

16th Century Italy

-Counter-Reformation

-Andrea Palladio

Martin Luther (1483-1546)

-a symbolic blow that began the Reformation, the beginning of Protestantism, in 1517

-He nailed Ninety Five Theses to the door of the Wittenburg Church.

-That document contained an attack on papal abuses & the sale of indulgences by the church officials.

-an example of Protestant art
-the quality of silence and tranquility emerges from the suppressed acts of Jesus.

-He is enveloped by an aura of quietness, or the eloquence of silence.

-There was a fundamental alteration in the relationship between God and the human being.

-In Catholicism, prevalent was icon worship in public realm.

-In contrast, in Protestantism, worship occurred in the private realm of serenity.

Rembrandt van Rijn

Christ with Folded Arms

The Reformation and a new cultural context

-The architects hired by the Catholic churches had to serve architecturally the restoration of the Church, its authority.

-In addition, the architects dealt with a problem:

-how to resolve the conflict bt. the centralized plan with its symbolic power and the liturgical demand to accommodate an increasing congregation and the ritualistic procession towards the altar.

The centralized plan

- favored for its geometrical symbolism.
- The circle or the square was adopted for the planning.
- In particular, commemorative churches favored the centralized plan (such as Bramante's Tempietto in Rome)

Latin Cross plan

- favored for its aptitude for liturgy
- accommodating larger congregations and procession on the Eucharist
- Those who adopted the Latin Cross also defended its symbolic value.
- They claimed that the plan resembled the shape of the cross on which Jesus became crucified.

Sant' Andrea
(begun 1470)

Leon Battista Alberti

Mantua, Italy

Sant' Andrea, interior view (begun 1470)

Leon Battista Alberti

Mantua, Italy

Synthesis between the two demands

-one from the centralized plan, and the other from the Latin Cross.

-a huge nave to accommodate a large size of congregation

-the crossing was also crowned by a dome that lets ample light in.

Significance of the façade of this church

-Along with the issue of plan, the proper treatment of the facade of the church was also an urgent issue.

-How to design a façade was an issue because of the Catholicism's wish to confront the challenge by the Reformation on its authority

-The solution was to adapt the Classical temple facade to a Christian church with the high nave and the low aisles.

Significance of Santa Maria Novella

-translation of the high nave and low aisles into a facade of the Classical temple front

-It adopts giant scrolls to facilitate the visual continuity between the high nave and the side aisles.

Santa Maria Novella
(1458-1471)

Florence, Italy

Leon Battista Alberti

Il Gesu, plan and interior view (1568), Mother Church of the Jesuits
Giacomo da Vignola

Rome, Italy

-Alberti, a highly respected Renaissance theoretician and architect, had already set a standard for this new type of church.

-Vignola was the leading architect who assumed the role of restoring the authority of the Catholic Church in confrontation with the Reformation.

-His church, Il Gesu, is one of the most important churches in the history of the Counter-Reformation

-We know that the classical temples were temples of paganism. However, the facade of the temples was employed for new Christian churches in this period, because the reassertion of the authority of the church in response to the Reformation was a more pending issue.

-This church, IL Gesu, was consecrated as the mother church of the new order of the Jesuits, or the Society of Jesus.

-The Society of Jesus, the Jesuits, performed an extremely significant role in cultural relationship between different continents: between Europe and Latin America, and between Europe and Asia.

-The Society was founded in 1540 by St. Ignatius Loyol, whom you might have heard of.

-It was the new principle agent of the Papacy to carry out the Counter-Reformation.

-Along with the High altar dedicated to Christ, there are two side altars dedicated to two important figures of the Society: one, St. Ignatius and, the other, St. Francis Xavier.

- These two side altars are located on the transepts.
- Its wide nave is 60 feet wide.
- It was found effective to accommodate a big congregation.
- The barrel vault above the nave was also found effective acoustically.
- The nave was flanked by side chapels and a transept (of the same width as the nave and aisles.)
- The grandiose character of the church is particularly striking at the crossing
- The crossing is surmounted by a large dome from which abundant light streams down.
- The nave is lit by windows set in the lower part of the barrel vault

- The interior was originally restrained in white
- The arches, entablatures and double pilasters were picked out in grey travertine
- During the 17th century, the interior became transformed into an ornamental Baroque one
- During the nineteenth century, the arches, entablatures and double pilasters were replaced in their material by marble.

Giacomo da Vignola

Rome, Italy

Il Gesu
interior view

Façade of the Church
-integration of the facade of the
Santa Maria Novella by Alberti
with the plan of the Santa Andrea
by again Alberti.

Il Gesu

project for the façade (1568)

Giacomo da Vignola

engraving by Cartaro

Rome, Italy

- The facade was completed by his Giacomo della Porta.
- Compared to the original, della Porta's facade is more strictly Albertian.

Il Gesu, façade (1568)
By Giacomo della Porta

Rome, Italy

Andrea Palladio (1508-1580)

- Mannerism developed non-Vitruvian details.
- Palladio returned to Vitruvian principles
- He was faithful to them and developed his own vocabularies on those principles.
- His architecture was highly influential on the architecture of Britain during the 17th and 18th centuries.

Andrea Palladio (1508-1580)

Biography

- The son of a (Paduan) miller and was a stonemason & sculptor.
- Later, his gifts were discovered by the humanist Giangiorgio Trissino. Trissino educated Palladio and took him to Rome in 1541
- Palladio was brought up on Vitruvian principles & also studied the antiquities of Rome
- Palladio's knowledge of Vitruvius was at least equal to that possessed by any of his contemporaries
- As a matter of fact, he was responsible for the illustrations in the edition of Viruvius' text published (by his patron Daniele Barbaro) in 1556.
- This edition became the standard text for those who wanted to study Vitruvius

- Four Books on Architecture (1570)

Palladio's Basilica

- The original building dates from the 13th c.
- It Served as a law-court, meeting-place for the City Council
- In other words, it was the modern equivalent to the classical basilica

Palazzo della Ragione (Basilica Palladiana), exterior and interior of loggia (1548)

Andrea Palladio

Vicenza, Italy

- By the middle of the 16th century, it needed repair
- The walls needed support against the thrust of the massive roof dome. -Many architects were consulted including Giulio Romano
- Romano died in the process of consultation in 1546
- Then Palladio's design was approved & with this project -he was at once established as a major architect.
- The palazzo was already 2 stories high

Palladio's Solution

-shoring up the earlier building by constructing two story stone arcades around the outside of the original structure.

-The outer layer of the arcades functions as a buttress for the walls

Palazzo della Ragione (Basilica Palladiana), detail drawings (1548)

Andrea Palladio

Vicenza, Italy

Palladio's Solution

-The lower one corresponds to the height of the ground floor of the original structure

-In contrast, the upper arcade was conditioned by the height of the arcade below it so that it could have a proportionally harmonious relationship with the elevation below

-Its height was conditioned by the need to rise high enough to contain the thrust exerted by the roof

-The inner structure had slightly different widths of bays

-By providing these arcades, Palladio gave successfully a homogenous appearance to the irregularities of the inner structure.

Palazzo della Ragione (Basilica Palladiana), elevation and plan (1548)

Andrea Palladio

Vicenza, Italy

Elevation

-To ensure the homogeneity of the facade further, Palladio carefully studied the relationship between the main arch and side openings

-Palladio varies the dimension of the side openings to maintain dimensions of the arches same

-This way, Palladio ensures the sense of Order based upon the repetition of the same motifs.

-The boundary b/t the building and the piazza was made permeable through the arcade

-This permeability befitted the building's function as the seat of the town council

Palazzo della Ragione (Basilica Palladiana), detail drawing of facade (1548)

Andrea Palladio

Vicenza, Italy

Villa Barbaro-Volpi, exterior (1556)

Andrea Palladio

Maser, Italy

-The Villa Barbaro stands on the slope of a low hill.

-The facade of this villa is a testament to Palladio's statement that a villa should have a dignified and elegant exterior by including motifs of classical temple architecture.

-The central part of the facade with temple-front projects itself assertively

-The facade is also marked at its both ends with classical motif of pediment and Albertian motif of scrolls.

-as Palladio wishes, the villa is simple and plain, yet dignified and elegant for its inclusion of classical motifs

Villa Barbaro-Volpi (1556)

plan and elevation

Andrea Palladio

Maser, Italy

Plan

- The wings of the first floor extend back toward the hill.
- In the garden at the backside, Palladio formed an open terrace area.
- The middle part of the terrace incorporates a semi-circular zone to extend further towards the untamed nature.
- At the point where the whole composition stands closest to the nature is a semi-circular nymph
- Its water is supplied from a natural spring behind
- The flow symbolizes the power of life streaming from the nature outside to the habitation of human construction.

Villa Rotunda (Villa Capra), exterior (begun 1565-1566)

Vicenza, Italy

Andrea Palladio

- This work bears most lasting witness to Palladio's longing for antiquity
- It was the last of Palladio's villas to be built
- It is one of Palladio's masterpieces and enormously influential even on modern and contemporary architecture.

Villa Rotunda (Villa Capra), detail drawings (begun 1565-1566)

Andrea Palladio

Vicenza, Italy

-It is a Simple, centralized structure.

-This simplicity was repeatedly conceived in the Renaissance, but was seldom realized. -Palladio brings finally a work of perfect mathematical and proportional harmony into realization

-Utility and functionality are not put aside. -Rather, they are transcended for the cause of creating a villa of symbolic significance impressively set in the middle of nature.

- At its centre is a circular *sala*, sitting within a square. -4 massive temple-front porticos approached by flights of steps.
- 4 narrow passages lead to the sala.
- There is an interesting contrast of scales in spatial experience: the contraction of the scale from the outside to the narrow passage way is released at the moment when one stands in the circular sala.
- The cupola of the central room was originally based on that of the Pantheon in Rome, but in its final execution, (supervised by Vincenzo Scamozzi,) it was made shallower and thus less prominent in appearance
- It exemplifies the way in which Palladio linked architecture w/landscape in a wholly new way in his villas

-Set on a hill, it appears majestic and appears to draw in nature from every direction.

-Regarding the construction of a villa, Palladio advised against building it in valleys as this would deprive the structure of its importance in being seen from a distance

-The territory surrounding & belonging to the villa should be overseen or kept under surveillance

-From the hill crowned by the villa, the view extends far beyond the garden of the estate

-This gives the beholder a sense of being at one with the whole of nature and simultaneously, at the control of the whole

-It is an architecture of paradox in this sense: it seems to be both within nature and at the control of the surrounding.

Baroque Architecture

Ecstasy of Saint Teresa
(1645-1652)

Gianlorenzo Bernini

Cornaro Chapel,
S. Maria della Vittoria
Rome, Italy

The change of status of the classical norm during the mid-sixteenth century onwards.

1. There was a group of architects who claimed that the classical architecture is enough. We do not have to create new architecture, what is important is to understand the classical norm as best as possible and restore it. This group took Vignola and Palladio as their models to follow.

2. There was another group of architects. They rejected to be a perpetual copyist. They took Michelangelo as their role model. To this camp belonged Borromini and Guarini.

3. The third group of architects who tried to balance between the first and second groups.

Bernini

Baroque Architecture and Urban Consciousness

- The architects of the Baroque period emphasize urban role of an individual building.
- Surrounding, more engaging, embracing
- Curvilinear shape: Not necessarily for the aesthetic play, but for its urban performance
- Concave, convex juxtaposition
- The effect of light
- Movement
- moving forward
- moving perceiver (not the perceiver in contemplation)
- Theatricality:
 - “spectators cannot fail to be impressed by the complexity of the architecture (its complexity), its richness, or its dramatic intensity. Baroque arch. Is consistent in its desire to impress, to transform, the environment to the viewer, to make the viewer a participant.”

Sant' Andrea al Quirinale
axonometric (1678)

Gianlorenzo Bernini

Rome, Italy

Sant' Andrea al Quirinale, plan and facade (1678)

Gianlorenzo Bernini

Rome, Italy

Sant' Andrea al Quirinale, interior (1678)

Gianlorenzo Bernini

Rome, Italy

17 century in France

1. Influence of the Italian church architecture of the Counter-Reformation

2. Two events that made France aware of her cultural supremacy, The cultural status of France as comparable to Italy, even surpassing Italy

Versaille

The scandal around the design of the east facade of the Louvre

(Claude Perrault (1613-1688))

Alberti's Two churches influential on the Architecture of
the Counter-reformation

1. *Sant' Andrea*
2. Santa Maria Novella

Leon Battista Alberti

Sant' Andrea
(begun 1470)

Mantua, Italy

Santa Maria Novella

-it has set a paradigmatic standard for the solution of how to clothe a gothic church with a classical facade

-The high nave and low aisles of the original gothic church was translated into a facade of the classical temple front.

Florence, Italy

- Originally a gothic church with a high nave and low side aisles
- The original façade was transformed into a classical portico with a pediment
- He also surmounted the rose window with a rounded pediment.

St. Etienne-du-Mont

façade

(1611-1622)

Claude Guerin

Paris, France

-This treatment of the rose window with a classical element was partially influenced by Alberti's Santa Maria Novella.

-The pediment is rounded, reflecting the manneristic and Baroque tweak of the classical element in Italy during the 16th and early 17th centuries.

-a juxtaposition of a classical pedimented portico and a rounded pediment, on one hand, and, on the other, elements of the existing gothic facade such as the rose window.

Church of St. Gervais

façade

(1616-1621)

Salomon de Brosse

Paris, France

-This work occupies a strong moment in the development of French ecclesiastical architecture

-This is so because it presents a superimposed treatment of classical orders

-The bottom adopts Doric, the middle part, the Ionic and the top part, the Corinthian

-This was the correct sequence of classical orders as present in Coliseum

-Here, we can see that the French architects of the 17th century looked at not only their contemporaries of Italy to acquire inspiration, but also the remains of the classical architecture.

-As the Italians were looking at their classical origin, this French architect was looking at the original classical architecture, not its imitation by Italian contemporaries.

-Because of this approach, this church happens to present an intriguing difference with Italian models.

-In Italian models, the facade was divided into two parts, low and upper, or two stories.

-However, in the process of adopting the superimposition of three different orders, the architect develops a facade of three stories.

-This addition of an additional story was found effective, as this facade also had to mask the height of the existing Gothic nave behind.

-Simultaneously, the facade shows influences from the development of the church architecture in Italy during the 16th and early 17th century.

-It adopts a pedimented portico at the ground story, and a rounded pediment at the top.

-It also adopts coupled columns

Church of the Sorbonne
street façade
(1636-1642)

Jacques Lemercier

Paris, France

-The design of the church reflects the combination of two factors

1. the creation of a classical facade

2. shaping of a central crossing.

-In this way, this church carries the spirit of the church architecture of the Italian Counter-Reformation.

-Its principle façade is of a (Roman) 2-storey type

-The bottom part is articulated with Corinthian columns, the top is articulated with composite pilasters.

Church of the Sorbonne
court façade
(1636-1642)

Jacques Lemercier

Paris, France

-Being a university church, it had to include 2 entrances, one from the street and another from the college

-Overlooking the court (shown in slide) he composed a simple variation that combines the portico of the Pantheon in Rome and the attic of French castle architecture

-Now, I would like to explain how France grew into a distinctive cultural status during the 17th century.

-To explain this, I will introduce two incidents that made the French aware of their cultural status possibly superior to that of Italy.

-The first is the design of Versailles

-The second, an episode around the design of the East facade of the Louvre.

Design of Versailles

Palace of Versailles, aerial view

Palace of Versailles, aerial view

Versailles, France

Site plan

- expression of the grandeur of the Sun King, Louis XIV.
- he was compared with the sun god Apollo in Greek Mythology

- The entire scheme was a manifestation of Louis XIV's absolute monarchy
- Most of the major talents in architecture, landscape, the fine arts and decorative arts were placed in the service of Versailles, and this immense was in constant progress

 - Architect Louis Le Vau,
Jules Hardouin Mansart
 - Garden designer Le Notre
 - Painter Le Brun

-The garden designer Le Notre was the one who laid out a formal garden on a magnificent scale with geometrically arranged avenues, woods and canals.

-The central axis of the immense garden corresponds to the rising and setting of the sun.

-The whole plan reflects the ideology of conquering nature and conquering the world

-Nature was conquered effectively by dividing it into parcels set between geometrical and axial divisions.

-These axes were meant to be infinite even beyond the confining frames.

-The whole earth was flatted out to be conquered.

-This infinity of never-ending axes speaks of the infinite power of the absolute King.

Het Loo Palace (completed 1686)
engraving by P. Schenk

Netherlands

Royal Palace and Park (1719-1723)

T. Ardemanns

La Granja, Spain

Peterhof Palace (1715)

Leblond

Petrodvorets, Russia

An Episode around the Design of the East
facade of the Louvre

Palais du Louvre, plan (1546-1878)

East facade: originally designed by Le Vau, but his scheme was obstructed by Colbert. Colbert called in Bernini.

Paris, France

Gianlorenzo Bernini

Project for eastern façade of the Louvre, Presumed competition project

Courtauld Institute of Art

Gianlorenzo Bernini

Project for eastern façade of the Louvre, final project, after Mariette

Courtauld Institute of Art

-Colbert decided not to use Bernini's scheme. Finally, Claude Perrault was chosen as the architect. He collaborated with Le Vau and others.

-But, Colbert decided not to use any of Bernini's schemes.

-A couple of reasons.

-The French builders objected to Italian construction methods Bernini's schemes were based on

-Second, Colbert himself criticized Bernini for not being able to make the best use of the equipments available in France

-In the end, Bernini was sent back with empty hands.

Palais du Louvre, east facade (1667)

Claude Perault (possibly in collaboration with Le Vau and Le Brun)

Paris, France

- The design is defined by an austere basement and a monumental storey above it.
- This monumental storey adopts an order of paired Corinthian columns.
- The verticality of these columns are met by a continuous entablature that lends an empathetic horizontally to the structure.
- In this facade, the coupled columns were proposed b/c they have twice as much area for the support of the architrave as a single column.
- In addition, the intercolumniation can be modulated and become larger if necessary.
- Also, the intercolumniation can provide more light and better ventilation.

- The design of the facade was in this way guided by practical concerns, as well the concern on the grandeur of the palace.
- This spirit of practicality is further reflected in the fact that this east facade was chosen as the main facade, not the south one facing the river.
- This was in consideration of the safety of the King.

-Who is Claude Perrault?

-He was a doctor.

-He wrote medical books.

-He in fact died of a disease which he contracted while dissecting a camel.

-He was an amateur architect.

-He however retained a sufficient knowledge to write a commentary on Vitruvius's treatise.

Then, he reexamined the classical proportional system, b/c it was considered the retainer of natural laws and a certified check for the authority of the antiquity

Then, this was what he found:

- There was no consistency in the numerical relationship in the proportion of orders among important authors of architecture, such as Palladio, Vignola, (and Scamozzi.) The proportional system differs from author to author.

-This discovery led him to conclude that:

Dealing with proportion as something absolute and unchangeable was a blind and excessive veneration

Claude Perrault

Frontspiece to *Vitruve: Les Dix Livres
d'Architecture*

Paris 1673

-Claude Perrault's criticism of Vitruvianism

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-His conclusion

“Dealing with proportion as something absolute and unchangeable was a blind and excessive veneration”

-Claude Perrault's criticism of

Vitruvianism

-He still said proportion is beautiful.

-But, why?

-Proportion was beautiful not because there is an intrinsic quality of beauty in there, but b/c of the human abilities to associate the ideal of the beautiful with a thing like an order. -The order in a classical proportion was beautiful, but not absolutely so.

-Its beauty was arbitrary, customary and educated.

-This was a fatal blow to the authority of classical orders.

The five orders, module demonstration
plate from Claude Perrault's
Ordonnance

- Then, Perrault created his own proportional system for orders
- It was a scientific chart which shows a single unit which basically can be multiplied to explain not only different part in a single order, but also all different orders and their mutual relationship
- This chart was transparent, clear, objective, mathematical.