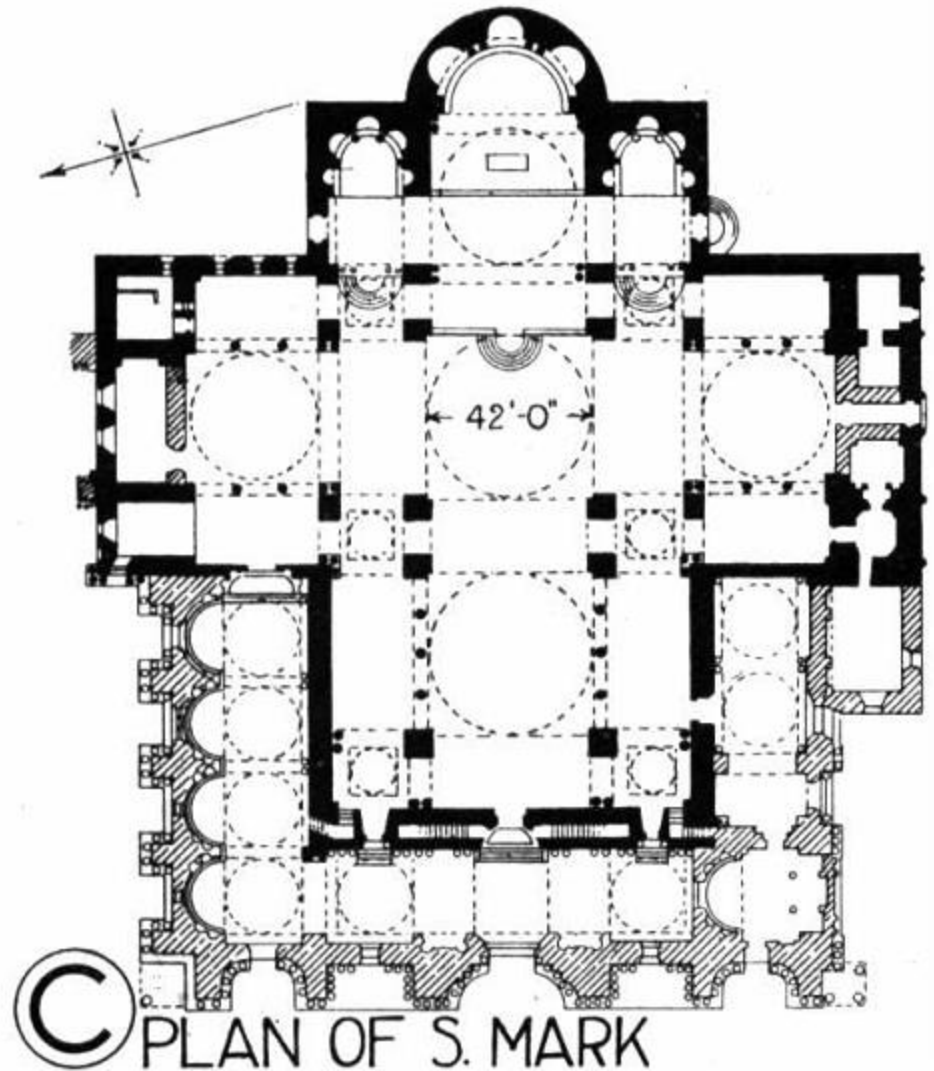
- St Mark is also a notable example of Byzantine architecture
- It lies on St Mark's Square, one of the most famous squares in the world
- The church has five domes each topping a square
- The church is based on a Greek cross floor plan, based on part on the Hagia Sophia and the Basilica of the Apostles, both in Constantinople



St Mark, Venice

Source: Great Architecture of the world

Floor plan of St. Mark. The basilica is in the shape of a Greek cross and covered with domes after the Byzantine tradition. The Venetians were influenced by the art and architecture of Constantinople (Istanbul) during the Crusades.



Byzantine Arch. in Other Places St Marks, Venice

- Each arm of the cross is of the same length and is covered by a dome
- A dome also covers the square space at the center
- While the basic structure of the building has been little altered, its decoration changed greatly over time
- The front façade is Gothic and was added much later



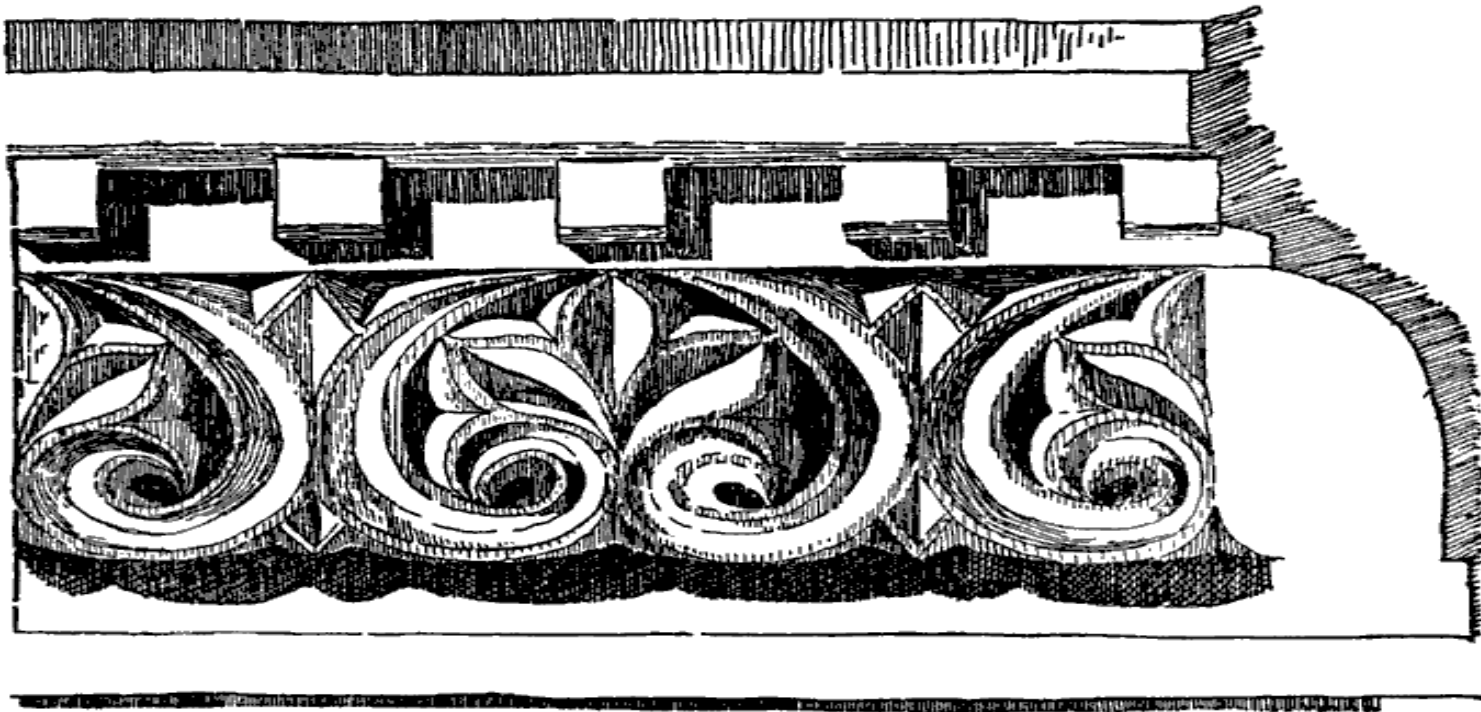
St Marks, Venice - Exterior View

Source: unknown



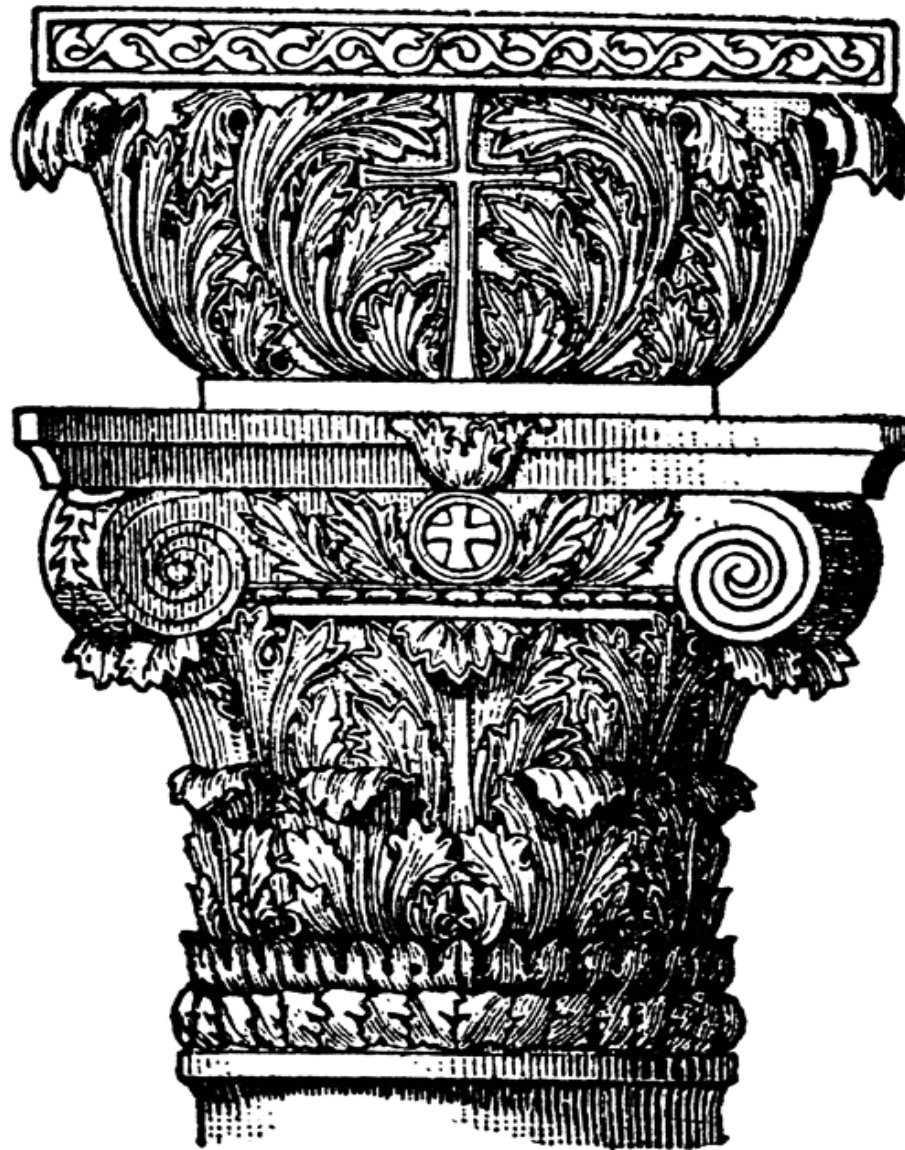
Facade of St. Mark's Basilica from the famous St. Mark's Square.

Anthemion Frieze

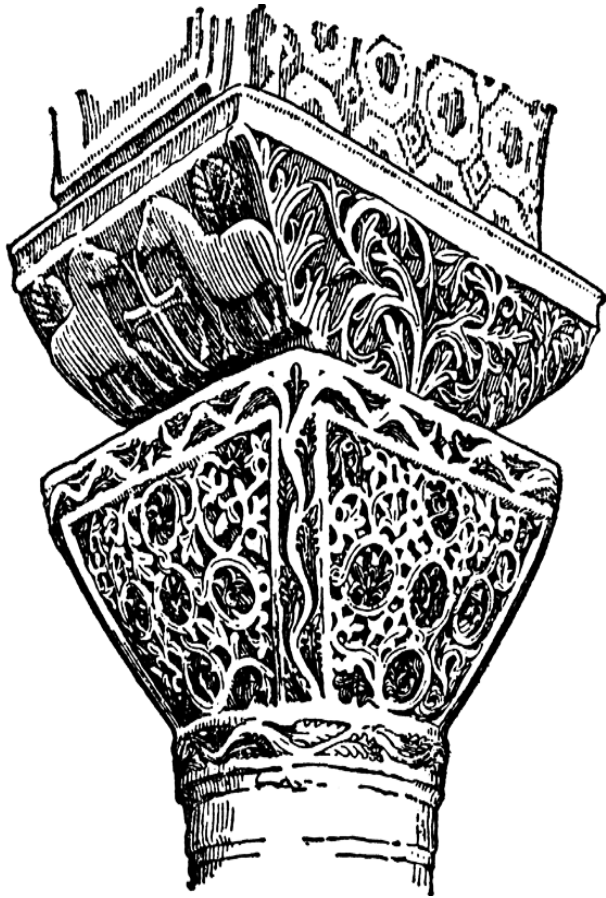




Byzantium, capital



"Byzantine Capital. The leading forms of the Byzantine style are the round arch, the circle, and in particular the dome."



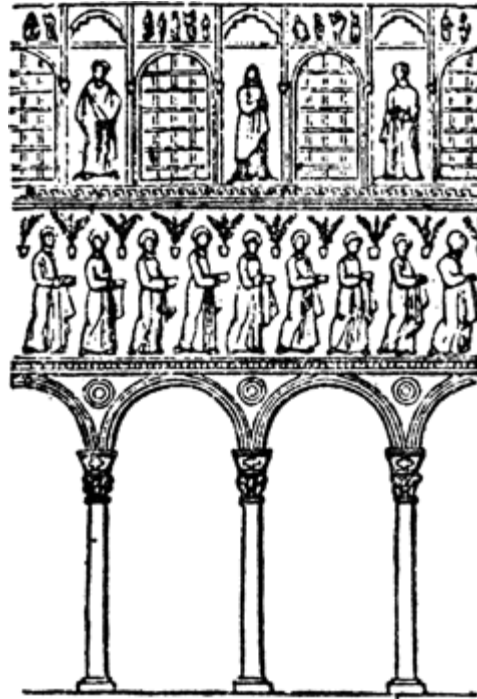
An illustration of a Byzantine capital from the the Church of St. Vitale, Ravenna. In several traditions of architecture including Classical architecture, the capital (from the Latin caput, 'head') forms the crowning member of a column or a pilaster. The capital projects on each side as it rises, in order to support the abacus and unite the form of the latter (normally square) with the circular shaft of the column.



Carved frieze from St. John Studios.



Carved frieze from St. Sergius.



Architecture, Arches, Arch, Apol, Linare,
Nuovo, Ravenna,

LATER BYZANTINE CHURCHES

Decline in the power of Byzantine also reflected in the churches as they lack the power and majesty and vigour of Hagia Sophia and its nearest contemporaries and successors.

- The trend was to contain the church within a square, with a dome over its centre and usually four cross like arms which might be either square ended or apsidal ended.

- Usually only the main apse containing the altar was allowed to project beyond the square though smaller projections might be allowed in the two flanking corner spaces which contained secondary areas known as pastophoria, used by the clergy.

- In Greece and Constantinople the piers which supported the dome were reduced to columns and all the side thrust previously resisted by the piers was passed over to the outer walls.

- At about the same time it became usual practice to enclose the sanctuary area in the eastern apse and two pastophoria behind a much more substantial screen, the iconostasis. This change introduced a new spatial dimension.

- Unlike in the Hagia Sophia where decorations were mostly non figurative golden mosaic the monastic churches of the ninth and tenth centuries show how perfectly the possibilities were exploited when forbidding of human representation came to an end in AD 843.

Christ and the Virgin were represented in the central dome and the conch of the apse.

- On the carved surfaces of the pendentives and other high vaults the principal events in Christ's life such as Annunciation, Baptism and Transfiguration were presented as if actually taking place in the spaces enfolded by these surfaces.

- In later churches a more narrative character was adopted.

- A final characteristic of later church building is the frequency with which new churches or chapels were added to existing ones, possibly to economize in the numbers of clergy needed to serve them. Notably in Constantinople where groups of two or more churches often separated in date by several centuries together create external combinations of form very different from the strictly organized massing of the single dome church.