- 1. 17 century in France
- 2. Neo-Classicism of the 18th Century in Europe

1.17 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 Counterreformation

- 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

Leon Battista Alberti

Santa Maria Novella (1458-1471)

-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 faced 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 -Now, I would like to explain how Frnace 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 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 palace was in constant progress Architect Luois 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 flattened 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.

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

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

-The French builders objected to Italian constructions 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 Pallaio, 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

-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 Pallaio, Vignola, (and Scamozzi.)

-The proportional system differs from author to author.

-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
This chart 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.

2. Neo-Classicism of the 18th century in Europe

Rediscovery of the Temple of Isis at Pompeii (1765)

Pietro Fabris

Neo-Classical Architecture during 18th Century: Archaeological discoveries and the emergence of historicism

-During the 18th century, Rome was still a center of cultural interchange (throughout the most productive phases of neoclassicism) in its richness of the antique ruins. -However, many new archaeological discoveries in different parts of Europe enabled architects to review the remains of classical architecture without visiting and staying extensively in Rome.

-These archaeological discoveries revealed the fragments of the Greek and Roman cultures.

-Interestingly, the 18th century was also the period in which an awareness of the plurality of architectural styles was first felt. -There were not only the classical architecture. Architects now saw other styles of architecture: Egyptian, Islamic, Gothic.

Chinese Pavillion

(after 1778)

Val d'oise

Cassan, France

-Simultaneously, the introduction of Chinese architectural style was also made about this time

Recueil, title page

survey of the history of architecture according to function

(1800)

J.N.L. Durand (1760-1834)

This cultural atmosphere gave rise to a unique attitude of history, which was called historicism, a degraded notion of history.
Historicism is an attitude in which one sees history with the lens of multiplicity.
History appears as the inventory of available styles in which there was no reason to consider one style superior to another.
Styles were catalogued.

-Major buildings of various styles were put into compilation in the same scale and in a manner which did not address any context in which the building stood.

-Buildings became now transferable from one part of the world to another.

Neo-Classicism

a two-fold response to the cultural context

1. Renewed interest in the Greek and Roman culture because of the new archaeological discoveries

2. Search for the true style and timeless value

-On top of thee pan-European factors, each country had its own cultural context which deepened her Neo-Classicism.

-Distinctive architectural legacy of each country that led to Neo-Classicism

England

Inigo Jone's Palladian architecture in the 17th Century, Beneficiary of the Grand Tour

France

The Rococo style (1st half of the 18th century) Return to noble simplicity (marc-Antoine Laugier's discourse of the primitive hut) (mid-18th century)

Germany (The Bavarian Rococo church) Johann Joachim Winckelmann's literature on Greek art and life -His books became very popular and instilled longing for Greek culture.

ltaly

Fascinating engravings by Giovanni Battista Piranesi depicting the Roman ruins

America

Thomas Jefferson's introduction of Palladian architecture

Queen's House, exterior elevation (1616-1635)

Greenwich, England

Inigo Jones

England

-As we studied last time, during the 17th century, classical architecture of Palladio was introduced to England by Inigo Jones. Jones' pupils succeeded his legacy throughout the coming centuries.

Mereworth Castle, exterior view (1723)

Colen Campbell

Author of *Vitruvius Britannicus* (1715)

Kent, England

-Colen Campbell, the architect was also the author of *Vitruvius Britannicus*.

-Campbell was one of the architects who enhanced the Palladian style in England.

-He began his career as a lawyer, and came to architectural prominence through the publican of *Vitruvius Britannicus*. -This work is a close imitation of Palladio's Rotond.

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

Vicenza, Italy

-Like Palladio's Rotonda, the Mereworth Castle has a pedimented portico on each of the four sides of the elevation.

-It also imitates Palladio's Rotonda by adding an attic. -In the treatment of the dome, however, Campbell puts a dome more prominent than that of the Rotonda.

-This was in fact also faithful to Palladio's villa architecture. -Palladio's original intention as to the dome of the Rotonda was to put a dome of prominence like that of the Pantheon.

Chiswick House, exterior view and plan axonometric (1725) Lord Burlington & William Kent

Middlesex, England

-Lord Burlington, the architect, is another central figure in the Palladian movement.

-He had a more intellectual approach to Palladian principles than others.

-He kept the main lines of the plan of the villa Rotonda.

-However, he adapted it by employing only one of the four sides of the elevation as the main access.

-He designed the main entrance with a portico. In other words, the temple front motif was adopted for only one of the four faces of the building

-Here again, there is a difference between Palladio's Rotonda and Chiswick House.

-In Palladio's Villa Rotonda, each entrance is directly accessed through a flight of steps.

-However, in the Chiswick House, the main entrance is accessed from the sides.

-In this way, the architect protected the raised floor of the portico from circulation and defined it as an observation platform.

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

Vicenza, Italy

- France
- Reaction against the curvilinear and sensuous forms of such Rococo designer as Germain Boffrand
- Gout grec versus Gout Pompadour (Pompadour: a mistress of Louis XV)

The Oval Salon Hotel de Soubise (1737-1740)

Germain Boffrand

Paris, France

The representative work of the Rococo

Rocaille façade (mid 18th century)

Nantes, France

-The Rocaille motif was also adopted for the design of the elevations exposed to public views

Marc Antoine Laugier, the primitive Hut, from Essai sur l'architecture, 1753 (from its second edition 1755) -The attack on the Rococo was most effectively made by an architectural theoretician, Marc-Antoine Laugier (1713-1769)

-Laugier was a Jesuit priest.

-As a priest of a society defending Papacy in response to the criticism made by Protestant leaders, the pomposity of the Rococo was not acceptable. -He wrote a book entitled Essay on Architecture. It was published in 1753, in Paris.

-In this book, he argued that architects should always have before them the primitive hut as a reminder of the origins of architecture.

-This assertion for radical simplicity and return to the origin was welcomed by those who were anxious to get rid of Baroque and Rococo ornament. -In particular, his demand to return to the origin was understood in the context of Jean Jacque Rousseau's quest for fundamentals in human nature and social conduct.

The origins of architecture according to Vitruvius (c. 90c.20 BC) in Book II, Chapter 1, *The Ten Books on Architecture (De Architectura)*

-The source of the restoration of a dignified architecture was the cult of the primitive Vitruvius described in Ten Books on Architecture.

-Vitruvius wrote that a fire which naturally occurred brought people around it.

-From this gathering, there emerged a language.

-After that, there emerged a need to construct a shelter.

-People looked around and found tree twigs.

-They started to build a hut with these available materials.

-The second edition of Laugier's Essay on Architecture, which was published in 1755, included an engraving.

-This engraving illustrated Laugier's argument so

compellingly.

-This image has become one of the most celebrated images in modern architectural history.

Marc Antoine Laugier, the primitive Hut, from Essai sur l'architecture, 1753 (from its second edition 1755)

-Let's take a look at this image more carefully. Architecutre is personified as a female. She directs the attention of a child – or a student of architecture - to her origin.

-The architecture of the origin is represented in the form of a rustic hut fashioned from trees and branches.

-The trees and branches are contrived to form a rude pediment.

-This way, this image gave a natural origin to the classical architecture at a moment when architecture needed to be purified again.

-The essential parts of the composition were the free-standing columns, the horizontal lintels, and the rude pediment.

-The hut was unadorned, functional, and its construction was rational.

-Another interesting point Laugier's book included was his claim on the shared rationality between the classical architecture and gothic architecture.
-He praised Gothic architecture in its structural lightness that is expressed in a succession of slender columns.
-The classical was rational in its construction. So was the gothic. -One interesting issue we need to think about is: why does an architect or theoretician like Laugier return to the origin of architecture?
-Is this origin real?
-Is this origin supported by archeological and scientitic data?
-If not, is this origin a faked one? -This inquiry into the origin takes place at any moment of history when there is a consensus that the culture is going to a wrong direction.

In this sense, this search for the origin shares the character of primitivism.
One unique thing about Laugier's story of origin, though, is that this origin is fictive, rather than a fake.

-What is the difference between fictive and fictitious?
-Fictive is about believability and plausibility, not about faking, deceiving and fabricating.
-By creating a story of believability, a cultural leader seeks to open a new horizon in culture. Marc-Antoine Laugier (1713-1769): Essai sur l'architecture (Paris, 1753)

Return to the primitive

Unadorned rational construction: functional and ethical

Purification of architecture by rediscovering the essential parts of the composition: the free-standing columns, the horizontal lintel and the rude pediment

Also praised Gothic architecture in its structural lightness that is expressed in a succession of slender columns

> Marc Antoine Laugier, the primitive Hut, from Essai sur l'architecture, 1753 (from its second edition 1755)

The Mint (1768-1775)

Jacques-Denis Antoine

Paris, France

-It is a Masterpiece of a leading architect of neoclassicism.

-His name is Jasques-Denis Antoine. (who after Gabriel was the leading architect of the period)

-This is considered Most impressive French building of the 18th century.

-Its character is defined by a very long façade w/a projecting central colonnade over a rusticated arcade.

-A subtle variation of classical architecture was made in this building.

-In place of a pediment, a row of statues were placed in front of a low attic

-Following the spirit of Laugier, the bldg. showed very little decoration.

-Even such elements as window frames were much simplified, contributing to the rectangularity of the composition.

S. Philippe du Roule (1774-1784)

J.F.T. Chalgrin

Paris, France

This building is an Exceptionally fine neo-Classical church.
-lonic columns with flutes run along the nave and around the east end
-Nave is covered by a coffered barrel vault.
-The vault is carved out regularly at its bottom to provide clerestory windows.

-These windows give a vertical counterweight to the pervading horizontality

Neo-Classicism in Italy

-In Italy, there also emerged renewed interest in its rich Roman heritance.

-The most important figure was Giovanni Battista Piranesi (1720-1778)

-Piranei's interests in archaeology: Le antichita Romane (1756), Four volumes

engravings of Giovanni Battista Piranesi

left: Self-Portrait

Church of the Gesu

-Piranesi was an Engraver, etcher, architect, archeologist, and theorist.

-He was a life-long crusader devoted to improving contemporary design through a formidable output of engraved images" -He did not design many buildings. (Few of his architectural designs were executed,) but, he had a seminal influence on European neo-classicism.

-His publications which included his beautiful etchings were circulated widely not only in Italy, but also in different parts of Europe. He was also very social.

-He enjoyed personal contacts with architects, patrons and artists visiting to Rome.

-Among the British architects he met were William Chamber and Robert Adam

-His publications are basically the collection of his life long productions of etching works. (about 50 volumes)

-The etchings depict Roman ruins.

-His depictions were supported by his accurate understanding of ancient constructional technology.

-His interest in Roman archaeology is best observed in his: *Le antichita Romane* (1756). (Four volumes)

-This publication earned him an international reputation

-The publication included Over 250 plates with formidable quantity of data and precision for each plate and with a strong visual impact

-It was a series of ambitious archaeological folios with themes ranging from Rome's achievements in architectural composition and ornament to Roman engineering and urban planning

Details of the Second Order of the Theatre of Marcellus

Flavian Ampitheatre exterior view (Colosseum)

Interior view of the Colosseum

Pantheon

Interior view of the Pantheon

Arch of Constantine

Carcere Series

Title Page: Imaginary Prisons of G. Battista Piranesi

(2nd state)

-From the perspective of contemporary architecture, Piranesi was also influential.

-His series of etchings entitled Carcere (or Underground Prison) were inspirational for many architects including Tadao Ando. -The spatiality of Cacere was defined by a strong contrast with light and dark, a strong presence of cannons of light, a complex organization of overlaying layers, bridges and walkways, and the structural clarity between solid masonry and tensile members. -This was further combined with the mysticism of the underground world.

The Well, Carcere XIII (2nd state)

The Staircase with Trophies Carcere VIII (2nd state)

The Drawbridge Carcere VII (2nd state)

Prisoners on a Projecting Platform

Carcere X (2nd state)

Neo-Classicism in America

-Neo-Classicism came to America was through Thomas Jefferson (1743-1826) who studied in England.

-Jefferson is one of the great founding fathers of the American nation

-He brought Leoni's translation of Palladio's Four Books of Architecture home.

-This book was the first architecture book he bought and it remained as something of a bible for him throughout his life. -In fact, he once referred to the book as his cultural bible.

Monticello (begun 1767) Thomas Jefferson

Virginia, United States

-He designed his own house Monticello, in the style of Palldian villa architecture with an English modification.

-It sits on an isolated hill top.

-It has pedimented portico looking downward the surrounding garden.

-It has an attic, and a dome showing the influence of Burlington's translation of Palladio's villa architecture.

-The central salon is also announced externally by the octagonal dome.