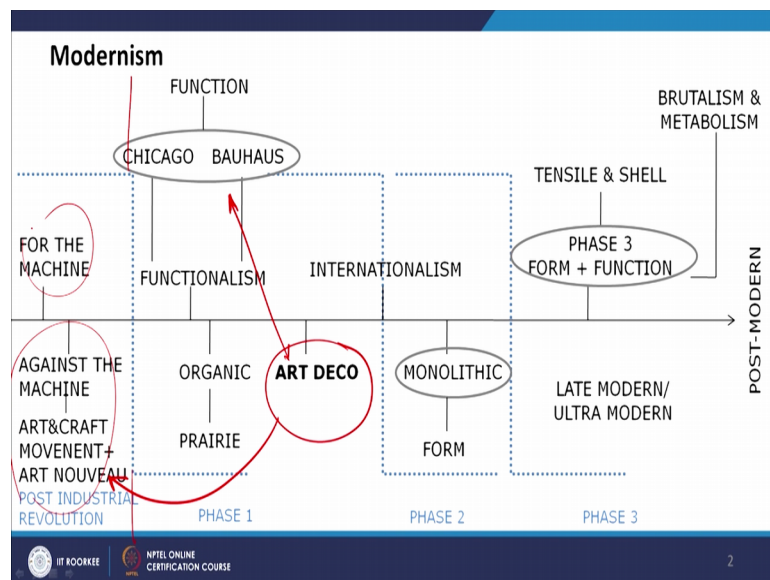


Contemporary Architecture and Design
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Lecture - 16
Phases of Modern Architecture-Art Deco
Part -1

Welcome students to the online NPTEL course Contemporary Architecture and Design. In the previous class, we started discussing about Art-Deco and we were positioning Art-Deco in the time frame in the in the modern time frame.

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So, it is in phase one. If we look at that in phase one, this in the earlier also we were discussing Art-Deco is a reaction against Bauhaus, which has less in less ornamentation. Art-Deco as a name term connotes that which is against the thought of form follows function. So, it talks about the form and the aesthetic beauty of the form in architecture is a very important.

And this as it is against the reaction of Bauhaus, the minimalist pure geometric and pure form based exploration of Bauhaus and also de still. Also it goes back to art nouveau for it is inspiration. So, we will discuss Art-Deco also, we will discuss how art nouveau inspired the later movement of art deco. Art nouveau is a pre modern movement which is

a just after industrial revolution 2 movements came art and craft and art nouveau and which is the opposite of what the machine movement.

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So, in art deco, we have seen earlier that if we look at the building, it has a similarity, but lot of dissimilarity as well and. So, in these, we have seen the machine made aesthetics is blended with the biomorphic style of and the over ornamentations next ornamentations of art nouveau.

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Art Deco (Modernism Phase 1)

The term Art-Deco came from the "International Exposition of Modern Industrial and Decorative Arts", 1925, Paris. The term first used by Architect Le Corbusier in his article "L'Esprit Nouveau".

An eclectic form of art, that combines Hand-crafted traditional motifs with Machine-made imageries.

This art is influenced by previous Art-Nouveau movement (against the machine movement of post-industrial revolution). But the bio-morphic and asymmetrical visual language of Art-Nouveau was diluted and influenced by machine-made geometric patterns in the Art-Deco movement.

So, the term Art-Deco is first converted by Le Corbusier, who is the modern architect, who is the very famous architect, who works at there from brutalism to international style to many other different phases. We will, we will discuss, but his works are not in art deco, but he connoted the term art deco in his article *l esprit nouveau*. The new spirit of a art and then the Art-Deco term is connoted by him. So, a decorative art or the Art-Deco .

The term came from the international exposition of modern industrial and the decorative arts in 1925 of Paris. In Paris, the art nouveau exposition happened earlier and in Art-Deco exposition is also happening in Paris. But later in 1925, this is eclectic, the word eclectic means, when the inspiration comes from different style, why the inspiration is coming from different style is, the inspiration is coming from art nouveau that is true because, it is going high on ornamentation as art nouveau did.

But it is not taking art nouveau as the final inspiration because, art nouveau did not talk about the machine made aesthetics and all the decorations of art nouveau were very different and they were not repetitive. But it also taking inspiration of the machine aesthetics and the plus points of for the machine movement for the machine, movement have shown the machine made aesthetics or the geometry and the new material as the visual vocabulary. So, Art-Deco is also doing that.

So, the Art-Deco is taking the inspiration of for the machine moment as well. And the art and craft art nouveau movement and in art and craft movement, it talks about the ease of use. And then in for the machine movement also, it talks about the motive has to be mass produced and that is also there in the art deco.

So, it is a eclectic form and here also it is eclectic because it takes inspiration from nature and it also takes the inspiration from abstract geometry. So, it blends nature and the abstract geometry together and both acts as a inspiration board of or mood board of the visuals synthesis. So, that is why, this form is eclectic but overall, if you look at the style. it has a homogenous and visual simile in the style.

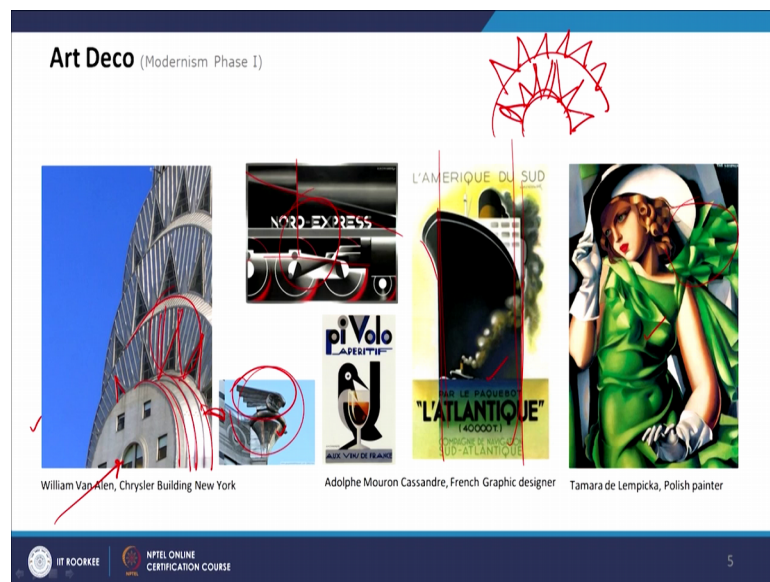
So, style is not has a similarity. So, it is not different from each other. So, it is not eclectic in visual, but it is eclectic from the way it is taking inspiration. There are some eclectic visual style as well which is different. For example, some postmodern architectural style, it will be eclectic in visual like pop art. So, there will be visuals from different styles and

there will be super imposed each other. So, visually, they will become eclectic and different kind of colors will come.

So, in terms of visual this Art-Deco is not eclectic, but in terms of the inspiration, it is eclectic because, it is taking inspiration from 2 different architectural style 2 or many different architectural style and as well as it is blending geometry with the nature and that is how it is eclectic. But visually, it has a particular visual tone so, that we will discuss later.

And this art influenced by previous art nouveau movement against the machine movement. Also it takes benefit of the machine movement for the mass production and some machine aesthetics will be there which we will discuss. When we discuss see the see some examples, but the biomorphic and asymmetric visual language of art nouveau is translated into a more geometric machine made geometric pattern which come from the machine for the machine movement and in Art-Deco movement that is why, this becomes eclectic.

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Now, if you look at the art, Art-Deco styles like from architecture to painting to poster designs and the murals of the this is the same building, but it this can be considered as a sculpture sculpture element. So, here you will see it is not as biomorphic as Art-Deco it is actually quite geometric. So, if you look at the poster there is a you will see a rectangle passing throughout the poster and small curves are there.

But these ornamentations if you look at, the work there are lot of ornamentation this ornamentations are there which is definitely very different from opposite to Bauhaus. So, lot of lines lot of different curves are juxtaposed, but this ornamentations are geometric ornamentation unlike art nouveau. So, here also, we will see a straight lines which is passing through, but lot of lines together is creating a very very interesting pattern in the in the Art-Deco style. Here also, if you look at the birds wing it is broken in geometry.

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Art Deco (Modernism Phase I)

Chrysler Building; Manhattan- New York, William Van Alen, 1930

- One of the best example of Art-Deco Architecture ✓
- ✓ Material: ✓ Steel frame-structure, ✓ Brick masonry, ✓ Metal cladding
- The spire of the sky-scraper consists of seven arches on each façade creating a crown-like structure.
- The crown is cruciform groin vault with seven concentric arches with transitioning setbacks.
- The façade ornamentation of Stainless-steel cladding and glass window form a sun-burst pattern, popularized during Art-Deco movement

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Now, let us discuss first architecture and then we will gradually move towards the art and design style design examples of Art-Deco in art, Art-Deco architecture. So, man if we look at Manhattan of New York, many of the New York Manhattan a skyscrapers Art-Deco style previously when skyscrapers started coming in New York, they were in Chicago styles. And if you look at the Chicago style skyscrapers, they are actually not skyscrapers in today's time.

That time these were the skyscrapers like monadnock buildings and others because, the previously they have this bourn and that kind of building which is lower in height. So, Chicago style movements started making the skyscraper, but now in Art-Deco style they started emphasizing the usage of steel frame structure and so, it went again with the innovation of technology it went higher.

So, in Art-Deco structures the skyscrapers are hundred story tall ninety eighty or hundred story tall in Chicago it was quite less in height. So, Manhattan skyscrapers mostly many

of the Manhattan skyscrapers are designed in Art-Deco style, but later additions of Manhattan styles like old world trade centers and other buildings are also in internationally the later size are also evolved, but Art-Deco styles were the first initial Manhattan buildings are in Art-Deco style.

So, Chrysler building is designed by William Van Alen in 1930 is one of the best example one of the famous example of Art-Deco architecture style. So, if you look at the material, it is has a steel frame structure within that the structural material. From outside, it has a brick masonry, but this brick is like grey fly ash brick and the and also had a metal cladding.

So, grey metal cladding and the grey brick masonry goes with each other and this has a grey finish from outside, but if you look at this, both the metal cladding and the grey brick gives a industrial look and also has a metal metallic finish has a style of or the color tone which is predominantly used in Art-Deco style which is not there in the previous architecture style.

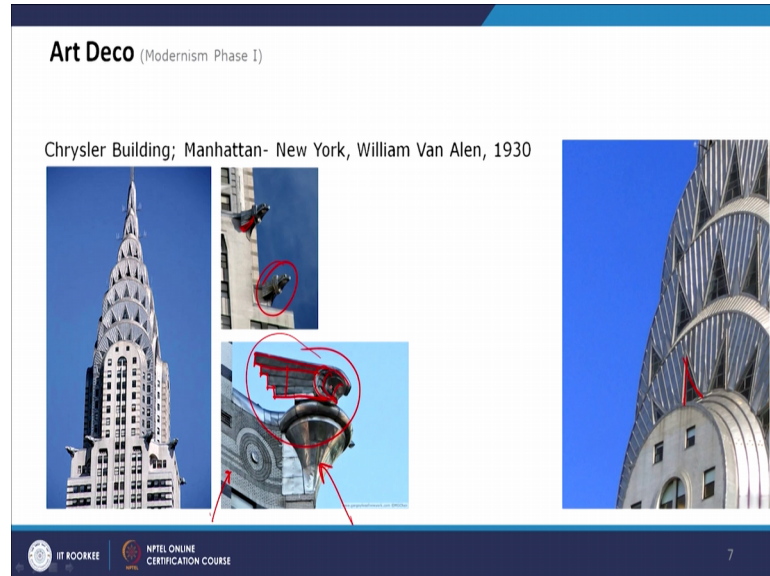
So, metal colors metallic colors has is a has a main protagonist is a main protagonist of the visual color palette of Art-Deco . It can be the steel silver color or or the gold or the metal golden metallic colors or the aluminum colors which comes in the Art-Deco sculptures, interiors and architecture. And also it has most of the Art-Deco building has the symmetry and has a spire because Art-Deco if we look at has a lot of luxury in design language.

So, it is after this world wars and then they thought that new cities will grow with the after world wars then the cities will grow as a new design. So, this is after first world war and before second world war and that is why, they thought that this luxury should defeat the post war cities spires and on top of the skyscrapers or the pinnacles gives this luxury in the building and it has a seven different arches which we will show and which has a crown like structure in on top.

Even in the other building like empire state building and other Art-Deco buildings. They have a crown on top of this buildings and this facade is ornamented with the stainless steel cladding and glass windows form the sun burst pattern. We will see the sun burst pattern which is popularized in the Art-Deco movement. So, this is the pattern. If you see from this side, this will be something circle and then it will be sun which is bursting from

the centre and then again and then again another sun burst. So, this is imagined as the sun which bursts from the, which with it is shine.

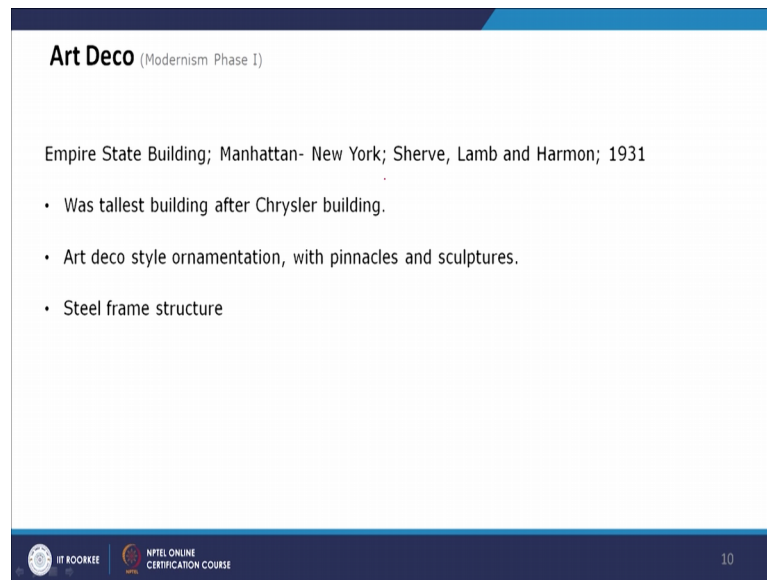
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So, if we look at this Chrysler building here this sun burst pattern is there and this is the brick grey brick and this metallic cladding which gives the very metallic shine from the of the of the building from outside and if you look at sculpture is outside these are the gargoyles, which is there in which generally this sculptures of gargoyles are there in the entrance of a city of the European city cities. So, this they have taken inspiration of those gargoyle, but if you look at the way it has been designed it has lot of geometric geometrically it is broken and abstract form of wings are used.

So, it is not a biomorphic line. It is a pure straight line and which has a regular interval of line and equidistant lines are there which is very different from a biomorphic whiplash patterns of art nouveau. And in art deco, you will see lot of straight lines and geometry, but with curves.

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Art Deco (Modernism Phase I)

Empire State Building; Manhattan- New York; Sherve, Lamb and Harmon; 1931

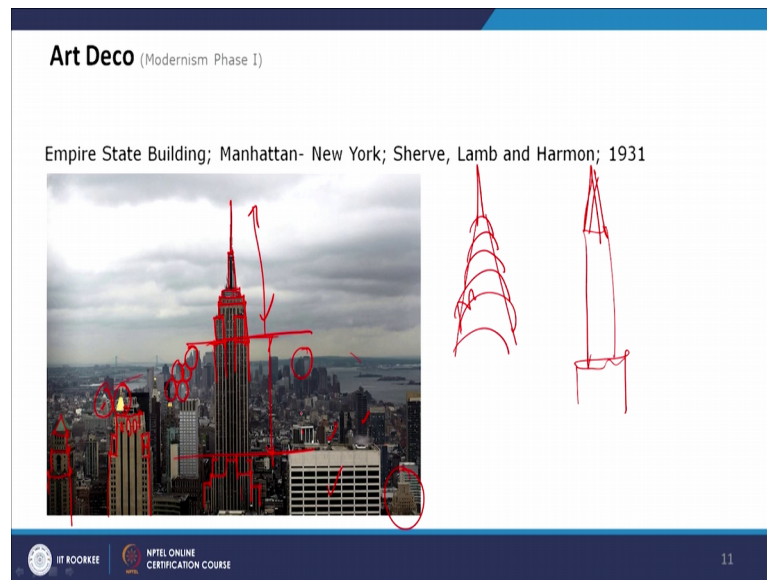
- Was tallest building after Chrysler building.
- Art deco style ornamentation, with pinnacles and sculptures.
- Steel frame structure

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Now, this is the groin vault and arche which is seven groin groin vault and seven concentric arches are there. On top of this, spire which of of this Chrysler building which resembles a pinnacle and gives out very royal on top of the building. So, here this this vaults and metallic ornamentation you know we are seeing here.

Now, another building of Manhattan in the same after this Chrysler building was empire state building and this is designed by Sherve Lamb and Harmon in 1931. So, it was the tallest building after Chrysler building. And before the twin tower exceeded the height this is also in Art-Deco style ornamentations with pinnacle and sculptures same similar as Chrysler building. But it is also a steel frame structure. So, that it reaches the height and same metallic aluminum cladding is there and it again gets some metallic shine from the outside and you will see a it is also symmetrical.

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And also, there is a spire though it is less ornamented ornamental form if compared with the Chrysler building where Chrysler buildings spire is has seven different arches in grow is much more royal than length empire state building, but empire state building also has a similar tapered spire on top. So, if you look at in the geometric way. So, it has divided the spire into if you break down the geometry, this has this structure which is gradually tapering down and then on top of this, there is a metallic spire added on top of it. So, this gives again the similar royal look and also this becomes structurally stable.

And also, here you will see this. There is a base and then from the base the building rises and then there is a spire on top of it, in the Chrysler building as well and the in any other in many other buildings of the Manhattan you will see this is the huts and the river and manhattans view of New York. So, here, in this building, this is another not. So, famous building, but any other buildings you will see similar spires will be visible. So, this building also has the spire and then gradually it is tapering down.

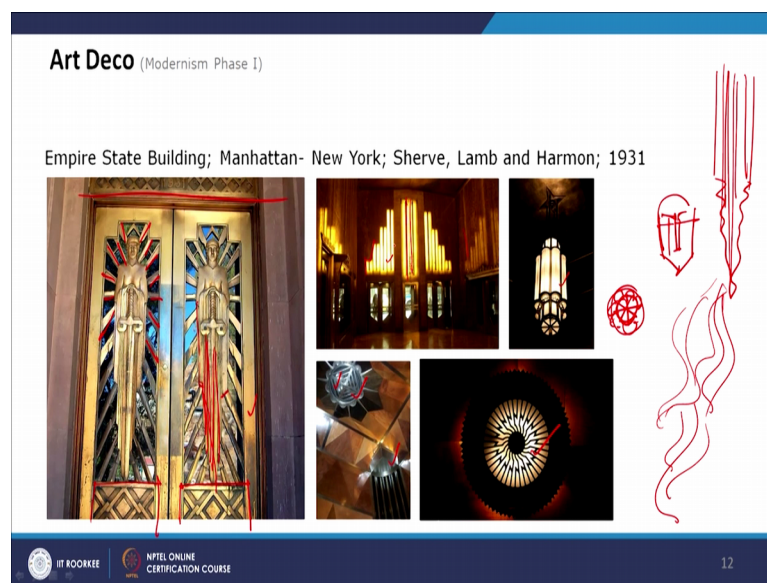
This building also has the spire. So, it is this part is is bottom part is protruded and is pushed back this part and then there is some ornamental element on top and this also have the spire like look and then many other buildings in the manhattans skyline you will see has a similar spire on top and these all are deco style buildings in the Manhattan city.

And also, if you look at the base of the empire state building, it gradually goes down. And it creates this as a base in visual base and this part becomes the building and this is

the spire portion of this many of the movies are shot in the Manhattan skyline. And this empire state building and Chrysler building are used because of it is beauty and it depicts Manhattans style of architecture because lot of Art-Deco style buildings were there and so, Art-Deco becomes a style of Manhattan when you look at when you pass through the manhattans streets and roads.

And also there is new buildings like this which are juxtaposed by this kind of Art-Deco style.

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So, inside if you come look inside, the interior of the empire state building it is a public place for people can go and the particular different terrace of the empire state building and see the city scrape of Manhattan and inside is very very ornamental in Art-Deco style. And lot of different patterns and lot of different illuminations and lines are created and it is very garish in ornamentation.

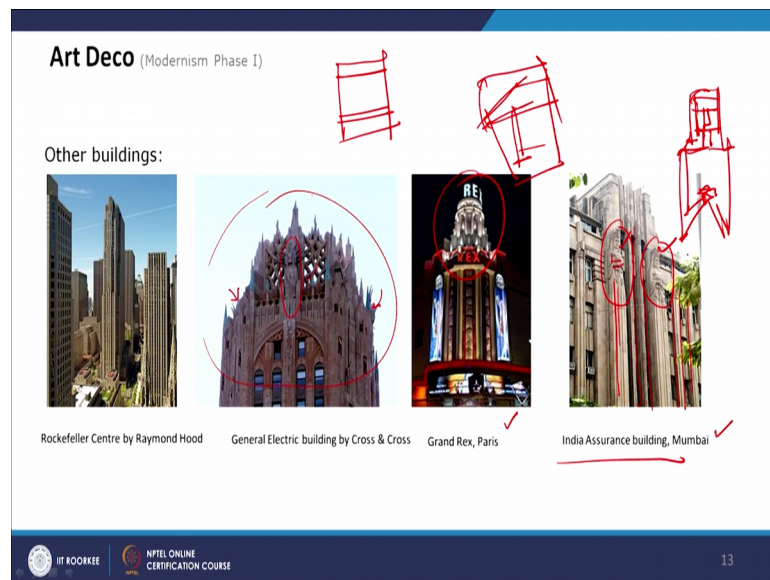
So, this is the empire state buildings do. So, if you look at the sun burst, pattern is visible behind this sculpture. Now, if we look at the sculpture, the sculpture is broken into geometry the face is broken. And then if we look at the drapery, it is also quite geometrical and straight lines are depicting the drapery, but if you look at the art nouveau style like Alphonse Muchas work the drapery will be floe and then this kind of patterns will be there in the drapery.

But here, if you look at the draperies are absolutely straight line which is how it is creating a more abstract geometry pattern in the aesthetics. And also if you look at lot of ornamentation are there, but still in a very geometric way and if you go inside this is this is the interior of the empire state building again the pure geometric ornamentations are there. But lot of works lot of different elements are juxtaposed and creating this highly ornamental design even the chandeliers. If you look at the chandeliers in the plan, it will be a circle and then another floral patterns on outside the circle.

So, this is again geometric, but lot of ornamentation again in the a illumination from top and this false ceilings has lot of patterns, but all are geometric patterns which can be replicated and can be produced in the industry. And also if you look at all this elements there is one color tone which is coming out which is the metallic color and which is depicting the luxury and the luxury of this style.

So, here we have the silver shine and and the golden shines are predominantly there and yellow color is used to enhance the golden finish of this of the interior and lot of metallic other places also has a metallic finish in the style.

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Now, there are some other buildings of the same Art-Deco style Rockefeller centre by Raymond hood. Raymond hood have designed many other Art-Deco style building. Here also, you will see the gradually it is tapering down and another interesting thing in Art-Deco style which is different from the Chicago style. Chicago style buildings they start,

they thought that they have to diminish horizontality of the building that is why, they have divided the building into horizontal lines.

But here, if you look at the Art-Deco style they have clearly clearly creating the vertical line one the building so that, it looks much taller though the building is taller itself. And then, they wanted this building even this building this is the different building this is the Rockefeller centre in this building also you will see lot of vertical lines are created from outside. So, that the building looks much taller because, by that time the thought ornamental model of the building should not look taller is gone and because cities are already started evolving.

And in Art-Deco style, they wanted specially in Manhattan the verticality, they wanted to show the verticality and the as the tall city and if you look at the Manhattan skyline it goes up all of the sudden from the other rest of the New York and the new jerseys plan.

So, in this empire state building as well if you look at the the the the empires state buildings line, you will see lot of vertical lines are more predominant than the horizontal lines. So, if you look at there is no there is no horizontal lines which is passing from one side to the other this horizontal line is broken. All this horizontal line is small and broken from each other because there is no straight horizontal lines over there.

But all the vertical lines are continued throughout these huge buildings. So, and that makes the building much look much more taller. That is also there in the Rockefeller centres designed by Raymond hood and few other examples like general electric building by cross and cross company. So, it is also there. And if you look at there is again on those spire there is lot of ornamentations are there and if you look at, but there is geometric geometric way of synthesizing this natural elements. So, there is a human being and all the floral pattern and other patterns are all geometric.

And then if you look at. So, from here from the, from USA it is also there is this different cities also started evolve having this same style. So, Grand Rex Paris which is a movie theatre centre has a similar kind of style and it falls under Art-Deco even in Mumbai, India assurance building is designed in Art-Deco style.

So, lot of decorative elements are added on top of this on the façade of the building and if you look at the statue, which is also broken into geometry and in the draperies are all

geometrical and even the hands and everything is positioned in the right angle has a geometric look.

But if you look at the style and if you compare this way of treating the human figure and if you compares this with the art Nouveau Antoni Gaudis design in Sagrada familia, you will see the there is a similarity of the way recreating in the in the sculpture. So, in Sagrada familia if you look at the Christ on top of the on the façade, the Sagrada Familia in Antoni Gaudis design also in the sculpture there is a geometric break in the face or in the in the human figure.

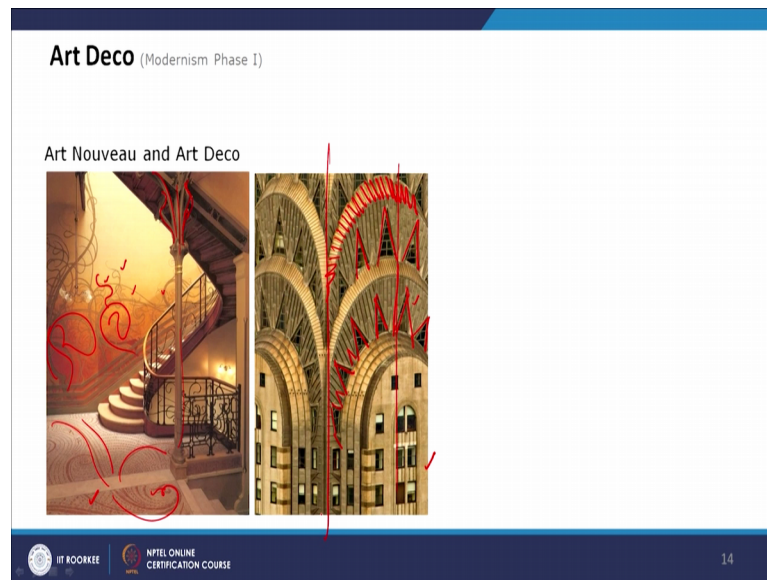
So, which is there in this design style, but there is more there is no repetition in the sculpture. So, 2 2 different sculptures here are exactly identical, but in that case in Sagrada Familia sculptures are different, but if you look at the sculpture, you will see a geometric break and whichI have shown in the art nouveau style architectural style in Sagrada Familia. So, have a look at it.

But in treating the wall and others there is a biomorphic style. So, the in the way they are treating the wall and the balconies and other elements in art nouveau style, there was a biomorphic line, but the way they are especially in Sagrada Familia Antoni Gaudi have designed the sculptures of the of the human being there is a similarity of the in the Art-Deco style.

So, in the sculptures are not. So, biomorphic as Alphonse Muchas painting. So, there is a geometry in the sculpture. So, if you look at. So, there is a there you will see a more similarity with Art-Deco in Antoni Gaudis though it is that falls under art nouveau because of the other buildings. And the other lines which is there in the building, but in case of sculpture there is a similarity.

So, now let us have a quick look at the dissimilarities or the similarities in the art nouveau and Art-Deco this is the design which we are we have discussed earlier by victor Horta the hotel tassel and this is Chrysler building, this falls under Art-Deco this falls under art nouveau.

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So, if you look at both has encompasses the new technology or the new material in the technology. So, there is a steel column there and there is a steel finish in the façade as well, but if you look at the way it is designed. So, there is lot of geometric repetitive design which is there in the Chrysler building and this has a bilateral symmetry. So, all this element. So, if you is the central line from this side and the other side there is a symmetrical design from all the lines from the central line and there is a repetitive symmetrical abstract geometric design is there in the Chrysler building though both are ornamental.

But here, if you look at the hotel tassels there is all biomorphic lines which none of this lines are identical none of these patterns are identical and it flows like a very organic or biomorphic. We should not use the term organic because, organic is a different movement and then there organic movement you use is very abstract geometry format, there we have discussed in the previous class as well.

In the floor also we have we can see a different biomorphic lines and if you look at the column. So, columns this part and this part is treated in a different way. So, the curve over here and the curve over here are absolutely different, but that we do not see in the Art-Deco style.

It will be absolutely same as in the sculpture is the same sculpture, but in Art-Deco nouveau sculptures. All the sculptures and the patterns all the façade elements will be

different. So, here also we will see the similarity in the bilateral symmetry in the sculpture.

So, in the next class, we will continue with the much example more examples with the Art-Deco style and specially through painting poster design and industrial design.

Thank you.