

Interior Design
Prof. Smriti Saraswat
Department of Architecture and Technology,
Indian Institute of Technology Roorkee

Lecture - 29

Interior Design: Interior Design Technology: New Concepts -Installations, Decor

Namaste, hello everyone. Welcome again to my NPTEL course on interior design. We are at lecture number 29 today. We are still discussing interior design technology, and today we will focus on new concepts related to installations and decor. So these are the broad contents.

Let's start with installations. When I talk about installation design, the creation of temporary or permanent structures within a space to enhance the user's experience could be part of installation design. The transformation of a space changes the audience's perception of reality. Installation art, also known as environments, may occupy a small space, an entire room, or a gallery.

There is a lot to discuss, focusing on what installations are and the history of installation design. But I'm keeping it as a brief introduction. I would like to focus on some interesting examples when we talk about installation design. One example is this installation called Crashing Waves, an outcome from a studio conducted at CEPT University in Ahmedabad. It is designed so that both the user and the structure react kinetically with each other.

This structure faces the sept south lawns, resembles waves splashing against a rock. This is the ideation, a very interesting sketch, you know, and also the details related to the joinery, the time-space continuum, what happens at every step. point in time, which aluminium fin that is used for making this design will rotate at what angle. So, there is a lot of detail and there are lots of drawings and the understanding of the structure, you know, that goes behind creating and executing such installations. So these are some of the renders that you see over here and some of the details and this installation is kinetic and you know the user interacts with these elements and then there is this sort of a system that is put in place and there is a certain you know response to each other and hence this kinetic installation works in that manner.

These waves move through swings. So if you see over here, there is a swing, there is a user and there is this installation which is running across this entire, you know, length. And in relation to how the swing or in what speed that swing is moving, moved or used by the user, there is a response and generation of a certain form and dynamic character that one sees achieved through this installation design. So, these waves move through swings that form the heart of the structure.

Thus, the rotation of aluminium fins that produce the illusion of waves depends directly upon the speed of the person swinging. with the waves splashing greater towards the peripheries of the structure. So, that's the detail which is, you know, thought about and put to use when this installation design is conceived and executed. This is one of the sections and it also gives all the details, you know, as per the dimensions over here. This installation is designed in the chosen space to pull people in for lunch, studio or just some silent contemplation or break from the work.

Very, very engaging and interesting installation design. This is the south lawns that I was mentioning. If we try to see the context of the CEPT University, this is the space where this installation is put on. This is the expense where it is installed. And then it, of course, operates through swing being used by a user.

More details. We saw this one. So this is an elevation, these two sections and very interesting and dynamic way, you know, very engaging and how it enhances the user experience. So that's what an installation can do to a space or a project. Some more renders.

So this is the overall summary. I also put this slide earlier. So how from the conception to the execution, everything is fairly detailed out and actually executed on ground. This is again a very interesting installation, one of my personal favorites. I think I am allowed to share some biases and some recommendations.

So, I really like this installation a lot. BMW Museum, Germany. The renovated BMW Museum in Munich, Germany, offers a vast space of 5000 square meters. For car design appreciation, showcasing the company's engineering prowess and providing an intriguing art experience. So, it also tells us about the history of the company and all the kinds of models and designs of the cars that evolved with time and technology.

One highlight is the kinetic structure by ART+COM, an impressive mechatronic installation consisting of 714 moving metal spheres suspended from the ceiling by thin steel wires. It's a very, very interesting installation. The installation represents the form-finding process in car design. And it unfolds in a seven-minute choreographed sequence. It has lovely music.

It's a total choreography. There is a sequence in which one can see the form-finding process while designing a car. And it's very, very engaging and aesthetically pleasing. Initially chaotic, the spheres gradually form geometric shapes related to the contours of future vehicles. So, it is a journey and mapping of the evolution of these shapes and designs.

So here we see some of the configurations and how these spheres are installed in this kinetic manner, creating different forms of various models and cars, designed as part of BMW's journey. Competing forms intersect and evolve until the final shape of each iconic BMW car emerges. Showcasing the design process of five significant models from the company's history. So that's what this installation is about. I'm going to show you a short video of this installation.

It will give you a much better understanding of what I'm talking about. I hope you enjoyed that video of the installation. Now, I would like to show you another very interesting, celebrated, and famous installation: Cloud Gate by Anish Kapoor. Cloud Gate was constructed using computer technology to cut 168 massive stainless steel plates into precise shapes, assembling them like a puzzle and welding them together. This is how it looks, but this is the construction.

To put things in perspective, it is 33 feet high, 42 feet wide, 66 feet long, and weighs 110 short tons. So it's a massive installation and very iconic. The central 12-foot-high arch is formed as a gate leading to the concave chamber underneath, inspiring the name Cloud Gate. Two large internal rings connected to a truss facilitated the assembly and distributed weight to two base points.

Flexible connectors affixed the stainless steel skin to the internal structure. Enabling it to adapt to Chicago's extreme weather conditions. So, again, it's not merely some kind of a hunky-dory design. For the lack of a better word, I keep using this phrase. But there is a lot of detailing that goes behind creating such designs.

The climatic context, the structural implications, the load calculations, the materiality aspect, the form which is aesthetically pleasing, and, of course, the functionality which is to engage people and create a landmark design like this. It's not easy. It requires understanding. It requires detailing. It requires time.

It requires conviction, and it requires sincerity. So, this installation is very interesting, and it creates reflections of the city because of the type of material chosen and the design which has been created. Inspired by liquid mercury, it is one of the world's largest permanent outdoor art installations. So, of course, massive, like I told. The stainless steel surface reflects the activities, lights of the park, and surrounding city skyline.

inviting visitors to touch and interact with its mirror-like surface and see their images reflected from a variety of perspectives. It is also a very very popular selfie point and we see a lot of pictures you know of people visiting the cloud gate and clicking their pictures, getting reflected in this cloud, you know, and the material which captures the reflections also around them, not just their own selfies. So there is also a video which is, you know, put over here to explain this installation, how it works and how it engages people around. So very interesting installation there and some of us like including me if we have not visited I'm sure it makes us excited to go there and visit this design installation and be a part of this entire vicinity and the surrounding buildings and nature.

Then Subodh Gupta's installations are also very popular and he is known to utilize utensils and use them as major props for creating the installation designs. And the one that is being discussed over here is Sangam which is quite celebrated. Sangam brings an Indian flavor to an iconic French department store. And it's a show of large scale installations in his signature style through the assembly of well used utensils and daily use objects. This also is a massive installation.

So we see here the love for utensils and daily objects and how installations are created by Subodh Gupta. And this also requires massive construction details, armature, load bearing, how to take care of such huge dimensions and expense and how to put things together. So it requires a lot of detailing. The exhibition Sangam, meaning Confluence, showcases large scale installations and fuses Indian influence with the French setting. So it's a very, very interesting exhibition which has these installation designs and it showcases, you know, Indian designs at an international pedestal.

I have another video that again talks about Sangam and helps us understand it in a better and more visual manner. Gupta's artworks and kitchen utensils play a pivotal role, enhancing their longevity and collector appeal. The Indian artist employs these everyday tools to construct intricate narratives, subtly alluding to cosmic themes. Gupta views these seemingly mundane items as windows into life's complexities, akin to the intricate lines and shadows on one's palm. Through his creations, he challenges viewers to contemplate the deeper significance of their dining experiences, community connections, and societal narratives.

So, I hope the video gave us some insights into how Mr. Gupta designs his installations. Gupta's art embodies the fusion of cultures, history, and commerce, urging viewers to ponder their place in a consumer-driven world. The title holds Hindu mythological weight, symbolizing the merging of three sacred rivers, hence the name Sangam. These are some art installations by a friend called Anuj Anjaria. I have been seeing his works, you know, during the time I was studying at CEPT, and he was also studying and working at CEPT in Ahmedabad.

And I like a lot of his installations. I have not been able to do justice. I've just put some pictures over here, but if you are interested, you should look at this link, as he does really wonderful work. Now, let us talk about decor. I am sure the installations part was quite exciting, and some of us would like to explore more and work on these designs in the near future.

So here, I've also tried to include some examples and case studies. I really like the work by Oorjaa Studios, specifically their decor and the kinds of products. They design and the kind of approach they have. It's very interesting. So, this is one of the design studios dedicated to crafting sustainable materials into one-of-a-kind lamps and products for retail and custom lighting solutions.

They offer very customized designs with an interesting material palette, keeping sustainability in mind while working with unconventional materials. These materials are not very conventional and haven't been explored enough, even though they have potential for use in interior design products, especially lamps. Their unwavering commitment lies in harmoniously combining waste and natural fibers to create stunning light fixtures while adhering to environmentally responsible practices. That's why I respect their designs a lot and have included them here. Their unique approach

leverages local and natural materials, including traditional resources like the versatile fiber Lantana,

contributing to the preservation of Indian culture and indigenous knowledge systems. So, I was talking about unconventional materials with potential that haven't been explored. Lantana is one of those, and during my other NPTEL course, 'Role of Craft and Technology in Interior Architecture,' I discussed Lantana, its origins in Uttarakhand, and how it can be used to create interesting designs through community knowledge and skills, processing it into unique products.

So they also use this material a lot, and then they design very interesting lamps and lighting fixtures out of it. This fusion of tradition and innovation not only adds character to the designs but also supports local communities—something that I was just talking about—utilizing their skills, creating employment for them, and developing this ecosystem where the designers, makers, and caregivers all work together. Resulting in both aesthetically pleasing and eco-conscious products. So again, a very promising way of working—creating this kind of ecosystem and working with materials that are environmentally friendly while also creating livelihood opportunities for local communities. Some of the examples you see over here.

A very interesting material palette, very interesting permutations and combinations, like a faux cement lamp with water hyacinth over here. This is another one that is handcrafted. It's a conical lamp, and it has banana rope woven into it, which has been given this kind of shape or form over here. So these are very interesting creations—very unconventional and experimental. This is also, you know, a cement lamp with banana rope weave.

Weaving over here. So interesting forms, interesting material palette, textures. And these are some lamps explored out of paper. This one is very interesting. It's a flower pendant lamp.

handcrafted with sculpted banana fiber paper. And it looks quite aesthetic. The form is very nice. The color combination is nice. The mood it imparts to the space because of this tactility and color palette and the kind of

light that you put in over here yellow or white depending on what the purpose it is will give a very interesting character to the space this is also a very interesting lamp city

birds lamp handcrafted with natural materials like brass and paper so here we see this lamp this is also very interesting Waves ceiling lamp, again handcrafted and the use of natural fiber paper, copper wires, wooden frame. Highly customized, very interesting combinations, unique vocabulary, not something which is mass produced and it can be simply procured from the material and everybody having the same design in their houses or spaces or projects, but a unique opportunity to create something customized. Then this interesting pillar of lights design over here. So it is a sustainable light sculpture made from natural materials like banana fiber, paper, lantana again.

And these are biodegradable and renewable. So that's the advantage and that's the buzz and the plus point. The use of these materials reduces the environmental impact of production and waste while also allowing for endless design possibilities. So there are countless possibilities for customization, for experimentation, for different combination of materials which are diverse. Of course, one has to see the compatibility of these materials being put together.

And for that, you need again, Mock-ups, experiments, details, and of course, it requires a lot of thought and time. That's why there's a lot of appreciation for designs like that, and that's why I'm putting them here and sharing them with all of you. So again, a small video. I have a lot of videos today, and I'm sure you are going to enjoy the visuals more than the text and what I try to explain. Lantana is an invasive species of shrub, and it's such a tenacious plant; it's very difficult to get rid of.

It grows so fast and so wild that it impacts wildlife movement and the availability of food, and that leads to all sorts of problems. But I think on the commercial side, it's important that crafts and architecture—people who work in these fields—use that material because it's so tenacious; it's also a very strong material. And there are lots of commercial uses for it. Gaya is the goddess of Earth. She represents Earth.

And to me, the two important pillars of life on Earth are matter and energy. So this very flowing form that we have in these two pillars represents matter and energy—the light and the solid material of Lantana. And the forms are flowing, yet they're stable. So that's why they're called Gaya, and that's what these two pillars represent. So that was very well explained—their philosophy, the choice of material, and the design that is achieved.

Now moving on to Alaya Design Studio, again, very, very promising ways of designing and very respected works. Dehradun-based Alaya Design Studio started an initiative to train local youth in carpentry. using local materials like wood, bamboo, natural fibers. So they are also providing livelihood to the youth. They are doing capacity building, they are trying locally available resources and materials, and they are designing responsible products and responsible projects as designers.

Over the years, it grew into a design-led social enterprise, anchoring and promoting a local ecosystem of artisans, informal sector-based producers, raw material providers, local customers, entrepreneurs and community-based organizations. So that is the power of design, that is the power of meaningful, thoughtful work. And I always, you know, with the help of my teaching consultancy research lectures like this that we are doing for NPTEL or for my regular classes, I always emphasize on creating an ecosystem. And, you know, bringing stakeholders together and trying to create very community oriented and, you know, very, very eco-friendly projects. And we have the capacity and power to do that.

It's just being aligned, you know, to that kind of ideology and being surrounded by those kinds of examples and getting inspiration from them. These are some of the items or some of the designs that you see over here. This is a lamp in a local natural fiber. These are some of the benches that we see. And, you know, some light fixtures and, you know, some kind of natural reeds and materials used again for putting these designs together.

So, this is a chair in bamboo with a footstool. This is another one of their designs. And I love this design. This is called Bird Mobile in Copper. And you know, swallows are traditionally welcomed in Kumaoni households as they are supposed to bring prosperity.

So, we see these birds, and there is this local narrative from Kumaon, Uttarakhand, which they try to capture through these designs. So, That's also, you know, again, an interesting way designers can capture narratives and showcase these stories from different parts of the world. And then, through materiality and what kind of form, designs, or shapes, you know, these stories could be communicated. This is an interesting coffee table in pinewood.

So, there is a lot of use of pinewood again. You know, we see it in Uttarakhand and other parts of the country. So, these are very interesting designs from the Alaya studio. These are some more. So, there is this lounge chair in bamboo splits.

We can see and probably imagine how this would have been made. These are the sections and the splits that we can see over here. And then there is a stool made of natural fiber. It could also be used for storage, as a basket, or even as a lamp design. There could be multiple purposes attached to a particular design.

That's possible. And then there is this interesting bench that we see over here, made of pine with a jute rope seat. So again, permutation and combination of materials, putting them together, and then exploring these designs in a very sustainable way. So some of the references focusing on today's discussion on decor and installations, I've tried to include them here. Thank you so much.

I'll see you next time.