Contemporary Architecture and Design
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Lecture-19
Phases of Modern Architecture-Internationalism Part II

Welcome students to the online NPTEL course Contemporary Architecture and Design. So, in the previous class we started discussing about internationalist movement, and we have seen few examples of Ludwig Mies, Van Der Rohe and Phillip Johnson's house. And then we will continue with the, with some other examples of architects like le Corbusier, who was also who started working who has great contribution in the internationalist movement.

And later also he have examples in Brutalist movement and other movements as well. So, in the time line if you are start placing internationalist movement so, it is in the transition of phase 1 and phase 2 as we are discussing in the earlier classes.

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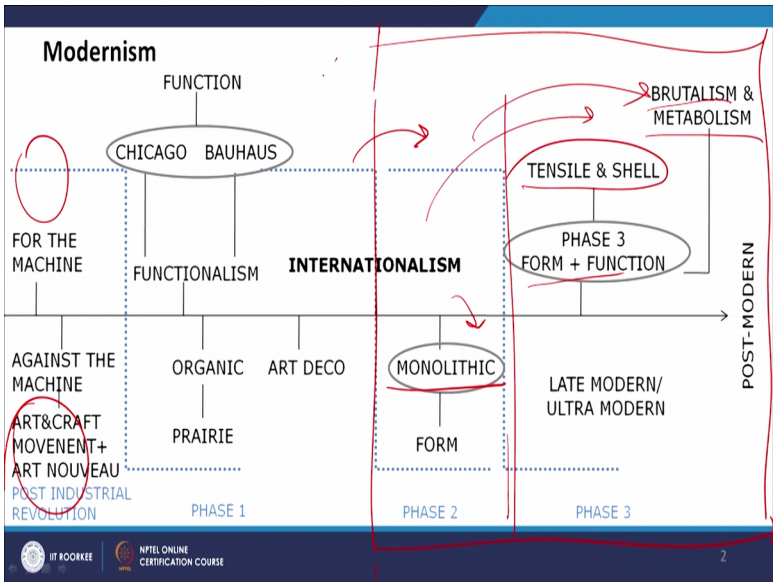

And the concept of internationalist style was carried forward in the monolithic which is of the phase 2 sometime, we do not even convert the term monolithic so, it is a continuation of the internationalist movement.

And then in the phase 3 there was internationalist approach was also there with some iteration in the specially in the tensile where form and functions are together and brutalism and metabolism. So, lot of internationalist styles were also translated in to these to expressions as well. So, that is why we were earlier we were also discussing that internationalist style from this time onwards, there is a holistic there is a single thought which is like design should not be contextual and it is like a particular visual style which is minimal, and less which is less is more, which is connoted by Ludwig Mies van Der Rohe should follow. And that is that is what the high modern or the late modern or style was talking about, that is how the modernism was in one word modernism is connoted.

Because before this there was lot of different styles and it actually started with 2 opposite styles, and even in the phase one there was lot of different styles which we does not follow each other's philosophy. So, that is why in from internationalism onwards there is a holistic one single thought which is which has the perception of the high modern or the late modern styles.

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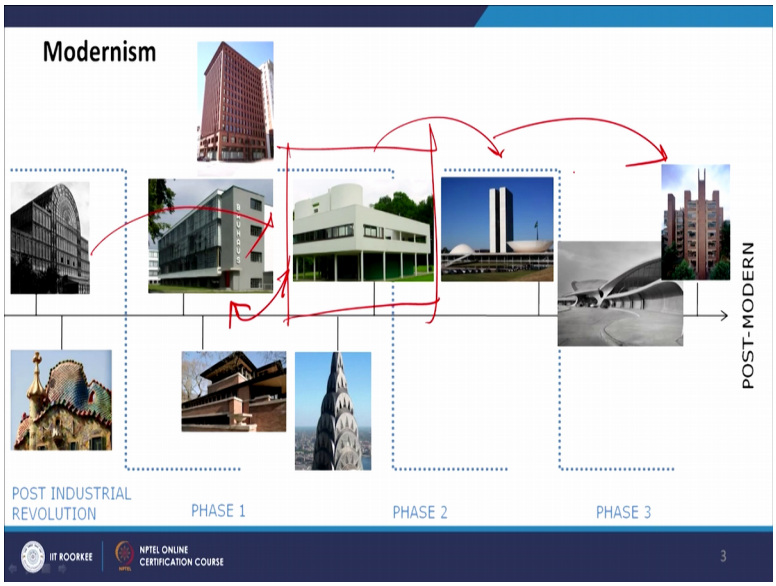

Now here also we have looked that this is the international style and which actually has some influence from Bauhaus, and also the machine movements machine aesthetics and which carried forward in the latter phases of architectural styles.

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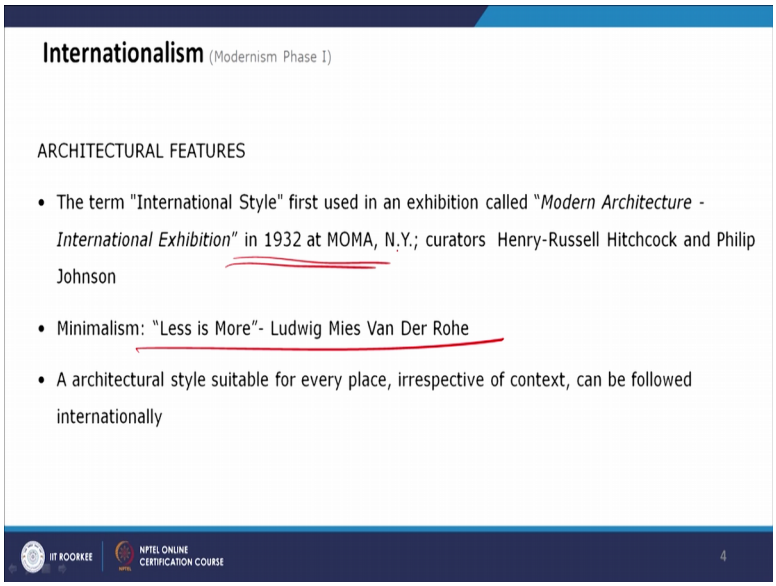

Now we have seen that it was started in the less is more is the term and started around 1930's.

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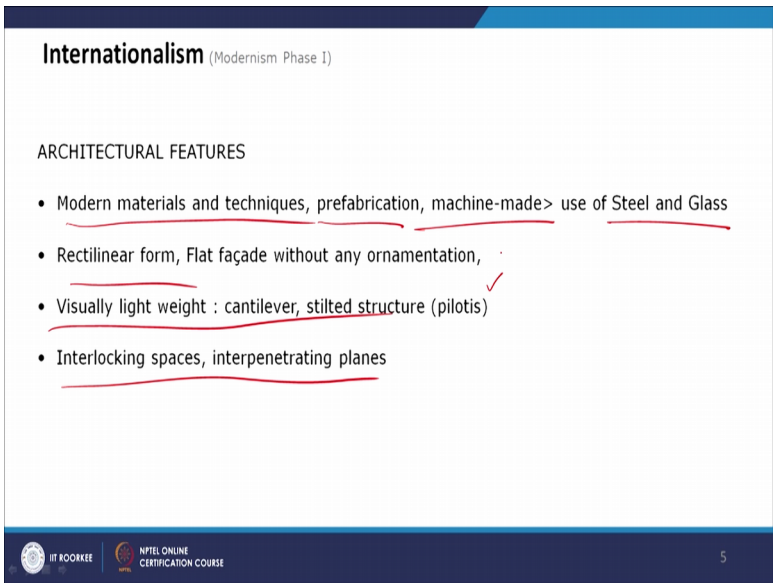

And with few of it is examples which we will see with the other few of the characteristics, which we will see today with the other examples by the prefabrication machine aesthetics with modern materials and techniques and which is a predominantly steel and glass modularity, rectilinear form or the pure geometry and black and white and grey these are the colours.

And the purity of the texture which is there and the visually light weight cantilever stilted structures which we have seen in Farnsworth house as well and interlocking free flowing spaces and juxtaposition of plates which is acting as free space or the overhang of the roof is there.

Now, again if we talk about internationalism over the pioneering architect is a le Corbusier.

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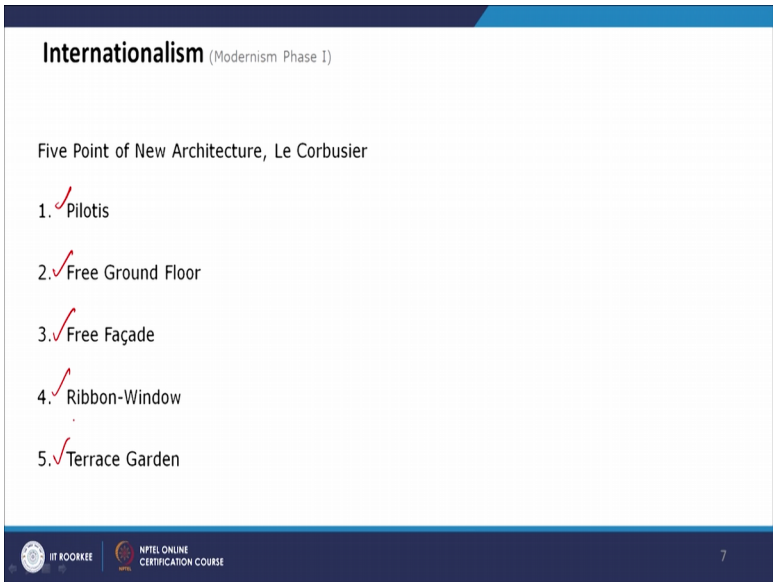

So, le Corbusier have given concept of internationalism in the building in architecture. So, there has to be characteristics of internationalism 5 different elements of internationalism which will give all these which will evoke the sayings of internationalism which is like light weight, which is floating and then the pure colours, and some the forms and all these are the style of internationalism he depicted with this 5 elements. So, he called it 5 point of new architecture is the new internationalism of internationalism.

So, these points are pilotis, which is the town for the columns free ground and free facade ribbon window and terrace garden we will discuss what these means.

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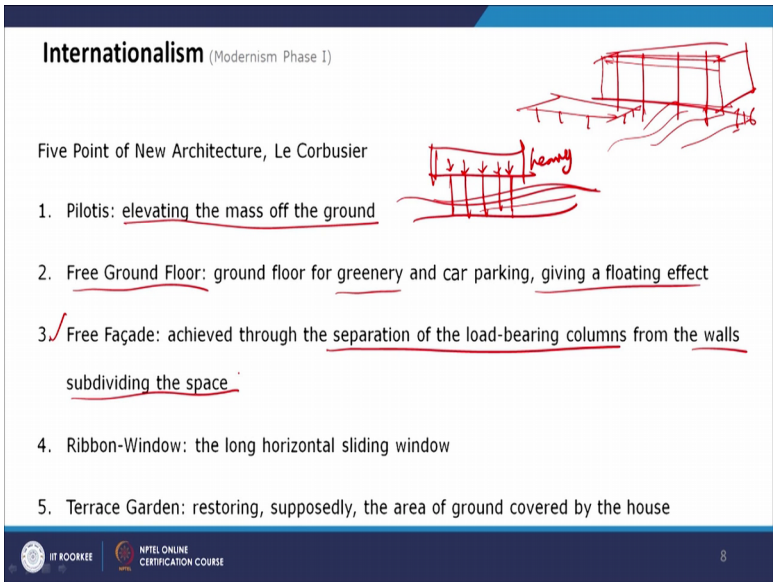

Now, pilotis is elevating the mass of the ground through on a column. So, the ground floor will be something like this, and this top floor will be elevated on the pilotis or the column.

Now, this pilotis can also be on top of the building like we have seen in Farnsworth house. So, this is we are seen this columns in the Farnsworth house which is supporting the overhang of the Farnsworth house and is floating on the ground. And there is another plate in front of the Farnsworth house. So, these are and again the pilotis which is visible from outside, which shows the structure how the structure is flowing from the support, and also it gives a antigravity effect. So, this is also there in the free ground.

So, when this pilotis added so that frees the ground and the so, this ground floor will be freed, and ground floor will be mostly for greenery and for car parking, and will give a floating effect. For here also it is 1.6 meter which is floating in the this platform is floating from the ground. So, this ground is also green and it does not hamper the ground, and in Farnsworth house. And in other examples we will see the villa Savoy and other examples by le Corbusier himself.

So, he is doing the same thing and freeing the ground. And it also gives the antigravity effect when you free the ground and the, this is structural the visually heavy surface and when a when the ground is free it looks very light weight in the structure.

So, and the free facade so, here what the meaning of the free facade is the separation of the load bearing columns from the walls so, which is subdividing the spaces. So, the wall and the load bearing structures or the columns load bearing columns will be separate. So, here in the previous examples also we have seen it is there.

So, the if you look at in the plan of the Barcelona pavilion, Barcelona pavilions structural columns, and then are there and then few elements as wall, which is not even encompassing the spaces are there which is not touching.

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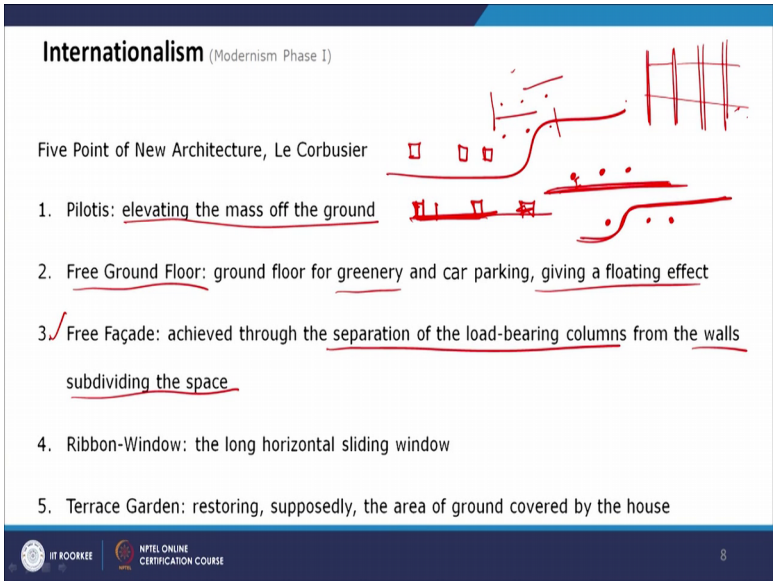

If you look at the Barcelona pavilions plan which is there in the previous lecture you will see that even in the from the elevation, it will also be there. From worth house which is designed by Ludwig Mies Van Der Rohe Barcelona pavilions also designed by him, you will see the structure member from outside and a glass curtain wall which is inside. So, there is a little a gap between that which does not fall together, and also in the next example we will see from the plan. So, plan in plan villa Savoy, you will see the partition brick wall is here, but the structural columns are there is a distance between these 2 so, and also in the through the structural column it can freely flow in a different angle different direction as well.

So, this does not has to follow, so, this if this is the column, these are the column it should not touch the column, it might not touch the column the brick wall and it can freely flow if the through and freely flow from any spaces.

So, it does not coincide with each other, and that is what the free facade concept is there. So, we will see some with the other examples as when we have seen it before in the in the in the previous example of Ludwig Mies Van Ser Rohe and here on in the Corbusier's work also it is there.

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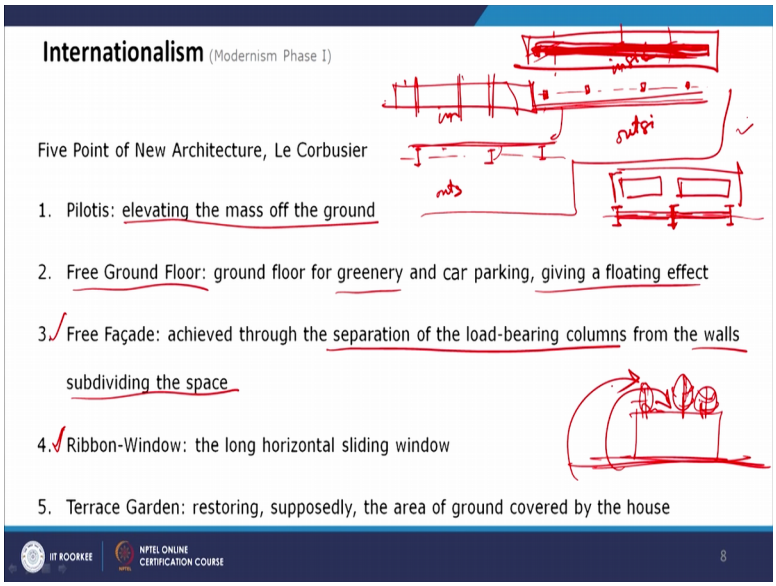

Then ribbon window, because we were freeing this facade so, there is a possibility of making ribbon window. So, if these are the structural columns in plan, I am drawing the plan, and then this is the wall. So, instead of putting through and through brick wall, we can put through glass wall which is visible from inside or outside visible from both the sides, and there can be a full glass curtain wall. And that is how in the Farnsworth house as well. So, there was through and through glass work which is inside the column, it can also be outside if it is outside. So, if this is inside and this is outside the building.

So, if the glass is outside you will see a ribbon window, and the through and through glass from outside you will not see the column. And in Farnsworth house what is happening? This I sections of the columns are here and this is outside and this is inside, and the glass is through and through glass is here. And from outside you see this column which is coming up in front of the building.

And if in so, these are the examples of free facade which is not touching the this partition wall which can be brick, which can be glass is not touching the structural grid, this is the columns grid. And if instead of this cases if the structural grid or the columns follow the

same line of brick work, if you put the brick work over here, this brick work or the window is getting punctuated.

So, if there is a window it will be punctuated by a column, again the window will punctuated by column. So, in elevation you will see these kind of windows in elevation, but in case of these so, you will see a through and through glass window totally it can be glass. Or in these cases so, you will see a glass box a total glass box which is behind the column, and from outside you will see few columns.

But visually you will see total through and through glass block. And here in this cases you can make also a ribbon like window, which we see in his example of villa Savoy. So, these kind of windows which is through and through, but because the columns are going behind the windows and you are not seeing it so, these are the concept of ribbon window.

Ah in terrace garden what he is le Corbusier is saying what you are taking from this ground. So, you put that on the garden. So, the greenery is on the on the top of the roof is also should be a features of internationalist style. But this generally this is followed by le Corbusier, but not extensively followed by other architects, but most of this other examples are in other forms are there in other architects work as well.

But terrace garden his was his own interpretation were the work point of architecture because what he was taking from the ground from the nature you should put it on the roof in different levels.

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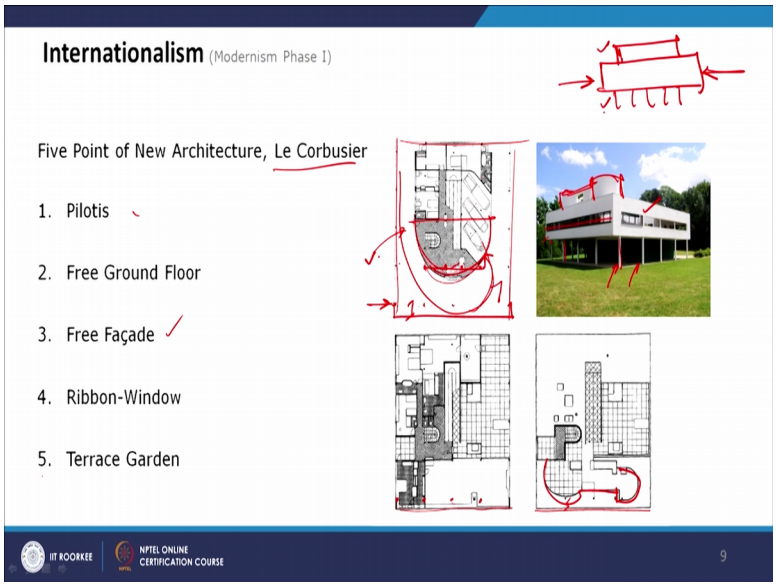

So, with the example of villa Savoy so, this is building designed by Le Corbusier himself, which is called villa Savoy which is a very famous building.

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This is the ground floor plan of the villa Savoy which you can see that the ground floor is elevated on the columns. So, these are the dots, which is represented as columns. So, if you are from not architectural background so, it might be little difficult so, I am explaining it. So, these dots so, plan is what? You are seeing from the top, and then

cutting it in this level specially it is little below from the eye lev[el]- human eye level and seeing it from the top.

So, here if you see these dots represent the column and this is the wall. So, if you look at carefully the wall is actually. So, if you look at these are the structural members. So, wall is not touching the structural members, it could have touched here, but here there is a gap so that the column will be visible from outside. And also this is not following these straight-line. So, this is freely flowing, this is the free facade, and the ground floor plan is actually derived from the car parking's cars turning radius. So, this is the garage and 3 space for 3 car parks are there.

So, the turning radius of car is actually giving the, this shape. And if you look at this shape, this is also a part of the semi-circle or the cylinder and which is also very geometric and in plan it is a square. So, and so, in elevation you see because of this height you see a cuboid, and in plan which is a perfect square in the in the in this design.

Now, if you look at this all this 5 principles 5 points of architectures are followed here. So, pilotis is there so, if you look at this is this is the pilotis and which is giving the anti-gravity look, because this is visually a heavy mask; which is getting supported by a slender column or the pilotis, and which gives a again this structure looks very light weight. And then free facade just now we have discussed, from here you will also see free facade which is like structural grid grids you can see this is behind this elevation line.

And so, so the outside wall or the outdoor or the outside wall is actually coming out of this structural grid here, you can see it clearly. So, this is the structural grid, and this outside wall which is non-structural just a wall is coming out and this is the there is the gap between this.

So, from outside you will see there is a free facade in the top floor as well. So, here also this is the top floors and this first floors plan, this is the structural grid which is going, and this wall is in front of this grid which is not following the grid.

Again in this you will see there is there is a gap, between these 2 because of this gap he can achieve through and through ribbon window. So, if you look at this window there is no punctuation and no gap in this window. Because the colums are coming and passing

behind this window and you cannot see this and you see ribbon of glass and which is not penetrated and not punctuated by any other elements. So, that also gives a sense of minimalism, because when whenever there is a there is a one material, you will see from outside there is one colour you will see and there is no break. So, lesser the visual elements are there, lesser visual elements are there.

And terrace garden will have some look within that, and these are the parts where the terrace gardens are there. So, from top if you look at these are the gardens and terraces which is there and small gardens are added on top of this terrace. And also if what you are this part, what you are seeing is added on top of this roof; which is like a free flooring visual wall which does not encompasses any room. But this is just a wall which gives volume on top of this building to balance, it visually because you are seeing a mask which is kind of a central part, and then you if you add a little part which balance as a counter part of this void.

And this is only added as a free standing wall with a punctuation with in this with in this part.

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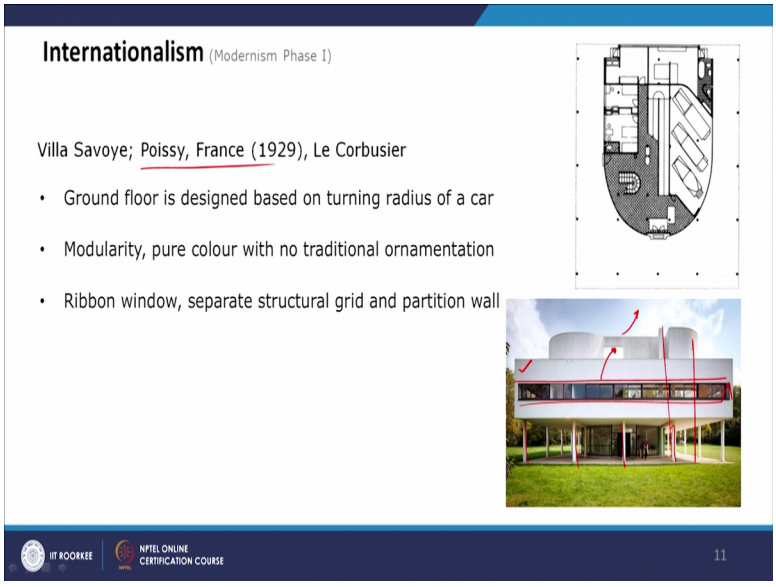

Now, the villa Savoy as in Poissy France, and the ground floor is designed based on the turning radius of a car which we have we were discussing. And the modularity of the pure colour was there, again it is white and from outside you see this ribbon window and

again (Refer Time: 16:56) of solid and void is there. And from outside you see this structural grids and which is also visible from outside.

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Now if we compare the Bauhaus which was before internationalist movement and internationalism together. So, we see lot of similarities; because there has a similar vision of vocabulary, and internationalism is closer to the Bauhaus rather than the other movements of phase one.

Now, in Bauhaus we have seen pure box like structure, and here also internationalism is also talking about the same box or rectilinearity. And the material in the Bauhaus which is fagus boot factory by Adolf Meyer, and this is the Bauhaus building. So, here also you see this glass curtain wall and from outside you see the structural members and that becomes the machine aesthetics becomes the visual language. And here with the 3 colours, the gray white and black; black is also used in Bauhaus building's interior.

And this steel members are painted black is also what we see in the internationalism this white black colours are there glass curtain wall is there. And also the materials own colour and textures is exposed and was shown as an aesthetic element.

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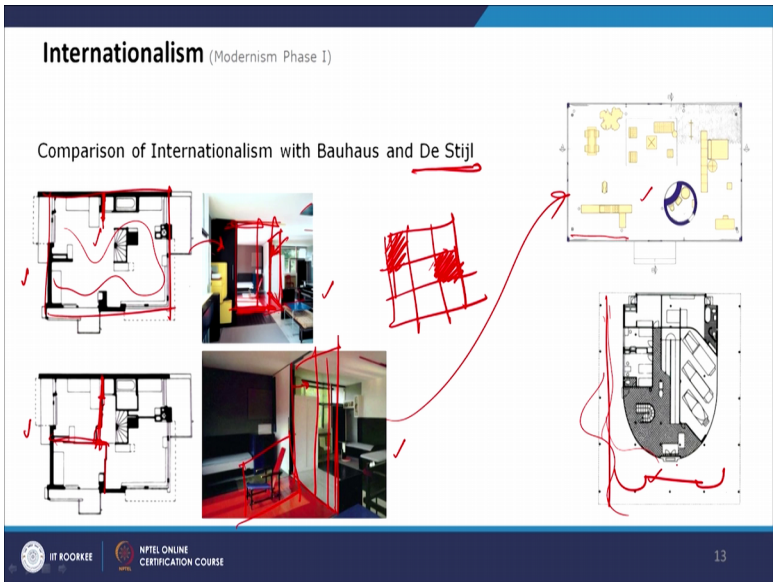

Now if you look at the concept of free plans which is there in all the examples of internationalist movement which is there in the Johnson house, and also there in the le Corbusier's villa Savoy. And also there in the Farnsworth house in Mies Van Der Rohes Barcelona pavilion comes actually from few examples of Bauhaus and de still movement.

This is the building we have discussed earlier, Schroder house by Gerrit Rietveld which falls under de still movement, we have discussed in the Bauhaus industrial movements , I think in those you might have identified this Rietveld chair which we were discussing by designed by Gerrit Rietveld which is there in the Schroder house.

So, if you look at the Schroder house plan so, this is the first floors plan of Schroder house. Schroder house talks about the visual palette of breaking the composition in different grids, of straight line and putting one colours palette and putting primary colours like red, blue and yellow you will see blue red and yellow, and with black and white in the in the interior as well. So, which looks like a Mondrian's painting and other painters painting of de still movement

So, in this Schroder house what Gerrit Rietveld have done. So, if you see this plan is also a free plan. And within that this composition is not so, there is a composition of one single canvas.

Now, inside this if you look at so, this is divided into different lines. So, these are the lines and here different colours are added. Now here if you look carefully, this is the partition wall, in after putting the partition this these are the partition walls. So, the partition walls breaks the spaces whenever it is required. So, this without the plan without the partition wall when you do not draw this partitions. But if you draw this partition wall this becomes a particular space this loaded floor patch.

So, if you take this panels out and this divides this space. So, this space is it can also be free when you fold this partition was in inside this wall. And then you can also take the partition wall out and then divide the spaces. So, this actually comes a precursor of a fee flowing plan which was there in the so, here also you can see this is the partition wall you can take it out. So, it can it can be a room for you for the use.

So, these kind of thing is explored here in the Johnson house, instead of these kind of partition wall they have used curtains to divide the spaces, or the free wall which is kind of a curtain free flowing wall which is not passing through the building or through the structural members which is like a curtain is dividing the space and which is meandering around the columns; which is which also a kind of a connection between this Bauhaus and de still movement from internationalism international style.

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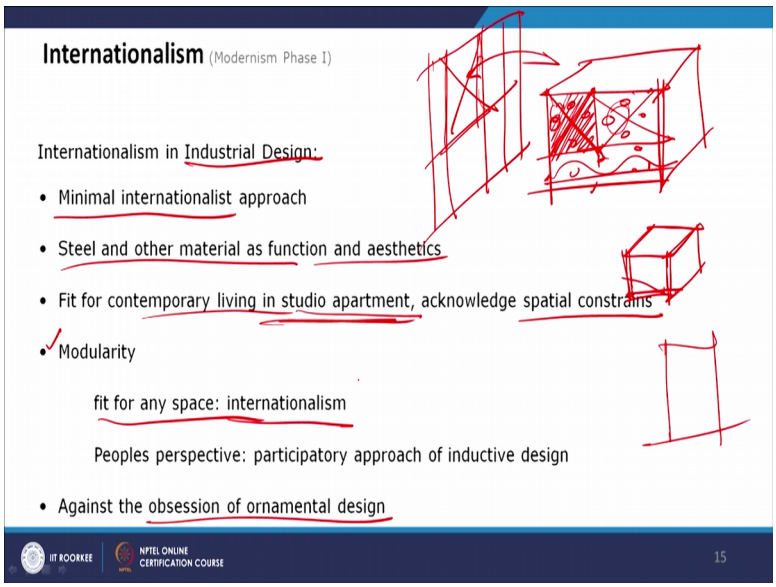

Now internationalism is also there in the industrial design, and industrial designs many of the new era of modern industrial design came from the internationalist movement. The

industrial design imbibe this style, and later on there was different other styles which came from this industrial internationalist industrial design was carried forward in the modernist next phases. And also there was some parallel movement which is there in the architecture as well. So, again in like architecture minimalist internationalist approach is there in the industrial design as well, and steel and other materials as the function and aesthetic material is also there in the product and furniture design.

Fit for the contemporary living of the studio apartment, now this studio apartments are the concepts which emerge from the free flow and the meandering spaces which blended with which we have seen in architecture. So, industrial design the interior and the furniture, compliments architecture which is there in the industrial design. Because what architecture where the architects leave industrial designers take from there, and start the designing the interior and the furniture. So, the concept of which evolved from the architecture and also is there in the industrial design or the furniture design.

So, they have the same kind of it is revolved around the studio apartment on the free flooring spaces of the living style the living style and the paradigm was changing from Bauhaus the Gerrit Rietveld Schroder house we are seeing the change. And then in the Farnsworth house it is extreme where living space and all the spaces does not have any boundary, where so, the interior design on the interstitial design was designed, because of this contemporary studio apartment style.

And which acknowledge the spatial constrains, and also you see the modularity which is there in the structural grid; which we were seeing in the architecture this modular proper rhythm is there. And then it is also it is talking about the purity of the texture and the purity of the color; which we will also see in the industrial design.

In the modularity, we will see the fit for any spaces which is internationalism. So, the furniture will be designed in such a way that it this furniture should be fit for any kind of spaces any kind of volumes, and any style of room. Because they are eliminating all the ornamentation from the furniture, when you create a cube without any ornamentation you can place this cube or a box in any places, because it does not talk about a particular style of the previous era.

When you start making the ornamentation or some decorations, then it talks about a particular style and put different kind of colours then this should match with the

particular if this is these kind of ornamentation or some other ornamentation is there in the cube. Then these ornamentation should also be there in the other context, otherwise in in the room or the floor somewhere then it will blend with each other.

But when you eliminate the ornamentation, then this cube is fit for any context, because it does not talk about the particular style. Instead of this ornamentation if you put a Saracenic or Moorish ornamentation, then it should go with a Moorish style of design, or you put an Egyptian decoration it should go with an Egyptian style of building. So, if you do not put any ornamentation that will go with any style of architectural style.

Now, again same thing with the colour if you put a blue colour here then that will go with the blue tone of the building or the blue tone of the interior design the blue particular colour palette, but if you show the real texture or the true texture of the material then it will blend with any kind of spaces. Or if you put the gray tone which is black white and or gray, then it will go with any colour because black has does not have any colour and white has all the colours together and gray has equal amount of all the colours. That is why these gray tones the achromatic colour does can go with any colour palette. So, that is why this these colours are pure colours and the pure textures and the achromatic colours are used.

Now, against the obsession of ornamentation of the design as we were discussing because this is the internationalism in furniture design. So, all the elements all the ornamentations were eliminated from this design.

Now in internationalism style one of the pioneering industrial designer was George Nelson, who was the founder of American modernism.

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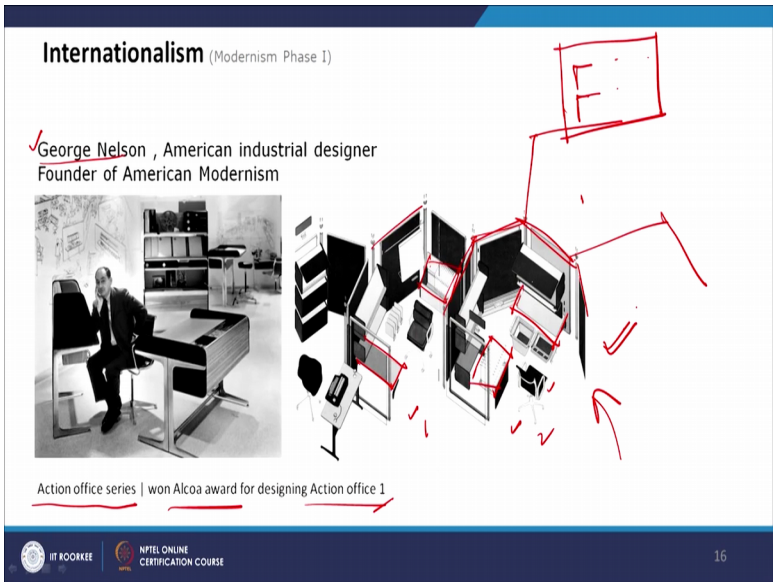

And you must have seen few of his designs already, because he is the first person in the in who have conceptualized the cubicles of office spaces.

Now, what happened and actually it started from the Chicago movement so, we have seen the office spaces has the free spaces also in internationalism style talks about the free flow plan, that is we have discussed free flows in the residential spaces, but in the office spaces also it is there. Till now the office spaces whenever a particular company purchases a office spaces they purchase the free floor. There was no their would not be any partition walls.

Now, whenever the employees go goes within the office they need the cubical. So, so all of you have must have seen the cubical. The first cubical of an office space was designed by George Nelson. So, he gave the concept of the cubical and all the necessary elements for a office worker to work within that cubical was given. So, this cubical is actually not a furniture it is a very small room, and all the furniture will be within that space.

So, it is designing it is a kind of extrapolating the design of a particular furniture. So, it is assembly of furniture which is creating workable space within the big chunk of free space. So, each and every employ will have this particular unit. So, this also talking about the modularity of the design, each of every unit will be the same thing, and each will have it is own working self independent working space.

So, one chair and few working days and file storage with work tables and chair, and other visual partitions so, that it can be hampered with the others. And so, it is kind of room which are there for one each and every employ.

Now, is each of these spaces if you look can be module, because you can freely add another element another cubical over here, you can add another cubical on the other side. So, it is modular in nature one module is there and then it changes.

Now, there is another concept of meta design we will discuss this after few slides. So, whenever you design a modular furniture based on the need of each and every person, based on the working style and based on the type of work each and every person is doing, there can be slight change which can be done. So, design is not fixed by the designer so, designers are giving few options to the users and users are selecting. So, if you look at the cubical 1 and cubical 2 there is a slight difference.

The storage is over here in the cubical one, in the cubical 2 the storage is over here. And then in cubical one instead of the work ah working space working space is on this side, and in cubical 2 the working space is on this side. So, designers is not fixing a particular design and it is leaving it is giving the free freedom to the users to customise the design according to their need. So, this is the design concept which is given by George nelson, and whose who say this is the action office series. And action office series one he have designed many other series of office cubicles.

When the this is the this design catalogue so, there will be different kind of office will purchase different kind of cubical. So, one cubical action office one which is the first design of his won Alcoa award for the new concept. This right now this concepts are very common in the office, but when he first visualise this concept of modularity, and customizable elements within the module according to the based on the need. And which fits into the contemporary international style of free space was a very innovative approach of of him. So, that is why he is very much celebrated in the industrial design fraternity and he is a founder of American modernism.

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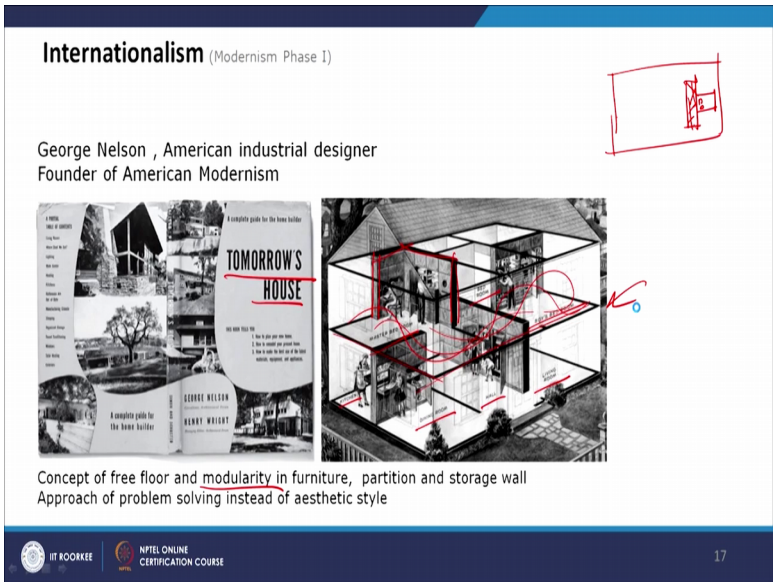

He wrote a book which is called tomorrows house and give the example of how tomorrows house will be will be envisioned. Now in this above this is the illustration, you can see a free space which is a box like space and that has to be divided. Within in the space it has to be divide with the furniture. So, this is the kitchen dining room hall living room, a boy's bedroom, bedroom, other spaces they are kind of flowing with each other, and he is giving a concept of storage wall or the partition wall which will divide. So, these is the partition wall, which will divide few spaces.

Even in the Farnsworth house if you remember, a Farnsworth house only has a storage cupboard which is dividing the bedroom, the not even the room the bed spaces. So, this kind of concepts he is also giving in the; and he have designed it in the in the industrial design domain.

So, and the modularity because the because of the modularity and studio apartment on the free space flowing space with in architecture, the this kind of concepts were evolving which is what he is designing designing, for the office spaces for the free flooring office spaces and he is give the cubical which is the solution for the free flooring office spaces he is giving a solution for the free flooring residential spaces which is the storage wall.

Now, he was also associated with the Herman Miller Company who have this company has many other famous designers like Noguchi, and was also associated with this company.

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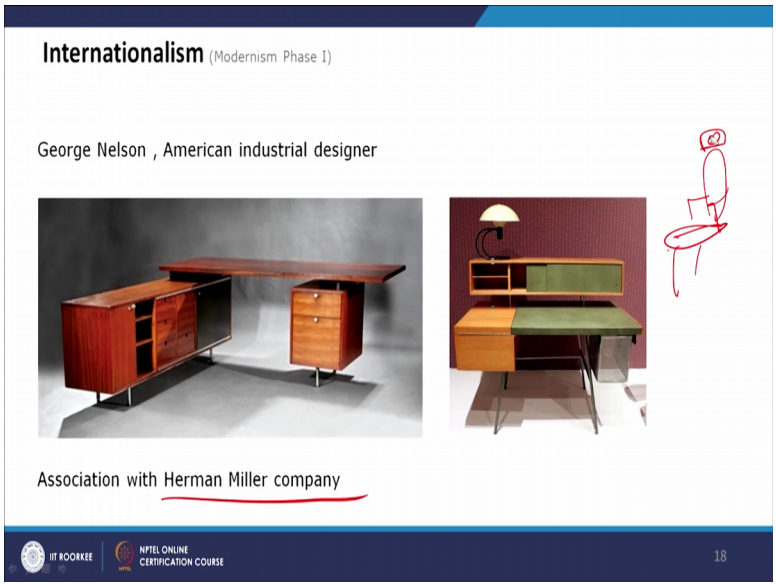

And this Herman miller company also designed a famous Herman miller chair which is which we see as a office chair, which is very agronomic in nature, and you must have seen that office chair; which is not designed by George nelson, but this Herman miller is very famous and is a very famous company in industrial design.

So, in this design this these 2 are designed by George nelson if you look at. So, this also has the similar vocabulary of what we have seen in architecture, this has a little gap and it also has a antigravity look, and this is the juxtaposition of different cuboids also the true materials, and different cuboids are interpenetrated by to by different plains which we are seeing in the Farnsworth house or the Barcelona pavilion is also in coming within the industrial design. And also the modular approach is there, and also here you will see that small the heavy volume is just supported by only 4 slender steel structure, and this heavy volume is just supported by 2 small lines which also gives a anti-gravity look.

This space is also given for this cantilever and which looks like a cantilever overhang, and also the true material texture is used. And here also if you see this the services and the functions are also visible from outside and that is not covered and the steeled the new material is also visible. Again you will see this floating element which is on top of this is not resting on the surface is again have given thus has the of sense of anti-gravity look which is there in the architecture.

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Now, this is the storage wall what he was giving in this concept of tomorrows house. So, this storage wall is a similar concept which he is applying in the office and this is the concept which is apply which is getting applied in the residential building. So, this is the storage wall one type of storage wall what he is designing which also has a modularity. So, in this storage wall he is also again giving the freedom to the customer to choose according to their need. So, this is a module and which is equal to each other.

So, if you look at this distance instead of this module, you can replace this module as well. So, instead of this you can have 2 of these, and these 2 modules as the same. So, you can instead of this design you can repeat this into inside this, you can play with according to your need. And it can also be this part can also be replaced by here, and if you need more close to assess it can be closed even. So, the openness and everything so, he is just giving an option of the structure, and the then everything is on the user.

Even in today's kitchenette and the modular kitchen, the same concept we have we use in the today's kitchen design. And this is one solution which is on top of the wall, and it can also be a this kind of modular cabinets, which are also we see in the modular cabinet which everything is closed. And this talks about the need of this today's life which is also one is is acting as a partition wall, and the next is like storage spaces which this poster, which is there for this Herman miller modular wall, this talks about what was the requirement of these all this thing to be stored. And it talks about the customers need of

storage, and what is the solution. So, this talks about this picture together in this part in this part it talks about the requirement and in this part it talks about the solution.

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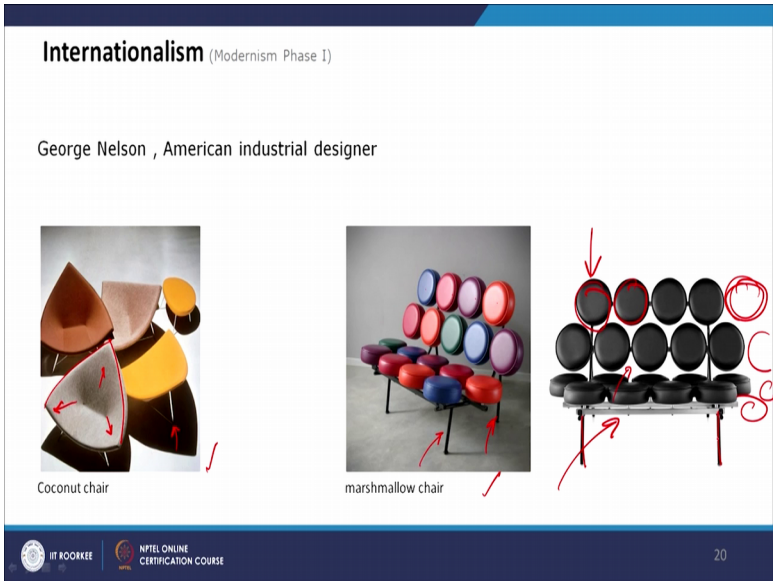

And now in a some other examples of George nelsons design. So, this is the coconut hair and marshmallow chair, both are designed under Herman miller's company's tag. And here also if you look at so, this chair is very minimal in nature. So, from top so, whatever is on this top is the same thing is there acting as an arm rest. So, there is no different design for the head rest and arm rest. So, it also talks about the minimalism, and it comes in different colour and it just a plate and this steel frame is the supporting one single plate.

Now if you look at the marshmallow chair, it is also has a modularity and marshmallow chair also can be elongated. So, if you add few circle more circles it can be elongated, and it can be a long sofa and if you delete it can be a single seated chair.

Now, it also comes in pure black which talks about internationalist approach, and the steel steel frames are visible. The structure system from outside you can see the every structure which is painted in black are visible, and that is the aesthetics of this chair. And it looks like marshmallow different; marshmallows are there which is act acting as a cushion. Here also you will see the pure geometric which is circle which is getting repeated and thing of solid and void and it is also has a light in nature, it is not a bulky sofa it is a very light weight and supported by only few steel members.

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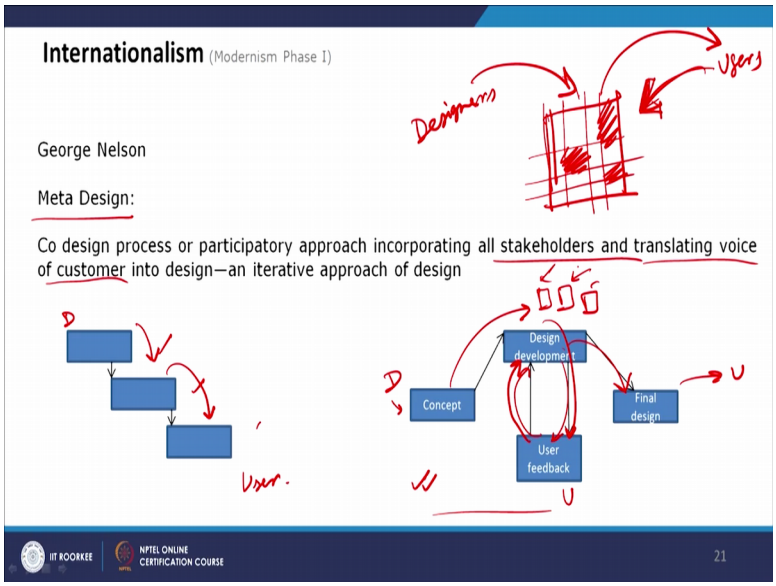

Now I was talking about the meta design concept, which encompasses so, designers and are not giving a particular solution which is very rigid. So, he is just giving some options where users cancel it and delete and replace some option according to their need. So, users need is kind of influencing the design. So, it is not designers are giving a design and it just feeded on the user.

So, users are giving a feedback to alter the design, and which is there in the cubical design and as well as the storage design. So, it is modular and then different elements are there. So, they can change it, and it can be add, it can be elongated it can be squeezed some modules can be added, and some modules can be deleted.

So, previous it was like a water fall model. So, designers is in visioning a thought and that is getting designed, and users are receiving it. Now this is the iterative model where stake all stake holders can translate their voice of customer or their own thought into the design. So, how this design model goes? So, this is the, this be a meta model designs model. So, designers are here, and this is the final design goes to the user. So, designers has first they envision they create the concept then develop concept of the design. Then they do not give it to the design users so, users also come here

So, they take the users feedback and they iterate the design, and then they show the design to again the to the users, and then they finally, design it and then the final design can come. But within that process so, it can also might not go. So, they can also give few

examples, and then leave it to the users and users can select few examples and make the make their own design assembling those a design things.

So, that is the concept and even in architecture today's architecture also in the post-modern architecture, this concept of co design or meta design or participatory approach there are different terms in design domains and architecture domain they all talk about the participatory approach of user and design collaborating and creating their design together. So, that gives the more sense of attachment to the with the design product with the user, because they have their own voice into the design, and they created to the need of the user much in a much better way, because this is different peoples need will be different, and that is how it has took it.

Because now, in internationalism that in one hand we are talking about the same thing has to be there, but in terms of that it cannot be accepted by all because if cannot be accepted by all, because every bodies need is different that is why instead of designing a full solid design in industrial design, they design in the module and few options, and then they give fix the international style into that, and then they users can assemble on top of the with that few options according to their need.

Now, there is other examples of internationalist movement, but as we were discussing that internationalist movement changed and also got translated into the later phases of modernism, where this stream lining and other elements are started coming. So, Noguchis is one of the architect designer and landscape designer and industrial designer. His in his example stream lining or the fluidity of the design which was in the which will come in the later phases of modernism. Where the form is again having an emphasis in the visual style is there, but still he is his style is from internationalism.

So, he he is from Japanese origin, but if you look at the purity of the material is there and in both the cases.

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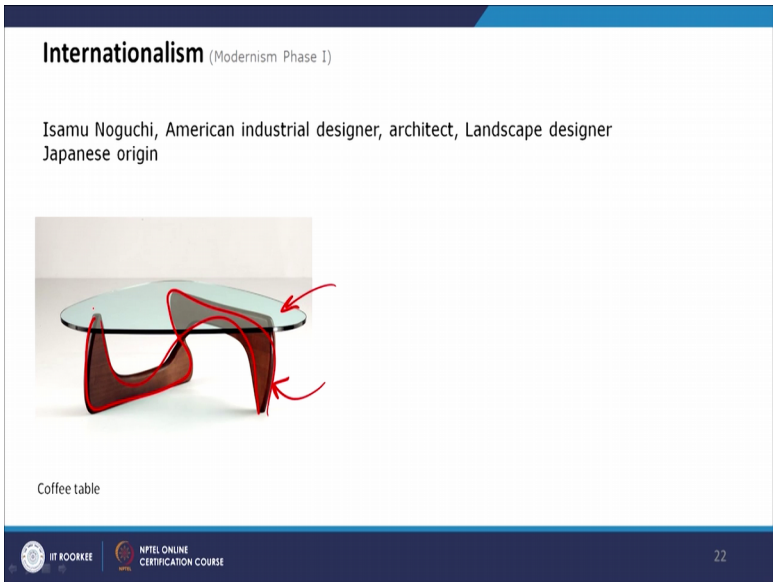

In streamlining which we will discuss in later phases. So, these kind of curves continuous curves are there which is predominantly there in the product design mostly. So, it talks about the ergonomics which we were discussing earlier in the previous when we were giving a brief about it so, it is also there.

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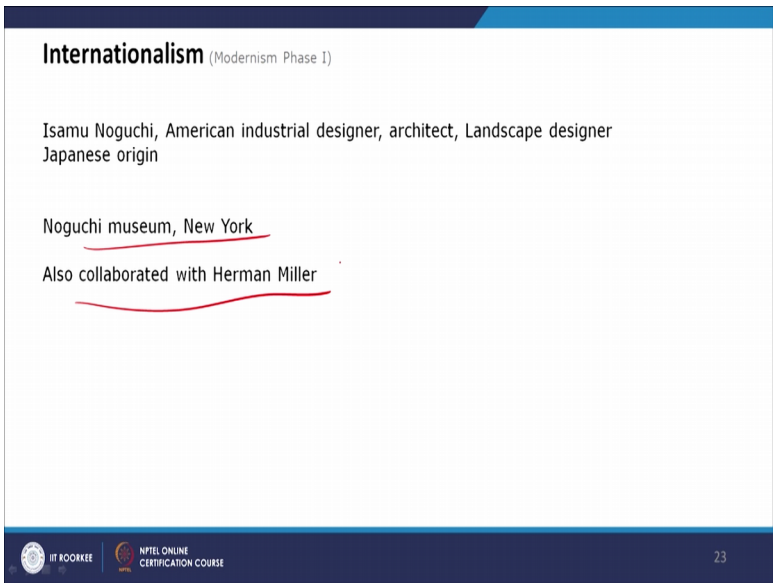

Now Noguchi has a museum in the New York, also his he again collaborated with the Herman miller whose a George nelson was also part of it.

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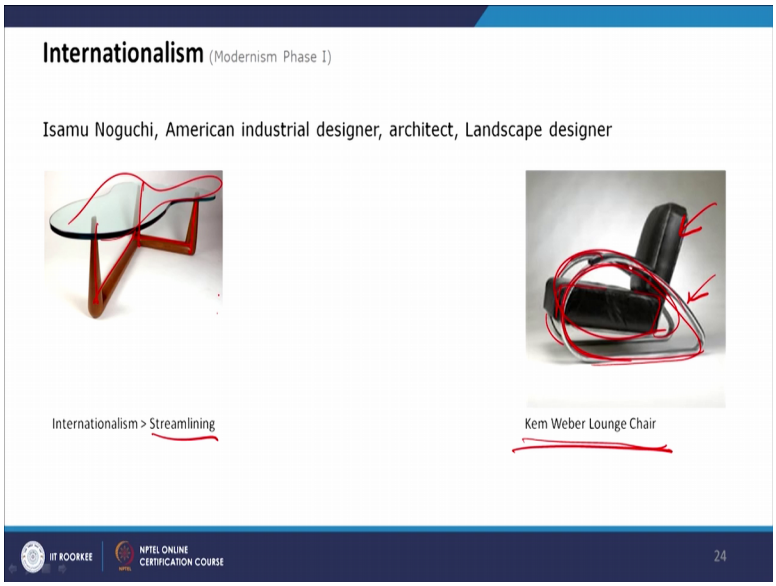

Now, in Naguchis design we will see minimalist approach which is there, but there is a fluidity added to it. Now this is not a internationalism style this is this is a yeah internationalism styles on different variant. So now, from internationalism style is actually called as we were discussing is a high modern or the late modern. So, all everything can be fitted into the internationalist style, but it is a little offshoot from the internationalism style which is steam lining.

So, stream in stream lining what happens? There is different curves are added which is non geometrical, not pure geometry and there is a fluidity in the design. So, this is Kem Weber Lounge chair, which has lot of similarity with the industrial with the internationalism, which is it is actually a part of smaller movement within the internationalism. So, here we will see the 2 material which is steel and black colour which is there, has some similarity with the Barcelona chair, but these curves are added. So, which is now which little different from internationalism.

So, Naguchis design is also something in between these styles.

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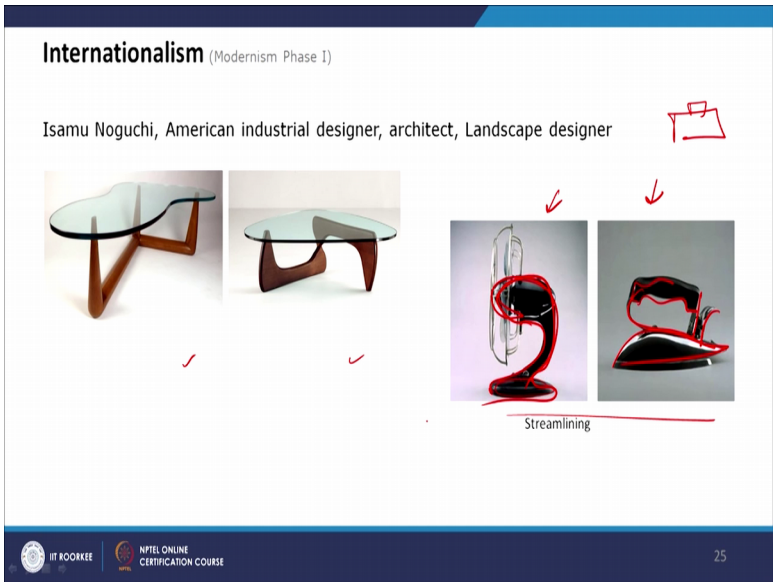

So, whenever architects design their style does not might not be particular one, particular style because this is a very qualitative thing and is very, very dynamic in nature and one architect gets influenced by other architect and or the designer. So, it is fluid and in one particular design there can be characteristics of 2 3 different movements design movements as well.

So, this is has these are the examples of other product design from stream lining. So, here also you see the industrial look, the new material and black and the stainless steel the pure materials colours and it looks about talks about the machine design and machine aesthetics. But not as the for the machine movement, for the machine movement for the machine movement there was no ornamentation and each and every elements were different, but streamlining everything blends together. So, in for the machine movement what will happen? One element will be just added with the other. So, we were showing the car in case of product design every element headlight and other things were just added and the car becomes the for the machine movements curve.

But here if you look at so, there is a visual correlation. So, this curve is blended with this curve, and proper design is added and this is the ergonomic design. So, the so, that people can hold it and this curve. So, these are all a different part of this fan, but the curve is together and this is creating one particular volume, which is there in the streamlining.

Stream lining has a kind of has also a similarity with the tensile curve and the shell structure which is there in the architecture while the shell structure; which is also the structural material will create a form like (Refer Time: 46:07) so, the form is not minimal. And also shows the structural stability and creates the aesthetics from this from the outside. So, this is something in between stream lining and internationalism movement.

This is also a landscape architect few of the examples in the landscape domain.

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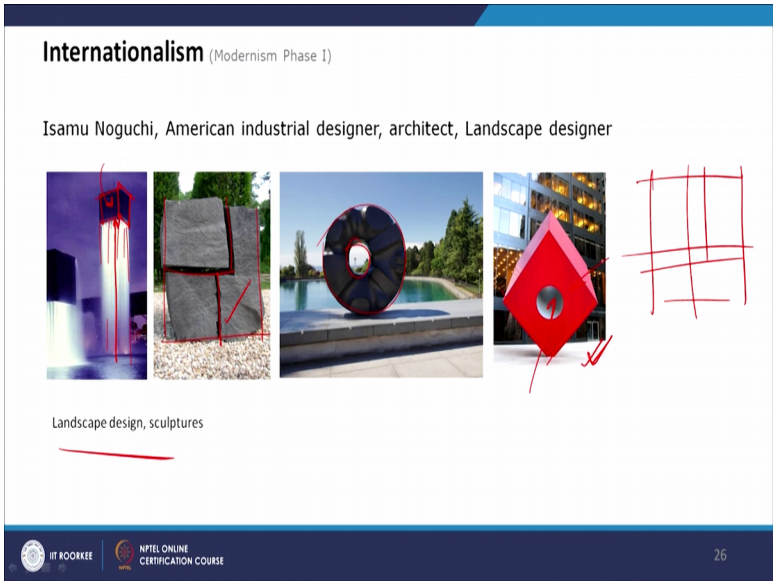

So, here we see the fountain which also has a pure geometry, in this case he is using pure geometry there is no different curves, and there is 2 different material which is a solid and a the water is flowing. So, actually the water is going from the pipe within inside when it is the fountain is on the water covers the pipe and this also has a antigravity look and pure geometry is like it is floating from this just by bottom. And also if you look at this is a landscape element and natural rock, but natural rock has also a look of a geometry it come it is trying to fit into a geometry.

The natural element is also trying to be a geometric element, and within that is like you can see the Mondrian's kind of dividing the canvas is also there in this design. And also if you look at this is the pure circle, and this is the pure cuboid penetrated by a cylinder this is this is there in the New York Noguchis this famous installation is there. And also

the color is red and this also takes a inspiration from Bauhaus as well because these are very close to each other.

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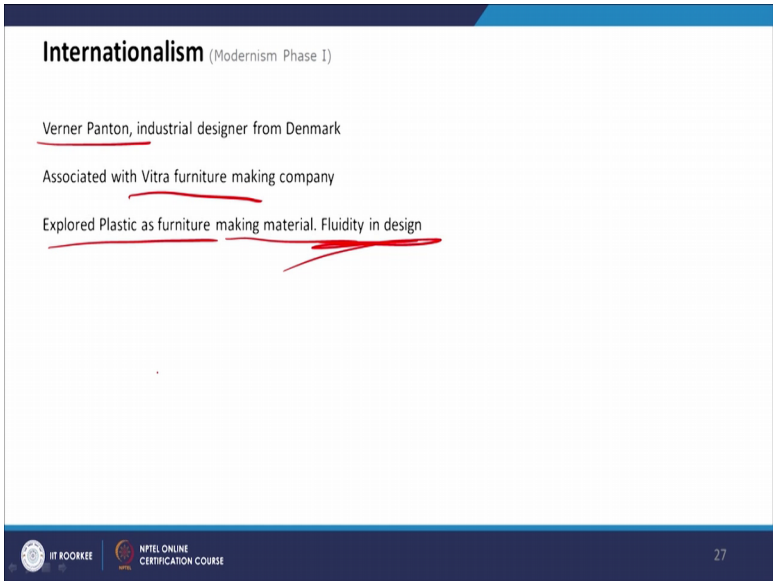

Now, Verner Panton is one of the famous designer and again Panton's design pantons chair will fall and some of the examples will fall under internationalism, and some will be kind of under streamlining. So, so it is not a different movements it is kind of a it goes hand. In hand he was associated with the vitra furniture company which is which is another again famous company. And he explored mostly with plastic as a furniture making material and also added fluidity in design, which is more closer to the streamlining phase, but also after late modern designer.

Now, in the when he is using plastic this fluidity of the plastic comes as an element and it is quite different from the industrial internationalist look.

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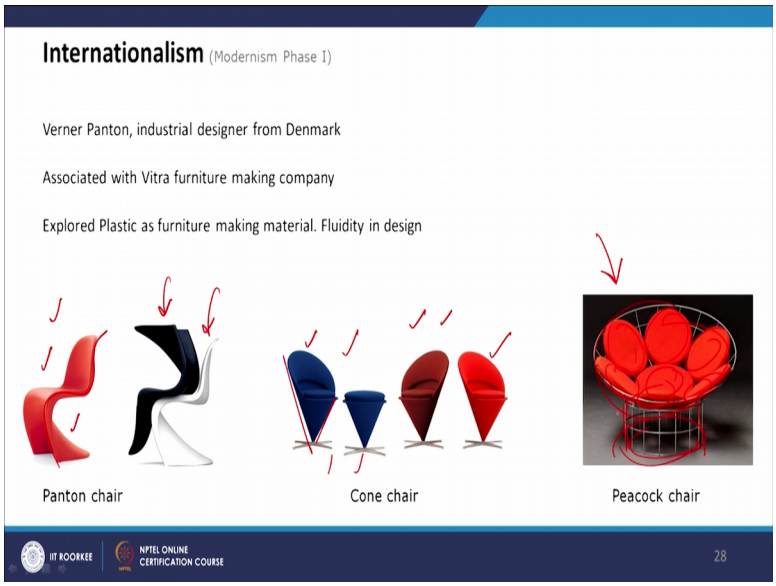

So, we will see some examples so, this is the famous Panton chair, and you see the this is this is definitely streamlining it is not internationalism at all. But it is also comes in black and white, but this colour is famous, and there is a one single fluid surface which creates the chair, which is which is called the Panton chair.

Verner Panton is known by this famous chair, but there are other examples as well by the Verner Panton. So, here he is exploring a pure geometric volume which is cone. So, this chairs and stool is derived from a cone which is a pure geometric shape. So, this is again it comes in blue red this pure colours, and then it is a peacock chair. So, a peacock's visual identity like it is tail is derived in a very simple geometric form, and here also this is assembled with the steel, which is not painted and then cushions which are pure geometric circles which creates the chair. And this is also a part of a hemisphere, and this is a part of this is a cylinder.

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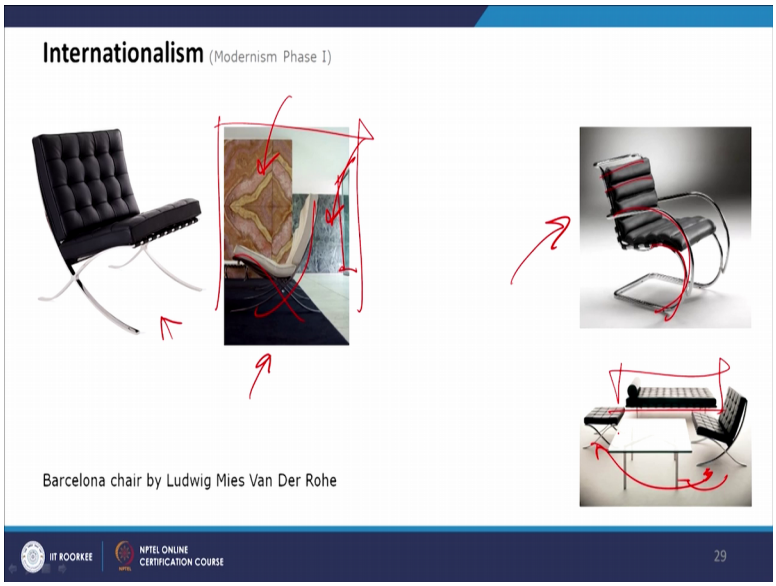

Now again we earlier we have discussed about Barcelona chair which is designed by Ludwig Mies Van Der Rohe, which is within this Barcelona pavilion this is the photograph from the Barcelona pavilion where you are seeing, different textures and this glass curtain wall. So, this we have already discuss this comes also on to the internationalist movement of furniture design. And these are some other Furniture's which is designed by Ludwig Mies Van Der Rohe. So, here also you see half circles and then pure it is very minimal in nature and the stainless steel black that kind of visual palette it is there.

These are the other set which is which can be assembled with the Barcelona chair.

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Now Corbusier also designed few of product design, and in villa la Roche which is in Paris these kind Corbusier's own design of chairs are there. So, here if you see you see this this chair is their, and you see a way of streamlining because if this curve it is not a pure curve, but this is something in between streamlining and modern internationalist movement. Again I am telling again and again that stream lining is not a very separate movement which falls under the internationalism movement as well. And this is the le Corbusier chair the chair is absolutely coming out of a cuboid some volume of the cuboid is taken out and this chair takes it is form. And it also comes with in the this colour tone black and then steel is added from outside.

So, which is also there so, if you look carefully this chair is also there in the villa le Roche. So, in the next class onwards we will discuss the lateral later phases after internationalist movement with some examples.

Thank you.