History of Architecture and Culture – 5
Lecture - 3

Types of Neo-Classicism

Neoclassicism – Types: The middle of 19th century saw the neo classical heritage divided between two closely related lines of development. One is the structural classicism of Labrouste and the other one is the romantic classicism of Schinkel. The structural classicist tended to emphasize structure- the line of Cordemoy, Laugier and Soufflot. These were the people who emphasized structural classicism. The romantic classicists stressed on the form – the line of ledoux, Boullee and Gilly. One school concentrated on such types as prisons, hospitals and railway stations while the other school focused on representational structures such as the university, museum. These are the basic difference between structural neo-classists and Romantic neo-classists.

Works of Marc-Antoine Laugier

Today we will be looking at structural neoclassists. The first one we see is Marc-Antoine Laugier. Marc-Antoine Laugier lived between 1713 and 1769 was a Jesuit priest and architectural theorist. He was born in Manosque, Provence. Laugier is better known for his essay on architecture published in 1753 and in 1755 he published the second edition with a famous often reproduced illustration of a primitive hut. His approach is to discuss some familiar aspects of renaissance and post-renaissance architectural practice, which he describes as faults. These faults induce commentary on columns, the entabulature and on prediments. Essai sur I ‘Architecture, frontispiece by Charles-Dominique-Joseph Eisen. Among faults he lists for columns are that of being engaged in the wall, the use of pilasters, incorrect entasis (swelling of the column), and setting columns on pedestals. Being embedded in

the wall detracts from the overall beauty and aesthetic nature of columns he says; Laugier states that columns should be free. He calls certain elements which we follow as faults. The basic faults which he talks about are, he talks about columns which are being engaged with the wall, he thinks that column should not be a part of the wall. He thinks that pilasters are wrong. Columns are free standing structure according to Laugier. And he also advocating against the incorrect use of entasis. Entasis is property where in you bulge the column in the middle so that the column appears as a even line for your eyes. Because the Greek used entasis as a optical correction methodology in their buildings. Often their buildings are not exactly rectangle, They are actually little skewed and little bulged on the side and the middle and all so that it appears as if it is a perfect rectangle from a distance. So Greeks used it extensively well. Laugier insists on being against incorrect entasis. Marc-Antoine Laugier outlines his theory about architecture in the 1753 Essau sur I'architecture. According to Laugier, all architecture derives from these three essential primitive elements: The three elements being the column, the entabulature and the pediment. Laugier explained his book length essay in second edition published in 1755. This second edition includes the iconic front space illustration by French artist Charles Eisen. In the picture, an idyllic woman (perhaps the personification of architecture herself) points out a simple rustic cabin to a child (perhaps the unknowing naïve architect). Just take a look at the picture. Here in this picture there is a simple idlistic woman who is sitting and she is pointing a hut to this child. It is personified that this lady here is mother architecture herself and this child is a beginner, a naïve architect. By showing him a primitive hut which looked like columns and pediments and all the three parameters which Laugier thought was basic in any building. He thought the columns, the entabulature and the pediment as three basic requirements in any building. Here you see he was shown a

primitive hut and he immediately looks at the primitive hut as columns entabulature and the pediment. This is how an architect simply deciphers the basic layout of even something as primitive as hut. The structure she points to is simplest in design, it uses basic geometric shapes and it is constructed from natural elements. Laugier's primitive hut it says the representation of the philosophy that all architecture derives from this simple ideal. An essay on architecture; in which its true principles are explained, and invariable rules proposed, for directing the judgment and forming the taste of the gentleman and the architect, with regard to the different kinds of buildings, the embellishment of cities and the planning of gardens. The note is self-explanatory in which he tries to explain all the invariable rules which he is proposing, all judgments which he is directing which forms the taste for the gentleman who is the architect with regards to the building, cities and gardens to which the architect is planning.

Let us take a moment and discuss here why is Laugier's primitive hut is very important? The essay is considered a major treatise in architectural theory. It is often cited by teachers of architecture and practicing even in the 21st century. Laugier's expression is pro-Greek classicism and reacts against the Baroque ornamentation and decoration of his day. It established the argument for future architectural movements, including 18th century Neoclassicism and the 21st century trend toward unadorned, eco-friendly tiny homes and small dwellings. The primitive hut is very important because Laugier states that anything in architecture the column, the pediment and the entabulature starting from that to every single thing that man has produced so far. Every little thing that mankind has produced so far is from this basic concept of primitive hut. Man learnt how to build structures and from there he derived the principles and according to him, it is a very formal nature of expression that even today, it is relevant because today we are going back to building eco-

friendly houses in a way of natural materials. Today we are looking at very very less ornamentation in our buildings and ornamentation which are rarely necessary. Today we are looking at space optimization as our population is exploring. We are looking at tiny homes and small dwellings spaces that are less in size and more in utility. As we are moving towards this kind of architecture, Laugier's primitive hut is very very important for us to understand. The primitive hut idea supports a back to nature philosophy, a romantic idea which gained popularity in the mid-18th century and it also influenced literature, art, music and architecture. Laugier's rustic cabin is sometimes call the Vitruvian hut because Laugier built on ideas of natural and divine proportion documented by the ancient roman architect Marcus Vitruvius. We all know Vitruvius because we saw in previous lecture that his trio, his famous trio of itilias because of that we know Marcus Vitruvius and his principles are often derived from nature ad proportions which he has documented in his books. Laugier's rustic cabin is also called as the Vitruvian hut sometimes based on the idea. Defining the essential elements of architecture is a statement of purpose, a philosophy that drives the work of an artist. Simplicity of design and the use of natural materials, what Laugier believes are architectural essentials are familiar ideas that have been embraced by modern architects, including Frank Lloyd Wright. Most of the famous architects now we are looking at making energy efficient buildings which are using natural elements and natural materials and uses principles that confounds to nature and which brings in more of nature inside the building so that people will feel more productive. Great architects including Frank Lloyd Wright and many others have used this principle as essential principle. Here in the slide, you see Marcus Vitruvian man which is made of divine proportions and this was sketch drawn by Leonardo Da Vinci and here you see Laugier himself.

Works of Jacques Germain Soufflot

Next, we are going to look at another interesting architect, French architect Jacques Germain Soufflot. Jacques Germain Soufflot was a French architect in international circle that introduced neoclassicism. His most famous work is the Pantheon in Paris built from 1755 onwards, originally as a church dedicated to Saint Genevieve. He was born in Irancy, France. Soufflot traveled to Rome in the early 1730s to study architecture, returning to France in the late 1730s. This is the sketch and paintings and statues of Jacques Germain Soufflot. He settled in Lyon and worked there as an architect for more than 15 years. In his design for the extension of the Hotel-Dieu (1739-1748), a major hospital in Lyon, Soufflot brought together a variety of styles, including classical Roman, Roman baroque and earlier French architecture. In its decorative motifs, the Hotel-Dieu represents an early statement of the neoclassical style and it earned the admiration of the Marquise de Pompadour, mistress of French king Louis XV. This gentleman who goes to Italy, studies architecture there for a period of more than 7,8 years comes to Lyon and settles, works as an architect for 15years. He designs a hospital building in Lyon with all the things he has learnt in Italy and whatever that was existing in French architecture so far. He mixed everything and designed this building. His style was admired by lot of people including Marquise de Pompadour, mistress of French king Louis XV. In the 1730s he attended the French academy in Rome, where French students in the 1750s would later produce the first blown generation of neoclassical designers. Soufflot's models were less the picturesque baroque being built in modern Rome, as much as the picturesque aspects of monuments of antiquity. After returning to France, Soufflot practiced in Lyon, where he built the Hotel-Dieu like a chaste riverside street façade, interrupted by the central former chapel, its squared dome with illusionistic diminishing coffers on the interior. With a temple to change, he was

interested to completely recasting a 16th century market exchange building housing a meeting space housed above a loggia. Soufflot's newly made loggia is an unusually severe arcading tightly bound between flat Doric pilasters, with emphatic horizontal lines. He was accepted into the Lyon academy. A more creative trip to Italy was made when the mature Soufflot returned in 1750 in the company of the future Marquis de Marigny, the talented young brother of Madame de Pompadour, who was being groomed for his future as director of the King's buildings, the Batiments de Roi. The Pantheon is a building in the Latin quarter of Paris. Pantheon literally means every God in Greek. This gentleman Soufflot was practicing for about 15 years in Lyon. Since he was in good books of Madame de Pompadour he had to take the younger brother of Madame de Pompadour to Italy and it was a more creative trip because this time Soufflot was much more matured persona dn when he came back he designed the Pantheon in Paris. This is how the Pantheon in Paris looks like. Look at the plan, a grand entrance, wide naïve, typical Greek cross plan with central dome. It has four other domes as the sides, walls all around and if we look at the transverse section we can see the double dome over here and we can see the magic proportions which he is created. It was originally built as a church to dedicate to Saint Genevieve and to house the reliquary chasse contains her relics but, after many changes, now functions as a secular mausoleum containing the remains of distinguished French citizens. It is an early example of neoclassicism, with a façade modeled on the pantheon in Rome, surmounted by a dome that owes some of its character to Bramante's Tempietto. Located in the 5th arrondissement on the Montagne Sainte-Genevieve, the Pantheon looks out at all of Paris. Designer Jacques Germain Soufflot had the intention of combining the lightness and brightness of the Gothic Cathedral with classical principles, but its role as a mausoleum required the great Gothic

windows to be blocked. The most spectacular aspect is the size of the Pantheon. On the ground floor, in the form of a cross, it has a length of 110m and a breadth of 85m. The dome with its height of 85m inspired the physicist Leon Foucault to carry out his first experiments with the pendulum in the middle of the 19th century. He wanted to demonstrate the rotation of the earth on its axis.

Pantheon, Paris

Quick points about Pantheon in Paris: It was constructed between the years 1757 and 1791. It is 110 meters long and 85 meters wide. The pantheon in Paris stands at the height of 83meters. Its address in Paris is Place du Pantheon. The pantheon is built of stone and marble. It was developed under the orders of King Louis XV. The pantheon's architects are Jacques Germain Soufflot and Guillaume Rondelet. The experiment with Foucault's pendulum was held in 1851 almost 60 years after it was commissioned. These are the building looks from the exterior, nice classic columns with pediment and the dome which is said to have belonged to the Tempietto by donato Bramante, he has taken the dome of Tempietto and he has tried to put it on this form. Here the central dome where it is surrounded by domes on all the other sides, this is the front elevation where you can see that the model is based on the pantheon and Rome and whereas the dome is modeled on Tempietto and this is one of the first neoclassicist buildings in the world. The construction of the imposing building started in 1757 mainly due to financial problems; it would take 34 years until the project was completed. After Soufflot's death in 1780, his associate Guillaume Rondelet took charge of the project. The building was finished in 1791 in the middle of the French revolution. The French revolution was going on when the building was constructed and the building is finished. Soufflot never left to see the end of this building, he didn't left to see the

completed building because he died in 1780 and the building only got completed in 1791, 11 years after his death. Assembly of the revolution decided by decree to transform the church into a temple to accommodate the remains of the great men of France. The building was adapted by architect Quatremere de Quincy to its new function as pantheon. In 1806 the building was turned into a church again but since 1885 the pantheon serves as a civic building. The function of pantheon kept changing from church to the civic building on and off. First it was built as church then it was changed to place where the remains of great men of France are accommodated. In 1806 the building was changed again to church and after 1885 it has consistently been a civic building which houses like a mausoleum for great men of France. The floor plan shows a Greek-cross layout, 110 meters long and 85 meters wide (361x279 ft). The large dome reaches a height of 83m (279ft). The portico, with large Corinthian columns was modeled after the 2nd century pantheon in Rome. The dome features three superimposed shells, similar to the St.Paul's Cathedral in London. Iron reinforcements were added to strengthen the structure even more. Here we can clearly see the drawings which Soufflot made and the building how it looks. This is how the building looked earlier and this is how it looks today. Another shot at the interior of the pantheon, here is where you can see the double dome with capsulated top. You can see a section of pantheon over here. Corinthians columns are the junction where the building was standing. Look at the three columns which are placed right next to each other. Pantheon has the statue of a Walter, famous French. On the second trip to Italy, Soufflot made a special study on theatres and in 1755, Marigny; the new director general of Royal buildings gave Soufflot architectural control of all the royal buildings in Paris. In the same year, he was admitted to the Royal academy of architecture. In 1756 his opera house opened in Lyon.