

Contemporary Architecture and Design
Prof. Saptarshi Kolay
Department of Architecture & Planning
Indian Institute of Technology, Roorkee

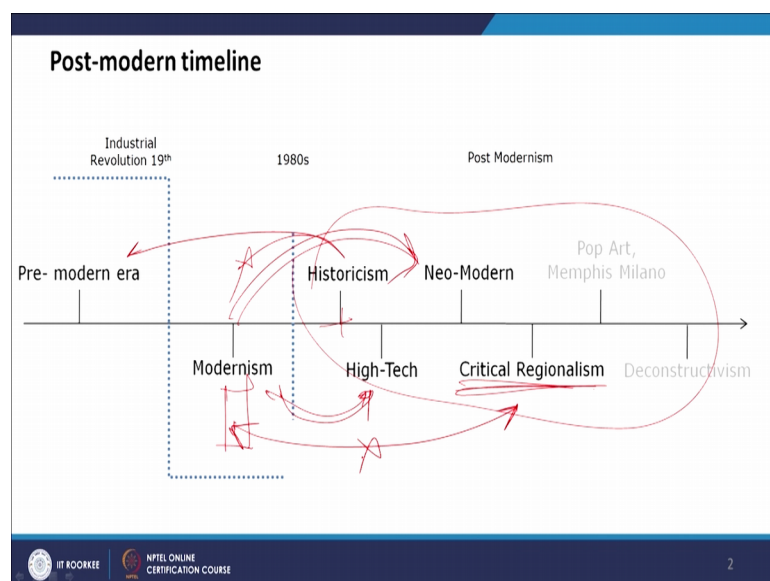
Lecture - 34
Phases of Post Modern Architecture – Critical Regionalism

Welcome students to the online NPTEL course Contemporary Architecture and Design. We started discussing about the post modernist architectural movements. So, today we will discuss another post modernist architectural movement which is critical regionalism.

This also, this architectural movement has a reaction this is a manifestation of a reaction against modernist movement which is internationalism. So, in internationalism was about international style which will be followed everywhere and a particular visual style which is previously set visual style which can be designed in any context and the over powering use of steel and glass and a particular color which was set from before was, has to dominate.

But in critical regionalism the main idea was it will it has to respond to the context to the surrounding and it has to blend the design element, it has to take the design element from the nature of the space or the culture of the surrounding into the design.

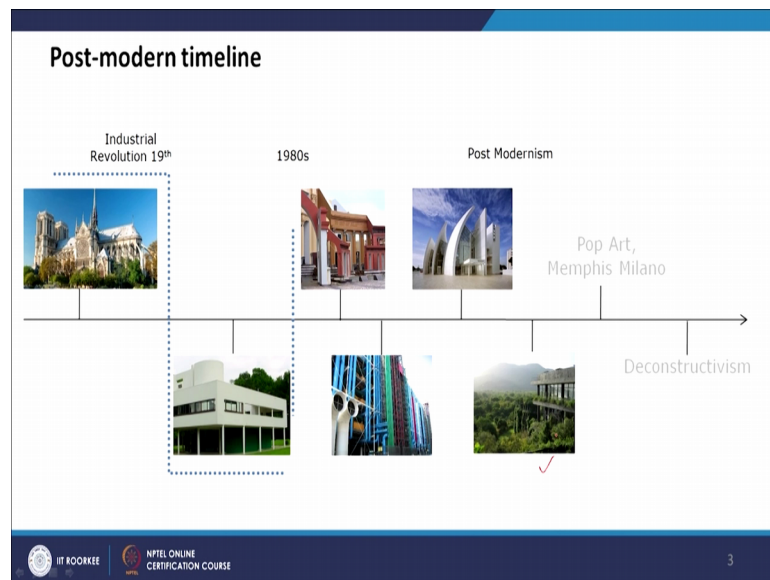
(Refer Slide Time: 01:39)



So, in this time frame. So, this is actually not a time frame. So, all these element post modernist movement started coming mostly parallelly with each other. So, this is the critical regionalist movement where we have seen how these movements were reacted with the modernism historicism did not acknowledge modernism it was it went past high tech change the modernism. So, as the neo modern it was changed the modernist movement.

High tech change changed the different style of modern phase of modernism neo modern changed the different phase of modernism. Critical regionalism have is a reaction against the modernism this is absolutely opposite of one of the particular style which is international style of modernism.

(Refer Slide Time: 02:28)



So, this is design which falls under the critical regionalist movement it is designed by Geoffrey Bawa of Sri Lanka. He is an Sri Lankan architect and his designs are emerged from the southern Indian and Sri Lankan style of design from Chettinad style of architecture which is a traditional architectural style of southern part of India and Sri Lanka.

And then also the local climatic context and the local designed elements were amalgamated within the design. So, this design which looks like it emerged from this particular place. So, it you cannot take this building anywhere and put the building it will

not go with the context. So, it his design for that particular site only which is opposite to the internationalist movement internationalist building can fit into any different places.

(Refer Slide Time: 03:31)

Critical Regionalism

ARCHITECTURAL FEATURES

- Against the place less "Internationalist" movement of Modern Architecture.
- Critical Regionalism : Sense of **place** > meaningful space making & contextuality: region, culture and space specific design >(Timeless factor)

IIT ROORKEE | NPTEL ONLINE CERTIFICATION COURSE | 4

So, the architectural features are against the place lessness of internationalist movement. So, internationalist movement does not have a place. So, there is a particular visual style, style is dominating over place.

So, there was a fixed style that these are the colors white, black grey has to be used and then you can use the main three primary color, the main this steel and glass has to be the main element and then it should have a anti gravity look it should be cuboidal, all these previously said visual design parameters was there in the internationalist movement. But this was devoid of a place. So, anywhere you put the design it will be like that. So, as the Seagram building was again the same of though it is in front of the sea it is the same and then Farnsworth house and Johnson house also has a similar kind of design palette.

So, it was against that movement of international movement of modern architecture. Now, critical regionalism has a sense of place which is opposite to this and meaningful space making and contextuality. So, what is there in the context that will be inferred, that will be inferred from the context and that will be reflected into the design. So, the regional cultural and special significance of the design is there. So, there is factor of the place, and there is the factor of the time because what time it is. So, the regional cultural

people's behavior and this spatio temporal elements which is there of this particular contextual spatio temporal elements will be reflected into the design.

(Refer Slide Time: 05:14)

Critical Regionalism

ARCHITECTURAL FEATURES

- Critical regionalism is not just regionalism (not Vernacular architecture);
Time specific (contemporary vernacular): consciously time specific at the same time consciously denying the universal visual vocabulary of 'internationalist' approach. > (Time bound factor)
- Experience design: a Bottom-up approach of Design (Post-modernist) >
Users centric, emotional design

The slide includes a diagram with red hand-drawn annotations. It shows a rectangular box at the bottom with an upward-pointing arrow, and another rectangular box above it with downward-pointing arrows. A circle with an upward-pointing arrow is also present. A checkmark is visible in the top right corner of the slide content area.

IIT ROORKEE | NPTEL ONLINE CERTIFICATION COURSE | 5

Now, critical regionalism is not just regionalism, regionalism is vernacular. So, it is not vernacular architecture. So, it will take the vernacular architecture as the mood board and the visual board and then it will change the vernacular architecture into the context of post modern architectures.

So, the that is why the time factor is coming it is not a replica of the vernacular or the aboriginal or the rural architecture or the traditional architecture. It is not just the traditional or vernacular architecture and the replica in the in today's time, it was a contextual change there will be a contextual change and it will be fit within the context of today. But the inspiration will be taken from the vernacular as well as it might not take the inspiration of vernacular or traditional it might take the inspiration of the local surrounding or the nature of that particular design as well.

So, the time specific, it is time specific it is the contemporary vernacular. So, vernacular will be changed into the contemporary that is one aspect of critical regionalism. The consciously time specific at the same time consciously denying the universal visual vocabulary of internationalist approach. So, it is a time bound factor because this is denying the internationalist style which was going just before that. But it was also taking the special factor into the thing. So, the local context is coming as a special factor and the

time bound context is coming as a temporal factor. So, these two spatio temporal factor is changing the vernacular design into a contemporary vernacular design.

So, this contemporary part is there, that is why this is not a replica it will be changed according to the today's need of behavior and peoples need of function within a building. So, the experience of the building is it is a bottom up approach of design which is post modernist or users centric or it is a emotion of people will be added within the design. It is not devoid of a people's perception and people's behavior like the internationalist movement. So, there is emotional attachment will be there because there is if you are putting the local elements or the natural surroundings into the design. So, there will be a connect with the users with the peoples that was the concept of post modernist approach, so there was no previously set design parameter and designers are imposing that into the built environment. And so, there will be design which comes from the people's behavior peoples culture and also the nature will be amalgamated within the design.

So, that is process of bottom up approach, top down approach is when there is a theory and that comes as a design, but bottom up approach is this observation and then the design. So, what happens in top down approach? So, there will be a previous theory like international like most of the modernist approaches is the top down approach. So, there is previously said theory that this has to be like this. So, that was there in the internationalist movement.

So, there was said design palette said design color and there was a said design principle. So, that theory came first and then based on the theory the designs are coming on the particular side. So, what the theory say is and that will be the manifestation of the design will be from there.

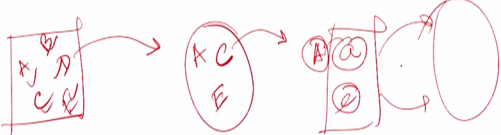
But in critical regionalism what is happening. So, there was no theory. So, it will be the only thing is it will respond to the context. So, first they, they will not, architects will not start with the particular visual style they will look at what is the local visual style, what is the people's behavior, what kind of elements are there and those will create the visual palette. So, there was no previously said visual palette and visual design. So, from these context and what all these elements will create the design and then the final design will come. So, this is the bottom up approach of design there is a difference between top down and bottom up approach of design.

(Refer Slide Time: 09:25)

Critical Regionalism

ARCHITECTURAL FEATURES

- The terminology first generated by: **Alexander Tzonis and Liane Lefaivre** : "critical regionalism need not directly draw from the context; rather elements can be stripped of context but used in unfamiliar ways. Here the aim is to make evident a disruption and loss of place, that is already an accomplished fact, through reflection and self-evaluation"



6

So, architectural features the terminology first generated by Alexander Tzonis and Liane Lefaivre ah. So, they are saying this critical regionalism need not directly draw from the context rather elements can be stripped of the context, but used in unfamiliar ways.

Here the aim is to make evident a disruption and loss of place that is already accomplished fact though reflection and self evaluation is there. So, what they are saying is, so in this bottom up approach, they will see the elements from the context. So, suppose there is a element these elements are there already there in the context which will be collected from there. So, few of the elements which is more dominant is collected and sorted here and, but it will not be it will not be directly added there.

So, elements can be stripped of the context and it can be changed into their own ways. So, there can be a fusion, and then it can change in a different way and then it can be translated. So, it is not a direct thing there can be disruption, then can it can be in a unfamiliar way of designing, but there will be a contextual connection. It will come from there, but it is not a direct manifestation it can change.

With other examples we will see what all Lefaivre and Tzonis is saying when we look at the examples.

(Refer Slide Time: 11:16)

Critical Regionalism

ARCHITECTURAL FEATURES

- The terminology first generated by: **Alexander Tzonis and Liane Lefaivre** :“critical regionalism need not directly draw from the context; rather elements can be stripped of context but used in unfamiliar ways. Here the aim is to make evident a disruption and loss of place, that is already an accomplished fact, through reflection and self-evaluation”



Centre for Development Studies and Activities, Pune
Christopher Charles Benninger

IIT ROORKEE | NFTEL ONLINE CERTIFICATION COURSE

7

Now, here if you look at the example which is designed by Christopher Charles Benninger who practices in India and his design in centre for development studies and activities in Pune.

So, if you look at. So, this was the element which was there in the visual mood board which is the hill, local hill and its color is grey and sometime this local hill if you look from closer it has this brown color. So, this is the Pune's hill which has stone color is like that.

So, when he is designing this he is using he is using the texture the stone texture which matches with that and the roof texture which also matches with the hills. So, he is taking the inspiration from hill, but he is not making a hill, it is a building and which is which has a similarity with the hill. So, it is it is local it is its taking the context its stripping away the elements from the context and putting it in a different way, but visually some connection it can be a visual connection, it can be a conceptual connection and functional and behavioral connection ah, but this connection is there. So, this design is set for that particular back drop.

Now, these hills if you look at, so there is irregular lines. So, in the roof line is also irregular different lines are there to match with the natural set up of the hill. And then this connection where you can see this from here you can see the setting sun. So, it is has a particular angle and this is giving the particular (Refer Time: 12:55) towards the hill.

So, these connections and the lines and access is coming from the particular set up of this design but it is not a exact thing what is there on the surrounding its changed and totally different paradigm of design is evolved from this context.

(Refer Slide Time: 13:26)

Critical Regionalism

ARCHITECTURAL FEATURES

- Critical Regionalism as explained by architectural historian & theorist **Kenneth Frampton** in "*Towards a Critical Regionalism: (Six points of Architecture of Resistance* *": "how to become modern and to return to sources; how to revive an old, dormant civilization and take part in universal civilization".
- Paul Ricoeur 'history & Truth')
- Adoption of Contemporary style critically (Universal progressive qualities: time + Values driven from geographical context of neighborhood: space).

IT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 8

So, another Theorition Kenneth Frampton explains the critical regionalism in his in his writer. So, critical regionalism is as explained by architectural historian and theorist Kenneth Frampton in towards a critical regionalism six point of architecture of resistance.

He talks about how to become modern and to return to sources, how to revive an old. It is talking about dormant civilization and take part in the universal civilization that is a this is a written by Paul Ricoeur in history of truth. He is taking the inspiration from his quoting Paul Ricoeur and then he is coming to the six point of architecture will discuss that how he is describing critical regionalism from his point of view.

So, he is telling adoption of contemporary style critically which is which is the process of critical regionalism. His universal progressive qualities which is time plus values driven from the geographical context of neighborhood which is space if you blend together then it will be a critical regionalism. So, it is not just a special factor is this. So, there is a temporal factor which is the contemporary.

So, it is a universal progressive qualities which is there in the contemporary architecture that is why it is the part of the contemporary architecture it is not vernacular architecture. And then values the concepts and the philosophy and the visual and then people's behavior or the nature natural surrounding will be taken from the geographical context. So, geographical context includes the nature or also includes the people who live in that surrounding and their cultural and social behavior and everything which comes from a special context. So, there is a special and temporal both the context has to be there in the critical regionalist style.

(Refer Slide Time: 15:19)

Critical Regionalism

ARCHITECTURAL FEATURES

Kenneth Frampton's Six points for an architecture of resistance :

- ✓ • Culture & civilization ✓
- ✓ • The rise and fall of the Avant Garde ✓ (Modern)
- ✓ • Critical Regionalism & World Culture (Post Modern)
- ✓ • The Resistance of the Place-Form
- ✓ • Culture Vs. Nature: Topography, Context, Climate Light & Tectonic Form
- ✓ • The Visual Vs. the Tactile

Space + activities = Place

IT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 9

Now, Kenneth Frampton in his six point of architectural style of resistance talks about these points which these are the chapters. So, you can you can read the his writer. So, these are the paragraphs heading and then gradually together with six writer headings he has he is talking about critical regionalism, what is critical regionalism what is the meaning of critical regionalism into the today's context.

So, in the first paragraph he is talking about the culture and the civilization, how the culture and civilization started forming and then rise and fall of Avant Garde which is a Avant Garde which is a part of the modern movement. So, modern art deco and art nouveau how they have started radical movement which is because Avant Garde style, Avant Garde style was very radical and it was it had has a particular set of norms and there were many of Avant Garde movements De Stijls part of it and then its it there was a

rise, but it collapsed. Why it collapsed according to him is because it did not take people's voice it was a radical it was a top down thing design style there was radical visual style and that was that was there and we did not have any social contextual content element into the design.

Now, in the next stage he is talking about the critical regionalism and the world culture how critical regionalism started flourishing in the flourishing in the world culture from the post modern era, so modern era. And the resistance of the place form, so there was a when these two things started then the built environment and the in this stanza he is talking about the built spaces in the urban form started to changing because and there was a modern and then modern buildings were there, then the post modern buildings are there and specially this place form which is the public (Refer Time: 17:28) design started changing and then people's voice like place making. So, this is a this is not a space this is the place.

So, space is becoming a place which that is becoming the form of a like form of a city which is creating a mental form or mental image of a city which is coming from the Kevin Lynch this five point elements of imagability, like this plaza elements the nodes which creates an impact of the visual in the mental frame of mental model of a particular urban form.

So, this and these when this places are this as we know space plus activity equal to place. So, when it can be a particular 3D space when you add people's activity. So, people's layer is added into the space then it becomes a place is a memorable space people remind that place like particular there is there is a connection within the memory of the people like connote place is a place. So, it is it is not just a space people remember that place in the Delhi. So, that has vibrant activity going on there is a particular characteristics that becomes the place. So, there is a people's activity and this people centric design is part of a of the of the change what he was talking about then the culture versus nature.

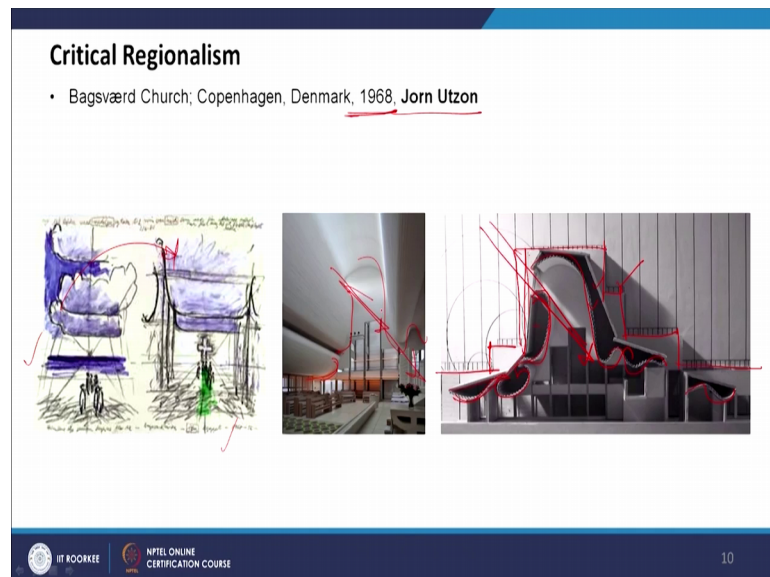
So, it is not culture on side and nature. So, culture and nature both impacts the place making in the urban design and or in a much macro level planning level, but this also impacts in the in a critical regionalism way this also impacts in a building level.

And the things which are impacting is topography what kind of land topography the contours are the context and this context is also people's context and this their socio

cultural behavior and their particular way of thinking, and the climate and light, and a tectonic form which is the which is not topography. With the tectonic what is the material of this particular stone or earth like the tectonic forms was taken as a inspiration in Christopher Charles Benningers this design in Pune.

The visual and tactile, so it is not visual it is also the tactile like for example, the stone is gives a tactile form like grass use of grass stone and different materials gives. It is not just a visual it is also tactile or the haptic or the sense of touch will also evoke this contextual connection.

(Refer Slide Time: 20:39)



Now, one of the example of critical regionalism is this church by Jorn Utzon. Jorn Utzon also designed one particular of this Sydney opera house in Sydney, which also sets in the particular settings which is near the water body, it is it is like a flower or this the like a lotus or like a sailing a boat.

So, that is also connecting the context. So, Jorn Utzon's if you look at this design time from its quite before. So, when the critical regionalist approach was coming up even Kenneth Frampton write if you read the write up to in the six point of architecture resistance, he have used this example of Jorn Utzon's design to conceptualize the to write the critical regionalism. So, this started the critical regionalism in the design.

Now, if you look at, so this kind of design taking from the nature was not it is not critical regionalism is not just the first because if you look at the prairie architecture and organic architecture they have responded to the surrounding as well. But that did not carried forward in the high modern or the internationalist movement that stopped and then different movement started coming. So, critical regionalism also in that way has a similarity with the prairie architecture and organic architecture which talks about the connection within the from the nature and architecture should evolve from the locals context.

Now, this town hall in Finland which is designed by Alvar Aalto who is one of the famous critical regionalist architect has a connection is comes under the this particular movement.

(Refer Slide Time: 22:30)

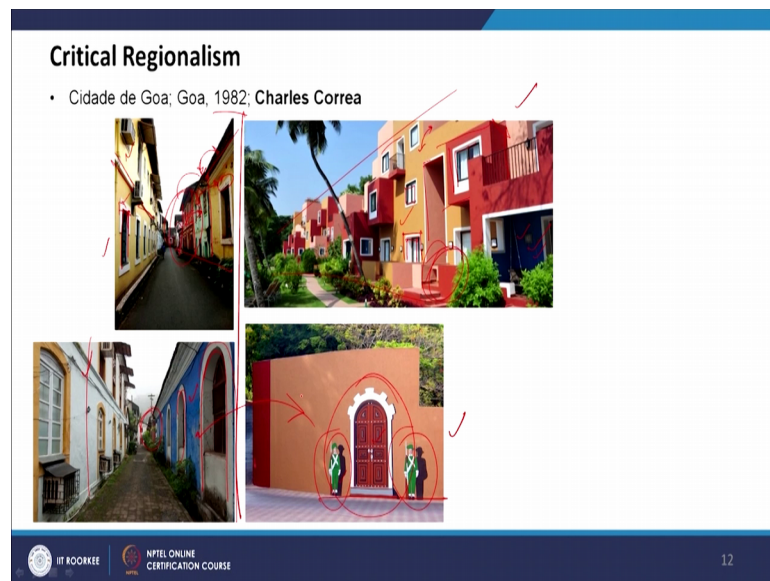


Now, if you look at, this is a entry of this town hall and this is the tactile connection from the nature to this inside of the building. So, there is a fluid amalgamation between the outside to inside. When you step on this grass land which is if you look at, so this is a grass and it is under the natural surrounding and all these coniferous trees are there. Now, when you start entering the building it is also the nature is coming with you. So, it is not just one particular line from outside this is nature and then inside this is a man made. So, there is a free transition between the nature to the building. So, these grass are giving the tactile context of texture which is coming within the built form.

Now, this if you look at the building. So, this is a exposed brick and a lot of wooden work is used in the building which was which is giving an art they look with the which also connects with the nature. So, these are the color which connects with the nature not the pure primary colors. This green, brown, these are the tins these are call the art tins which connects the nature more strongly with the blends the nature with the building.

Now, this is if you look at the plan of the building which has which comes from this traditional European court and tower model, so the of a civic center. So, this is the town hall which is a civic center the traditional European civic center has a court. So, there is a court and you enter towards the courtyard and then there is a tower. So, these are the traditional model of a civic center which he followed and the traditional material wooden brick is giving this design. So, that is how this is blending the concept of traditional court and tower model of a civic center into the design and becoming a example of a critical regionalist move design.

(Refer Slide Time: 24:42)



Now, this is another example which is in India which is designed by famous architectures Korea in 1920 which is Cidade de Goa this is the design this is the this is the hotel in Goa and which is taking inspiration from a Portuguese colony of Goa. So, these are the Portuguese colonies photograph from Goa. So, if you look at the Portuguese colony this is making a street facade, street facade are the facade when the different buildings,

different buildings of different people different property of building are joined together and then creating a linear joined façade.

So, these are the different peoples building they are joined and their treatment is different, but they have a visual simile what are the visual simile. So, they have a white border on top this kind of line is going from different floors, but there is a dissimilarity because each and every people they have a different color. So, this dissimilarity also there and similarity is there. So, here also there is a one side there is a circular and sometimes it is also can be rectilinear, but the thing is there has to be a border which is white border which goes in which is there in the Portuguese colony. So, he have taken this in the and change it into a more modern way. So, this circular and ornamentations on top of this are deleted and became more modern and this white border is coming in everywhere in the design.

And also there is a the to break the break the monotony there was different different peoples buildings are different. So, to break the monotony he is not following this particular street facade and he is just changing the playing the breaking the monotony with this solid and void. So, there was a monotony was braked here by the color he is breaking the monotony with the solid and void.

But there was also break with the color, but more or less the similar color palette was used with some accentuation darker color tone and sometimes this blue which also is used in the Portuguese colony and most of this colors are taken from this Portuguese colonies building. So, these colors are quite similar and taken directly from the Portuguese colony.

Similarly, within the gate also this is just a painting which is how the Portuguese traditional doors, are the doors and with the guards are there. So, this is just a painting and this is not a door this is just a wall treatment is there, that is why this is the post modern thing. So, this elements of designs are also added into that and thus gives a connection with the Portuguese colony into the design of this hotel.

(Refer Slide Time: 27:21)



Now, another design of Charles Correa Jawahar Kala Kendra in Jaipur, it is designed in 1991. So, the concept of Jawahar Kala Kendra's plan was evolved from the Jaipur's city plan which is designed by Vidyadhar the architect of the city planner of the Jaipur. So, there was one side there was a rework. So, this coming from a nine squares creating the Jaipur's plan, but because of this rework one square is added on the other side and this is coming from a concept of a Navagraha which also he have Charles Correa have used.

So, one side when it is the people enter one cube one cube which is part of the [FL] is removed and shifted here to make courtyard through which they can enter the building. So, this which is also done in the Jaipur city plan. So, one side from one side Jaipur's have shifted one cube and he have shifted this to make a gate way to the design and all these [FL] nine [FL] are there in the design. So, this also has a the concept of the traditional Indian culture and if you look at the, and this [FL] signs are there in the design and the center is the sun and then the style of this design if you look at all these elements the Charles works are taken from the Jaipur's, Rajasthani style of design and all these broken works is also a walls which is coming over from outside gives the sensation of the fortress of Rajasthan. And the sand stone cladding also has a connection with the Jaipur's color palette the pink sand stone.

And, but if you look at this Charles and doors these are not ornate like the typical Jaipur's door or like this these kind of doors it is a very modernized and just a rectangular door,

but and also the Jalis of jharokhas are, jails of jharokhas are change into a more modern which is a cuboidal elements. But still you can see the connection from this how this elements of Jaipurs has translated into a more modern concept of design.

(Refer Slide Time: 30:10)



There is another example of Charles Correa in Kolkata. So, this is a city centre of Kolkata and the Kolkata's context of cramped and the Kolkata's context of these streets. So, these are the if you look at this traditional this the street shopping these are the traditional ways of shopping, but the shopping mall generally has a atrium and around that it will be a glass box that is the general concept of shopping mall, but he have not design that. So, these are the trees and so these are actually the black street floorings which looks like a street and if get a ambience of a street shopping into the shopping mall.

And also if you look at the plan this khund which is design, design on the centre takes if this is the khund which is near this cross section of the road. So, people can come from this and that is also coming as a concept of a place making from post modernist approach of urban design. So, this is if this is the road and this part is given for the people and people can come and sit. So, there is no shops over here and people can just sit and then talk to each other that is also a culture of from the locality which where people love to talk to each other. And then this part which is given to the place of Urbanarium is creating the place of memorable place at this shopping mall.

(Refer Slide Time: 31:36)

Critical Regionalism

- Tadao Ando
- Zen philosophy (Buddhist principle): ✓
 - ✓ Minimalism (social reform, way of living)
 - ✓ Emptiness (spiritualism, serenity)
 - ✓ Solid and Void (positive and negative spaces): yin yang

The slide features a red hand-drawn yin-yang symbol to the right of the text. At the bottom, there are logos for IIT ROORKEE and NPTL ONLINE CERTIFICATION COURSE, and the number 15.

Then another famous architect of critical regionalism was Tadao Ando he is from Japan. So, he his philosophy are coming from the Buddhist principle of Zen philosophy. So, when he is taking the inspiration from a Buddhist philosophy which is Buddhism is followed in Japan, so then he is connecting the building with the locality because that is the principle which is followed in that particular area.

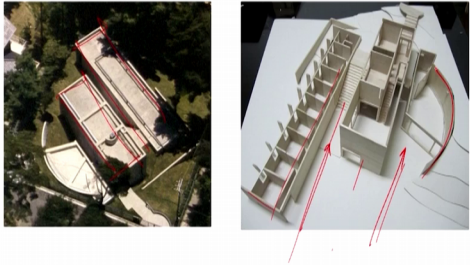
So, that that is how it can also be a philosophical connection which is coming from that particular context. So, context can be of anything which is dominant on the particular area. So, the from this Buddhist, Zen philosophy he is taking the minimalism and social reform and the way of living as a particular concept. And the emptiness of the spiritualism and the serenity and this emptiness to show this emptiness he will connect this he connects the nature with the with the building and this spiritualism and serenity comes through the nature natural elements bringing the sun sunlight or the other natural elements like water into the into the design.

And then solid and void which is a positive negative thing of yin and yang is also a part of his design philosophy which is all coming from the Buddhist principle and the other philosophy.

(Refer Slide Time: 33:13)

Critical Regionalism

- Koshino House, Tadao Ando



IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 16

So, this is a Koshino house by Tadao Ando this here also if you look at. So, this is a rectilinear building and this rectilinear building is not this rectilinearity is not coming from internationalism this rectilinearity is coming from the Buddhist philosophy of minimalism which is the local concept and then and that is how it becomes a critical regionalist he becomes a critical regionalist architect. And then this solid and void if you look at this building the solid and then the entrance is void and then solid and again void is created in this design.

(Refer Slide Time: 33:48)

Critical Regionalism

- Koshino House, Tadao Ando



IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 17

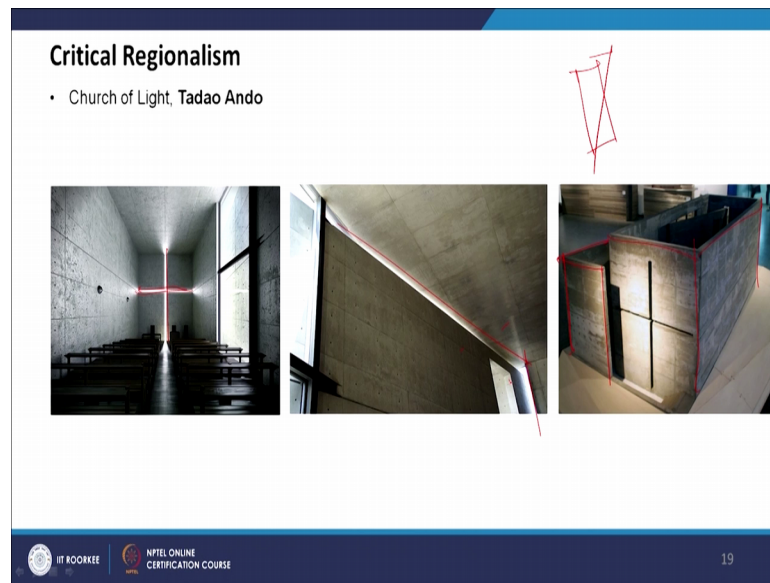
And then in his design also if you look at the tectonic plane of this terrains are blended with the, with his design and his design is following the terrain land and the contour of this design.

(Refer Slide Time: 34:03)



Now, the lights are lights play very predominant role in a Tadao Ando's work. So, light has a lot of emphasis in his design. So, the way he is taking the outside light that becomes a design element and in this space creation of space light plays a very important role in the design. So, these patterns, these patterns on the floor and the wall is created by the on the roofs are created by the light he is taking from outside. And all these slighter lights are natural lights, these are not artificial lights the sun lights are creating the pattern within the design.

(Refer Slide Time: 34:42)



So, this is church of light which is designed by Tadao Ando again and this church this is the church and if you look at the church. So, this cross which is in the in the church we will look at the cross of the Jesus is not a cross, this is just void in the design and from outside the light is creating the pattern which is the cross. So, here from outside the light is creating the cross and so nature is blending with the design and that is what this is he is taking nature the natural context in to the design and that is creating the light in the design.

So, there was a example which was designed by Jorn Utzon that is also of the similar concept. So, this design I did not discuss this in detail this is this is also a church in Copenhagen. So, what Jorn Utzon; from outside this is a rectilinear building. So, you will see from if you look at the exterior building. So, this will be this so this is a sectional model. So, within this building, so these kind of elements are created in this building. So, this is again, double roof is created. So, this is not a minimalist approach and then these roofs which has a void within that. So, you are seeing these roof which is the section gives the sensation of the cloud .

So, this is the sketch by sketch conceptual sketch of this. So, these are the clouds that translated into the roof pattern of this inside of this charge and through this cloud sometimes this sun light comes through this cloud, that is what he try to create in this

church. So, this sunlight will come through the cloud and this is dependent on the nature. So, when the sun will come then only the sunlight will come from this his design.

And this is this is taking the natural element which is sun and the sunlight into the design and that is playing a role in the design in his design. So, this sunlight which he is taking from outside is taking the sun, a natural element into the design that is why it become critical regionalist building.

Similarly in the church of light he is doing the same thing and this is also if you look at this is a very minimalist building Tadao Ando is a minimalist architect. But he is the post modernist architect because he is he takes the inspiration he takes the design element from outside into the design into his design. So, also if you look at, so this building is just like this two elements are there and this and also from the other sides there this natural sun light, sun lights are coming and playing a pivotal role in the design.

(Refer Slide Time: 37:34)



This is church of water again he is taking a natural element into the design. So, the water which was there in the natural set up he placed the church the cross in the water. So, you look at the natural settings. So, natural setting becomes a part of this wall in the design, so this part which is the main facade and people will look at that part is the nature. So, they will look at the nature and his design which is the main element is the church cross is on the natural element which is the water. So, he is blending the nature into the design and into his design. So, the nature is fusing with the, with his design that is why it

becomes the critical regionalist building where he is taking his blending the context into the, keeping the context (Refer Time: 38:31) design.

(Refer Slide Time: 38:34)



So, it is again the water temple if you look at this water this water is the man made water and this waters color could have been the blue tiles which is the predominantly what we seen. So, from the building this is on top of the building. So, if you see if you come from within and you have to take this staircase and then you have to turn back then people will turn back and look at this pond, it is not a it is not it does not give a look and feel of a man made water body. It looks like a pond because of this plants which is there within this water and this color of this water which blends with the nature of the natural surroundings.

So, if you look at, so this is a (Refer Time: 39:19) of a dense vegetation and the similar color palette is blended on top with the design. So, this because of this water temple this is creating a natural this is blending with the nature. And all these curves and all is flowing this terrain contour land is flowing through the building, and this is encompassing the building and this is this looks like this building is designed for this particular set up. And also if you look at, so this comes from a curvilinear line and then again a pure geometric thing. So, it is this is coming from natural random lines to a particular circle. So, this is fusing with the nature.

(Refer Slide Time: 40:08)



Now, again this is an art museum by again Tadao Ando. So, all these lines and then this particular water has a connection with this water which is on the on the outside of this side and this roof garden is helping the design to blend with the natural surrounding.

Now, all these natural elements are within also within the design and, but with the Tadao Ando style of rectilinear pure design and geometry which is his style is also followed.

(Refer Slide Time: 40:44)



Now, if you look at the roof of this building. So, all these natural tectonic surrounding and then the other natural contours are maintained and with the punctuations of very

geometric style which is Tadao Ando's style, but the natural context was retained as much as possible in the design. And also this access and are created to a visually frame the natural surroundings.

(Refer Slide Time: 41:15)



And this is another example Awaji Yumebutai International conference centre by Tadao Ando. Here within the building you will see the geometry and geometric elements which is creating the design, but from outside. So, this is the terrain land. So, this is the buildings are within this roof garden. But the roof garden if you look at, so these are the square which is coming from his minimalist approach of designs square is a pure form, but this squares all together and square is again divided with another square together creating a are continuity has a continuity with the terrain land form.

So, the land form which is the natural land form is not disrupted with a built form which is on top of it you will see amalgamation and a blend with the land form because the same kind of colors are retained and each and every top of this square has a different different color. So, that to blend with the natural variance of different colors of trees foliage and this blends with the nature.

But, within that building if you look at Awaji Yumebutai again this waters and lights will come within the building and the way Tadao Ando uses the natural light is also there in the building.

This is another example of by Mario Botta is another famous architect in the critical regionalism style.

(Refer Slide Time: 43:00)



This is casa Bianchi in Switzerland. So, this design is evolved from this particular set ups. So, the design is like generally we enter the building from bottom and then go up in this building it is like we enter at the top and then go down the functionality of the building is changed according to the local context. And all in this building this through this bridge you enter on the top level of the building and you start going down and this is set in the terrain of this particular terrain and if you go in. So, if you have a clear vista of the terrain which is visible from this side and throughout each and every floor you can have a different vistas from this beautiful terrain of valley of this design.

So, the design functionality is evolved from this particular context and also the design is depended on that. So, these long slits are to create uninterrupted vista of this particular building. And this building if you look at the plan this details are available on net. So, this has a lot of layers and elements added on top of each other. So, that you get a clear punctuation and lot of punctuations are there. So, its layers on layer after layers are added and then you see different, from different angles you will see look at this you have a vista of this valley from different angle and that is derived from a particular context of this sight.

(Refer Slide Time: 44:44)

Critical Regionalism

- Casa Rotonda, Stabio, Ticino, Switzerland, Mario Botta




IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 26

Now, Mario Botta has other designs which evolve from a particular design styles. So, his design style he mainly uses a pure forms of circle a square and lot bilateral symmetry will be there in his designs. So, that is his style. And all these lines these brick and in stone and in concrete he will use this lines these are lines which comes from a horizontal picture frame and this kind of textures, he uses his brick and concrete which is grey and the brown in this stone which also blends with the natural surrounding.

(Refer Slide Time: 45:26)

Critical Regionalism

- Tschuggen Bergoase Hotel & Spa, Switzerland, Mario Botta



IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 27

His another design, it is a hotel and spa in Switzerland. So, if you look clearly what is the concept of this design. So, this hotel and spa is here under this which should blends with the terrain of this Switzerland's snow cladded terrain land, and all these elements this stress are giving natural look of this terrain which is not a straight line. So, all these bricks are there. So, actual spa and hotel is in you do not see the actual spa and hotel. So, the main visual focal point is a sky light of this spa and hotel.

And if you look carefully the sky light which blends with the conifers trees around the buildings even the color of this sky light is the gray the gray color which is the color of this conifers trees on the high altitude. And the position of this sky lights are also quite different in this concept these are the visual inspiration and his design of this sky lights. And if you look at this sky lights also there has a difference in the sky lights, so some of the sky lights has these kind of design and some of the sky lights are like this. So, because to because in the natural setting the trees are different. So, to a break the monotony he created this different different sky lights and their position in different spaces and these lines which is there in the sky light creates the visual line of this, blends with the coniferous trees visual line.

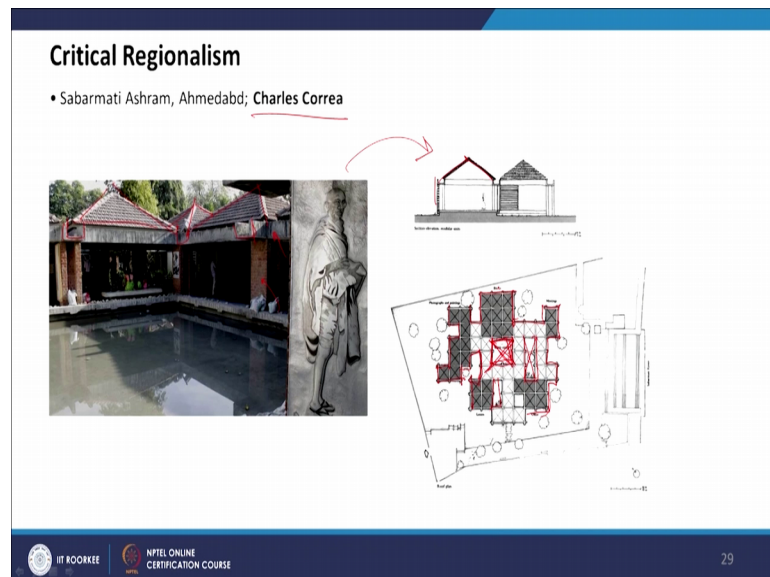
And within that there are some sky lights which also takes natural light and which is also suitable for this extreme harsh climate. So, that the sun light comes and through green house effects some heat will be there and also you have a visual connection from the outside, and through the big sky light also you can see the outside and there is a visual blend from nature to the to the build firm.

(Refer Slide Time: 47:26)



And as why I was talking about Mario Botta has this kind of lines in his design which is his design style and he plays with the pure geometric form this is the truncated cylinder, and these cuboid, and these circular punctures are also Mario Botta style of design and these straight lines are also there in the two of his other designs.

(Refer Slide Time: 47:54)



Now, coming to the Indian context a Sabarmati Ashram Ahmedabad, Charles Correa we have design discuss this in the new brutalist design because that was the later face of modernism. So, some of the examples which can be in the later phases of modernism

which was going to our post modernism which is from in between modern and post modern and also can come in the critical regionalist movement.

Many of the examples which we have discussed like Louis Kahns, Dhaka assembly is also can be consider as a critically generalist building as well because it takes the bamboo texture in the sky light and then also the it blends with the river and the like the moved around the around the fort and the translates the fort and also the arches in to a modern context. So, that is also a critical regionalist building.

Now, here in the Sabarmati Ashram we can see this is a very it is not a rigid plans. So, it is going in a different direction in a in a very organic of free flowing way. So, it gives way of a village like village clusters are there and this comes from a village heart and all these styles and local vernacular elements are is creating the palette though there is concrete and brick, but this blends with color tone of this mud house. And this elements are totally vernacular elements, but also we have discussed how this is having a concept of servant and served and also if you look at the plan this has a very organic way of delineating spaces around courtyard and this courtyard has water court and then green garden court and to give feelings of a village formation the way organically it grows. ah

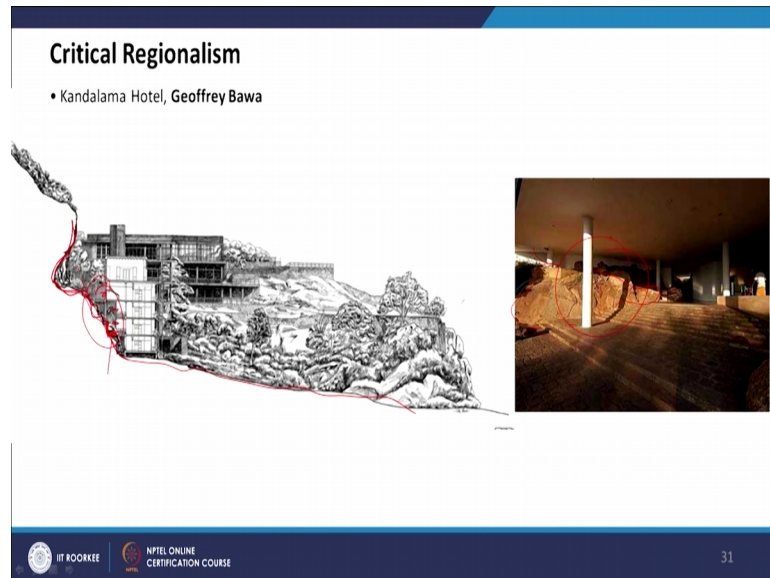
(Refer Slide Time: 50:03)



Now, examples of Geoffrey Bawa's design his works are very important in a critical regionalism aspect. So, this is the Kandalama hotel which is set in which is in Sri Lanka. So, if you look at the hotel, this hotel does not disrupt the terrain of this hill at all. So,

this looks like this hotel is emerged from this terrain and this stone is it is a kind of in a rhythm with the particular hotel and this hotels water bodies are also in different stages and in between this all this natural elements are imbibed in between and then because of this roof garden on top of this roof and in different levels and all this creepers around this facade creates the continuity of the natural element through this manmade element.

(Refer Slide Time: 51:03)



So, if you look at the section. So, this terrain is not disrupted in the section as well. So, these kind of spaces you will see within this terrain. So, natural rocks are coming within the spaces. So, this is the corridor of this hotel through this they will enter in the in this hotel rooms and one side you will see this valley of this side. So, this side instead of a manmade element they will see one side this enclosure and one side of the enclosure there is a natural element and one side is the manmade element. So, this is how this is fusing with the nature.

(Refer Slide Time: 51:42)



But most of his Geoffrey Bawa's work are inspired from a traditional vernacular house form which is called Chettinad style of southern part of India in Tamilnadu. So, this Chettinad style of building will have a courtyard and these are the Chettinad column and they have a particular style of a southern Indian column. And these are the elements of design which will be added on the eaves of this of every eaves of this each and every slope. And a particular color tone is used in this earthen roof styles and this the main feature is the design feature is the courtyard.

So, these are the design by Geoffrey Bawa where he is using the courtyard in different form. Sometime the courtyard is becoming water body, sometime this is blend of stones and different pebbles and other elements, but he is translating this courtyard into the modern different context. Sometime its completely water and then Chettinad style because this a vernacular architecture there are lot of ornamentations and different elements are there, but in modernist movement this has to be very simple. So, this Chettinad column which was a vernacular and style design and then lot of elements are there a translated into pure circular column, but the proportion of Chettinad column is retained in each and every design. So, this form circle this is becoming cuboidal column, but this is you can see a clear clear connection between the Chettinad style column.

And these ornamentations in the eaves are changed into the very minimal way of ornamenting the this elements because of this patterns are coming in the front you see

little hint of this ornamentation, but which is not exactly and added ornamentation in this his design. And if you look at many other designs of Geoffrey Bawa you will see how he have taken inspiration from the Chettinad style of design into his into his building.

Thank you.