Religious architecture

1. Theology and symbolism of church building

a. The sacred space

In the ancient Greek temple of a peristyle type the outer surface is most important.

Early Christian architecture reverses the peristyle temple, turns it inside out, concentrates on the inside: the basilica type.

The main goal is to create the atmosphere of mystery and immateriality, the sacred space. The church is the "earthly heaven" (St. Germanus).

What happens inside is the desubstantiation of the physical reality of the building: cf. the soaring canopy in Hagia Sophia or the mysterious lighting of the Gothic cathedral.

b. Parts of the Church and their symbolism: example of Eastern churches

The tripartite basic structure of the Eastern church:

The apse with the altar (the sanctuary) separated by the iconostasis or screen: the holy space, the image of the divine, the vision of another world, "heaven on earth."

The nave

The narthex and porch: the idea of a gradual separation from the world and transition to the sanctuary.

Directional symbolism: the cruciform shape; the four directions (the world); the apse towards the East (sunrise/sunset); the "three-dimensional" cross; the upward movement toward the heavens (the dome/cupola; cf. the upward movement in the Gothic cathedral)

Frescoes and images: Mother of God "Orans" in the apse who shows the way; Christ Pantocrator in the dome indicates the heavens; the four evangelists on the pillars; the last judgment over the door.

Just like the icons, the symbolism of church buildings is also subject to the canon and tradition.

2. Liturgical considerations

Another practical goal achieved by the church building is to accomodate the liturgy, different types of congregation, and clergy.

The three types of congregation and three parts of the early church:

penitents and catechumens (narthex)

regular congregation (nave)

clergy (sanctuary)

In the East: the solea and choirs for lower clerics, singers, and guests

In the West: the choir for monks, the ambulatory for pilgrims

3. Architectural considerations

Two types of early Christian churches

a. the basilica (for the eucharist)

In the West: the addition of the transept helped to focus on the most important point (convergence of axes; also creates a cross in the crosssection)

b. the circular type (for shrines)

In Byzantium and Russia: there was a fusion of the centralized and the basilica types that lead to the cross/domed type

Historical overview

The period of Justinian (6th c.)

S. Vitale, Ravenna (the round structure); The Hagia Sophia in Constantinople

Tasks: lighting, symbolism, dematerialization of the building

Architectural problems: to accommodate the dome/cupola

The basis of such architecture: a baldacchino or canopy-like vault, the four pillars, pendentives, etc.

Byzantine architecture

In the 9th c. the Eastern church generally acquires the basic design of narthex, three naves and apses, four pillars with a dome, and five cupolas on elevated drums. There is also more concern for the exterior than in earlier churches.

Russian architecture

Inherited Byzantine features: a dome (cupola) on a drum supported by four pillars (derived from the cruciform shape) and pendentives; quadrangular shape; one or five domes. The Russian type is thus a simplified Byzantine type. This plan was almost never changed.

In general, churches are taller than in Byzantium; bellfries are frequent; the outside effect is important (cf. Gothic cathedrals); the gaze is directed upward to the cupola; the typical "onion" domes.

Since 15th c. Russian churches have the iconostasis. Inside churches are covered with frescoes on subjects determined by the iconography.

Gothic architecture

Evolution of Western architecture towards the Gothic

The West assumed the architectural type of the basilica. The tasks Western architects were facing were: lighting, fitting more people into the nave, structural integrity of a large building.

One of the solutions was creating side aisles, or a three-partite structure of the nave with a clerestory.

Later, in order to improve lighting, create more space, the "upward movement" symbolism, and further dematerialize the stone building, the following developments had occurred that resulted in the creation of the Gothic form:

The Gothic arch; ribbed vault; piers; larger "screen" windows; the greater height of the nave; the flying buttress; portals with towers.

The lighting: the idea was to replaced the heavy Romanesque walls with "window-screens." This type of design brings more light and creates the feeling of immateriality and lightness of the walls, almost eliminating the walls. All structural modifications were to meet this goal: e.g., the flying buttress.

Another device to make the building lighter is the piers. Heavy columns were replaced by ribbed shafts of piers that flow into the ribs of the vaults and create the sense of lightness, lacework, etc.

The Chartres Cathedral

The symbolism and theology of the church building in the Middle Ages were very real: architects seriously took them into consideration and tried to create the "vision of the other world."

The sculptural programs of the facades

The West portal (Christ in glory): the Second Coming (central tympanum), the Incarnation (right tympanum), and Ascension (left tympanum) of Christ.

The North porch (the triumph of Mary the Virgin in heaven): death, resurrection, and triumph of the Virgin (central tympanum), incarnation of Christ (left tympanum), suffering of Job (right tympanum).

The South porch (the Last Judgment): the Last Judgment and the Deisis (central tympanum), St. Stephen (left tympanum), SS. Martin and Nicholas (right tympanum).

The symbolism of rose windows

(The programs of portals and windows are practically identical, except that the Southern and Western facades are switched around)

The West portal: the Last Judgment

The North transept: Mary enthroned with Christ (on the periphery: kings and prophets)

The South transept: the Second Coming of Christ, Christ with the four beasts/evangelists

Select Architectural Terminology (see illustrations belw and on the website)

General

• 1			
ais	le;	apse	9

barrel vault

basilica

chancel: portion of the church that includes the choir (West) and the sanctuary

clerestory (in a basilica)

crossing (between the nave and transepts)

cruciform plan (in the form of the cross)

cupola

drum

groin vault

nave

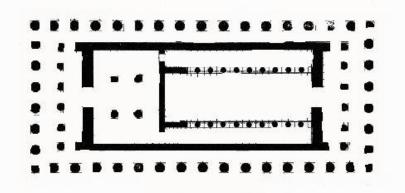
pillar

sanctuary

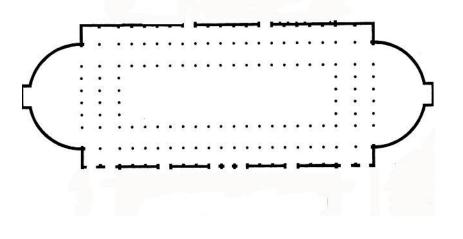
transept (lateral arms)

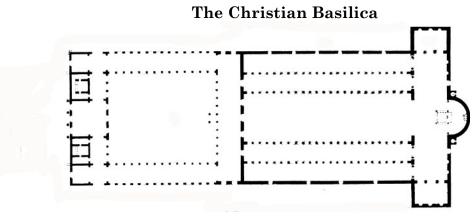
Gothic

ambulatory **arch** (Romanesque, Gothic) **buttress**, flying buttress choir (between the sanctuary and the nave) pier; portal **ribbed vault rose window tympanum** The Greek Temple



The Roman Basilica





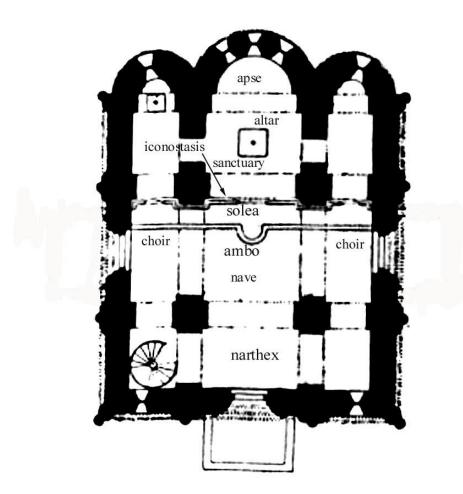
The Greek temple



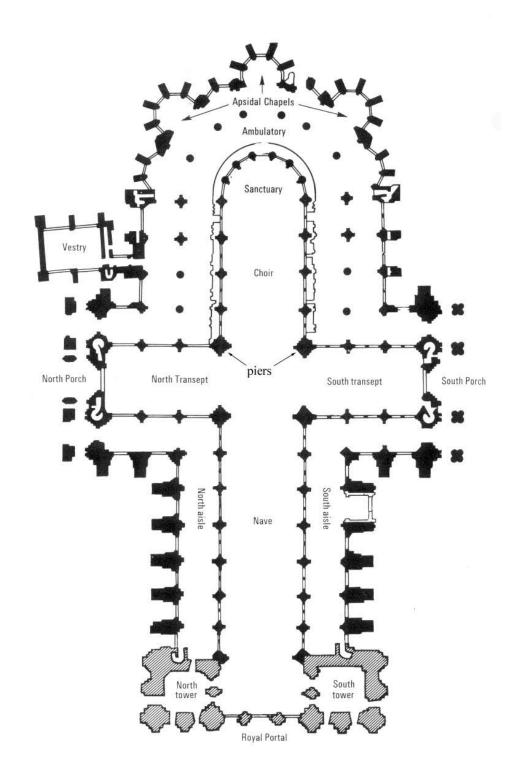
The Early Christian Basilica

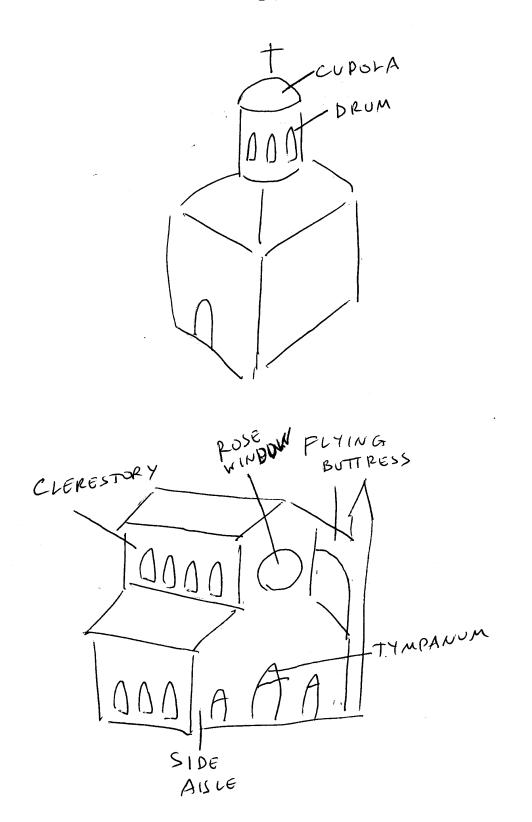


Eastern church



Western Cathedral





External elements of design, cross-domed and basilica