

Interior Design
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Lecture - 2
Interior Design; Interior Decoration; and Interior Architecture

Namaste. Hello everyone. Welcome again to my NPTEL course on interior design. So with the introductory lecture, lecture number one, we began our discourse on interior design, and I'm going to continue our discussions on that. So today we are at lecture number two, and it's a very crucial subject today as we are going to talk about interior design, interior decoration, and interior architecture.

So, these are some terms that we come across. When we focus on interior spaces and try to shape our understanding of the world of interiors, we often come across these terminologies, concepts, or disciplines. And it's very important to understand the subtle nuances that distinguish each one of these, what the technical definition of each is, and why it's important to even try to understand these nuances. So, let's see through today's discussion what these three different terms on the screen mean. So, if we look at the contents for today, we are talking about the nuances, focusing on interior decoration, design, and interior architecture.

And we'll try to understand what interior architecture is—what formal definition has been assigned to it and why it is important to talk about interior architecture, especially when we are contributing through our ongoing discourse to the interior design pedagogy and practice. What is the understanding when we talk about interior architecture? What understanding could be shaped through these discussions and examples that we will see? And then, of course, references for further study, etc.

So, let's try to understand. So, when we talk about interior decoration, we could, you know, summarize it in the sense that it deals primarily with surface treatment selecting upholstery like fabric or curtains or some kind of material for furniture, etc. And it could be rugs, mats, or fixtures. Also, some decorative elements may be placed in a space for decorative purposes.

And there is also a specific focus on color palettes, color combinations, and any kind of artistic effect that could be used to adorn a space. So, it could be very restricted to just surface treatments. It could be restricted to only an additional layer applied to an

already designed wall, surface, or space. Interior design, on the other hand, is a very skillful professional discipline. It involves much more understanding, much more detailing, and it requires a very technical set of professional skills to contribute to the larger field.

So interior design could be understood as the art and science of understanding people's behavior to create functional spaces. So, it's not just something decor-related, but it also focuses on human behavior. It also focuses on functionality. And along with aesthetics, it considers the different aspects that contribute to creating healthy interior spaces for the well-being of the users. So, in that sense, it's a very technical and highly professional field.

Interior designers may decorate, may not decorate, but decorators may not be able to design. So, there is always this distinction that interior design as a profession and as a degree course when it is sort of followed academically, it builds that authenticity and credibility, of course, through a number of credits achieved or the number of projects practiced, you know, in the field, on field. And that gives a distinction of interior designer versus interior decorator. So, the discipline of interior design actually has been treated with a lot of uncertainties.

And unfortunately, it's getting reduced to interior decoration, which it is not. So how do we deal with these uncertainties? How do we restore its formal, professional, technical sanctity and not reduce it to be just a decor related exercise? So, for that, actually, this comprehensive term called interior architecture, it came up. It's discipline in its own right now and it's slowly gaining a lot of popularity.

And we have some courses on interior architecture in India, but more so internationally in different schools and colleges and institutes. There is, you know, a proper subject or discipline or degree course focusing on interior architecture. So roughly speaking interior architecture means design of an interior space in architectural terms. So, we just try to understand it in the sense that there is an architectural rigor, there is an understanding of structure, there is an application of theoretical understanding of spaces along with the other aspects of interiors.

So, the term interior architecture emerged in the 1970s as the description of a discipline that employs architectural theory, history, and principles in the design and creation of interior spaces. And with the rigor of architectural thinking and the sensory understanding of interior design, a synthesis could be produced that is both intellectually and humanistically satisfying. Moreover, what interior architecture did

was overcome the narrow specializations of facade-driven architecture and context-free interior design, which were very prevalent at the time when this discipline was introduced. So, what shapes our understanding of interior architecture? So, it's a response to the uncertainties inherent in interior design, as we were discussing, and what distinguishes interior architecture from other related disciplines, what gives it distinction in all we have discussed so far and, of course, in the subsequent slides.

So, interior architecture acknowledges the enclosing structure and its context. So, it's not just, you know, one narrow focus, like one surface, but it does acknowledge the entire setting, the entire context. It also involves the manipulation and experience of three-dimensional space. So, it's not just a surface treatment. It deals with forms and volumes, not merely 2D shapes and surfaces.

So, this is very important to understand. Also, it employs the sensory stimuli of sound, touch, smell, and sight, which are essential parts of the interior experience. So, as we were talking about the understanding of human behavior, all the sensory experiences, and then, you know, trying to employ them during the design process. Interior architecture recognizes light as a medium for defining space, creating effects, and producing well-being. So, there are all technical aspects.

So, if I'm standing here and, you know, I'm reading something, like a book or slides, there is a certain level in terms of lux levels that I need to achieve here on this desk or podium, which makes it comfortable and easy for me to read or perform well in front of my audience. So, I need to understand how to achieve that kind of lux level and how to design light fixtures accordingly. So, it's not just about going to the market, buying the first thing that comes across, and installing it. We have to understand the physics of light and how these fixtures are designed. And how to achieve proper and sufficient light levels to perform well within this interior space.

So interior architecture also employs materials and colors as integral components of the designed environment. So, there is the physics of light and the chemistry of colors. One also needs to understand the anatomy of materials. As we will see in the week where we focus on materials, the anatomy of timber, and so on. So also, some aspects of botany, etc.

So, it's a very comprehensive, challenging, and demanding field where we need to draw our inspiration, knowledge, and all the information we require. We need to draw from these different diverse sources and disciplines and then try to design spaces for human comfort, well-being, and proper functioning. Now we have reached a point

where we probably have some understanding of what interior architecture as a discipline is. If you look at the screen, we have this example—a house by the very famous FLW. If we try to understand these interior spaces, the way they have been designed—keeping in mind the architectural rigor, human behavior, the understanding of light (especially daylight), the orientation of the site accordingly, the detailing of the furniture, the use of the material palette, etc. You know, the very important aspects of materiality, tactility, and the senses—sight, touch, smell, etc.

Same way over here the overall composition. So, the understanding of the structure, form, function, aesthetic, materiality, color combination, lighting All of these, when we, you know, try to put together, then we create some very, very exemplary illustrations of beautiful interior spaces. So, this of course, is like one example where I'm trying to discuss and emphasize on the importance of interior architecture rather than interior decoration or interior design. Because interior architecture is all encompassing and it does have the components of decor as well as design.

So interior architecture centers on developing the design of interior spaces for specific uses. These could be institutional, commercial, housing, mixed use projects. And there is also the knowledge of adaptive reuse, you know, and the strategies associated with it that come handy when we, you know, understand interior architecture or study it or practice it. Now, the adaptive reuse could be in an urban, suburban or a rural setting. And it mostly involves remodeling and repurposing of existing buildings.

So, for interior architects and interior designers, that is also a very, very important upcoming field, especially in the context of India, where our services and knowledge may be required for remodeling and repurposing of existing spaces. And that's also very challenging. So thus, playing a significant role in the sustainable uses or reuse of the built environment. So that's a very crucial aspect of the training which is associated with interior architecture. And also, the role of the interior architect varies from practitioner to practitioner and from commission to commission, what kind of project it is, for whom it is and so on.

Interior architecture largely involves understanding and interpreting the needs of a client or clientele, who might be an individual, a public organization, or a commercial business, and then creating a collaboration with other professionals. They may be architects, structural engineers, craftspersons, surveyors, engineers, etc. To develop a creative response to those needs and to oversee their translation from a concept to a

built reality. So, teamwork is very, very important. Involving stakeholders is very important.

And a few of you may be aware of my other NPTEL course, where I have hugely emphasized the role of crafts and craftspersons. And I continue that discussion during lectures within this subject as well. Like, how can we collaborate with makers and communities? And introduce interesting details, crafts, and space-making elements within our interior design projects.

So, the interior architect is responsible for specifying and documenting the decisions and activities required during the building process and ensures the fulfillment of legal and regulatory obligations. Some projects in the field of interior architecture, just to have a look at and try to understand this discipline more. I would like to showcase here the AIA, which is the American Institute of Architects, and they honor interior architecture projects. And there is an AIA Institute Honor Award for challenging and exceptional interior architecture projects.

So, this is a project from 2020. It's a museum, and the location is New York. And again, if we look at this entire project, all white, very free-flowing, and the way, you know, the visual connections are created. There is a feature of skylighting here.

And, you know, there is a sophisticated filtering of light within this system. And then we also see these structural elements exposed, which become a part of the design vocabulary. There is a curvilinear plaster wall and, you know, a series of those which impart a very interesting form to this entire project. And they also encourage circulation. And there are also very interesting, you know, contemplative spaces.

And there is a use of glass as well. So, very, very interesting design. And, you know, just the definition of space is dictated with color, light, form, function, all of it. There is a play of white, which could be understood as the absence of color actually.

And when it's all white, how do we create a certain impression of depth and movement and just break that monotony and flatness? That's what these planes and punctures within that do. So that's an interesting way of dealing with the design. There is a long window that provides views to the campus green outside. And, you know, it reorients the visitor to the larger landscape.

And it also breaks your eye from the all white to, you know, greens outside. So that's another interesting way of dealing with this design process. This is an adaptive reuse project which got AIA Institute Honor Award for Interior Architecture in 2020. It's a dandelion chocolate factory. in San Francisco.

And here, you know, this adaptive reuse project transformed a century old vacant warehouse into both a tourist friendly boutique with a cafe, a shop and a tasting station as well, you know, which is like a fully operational factory. So, it's a very, very interesting project, which is adaptive reuse project. So sustainable practices, repurposing spaces, reusing them, trying to again recycle the resources, all of that. To reinforce the idea of craft and tradition, the team opted for finishes and details that echo the spirit of manufacturing. So again, there was a collaboration with makers.

There were details involving the craftspersons and hence the manufacturing of certain components and elements which were put together here. The brush painted, you know, wood siding, handmade tile like this one and the redwood millwork found throughout help enunciate the design intent. The color palette of white, brown and black. It reminds of chocolate and it goes well with the name of the factory and what it is meant for. And it reminds of the chocolate with carefully detailed metal fixtures and wooden displays as well along with the color palette put together to create this interesting space inside.

And then we see here the Ford Foundation Center for Social Justice, again New York City. This also is an awarded project. that there is a transformation of a 50-year-old building into a 21st century workplace and public amenity. So, we are reassigning the function to this space, which is 50 years old and might as well have been discarded, but then it is transformed and, you know, there is this entire new life given to this. Redesign maintains and enhances the building's original character while significantly improving functionality, transparency and accessibility.

This is a very, very important aspect that the building's original character is still retained and yet the functionality has been revised. So that needs a lot of sensibility while designing. The atrium has been made, you know, visually accessible to all. And many spaces, finishes and furnishings were redesigned to be seamless with what already existed. And it's a LEED platinum certified project.

So, there will be a discussion in the upcoming weeks, in the upcoming lectures, where we talk about the rating systems, especially for interior spaces. So, LEED CI, we will see a lot of details in that discussion, in that lecture. This is another one. This is the Weisman Music Building. And here, this building celebrates musical performance at every turn, embracing a collaborative and exploratory student-driven model of education that treats every space as a performance space.

So, these details are very, very interesting. The scale is quite magnificent. And the functionality, of course, has to be kept in mind. The cone of vision, the sight lines, the performers. How they are visible to us with all the details.

We are able to see that from wherever we are sitting. So, the section has to be designed very functionally, along with the understanding of lighting and everything. So, this is a very interesting project. Between the performance spaces. Porous, day-lit circulation volumes interlink to form the student commons, performance and rehearsal lobby, and a three-story atrium while maintaining acoustic insulation.

So, this is an interesting part or the detail about this project because it focuses on the performances. It has to have an acoustic insulation. The sound has to be of utmost good quality and the performance cannot be compromised. So, to maintain that acoustic perfection, what kind of insulation is put and, you know, what materials are chosen, all of those decisions have to be carefully made. And therefore, it's a very, very recognized and awarded project because it does deliver perfection.

Composition of subtly textured terracotta panels and low iron glass with delicate shading patterns wraps the full exterior. So, there is also a detail on the exterior and there is this entire... free-flowing, you know, mobility from exterior towards interior where we see the exquisite details of different materials. So, there are terracotta panels that have been used. Terracotta is also a very interesting material.

It's getting used in a lot of projects these days. It is from the earth materials category and if it is used in a proper way with proper specifications, it could be a sustainable and it could be used to its, you know, best possible use and maximum potential, which I think still lies quite untapped. So, it is one material that I personally like to, you know, do research on and experiment with. Then continuing with this building again, and we see some details and we also see the colors white and yellow, you know, put together as contrast, which sort of again highlights a certain detail and takes our eye movement, you know, towards certain elements because of the wavelength of the color.

So, we see the yellows and reds very quickly because they have, you know, high wavelengths. So, when I say chemistry of colors, physics of light, anatomy, and botany, these technical scientific aspects also need to be understood and put to use. The requirements of the facilities' high-profile performance spaces are met by high-performance digital design. So, there is, of course, digital design, which is quite extensive in this kind of project. The concert hall features a suspended theater

acoustic system, unifying acoustics, lighting, and life safety requirements into a dramatic, multifunctional architectural expression.

So, very, very interesting system design over here. The resulting intricately sculpted element is assembled out of 946 unique folded aluminum composite modules, which are digitally fabricated. From the architect's parametric model. So, there is also an employment of digital tools, the fabrication equipment, and an understanding of parametric architecture or parametric design. And, of course, they are, you know, software-simulated and done in folded aluminum composite modules.

So again, the detailing in terms of what material you are choosing. And even, what are the possibilities of available materials? Why stick to some very basic material palette, which is very conventional and energy-intensive? We can think about alternate materials. We can think about using conventional materials but in a very interesting and new way.

So, these are some interesting details that we see in this project. In the three major rehearsal spaces, high ceilings are filled with swarms of brightly colored kite-like reflectors that vary between solid and perforated to achieve dynamic acoustical and lighting effects. So, I was talking about the entire system that has been put together—the installation, the elements, the lighting in between, the acoustic panels, and everything, which is sort of digitally put together. It works well for the perfection that is required for a space like this, which is very performance-oriented and accommodates a large audience, where the performance matters a lot and cannot be compromised.

And in the recital hall, red-colored acoustical panels optimize the room's acoustical properties while incorporating a wall-sized shingle glass window that unites the performance event with the urban experience. So, this interesting detail over here, where we see these red-colored acoustical panels, they also create a very interesting experience, design vocabulary, and, of course, cater to the function for which they have been employed, specifically aligned with the need for acoustical perfection. The project finds form in the acoustics rather than finding acoustics in the form. That's very interesting, actually.

And this was a comment from the jury, where this was judged as one of the best projects for that year, specifically in the interior architecture category. This one is another one over here, California; originally built in 1943 for the construction of Howard Hughes' H-4 Hercules airplane. This was a hangar, and it now houses a new

technological marvel. So, the hangar's original 75-foot glulam arches and wood sidings were preserved. So, this is a very interesting project where we have these wood sidings.

And there is this very interesting form and this huge span that is achieved because of this structural detailing. So, there was an attempt to preserve these sections of timber and sort of repurpose this into a technological marvel, which requires a lot of understanding of scientific aspects related to interior design. Now, given Google's commitment to creating inspiring spaces and experiences, the project required an innovative design approach. And we all know Google does encourage innovative approaches. So, of course, they would want it to be reflected also in their offices, their spaces and the designs that they promote.

Each new floor is varied in shape and height, offering interesting vantage points and allowing daylight to flow into every level. So, there is an entrance of daylight. There are visual connections from this point if you are standing over here to outside here and also here. So we will try to understand when we talk about green interiors and rating systems, how daylight is so important. The views to outside landscape and spaces are so important.

And what does light and views and the details within the interior spaces do for our well-being and good health so that we perform better while inhabiting this interior space for the maximum time during a day or even a year or, you know, a certain season. So, these are the kinds of details that have been, that are seen here. There is also some aspect of interior landscaping, which we are going to talk about in subsequent lectures. Circulation is intended to promote interaction.

So, there is a lot of interaction because there are vantage points and there is nothing like blocked or curtailed, nor are there solid walls. So, there is a lot of visibility and there are connections—visual connections. So that promotes interaction among the employees, and bridges connect the new architecture to the central spine at different points on each level, serving as a unifying element. Subtle materiality throughout allows the original wooden structure to shine and relies on matte finishes. So that's also very interesting.

The preservation of the original material, the introduction of certain subtle new material aspects, and the effort to maintain the continuity of finishes. There is no stark or abrupt introduction of a mirror finish or a gloss finish. So, finishes are very subtle

and complement the rustic, rugged timber as a material. Color and pattern can be found in furnishings and art installations.

So, it's carried throughout, not just in the overall structure but also in the furnishings and installations. A mural by artist Human covers three walls and spans two floors. So, it's a huge mural, and it spans two floors. And what does it do visually to such a huge volume? That's also a very interesting aspect of the design and why this was placed here.

Because, you know, we have to introduce some elements that sometimes the space does not become overwhelming. It is the volume is not, you know, incomprehensible or we don't want to get lost. So, we do introduce accents, highlighter walls, murals and some of these elements of design which, you know, sort of enhance interior spaces and also make them less intimidating or overwhelming for us. So, we will see some of these details also later. Then there is another project and here we see, you know, again, very, very interesting views, sight lines, material aspects.

So, despite the significant alterations, the original building retains its character, context and history, resulting in a combined work that marries old and new very seamlessly, which is a rarity and it's not so easy to achieve, mind you. The interiors of existing mill structures become the backdrop for contemporary art galleries. So, it's an existing mill and how it becomes a backdrop for a contemporary art gallery and becomes intertwined with its narratives and, you know, carries the new stories and define spaces for the user experience and functionality. That's a very challenging aspect in this project. Overall, the design is driven by ideas of space.

This volume. There is light and of course there is rhythm. There is a repetition of certain elements, these columns, also these openings and the repetition and recurrence of these elements at a certain interval, at a certain frequency, it creates rhythm. So, we are going to also discuss elements and principles of design which are important tools for achieving good interior spaces. And we will see the examples for rhythm there also.

Designed as a museum within a museum, the galleries were all inserted into the industrial landscape. So, it's a very, very interesting way of adaptive reuse. And it does have this recognition because of the demanding and challenging aspects, you know, of design. The massiveness of both the buildings and the complex with interlocking courtyards, bridges, and walkways. Offered the opportunity to experiment with open spaces, structural elements like these, and the connections.

So, you know, the way this entire spatial configuration is achieved and how we use these courtyards, walkways, and bridges to sort of intertwine spaces and bring all the details and elements together. That's also a very important part of the design process. Existing spaces are edited, sculpting a two-story glass-roofed central core, a lounge at the museum's prow, and two-story openings for art and visual connections. So here also, there is a profound role of openings and how visual connections and interactions are encouraged within this project.

All bricks, structural wood, and finished wood used on the project are salvaged from the building itself. So again, the most ideal part is that we could reuse or repurpose materials from the existing or the old built form and then sort of use that again in the new spaces that we are envisioning or the repurposing of the existing space, continuing with the same material palette so that there is less burden on resources, less harm to the environment, and an aspect of circularity and sustainability that we are able to acknowledge, honor, and facilitate. So throughout this course, you will hear this a lot from me: circularity, sustainability, trying to have less burden on resources, alternate materials, interior architecture versus interior design, and so on. So, I hope through this repetitive discussion on these important and crucial aspects, I'm able to shape some of your understanding regarding the, you know, the discourse, the worldview, the global discussion that is happening, focusing on these terms and concepts. We see this Chicago Public Library and this is again an adaptive reuse project. I have mostly put them here for today's discussion. So, this ARP transformed former television studios into a new cultural and social center. So again, a television studio into a cultural and social center.

So, there is some repurposing and some kind of a new function assigned. Architectural interventions and bold graphic design elements such as codes, they create identity signage for the different areas like over here we can see. So, there are architectural details plus there are graphic elements which are put together and there is some kind of demarcation and identity creation also through these elements. Uncovered hidden skylights are used to increase daylighting and add to the calming atmosphere of the main reading room. The skylights over here.

they preserve the industrial character of the project so it's like you know the industrial design elements are used and they are preserved and that character is preserved the original bow truss ceilings that we see over here these trusses covering this entire span which is column free so these original ceilings and skylights lend a loft like

atmosphere that is typical of neighborhoods factory warehouse style And they have tried to retain that character and that original ceiling style and the skylights are, you know, preserved. And it sorts of gives a very calming atmosphere in this reading area or the reading space. So, it does have the character of an industrial setup, but it is transformed to a reading space. That's what the understanding of elements and principles and technical aspects of interior design can do to a space and project.

Yeah, we are talking about, you know, these nuances focusing on interior decoration, design, and architecture. And we were trying to understand why interior architecture is becoming more and more widely accepted and popular, and how it talks about the physics of light, the chemistry of colors, important details, concerns for aspects like circularity, sustainability, adaptive reuse, understanding of materials, alternative materials, all of that. And I always try to end with a nice quote because, you know, there are some profound thoughts. So here is one for today. Rawness and refinement are not opposite ends of a luxurious spectrum.

They are two complementary features with which to populate a loose environment. Very interesting. So next, we are going to focus on a very, very, very important aspect: the costing and career when we talk about interior design projects. Some of the references, I'll keep sharing them throughout the course. Thank you so much. I'll see you on the next one.