

**Modern Indian Architecture**  
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**Lecture 39**  
**Search for a New Architecture – Part 4**

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Hello students. Today we will again continue with our final series which is looking at a Search for a New Architecture. This is part 4 of that series. And last time we looked at some contemporary trends, we were looking at what is happening in India with changing city skylines is a greater concern for past architectural and urban forms. They said there is a greater impetus towards ecological architecture. Major changes are happening due to digital technology.

Modernist principles are being revived again, critical regionalism is reappearing again in the 21st century, with very strong focus towards a climate responsive or passive design, post-modernist principles are also being explored. Architecture as an art form is also one area that architects are looking at. And then there is community involvement.

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**Continuing trends...**

- Community architecture – attempts by Doshi and Correa
- Will persist as **architects continue** to engage in **addressing full range of problems facing contemporary India**
- 1950s-60s – **slum clearance and new housing**
- 1970s- **sites and services programmes**
- Mid-1980s – **slum upgradation**
- 1990s – **slum redevelopment**

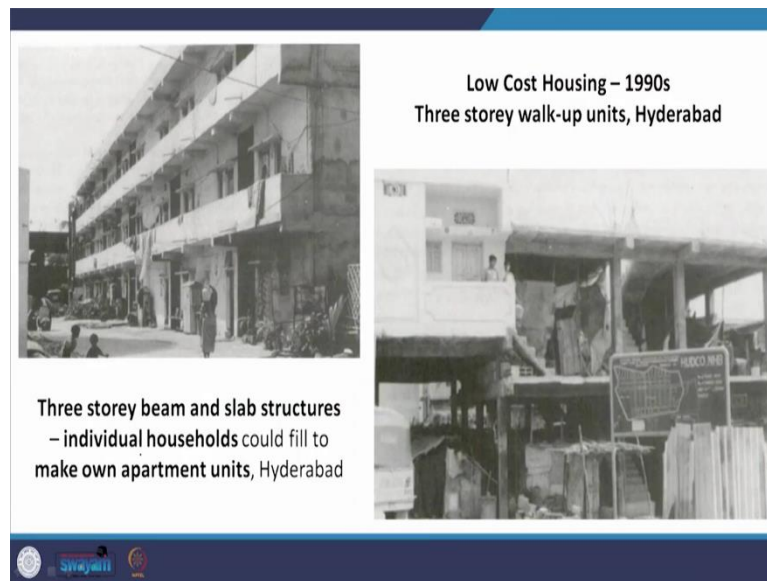
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Community involvement, or community architecture were attempts earlier made by architects like BV Doshi and Charles Correa. And this will persist as architects continue to engage in addressing the full range of problems that are facing contemporary India. And architects and planners are at the forefront of this fight for the built environment of the future in India and all over the world.

In the 1950s and 60s, the focus was on slum clearance and new housing in the 70s. We started talking about Sites and Services program, we looked at Aranya, for example, we looked at incremental housing, for example, in the Belapur housing. The mid 1980s slum upgradation, was being looked at, in the 1990s talked about slum redevelopment, but over time, as we have moved into the area of a time period of post liberalization, the money available or the funds available to develop a socially viable and infrastructure with regard to the economically weaker sections is slowly not as evident as before.

In terms of projects coming up for EWS housing, the focus is shifting to more substantial ideas and that ought to be also because this problem is immense.

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So when we had seen these projects earlier, we looked at sites and services, we looked at incremental housing, when there was low cost housing in the 1990s these three storey walk up units in Hyderabad, in which there is a three storey beam and slab structure provided and individual households could then fill them up and make their own apartment units. So, this is very similar to or close idea to sites and services and incremental housing.

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Now, when I talked about this substantial wall footing exercise to deal with the most important problem of the built environment in India today and that is housing. Now, two things are being looked at, when it comes to the cities in totality, we have the Smart Cities

mission, that all cities should become smart in every sense of the word in terms of the economics in terms of the built environment, in terms of resource utilization, etcetera. And then there is so we are talking of society, we are talking of the quality of life environment, we are talking of the governance system, we are talking about the economic economy of the cities, and we are talking about the mobility within the city.

Then focusing on architecture on Smart City side, we are looking at planning and then focusing on architecture, we are looking at the skills like the Pradhan Mantri Awas Yojna, the Pradhan Mantri Awas Yojna has worked for the rural and the urban sector. When we talk of the urban sector, it talks about CLSS that is affordable housing scheme under the credit linked subsidy scheme, where a major interest subsidy is provided to the economically weaker sections for building their accommodation.

Then we have the beneficiary led individual house construction, we have the affordable housing in partnership with private or public sector and we have the IN SITU slum redevelopment programs. So all this is looked at holistically, both at the individual building level or housing level and then we are looking at the overall city level.

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Then of course there are various very important documents that are now forming the backbone on the buildings we designed today. With regard to energy efficiency, resource efficiency, environmental friendly design, those sustainable development goals that particularly refer to environmental design. So, we have the GRIHA rating system which was which is an Indian derivation of the green rating system and we have the lead IGBC coming

from lead that this is India specific and then we have the energy conservation Building Code formed in connect with the Bureau of Energy Efficiency to design energy efficient buildings today.

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**Changing Narrative**

Architecture in India - no longer understood through Western narratives

Variety defies any attempt to pigeonhole

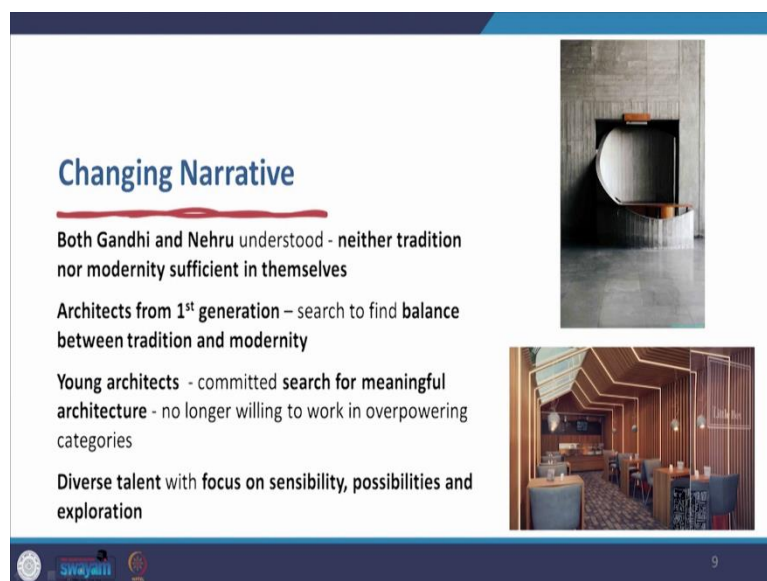
Indian architecture moving forward on its own terms – reflection of a stronger and more confident nation

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This slide features a white text box on the left with a blue header. To the right, there are three images: a modern building facade at night, an interior view of a large hall with a red carpet, and a large, illuminated building at night with a prominent overhang.

Now, the narrative in Indian architecture is changing, architecture in India is no longer being look to a western narrative. The variety defies us putting us ourselves or our architecture into a pigeonhole, because Indian architecture is moving forward on its own terms, it is a reflection of a very of a stronger and more confident nation.

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**Changing Narrative**

Both Gandhi and Nehru understood - neither tradition nor modernity sufficient in themselves

Architects from 1<sup>st</sup> generation – search to find balance between tradition and modernity

Young architects - committed search for meaningful architecture - no longer willing to work in overpowering categories

Diverse talent with focus on sensibility, possibilities and exploration

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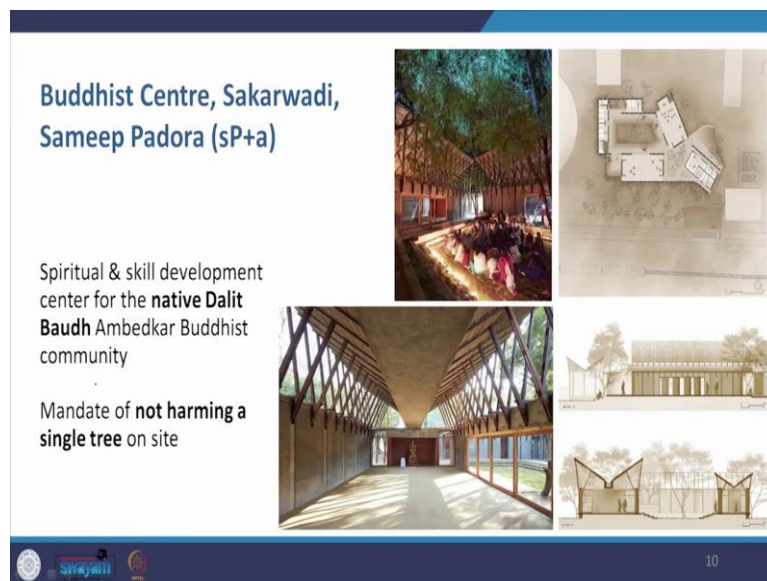
This slide features a white text box on the left with a blue header. To the right, there are two images: a modern interior space with a large circular opening in a wall, and a modern interior space with a large overhang and a red carpet.

Now, both Gandhi and Nehru had understood one thing that we can neither be tradition nor modernity are not sufficient in themselves. Rather, it is a mix of tradition, with modernity that leads to a sustainable development. So architects right from our first generation that we had seen earlier, they are searching for this balance between tradition and modernity, that has always been an endeavor, an objective and also a problem to be resolved. How do we connect a long history and a long tradition background with the rising modernism.

Young architects are also committed to the search for a meaningful architecture, and they are no longer going to be bogged down by stifling categories. The diverse talent is focused on sensibility, the possibility and an explanation of new ideas and identities in modern architecture in India today. Now, the reason why this stuff, the categories are stifling they are overpowering is because once we bracket architecture into a particular style, or a movement, we become very restrictive in our approach in trying to derive an architecture like that, but we want to break out of that mold and we want to come out of that bracket.

We want to develop an architecture or rather the young generation of Indian architects want to develop an architecture that is not predicated to a western ideology, per say. And that is not also predicated to forcing ourselves to make to explore traditional ideas where they do not work. So, though want to have that freedom to come up with an architecture that will truly work that will be practical, and that will be total, truly viable.

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So there are examples. Lots of young architectural firms are coming up like Sameep Padora of sP + a, this is the buddhist centre. It is a Sakarwadi. And it is a spiritual and skill

development Center for the native Dalit, Ambedkar Buddhist community and the mandate here was not to harm a single tree. So this is an ecologically focused design.

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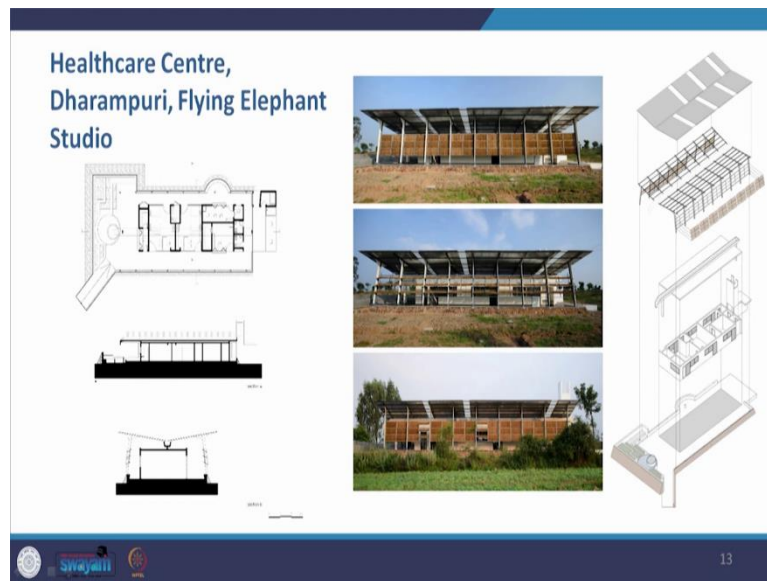
Then there is the smaller project the Tara book building which is in Chennai by MOAD architects. And this is a multifunctional space for a small independent publication house, which is known for handcrafted visual books for both children and adults.

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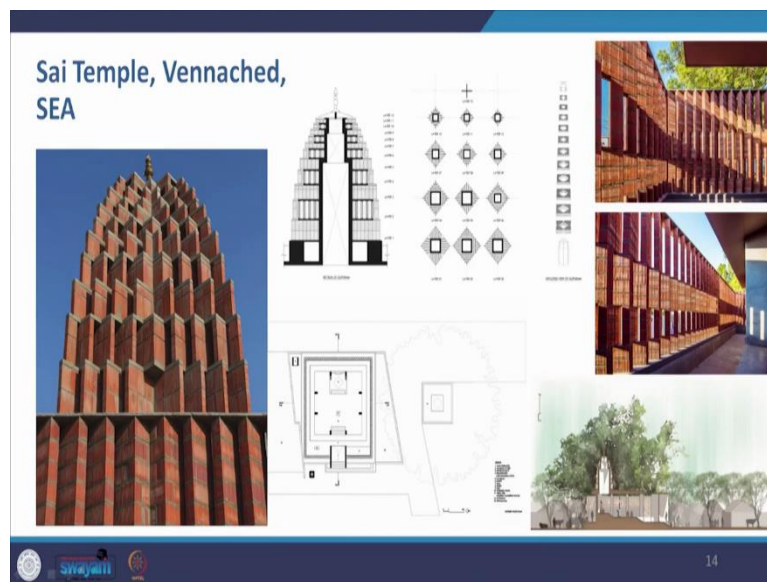
These are the pictures of that particular building.

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Then there is the Healthcare Center at Durhampuri, by flying elephant studios. These are all young firms, which are coming up with very interesting, innovative forward looking architecture.

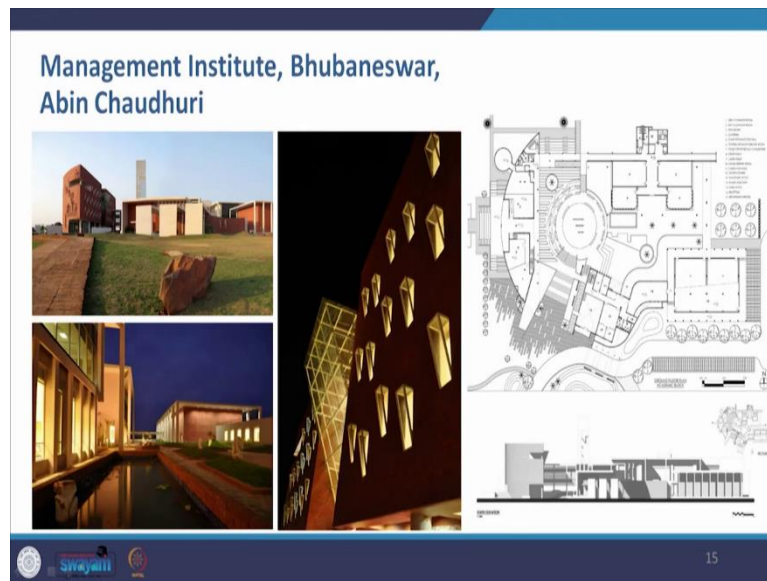
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There is the Sai temple, at Vennached by SEA, as you can see, the very form is a reflection of the temporal form of architecture. So, there is a connect between modernity and tradition.

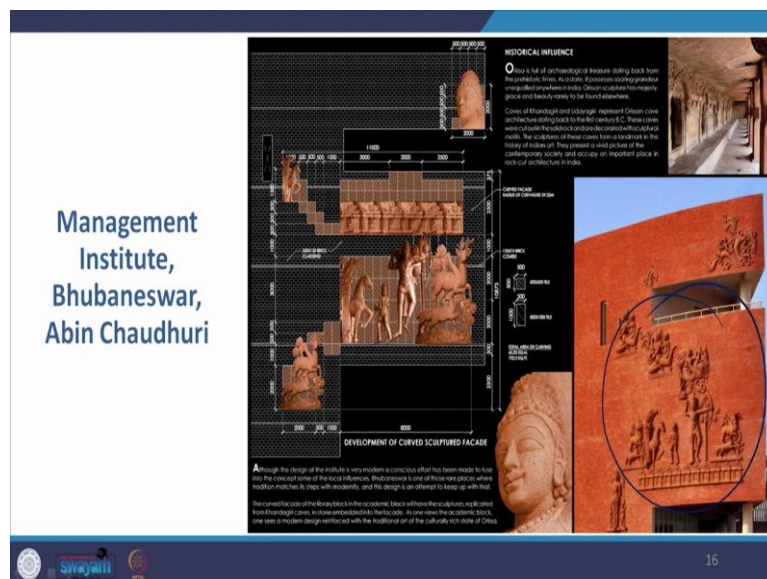


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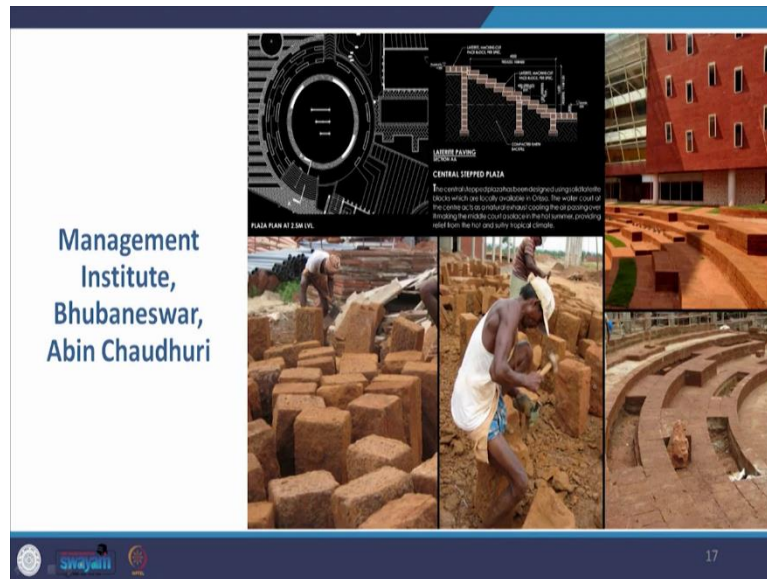
The Management Institute in Bhubaneshwar, by Abin Chaudhuri. It is a very interesting building and Abin Chaudhuri is one of the serious upcoming talents in India.

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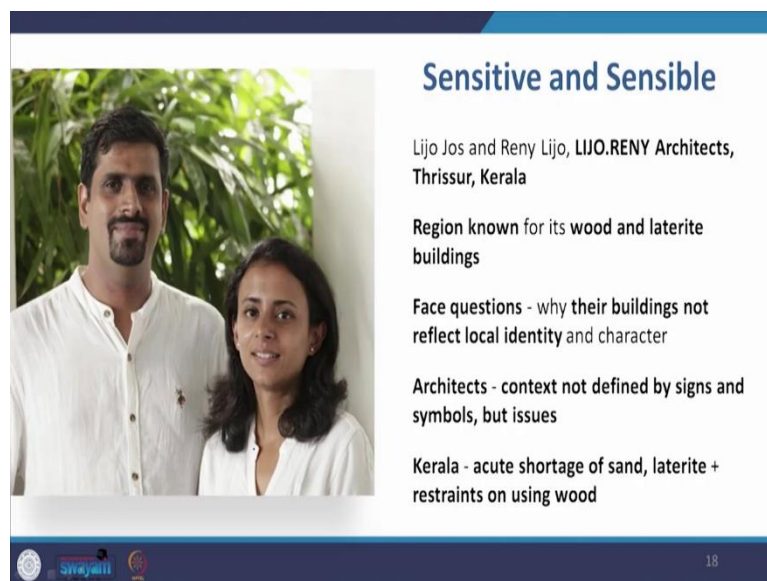
This is again the same project and the use of the historical with mythological features on the building façade.

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And the use of cements stabilized earth blocks and construction of the Management Institute.

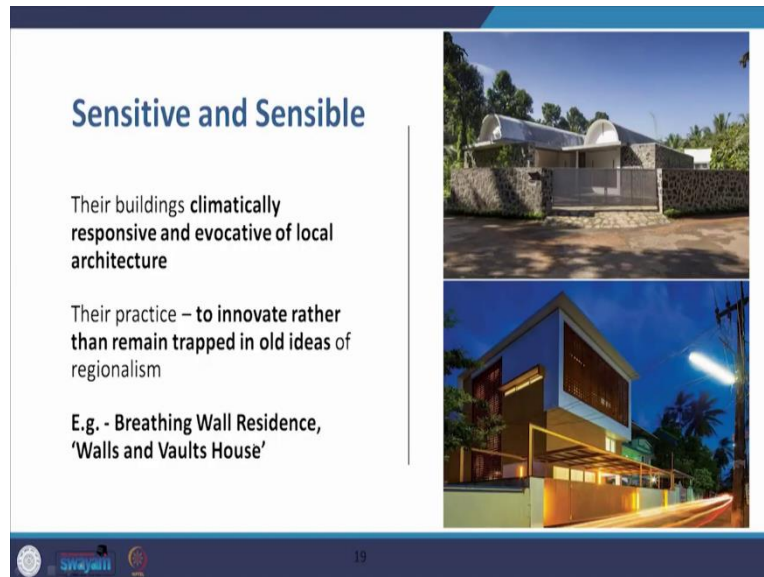
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Then there is a kind of sensitivity and sensibility in the young generation of Indian Architects. Like that of Lijo Renny architects at Thrissur in Kerala. Now the region is known for the use of wood for wooden laterite buildings. And these this group of architects this couple, they face this question, but why is it that their buildings do not reflect this local identity of the use of wood and laterite? And the answer is, the context should not be defined by signs and symbols but issues.

Now there is a very critical issue here, there is a shortage of sand and laterite in Kerala and there is a strengthen using wood. So just to imbibe that regional identity by using such materials which will cause serious ecological problems is not wise. That is the sensitivity and sensibility in their architecture.

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These buildings are climatically responsive, and also evocative. They also evoke the idea of a local architecture, for example, courtyard planning, but it is in a modern context, their practice is to innovate rather than remain trapped in old ideas of regionalism. So the building is modern, the building responds to a modern space organization and to modern needs, yet it is responsive to the local climate and also to the kinds of spaces needed within which are in connection with additional identity.

So there is for example, the breathing wall house or the breathing wall residents and then there is the walls in vaults house.


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**Breathing Wall  
Residence, Kerala**

**Narrow plot** – Corten steel surface that provides natural ventilation – resistant to harsh tropical climate

**Central atrium** – natural light and ventilation; landscaped core with staircase

**Ventilation to other parts** of house thru' perforated Corten steel wall



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**Sensitive and Sensible**


Lijo Jos and Reny Lijo, **LIJO.RENY Architects**, Thrissur, Kerala

**Region** known for its wood and laterite buildings

**Face questions** - why their buildings not reflect local identity and character

**Architects** - context not defined by signs and symbols, but issues

**Kerala** - acute shortage of sand, laterite + restraints on using wood



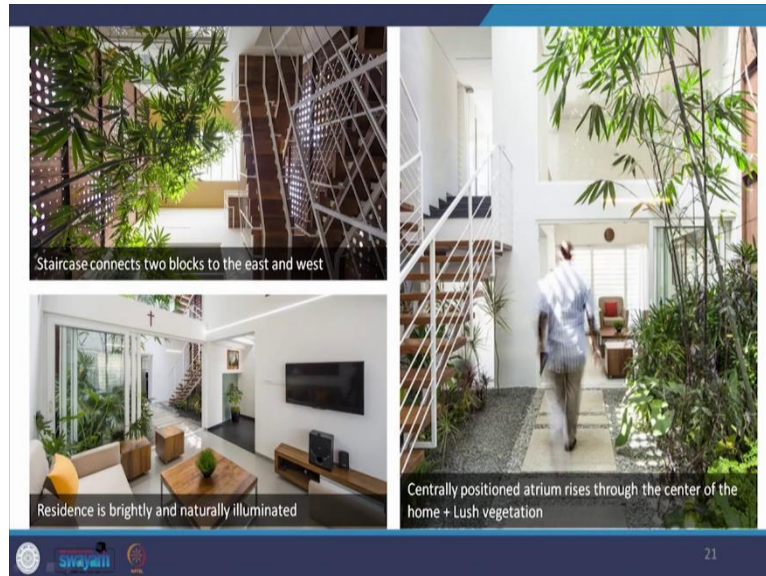
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Let us take the example of the breathing wall residents in Kerala. By I am sorry, I get the name wrong it is Lijo Renny architects. And it is a narrow plot in which it has a Corten steel surface as the facade you can see here. It is a perforated sheet and Corten steel allowing for natural ventilation and resistant to harsh tropical climate. How you see Corten steel has a tendency to have natural rusting as would happen in steel, if it was getting impacted by the elements. But in this case, in Corten steel, the rest works first advantage and creates a fine layer on top of it, which protects it.

The rest acting against steel rather than rest acting steel works in favor of it. And it gives it certain text color, a patina that is very attractive. And not only that the central atrium of the house, it is like a courtyard space, it pulls in natural light and ventilation. And it is also

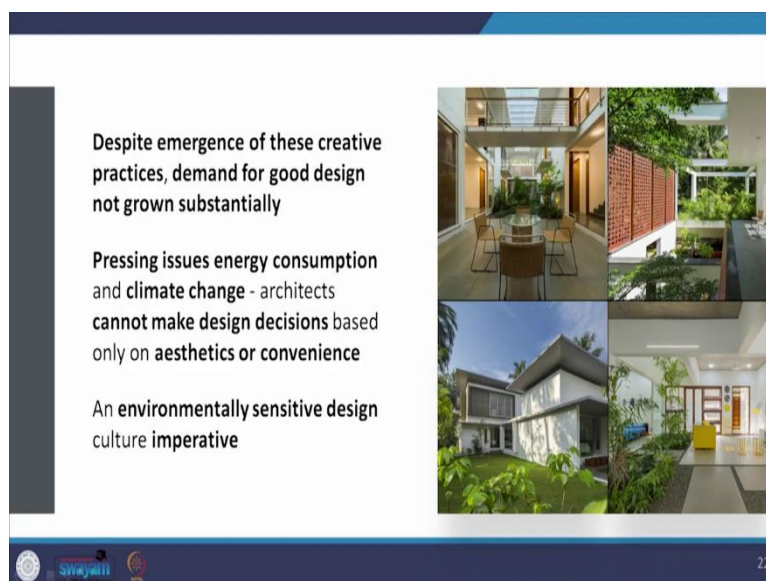
landscaped core with the staircase leading to the to the eastern west wings of the house, the ventilation to other parts of the house is also through this perforated Corten steel wall.

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Now, these pictures show you this is looking up, this is looking up the house, we look up to perform the circus on our right side of the picture which connects the two blocks of the house on the east and the west. And this picture actually shows you how brightly and naturally lit the houses from inside. And this shows a centrally positioned atrium, which is running through the center of the house and having less vegetation.

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Now, despite the emergence of these creative practices in India, there is still a demand for good design. And but this demand for good design is not growing substantially. The pressing issues that are facing us that is one problem that the demand for good design is not growing substantially. The other is there is a pressing demand for energy conservation and energy conservation and climate change, pressing demand to bring down energy consumption. And that is an issue that I have repeated so many times in this presentation, that I believe this is one of the most critical areas facing the built environment of tomorrow and it has to be done on an emergency footing the work in this area.

So architects cannot now make design decisions based solely on aesthetics and function or convenience and environmentally sensitive design is imperative, rather, environmentally sensitive design culture to develop in architects and students of architecture has now become imperative.

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**Shirish Beri**

Graduated from **CEPT**

Founded **Shirish Beri and Associates** in 1982 at Kolhapur, Maharashtra

His work is said to be **free and spontaneous**, not bound by constraints of a **particular style**

Intensely **site responsive design**

**Unity and harmony** between various natural and man-made elements



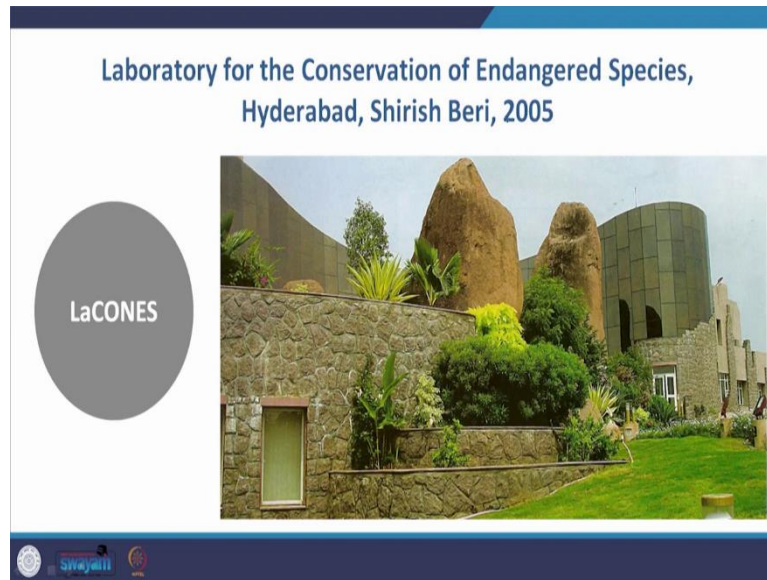


Let us just take an example of a design which is site on site conscious and an example of an architecture who an architect who has that environmental consciousness and that is the work of Shirish Beri. In fact, in these last 2 presentations, we will look at this one project by which we are concluding this presentation today. And in the final presentation, we will look at a future project that is coming up by Sanjay Puri. So both presentations, I have got one example to kind of conclude the presentation.

Shirish Beri graduated from CEPT and found it Shirish Beri associates in 1982 in Kolhapur. His work is said to be free and spontaneous and is not bound by the restraints of any

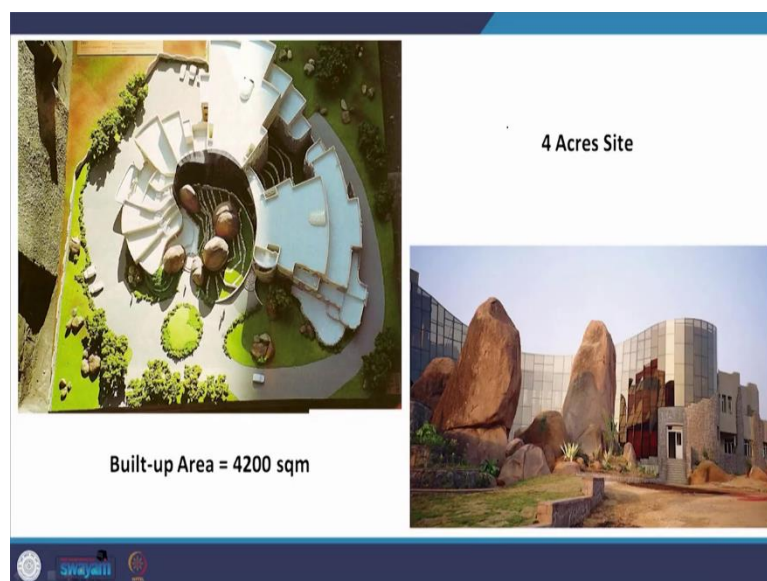
particular style, just as I mentioned a while back, but not to be bound by stifling styles and movements. It is intensely site responsive, this is only one project we are looking at, but you can always go and look up his other projects, and you will find the same approach towards site sensitivity in his work.

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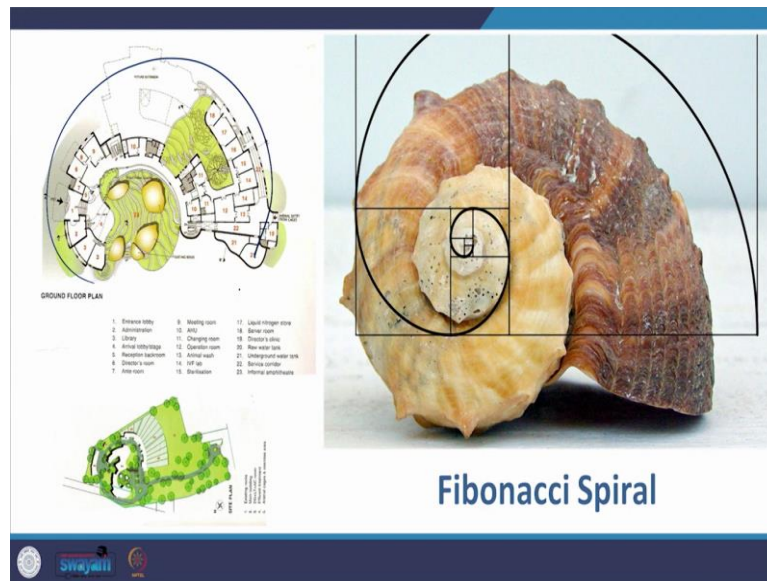
There is unity and harmony between the various natural and manmade elements and this project, the laboratory for conservation of endangered species Hyderabad, LaCONES in 2005 is a classic example of Shirish Beri's work.

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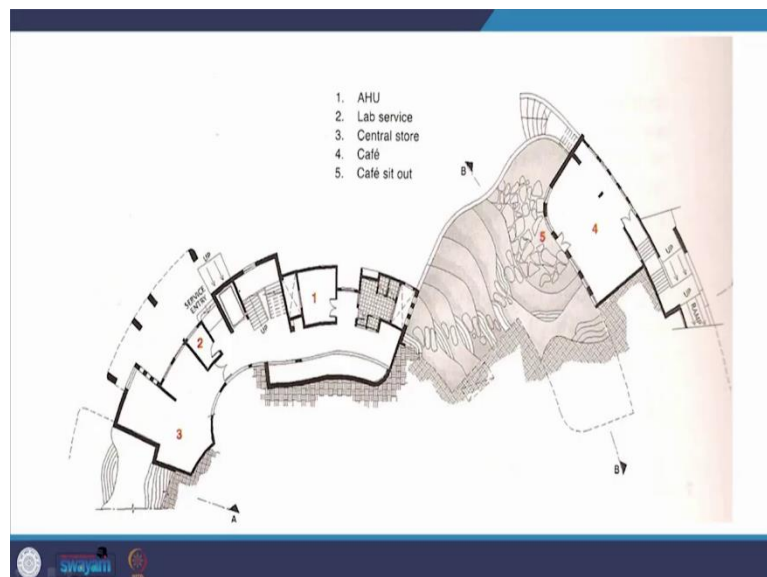
This is on a 4-acre site with a built up area of 4200 square meters.

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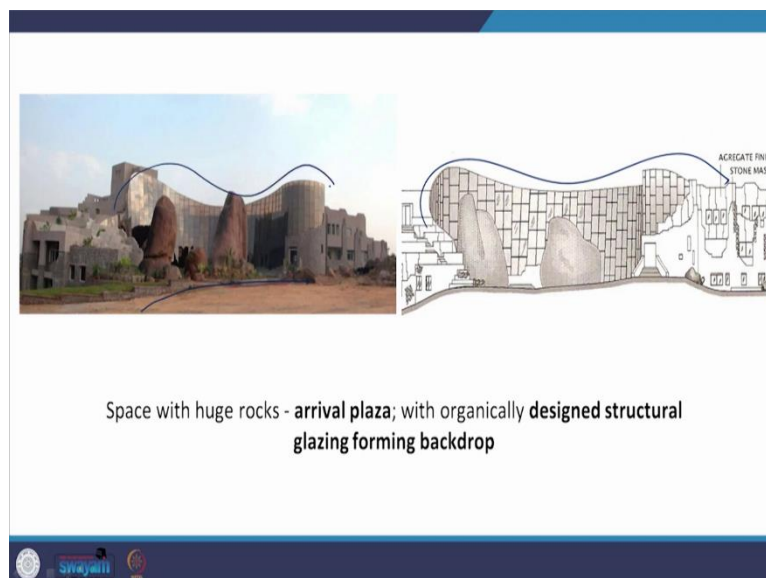


And if you looked at the form, it reminds you of something. So if you are aware, it reminds you for example, of a seashell of a snail shell. But more than that, it reminds us of the Fibonacci spiral. Now, if you want to understand the use of the Fibonacci series or the Fibonacci spiral in architecture, please look up the works of Corbusier in Chandigarh where the Fibonacci spiral is fitting very well.

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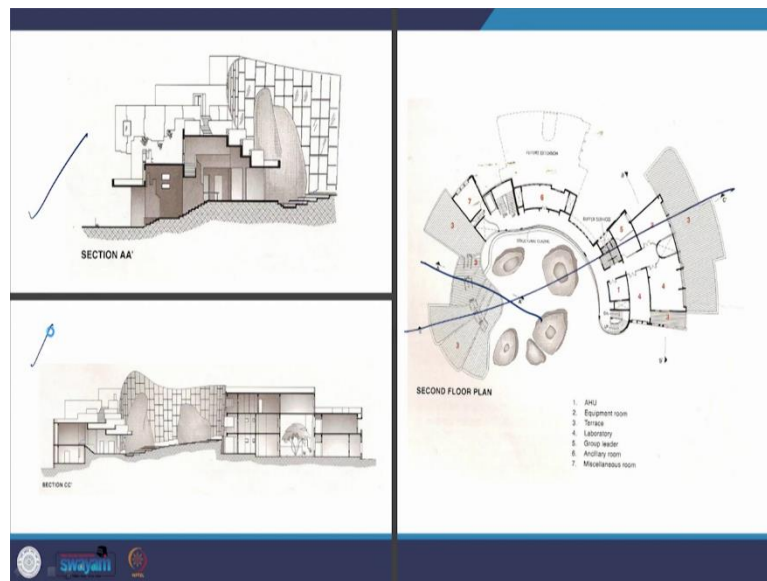
And here it is, the plan is derived from the Fibonacci spiral. And this is how the plan has been organized. These are the two the second floor plan the first floor plan, and it is it is a site with huge rocks, the rocks have not been eliminated, but blocks have been retained. And this is where the arrival Plaza is. And we, there is an organically designed structural glazing, which forms the backdrop and we will talk a little more about it. This is how the glazing is.

Now the glazing does two things, by circumventing it by putting it in a curvilinear fashion in this way on this site, we are not letting it destroy the site. We are not letting it destroy the rocks on the site, but we are retaining that the architect is so confident and bold in his design, that he is not concerned that writing can produce elevation is a big drop in front, he is confident self-confident, I would say that he knows this rock will add to his innovation not

take away from it. And he is not so self-conscious that you know his architecture will be overpowered by this natural element.

And so we both found the result, it actually adds to the design. Not only that, the glass itself serves a function of reflecting the natural landscape. So in fact, the glass not only disappears in the background, but the way it has been put in. But also because it is glass it reflects the natural landscape.

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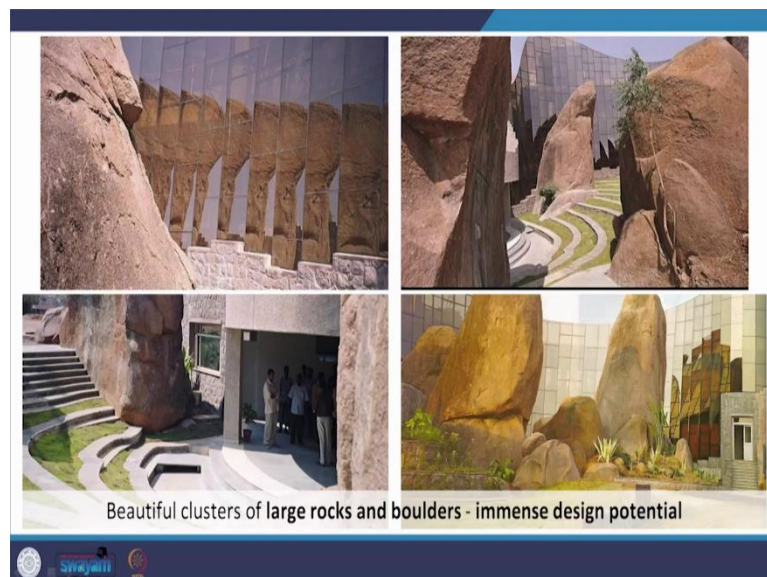
These are the sections, there are two sections. One is this AA section that you see here, and one monster CC section that is going through and through like this that you see here and then you have the design idea to create a facade by avoiding typical visual image of a manmade building, in other words, is what I just mentioned a while back.

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So let us take a comparison. This was the site what it was originally. And this is what happened, what an amazing thing Shirish Beri has done, he has retained it, just as it is, he has retained even the contours more or less as they are and the building is formed around them. Rather than building imposing itself on the site. His building merges with the site, again reminded of right statement, a house should be off the hill, not on the hill.

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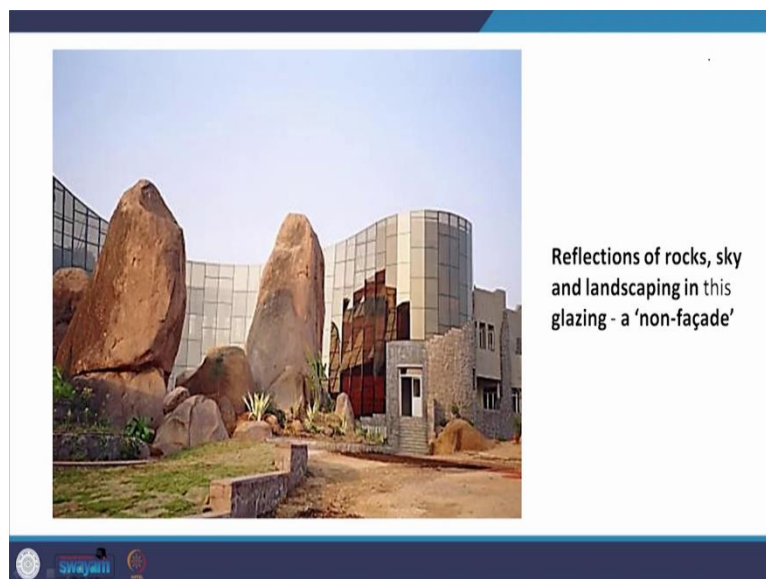
And here we have these beautiful clusters of these rocks, rocks and boulders which are kind to means design potential and the architect is fully exploiting them and making them a part of the overall scheme. And we have the elevation, the facade of the building.

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So we have the structural glazing, we have the rocks and builders and the glass curtain wall is bonded to the structural system.

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There is a reflection of these rocks, sky and landscaping in the glazing so much so, that it becomes a non-façade. It simply disappears in the background. It simply becomes one with the surrounding scape of the site. So and there is also comparison of course.

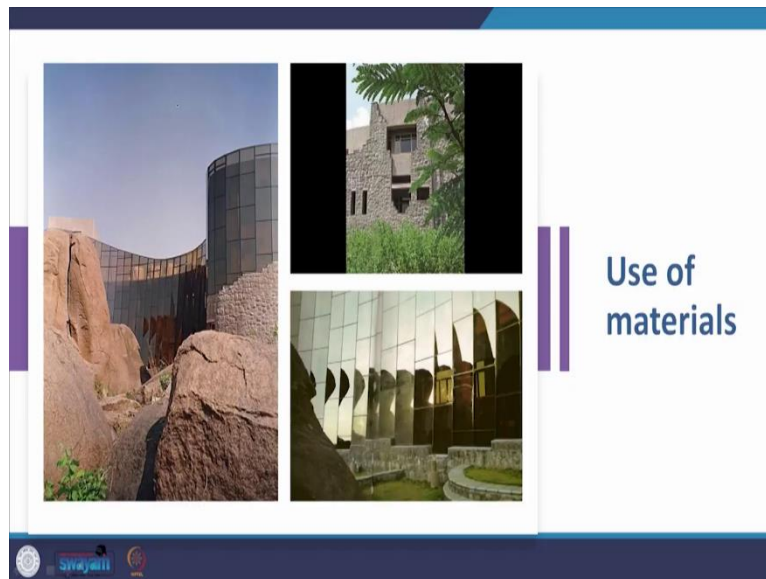
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We are looking at a building which is completely in an urban setting. This is the Willis Faber and Dumas Building. It was built in the 1970s designed by Norman Foster in England. And here it Shirish Beri work and as I can see, both have this curvilinear facade both were built to connect it to the site in the case of Willis Faber and Dumas , which is an urban setting, the site was polygonal, the site was like this only, and Norman Foster did not try to fit the building on an irregular site, he made the site boundaries to have this curvilinear glazing and occupied it completely.

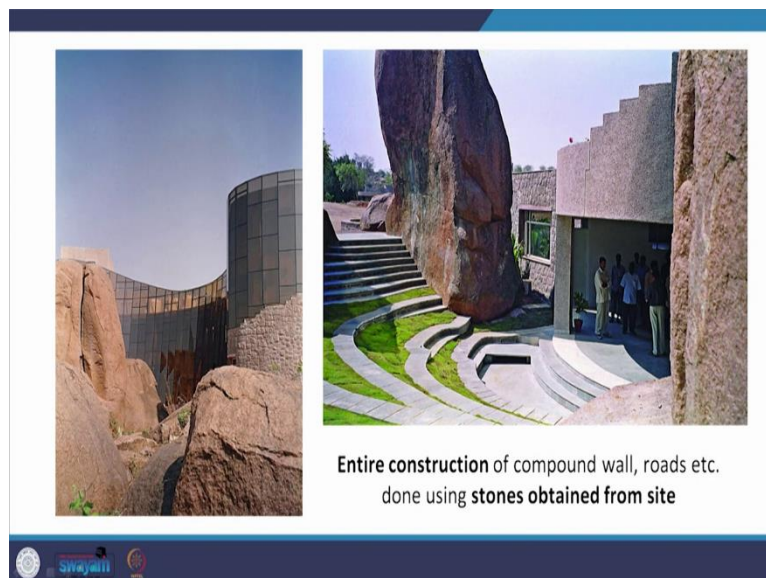
And therefore the site goes with defined by the boundaries of the site. In Shirish Beri case also, the site topography, the elements on the site define the elevation.

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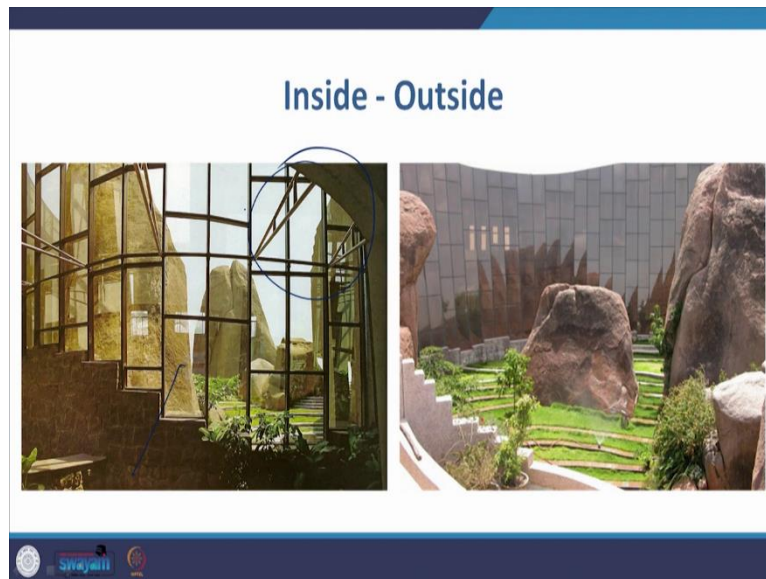
There is the use of materials, he is using the stone which is locally found here in the construction of the building and the great advantages, the rocky texture, the texture of the rock, and the texture of the stone, which is cut and dressed and used in the building is the same, and is where we see the rocks appearing in the glass elevation.

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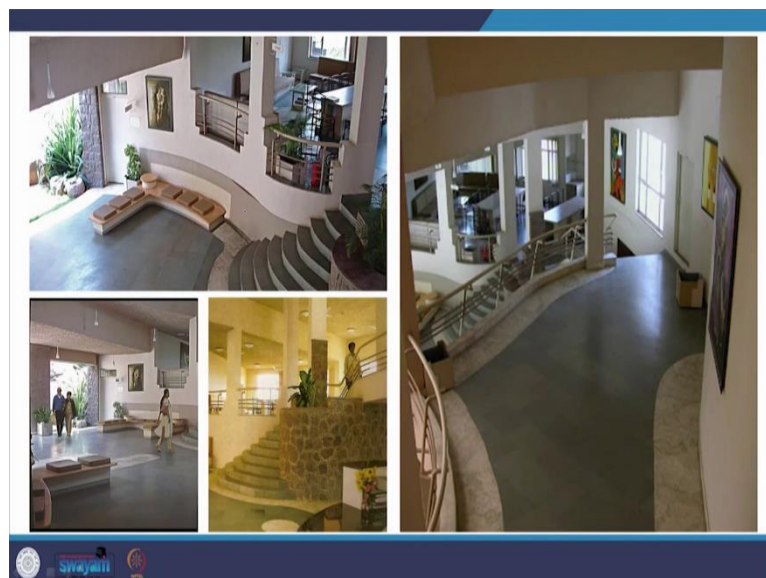
The entire construction of the compound wall, even the roads etcetera, is done by using the stones that have been obtained on the site.

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And this is the view of the inside and outside. And it is so that inside and outside seem to merge with each other. So when I am standing on the inside, except for the fact that this is a structural glazing requires is supposed to make it stand basically, inside and outside seem to totally relate with each other.

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These are some of the other views of the building the interiors. And you can see there are other things also with regard to diffuse lighting the use of the natural light in the daytime etcetera, which is also a part of the overall scheme. So we come to the end of this first presentation of a search for new architecture. Though we again once reminded ourselves once again with some of the areas of focus of modern architecture.