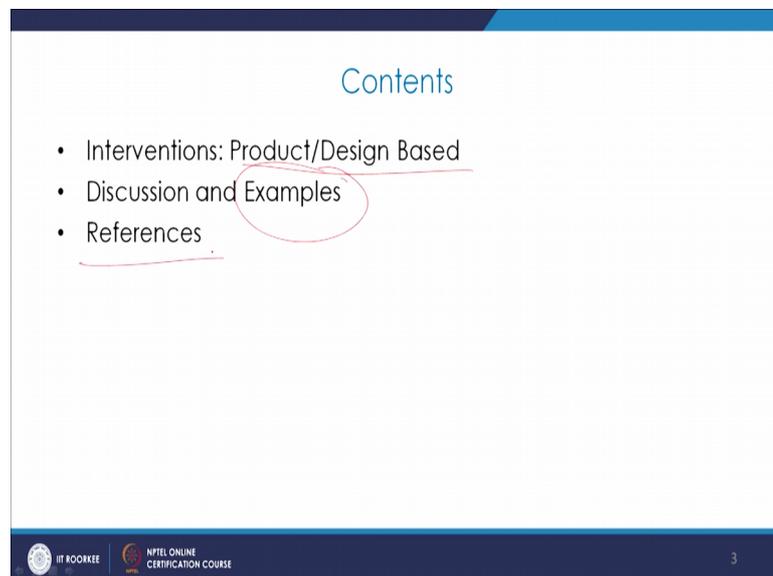


Role of Craft & Technology in Interior-Architecture
Prof. Ar. Smriti Saraswat
Department of Architecture & Planning
Indian Institute of Technology, Roorkee

Lecture - 37
Interventions: Product/Design Based

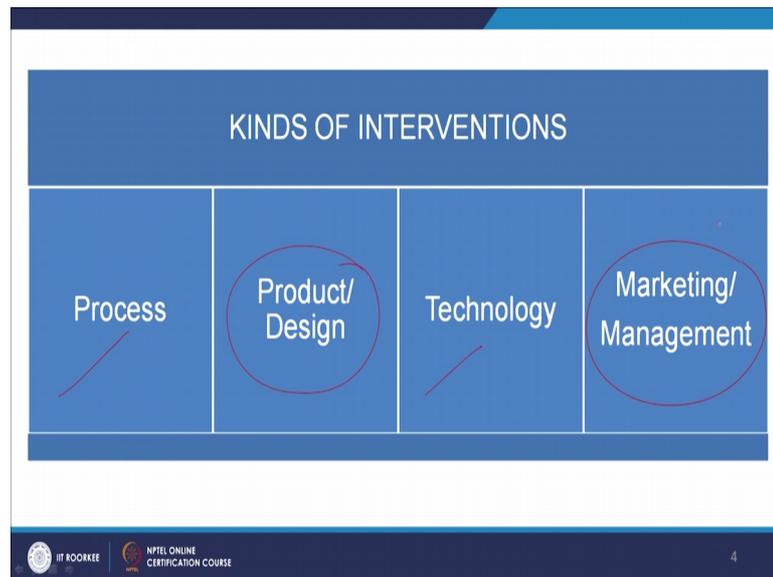
[FL] Hello everyone welcome to the NPTEL course Role of Craft and Technology in Interior Architecture. Today we will discuss module 37 and we will talk about Interventions and the focus would be the Product or Design Based interventions.

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So, we will talk about the product design based interventions we will see some examples and references towards the end. So, in the previous module where we started talking about interventions we identified majorly four kinds of interventions that we will talk about.

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The process based, product design based, which we are going to see today few of them of course, technology based and a marketing and management based.

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"Design interventions are seen as a supplement to existing research methods, one that favors and explores unsettled and imagined possibility, yet employs empiricist virtues of embodiment, empathy and documentary forms. The design intervention is a placeholder concept, which because of its ambiguity allows for a wider range of conceptual alternatives to be explored. And the immediate objective is not so much to arrive at closure, as it is to prompt reflections about the issue in discursive contexts."

_ Halse, J. And Boffi, L. "Design interventions as a form of inquiry", Paper for the seminar *Ethnographies of the Possible*, The Research Network for Design Anthropology, 2014, Aarhus, DK

The slide features a white background with blue text. The main quote is underlined in blue. Several words and phrases within the quote are circled in red: 'Design interventions', 'one that favors and explores unsettled and imagined possibility', 'empiricist virtues of embodiment, empathy and documentary forms', 'placeholder concept', 'because of its ambiguity', and 'prompt reflections about the issue in discursive contexts.' At the bottom, there are logos for 'IIT ROORKEE' and 'NPTEL ONLINE CERTIFICATION COURSE', along with the number '5'.

We also try to understand, what is the meaning of design intervention? So, design interventions are seen as a supplement to existing research methods, one that favors and explores unsettled and imagined possibility, yet employs empiricist virtues of embodiment, empathy and documentary forms. So, the interventions definitely talk about the explorations and one step further about exists, but it definitely does not take away

from the empirical knowledge, the one which has been employed generation to generation and which has transferred through you know oral traditions also by making and giving it to the next generation. So, there is an empathy towards the existing skills and knowledge.

The design intervention is a placeholder concept as this report suggest and the author suggest because of it is ambiguity allows for a wider range of conceptual alternatives to be explored and the immediate objective is not so, much to arrive at closure as it is to prompt reflections about the issue in discursive contexts. So, I really found this interesting that how it is also the empathy towards the empirical word choose and skills plus the explorations and where the target and the closure is not the only aim, but to also understand the importance of different contexts and how the intervention actually works for that particular contexts.

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So, we are going to see some examples the first one is the Kala Raksha Vidyalaya it is in Kutch Gujarat and the director is the Judy Frater and she has dedicated her entire life to this cluster you know specially the women who worked on embroidery here and she settled in India she is not an Indian, but she dedicatedly works with this cluster of women artisans.

And then she has really natchared their skills and introduced lot of inventions and the Kala Raksha Vidyalaya is now something else it is an example it is an exemplary illustration of interventions and how the artisans can actually be empowered.

So, here we see some of their traditional designs and you know how they work what are the different designs at they work on and with the help of interventions they have come up with a range of products which is a local as well as global, it is all done by the artisans themselves and lot of you know the exhibitions displays and fashion shows happen where their works have been displayed. Also there is a product range which can be brought online there is a digital portfolio where you know different users and interested individuals can see their product ranges along with the detail of the artisan who actually did that.

So, it is a platform where we see the primary importance and focus given to the artisan and their skills and how they have really continued their craft revived it and attain the market goal they are empowered they are employed they have livelihood and the designs are accepted according to the current market trends.

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"The **problem for many of the artisans at the Kala Raksha Vidyalaya in Kutch (Gujarat), says project director Judy Frater, is finding a market for their finished products.** The **traditional solution is what Frater calls "design intervention" – when a professional designer from outside the community steps in to provide new concepts for new markets.** But in many cases, **that approach can be detrimental, diluting the craft and reducing the artisans to common laborers. It would be a waste of effort and creativity - labor without the joy of creativity."**

Interventions: Case of Kala Raksha Vidyalaya, Kutch (Gujarat, India)
Source: Marati, J. "Teaching Design", Handeye Magazine (Online), <http://handeyemagazine.com/content/teaching-design>, 2013, accessed Feb 2018

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So, the problem of many of the artisans at the Vidyalaya as pointed out by Judy Frater herself is finding a market for their finished products. The traditional solution is what Frater calls design intervention when a professional designer from outside the community steps into provides new concepts for new markets.

Now this is what usually happens designer meets artisans and a designer comes from outside the community comes with their new ideas and concepts and then try to tell the community that they need to do this work in this particular manner and for such a such and such output or the target which is required to be achieved.

But in cases like that you know the approach can be detrimental diluting the craft and reducing the artisans to just being laborers it would be a waste of effort and creativity labor without the joy of creativity. So, in such an approach the artisan takes a back seat and their creativity is not given importance they are not given creative freedom so, that is the problem with this approach.

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"Kala Raksha Vidyalaya, created by Judy Frater in 2005, with the help of the prestigious Ashoka Foundation Fellowship, provides the foundation upon which artists can design their own products. The one-year program consists of six classes teaching everything from color sourcing to market orientation to concept development and communication. The program culminates in the creation of a final portfolio, which encompasses not just new designs but also brand identity and marketing. These portfolios are then digitized and placed online, in order to expose student talent to people outside the community."

Interventions: Case of Kala Raksha Vidyalaya, Kutch (Gujarat, India)

Source: Marati, J. "Teaching Design", Handeye Magazine (Online), <http://handeyemagazine.com/content/teaching-design, 2013>, accessed Feb 2018

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Kala Raksha Vidyalaya created by Frater in 2005 provides the foundation upon which artists can design their own products. So, artisans they design their own products they are the main stakeholders and they are given entire freedom, along with inputs from the visiting designers students professionals, but they have this creative freedom and they design on their own. They have this one year program which consists of 6 classes teaching everything from color sourcing to market orientation to concept development and communication.

So, they are given exposure to everything and eventually, they design on their own the program culminates in the creation of a final portfolio which encompasses not just new designs, but also brand identity and marketing. So, this artisans are also taken outside the

community to some cities to do the market survey to get exposure to ask questions to see to observe to learn to understand they come back. And they try to put that you know observation in their design and come up with different kinds of product ranges so, that is another interesting you know way of empowering them.

These portfolios are then digitized and placed online in order to expose student talent to people outside the community which is like phenomenal for all their work is digitized in their name, with you know due importance to their creativity it puts online in a digital mode.

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So, we see here this digital portfolio and even artisan who is you know putting her work with the assistants some of them are also given basic training for you know ICT. So, all these are like empowerment to the women, first of all the exposure to the market and giving them different inputs and then putting the portfolio digitally also bringing in lot of people for discussions and brain storming and inputs.

So, it is a very interesting platform in model and it is a successful intervention, different pictures, products and the women with the founder Judy Frater.

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And there are some melas and you know some ramp walks where these artisans are taken they are empowered their work is celebrated and recognized.

So, all these really intrusions empowered these women and when they go out to such exhibitions and melas and shows and they introduce themselves as a young designers that is when you know everybody knows right he has that empowerment. And they have the courage to face the world shows their designs and work upon them improvised continue their designs revive them re-contextualize them reinvent them rediscover them represent them so, that is how it is an interesting model.

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"Since the new market is no longer local, nor are crafts necessarily prepared for utilitarian purpose, the functional basis that drove innovation is altered. In addition, since the market has expanded, innovations must be faster and less subtle. Instead of varying the pattern within an object, the object itself must be changed. A different consciousness is essential for craft to succeed in the market "

Interventions: Case of Kala Raksha Vidyalaya, Kutch (Gujarat, India)

Source: Frater, J. "Kala Raksha Vidyalaya: A New Approach for Revival of Craft". *The Encyclopedia of Intangible Cultural Heritage* (Online). Craft Revival Trust, <http://www.craftrevival.org/voiceDetails.asp?Code=14>, year not known, accessed Feb 2018

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“Since the new market is no longer local, nor are crafts necessarily prepared only for the utilitarian purposes, the functional bases that drove innovations is altered in addition, since the market has expended, innovations must be faster and less subtle, instead of varying the pattern within an object, the object it itself must be changed. A different consciousness is essential for craft to succeed in the market.”

So, whenever we talk about interventions such kinds of observations come into picture what is the what are the attributes of interventions today and what kind of scale is required. It is not just changing few patterns and few you know motives, but it is thinking about all new productories, different kinds of objects and products themselves how could they not be just utilitarian, but also serve other purposes.

So, when the intervention comes into picture and particularly the product and design aspects talked about and looked at it is huge gamut of you know explorations which give that kind of intervention which really put that kind of result into picture that you know the intervention is accepted successful there is demand for the product and there is lot of employment generated. So, all those concerns are paramount in they have to be catered to.

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"The minimization of labour in traditional art has allowed entry of new elements. With exposure to new markets through settling and embroidering commercially, rabari women have gained access to a vast array of new materials, colours and patterns. Remarkably, Rabaris choose new elements according to their own, still vital sense of aesthetics – essentially following the design brief. The labor savers expressly enable more rapid execution. As a result, artisans have become eager for ever rapid changes in style. Thus, fashion has emerged as a concept."

Interventions: Case of Kala Raksha Vidyalaya, Kutch (Gujarat, India)
Creativity and Design in a Living Tradition

Source: Frater, J. "Kala Raksha Vidyalaya: A New Approach for Revival of Craft", *The Encyclopedia of Intangible Cultural Heritage* (Online), Craft Revival Trust, <http://www.craftrevival.org/voiceDetails.asp?Code=14>, year not known, accessed Feb 2018

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The minimization of labour in traditional art is allowed entry of new elements, with exposure to new market through settling and embroidering commercially, rabari women have gained excess to a vast array of new materials, colors and patterns. So, when an intervention is you know talked about and the product is the you know outcome and the end consideration it is not just about changing a little pattern or just thinking about a new design, but it is also introducing new materials, the colors schemes. So, there are lot of layers to intervention and the more they are explode in a very creative and functional way the more the better the results.

Remarkably rabaris choose new elements according to their own still vital sense of aesthetics essentially following the design brief. So, they have a sort of a design brief, but lastly the women here who have working on these embroideries they choose element according to their own vital sense of aesthetics, which is again putting the artisan or the artists at the centre of all the you know activities at happen and giving them that freedom the labors savers expressly enable more rapid execution.

As a result artisans have become eager for ever rapid changes in style, thus fashion has emerged as a concept. So, they do understand you know what is the fashion, what is invoke, what is the market demand, and they are ever ready for these rapid changes. They do understand what is required for the market and when they are given that liberty

and cater the centre after gaining all that exposure and understanding their designs do reflect what is needed for contemporary times.

But still they are the creators it is still customized and not getting mass produced and they have their sense of again re contextualizing and reviving.

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"What if artisans learn to think like designers! If one recognizes the creative capability of artisans, in terms of cost efficiency and feasibility, it is more practical to think of training traditional artisans in design principles than to train designers in craft traditions. Further, in terms of the survival of craft traditions, it is far more sustainable."

Interventions: Case of Kala Raksha Vidyalaya, Kutch (Gujarat, India)
An Artisan Centered Approach

Source: Frater, J. "Kala Raksha Vidyalaya: A New Approach for Revival of Craft". The Encyclopedia of Intangible Cultural Heritage (Online). Craft Revival Trust, <http://www.craftrevival.org/voiceDetails.asp?Code=14>, year not known, accessed Feb 2018

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What if artisans learn to think like designers! If one recognizes the creative capability of artisans, in terms of cost efficiency and feasibility, it is more practical to think of training traditional artisans in design principles then the other way around which usually happens then to train designers in craft traditions. Further in terms of the survival of craft traditions, it is more sustainable and that is what Kala Raksha Vidyalaya follows.

So, they give the training of design principles to the artisans and while we are talking about this successful intervention and this example it is also important to understand how you know this empathy towards the artisans their empirical skills and the employment of ethnographic techniques could be a successful model to work upon. Because slowly the field of design is you know there is a lot of importance now given to the ethnographic field techniques and how to really do research and work with these communities and put the entire focus on them and learn through them.

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"The ethnographic field techniques of in situ observation and interview have been widely adopted and employed in various newer professional design fields that value the inspirational potential of qualitative studies and potential for collaboration, such as interaction design (Löwgren & Stolterman, 2004); design thinking (Brown, 2009); commercial innovation (Kelley, 2005); service design (Potaine et al., 2013); and public sector innovation (Bason, 2010). Also in more academic circles of design research, have ethnography gained relatively much exposure and application (e.g. Dourish, 2006 and Koskinen et al., 2011)."

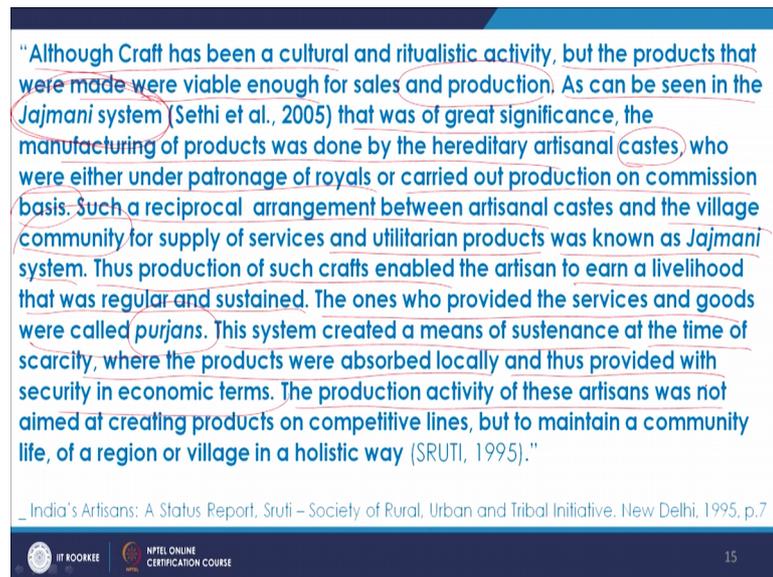
_ Halse, J. And Boffi, L. "Design interventions as a form of inquiry", Paper for the seminar *Ethnographies of the Possible*, The Research Network for Design Anthropology, 2014, Aarhus, DK

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So, the ethnographic field techniques of in situ observation and interview have been widely adopted and employed in varied newer professional design fields that value the inspirational potential of qualitative studies and potential for collaboration. So, when we talk about interventions it is not just a measurable quantitative output or a target, but it is also the qualitative studies, the ethnographic field studies, to get to know the artisan community better to build a rapport with them, to learn from them to give our inputs to let them hearers you know with all comfort. So, that kind of a rapport it needs different kinds of tools and now the design field is gaining you know more and more attention and it is employing those kinds of field techniques.

So, such as interaction design, commercial innovation, design thinking and public sector innovation all these different fields are coming up within the design umbrella and they all will give lot of importance to the ethnographic field techniques. More academic circles of design research have a ethnography gained relatively much exposure and applications. Now, talking a little bit more about the product intervention and the different perspectives and opinions different people and different reports have pointed out regarding the product and product when we talk about craft.

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"Although Craft has been a cultural and ritualistic activity, but the products that were made were viable enough for sales and production. As can be seen in the Jajmani system (Sethi et al., 2005) that was of great significance, the manufacturing of products was done by the hereditary artisanal castes, who were either under patronage of royals or carried out production on commission basis. Such a reciprocal arrangement between artisanal castes and the village community for supply of services and utilitarian products was known as Jajmani system. Thus production of such crafts enabled the artisan to earn a livelihood that was regular and sustained. The ones who provided the services and goods were called purjans. This system created a means of sustenance at the time of scarcity, where the products were absorbed locally and thus provided with security in economic terms. The production activity of these artisans was not aimed at creating products on competitive lines, but to maintain a community life, of a region or village in a holistic way (SRUTI, 1995)."

India's Artisans: A Status Report, Sruti – Society of Rural, Urban and Tribal Initiative. New Delhi, 1995, p.7

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Although, craft has been a cultural and ritualistic activity, but the products that who have made were viable enough for sales and production; As can be seen in the Jajmani system that was of great significance, the manufacturing of products was done by the hereditary artisanal castes, who are either under patronage of royals or carried out production on commission basis.

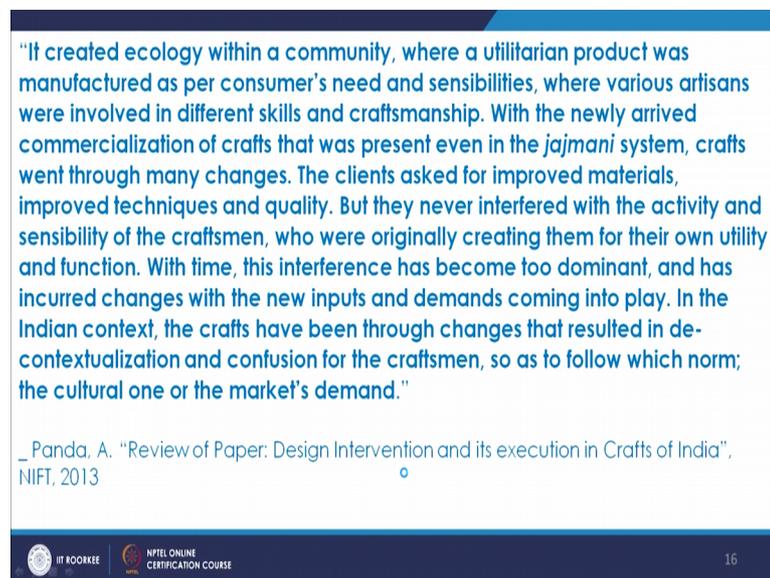
So, there is a mention of this jajmani system and how the production and sales of the craft products was carried on. Such a reciprocal arrangement between artisanal castes and the village community for supply of services and utilitarian products was known as the jajmani system. When the craft was largely utilitarian and there was not an there was a large interaction between the artisanal casts and the guilts and with the other community of the village and how their services were taken, how the services were taken care of, how they are their needs were taken care of and how the products reach the community through this artisans.

So, that was the jajmani system, thus production of such crafts enabled the artisan to earn a livelihood that was regular and sustained. So, it does not happen anymore and the livelihood is the biggest concern and hence all these discussions on revival and interventions are happening. The ones who provided the services and goods who are called purjans. This system created a means of sustenance at the time of scarcity where the products were observed locally and thus provided with security in economic terms.

The production activity of these artisans was not aimed at creating products on competitive lines, but to maintain a community life of a region or village in a holistic way. So, because the system has changed it is the crafts are not just utilitarian the market is not just local and there is lot of competition therefore, all this changes have happened and there is a need of intervention.

And it is important to have this cognizance to understand this change to understand the continuity and to work on the traditional designs with some interventions and in inputs and to you know give them some contemporary expressions, contemporary functions and generate livelihood for this artisans which is otherwise you know in a very decimal state.

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So, this system that we were talking about it created ecology within a community you know utilitarian products and community interacting with the artisans and the entire supply and demand working in that particular system. But now, that is not happening anymore and therefore, we are discussing lot of interventions which are needed for the sustenance of the community, but the crucial point here is that how is that sustenance you know still culturally rooted and how does it really involve the craft person and their tested skills.

So, that the entire attention is not on the hand product which is very contemporary and different from what they use to do, but it has to be a synthesis of what they were doing and how certain new inputs come into picture which are also through their observation

and understanding and in finally, there is an hand product which really serves all the purposes.

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"By reviewing a community's uniquely nostalgic definitions of craft, designers might uncover which technological traditions, values, and goals users desire to take from past designs into the future."

"By understanding craft as a local process, a cross-culturally variable logic, and a product that hails active consumers, this essay ultimately argues that designers and writers alike might come to create more user-centered and emancipatory compositions."

"Whether it's knitting, cross stitch, woodwork, or origami, more and more digital composers are turning to craft, for handicraft seems to hold a godly power to re-embodiment the digital, produce calculable products, and connect designers to their technological roots in ways digital modes of composition do not."

_Kurlinkus, W.C. (2014), "Crafting Designs: An Archaeology of "Craft" as God Term in Computers and Compositions", Elsevier, Volume 33, Pp. 50-67

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Some more perspectives and opinions regarding the product you know products in the craft process and how to really think about product interventions. By reweaving communities uniquely nostalgic definitions of crafts, the designers might uncover which technological traditions, values, and goals user desired to take from passed designs into the future. This is the synthesis or the symphony that I was mentioning you know while we were discussing the last slide and it is very important.

How the past designs are taken into the future, what is the approach? By understanding craft as a local process, a cross culturally variable logics so, we were talking about the culturally viable sustenance and a product that hails active consumers, this is very important this essay ultimately argues that designers and writers alike might come to create more users centered and emancipatory compositions.

So, this is an assert from an assay this is what they are talking about when we talk we think of product intervention or a design interventions and how it has to be more user centered and you know it hails active consumers. So, all these studies need to be done they have to be understood and only when the interventions would be successful.

Whether it is knitting cross stitch woodwork origami more and more digital composers are turning to craft, for handicrafts seems to hold a godly power to re embody the digital produce calculable products and connect designers to their technological roots in ways digital modes of composition do not. So, there is also a lot of mention of digital crafts and how more and more digital tools come into picture and there is a sort of digital exploration of a particular hand craft skill. So, all those explorations are also happening.

And during one of the modules we discussed you know for the case of stone, that how see the cns, the cad and cam has completely taken over the stone craft and how there is a debate. You know how much interventions should be there and we tried to sort of you know conclude that there has to be a balance where the hand scales are also celebrated and then there is lot of assistance and help from the power tools and technical interventions.

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"According to Gray, Cooly, Lutabingwa, Mutai-Kaimeny and Oyugi (1996:114) product development can include adding product features, refining of a product, expanding the product line, developing a new generation of products or developing new products for the same market. Any one of these areas can be applied to the arts and craft market."

"Arts and craft are perfectly suited to impact sustainable development through design"

_ Greyling, H.M. (2003), Brokering for Sustainable Development in Arts and Crafts, Master's Thesis, Department of Textile Design, Faculty of Arts, Tshwane University of Technology (Supervisor: Prof A Lombard, Co-supervisor: Ariana van Heerden)

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According to Gray, Cooly and others product development can include adding product features, refining of a product, which is already existing expending the product line, developing a new generation of products or developing new products for the same market. Any one of these areas can be applied to the art and craft market, and when we talk about the product development, interventions related to product an design then all these value additions and different aspects yet the authors are talking about are quite possible and vival.

“Art and craft are perfectly suited to impact sustainable development through design.” So, we talk about design and we talk about sustainable development and art and craft. So, all this linkages they need to be stabilized and design can really sustain art and craft and they can be very interesting interventions which are suited for particular community which are relevant to their needs. And that needs lot of background research ethnographic field techniques rapport building with the community working with them going to them, rather than bringing the out of their context and you know sharing and bring storm and working together.

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“Brokering has to do with bringing partnerships together for the purpose of sustainable development. Resources that can be brokered include human, informational, natural, manufactured and organisational resources. Dialogue takes place between different partners and this leads to decision-making and active contributions of resources. It is within this framework that the arts and craft can function. **In the area of product development the artist can fulfil a vital role as a broker. The community, market, business, government and trainers are among the different parties that must be brought together to form a partnership that can develop the necessary products.**”

_ Greyling, H.M. (2003), Brokering for Sustainable Development in Arts and Crafts, Master's Thesis, Department of Textile Design, Faculty of Arts, Tshwane University of Technology (Supervisor: Prof A Lombard, Co-supervisor: Ariana van Heerden)

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There are few more in interesting thing. So, brokering is another approach that has been you know adopted in the countries specially your. So, in the area of product development the artist can fulfill vital role as a broker the community, market, business, government and trainers are among the different parties that must be brought together to form a partnership then can develop the necessary products. So, it is talking about establishing necessary partnerships and then taking care of product development trying to understand these linkages and value chain.

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Design interventions have a very important role in every step of the process in creation of the craft. They **should focus on the identity of a craft, its social and cultural relevance to its region, and the processes and materials involved, to incorporate the interventions in the right situations, with efficient expected outcomes and reasoning.**

- (Design Intervention and its execution in Crafts of India- Amrita Panda)

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Design intervention have a very important role in every step of the process in creation of the craft and these interventions should focus on the identity of a craft which we always keep talking about it should not take away from the identity of the craft. It is social and cultural relevance and the processes in materials involved, to incorporate the interventions in the right situations, with efficient expected outcomes and reasoning.

So, ideally this is what design interventions mean and how they have to be employed and introduced and what all important aspects and considerations they must have. If we have to really empower this artisans and craft persons and if they have to really establish this sector as something which is very important or generating employment as well as the one that we see as a cultural resource and as an identity to our country.

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"Design intervention can help bring in the much needed empathetic understanding and holistic vision to connect and integrate the various efforts towards a positive outcome. One would come across amazing indigenous innovations in India that can be developed into marketable products and thereby help in creating business success. These could provide vital directions for a country like India, to transform into an innovation-driven economy."

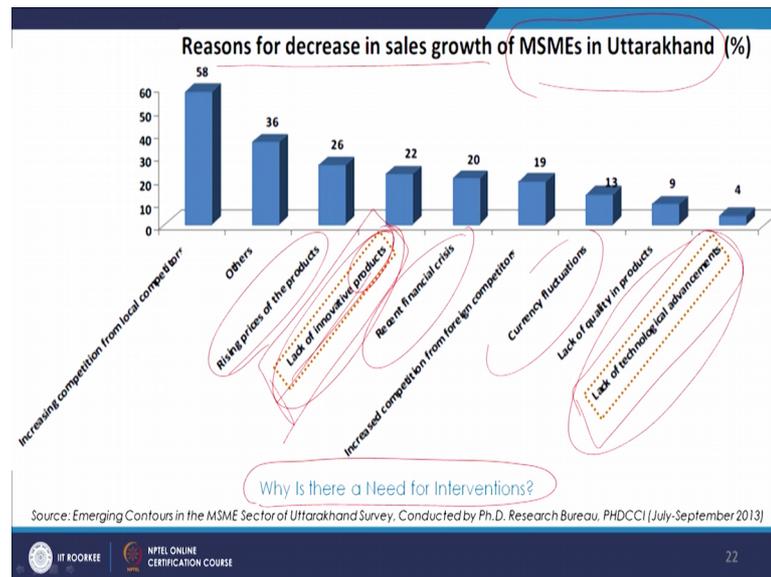
-(Ascertaining the Scope for Design Interventions for their Successful Commercialization- Ravi Mokashi-Punekar, Shashank Mehta- 2011)

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Design intervention talking about that further one would come across amazing indigenous innovations in India that can be developed into marketable products and their by help in creating business success. These could provide vital directions for a country like India to transform into an innovation - driven economy, which is already happening.

And we have held the decade of innovation we have lot of design hubs coming now into picture we have innovation as the buzz word and we are already an innovation driven economy. So, all that is happening and this interventions just need to be understood from the perspective that the community benefits out of it.

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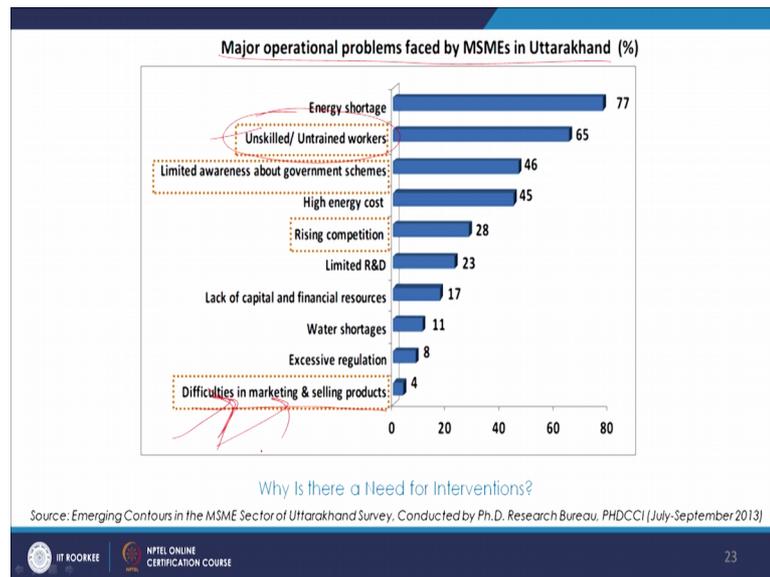


Now, since we were talking about you know what are the design interventions that one seeks what are different perspectives on it and what are different attributes which are ideally required out of such interventions. Let us also see you know what are the problems and why the interventions are needed and what are the bottle, next when we talk about the aft crafts forms, their marketing, their products.

So, particularly talking about Uttarakhand we are the reasons for decrease in sales and we see here one of the major highlights lack of innovative products, their other also other factors, but we are highlighting particularly here the lack of innovative products and lack of technological advancements. So, we began with the identification of four kinds of interventions where we talked out about the product or design intervention and we also talked about the technology interventions.

So, there are already statistics which tell you know and which have highlighted this gap and which can be addressed through the interventions so, that this problem could be solved.

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The major operational problems faced by MSMEs in Uttarakhand again here besides other things like skilled unskilled, the unskilled and the untrained craft persons are workers and limited awareness and lack of knowledge of policies.

We see this crucial point over here difficulties in marketing and selling products. So, we also identified one area of intervention is the market if management intervention and we see here. So, sometime the products themselves are not in demand because they need lot of revival, re-interpretation, re-designing, re-contextualization, at times if the product range is there then there are problems with the marketing it did the products are not reaching the market.

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SWOT analysis of MSMEs in Uttarakhand

Strengths	Weaknesses
<ul style="list-style-type: none"> Abundance of natural resources Close proximity to high demand markets Availability of cheap labour force Low manufacturing costs Favourable government policies 	<ul style="list-style-type: none"> Highly fragmented sector Low productivity Technological obsolescence Lack of awareness of business opportunities Inadequate exposure to international environment
Opportunities	Threats
<ul style="list-style-type: none"> Emerging economy & expansion Initiation of overseas collaborations Special policies developed for the sector Achieve economies of scale through diversification 	<ul style="list-style-type: none"> Stiff competition from global players Loss of export competitiveness due to currency fluctuations Product substitutes due to fast changing technology

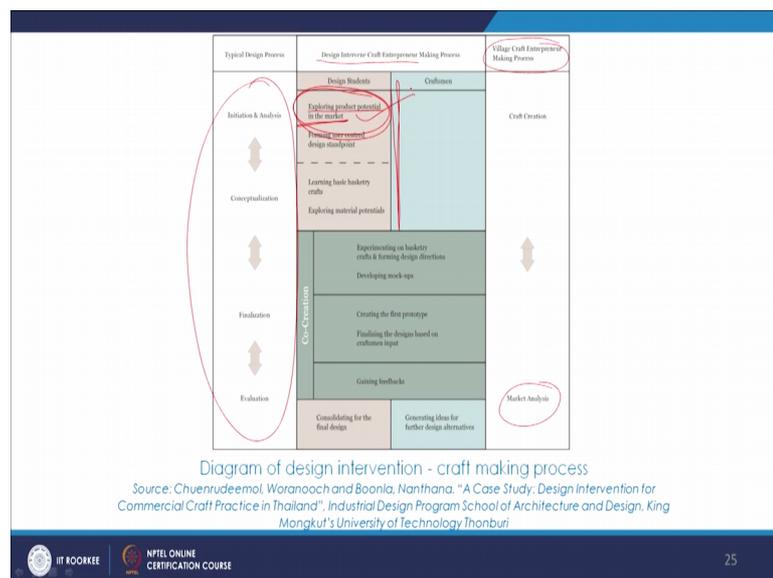
Why Is there a Need for Interventions?

Source: PHD Research Bureau, compiled on the basis of various inputs, received from the respondents

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Again going by these what analysis we see here low productivity then we also see products substitute due to fast changing technology. So, this they have highlighted as a thread. So, what kind of product interventions are done that they are not reduced to just some low quality substitutes which are just produced in a quick fast way to you know suffice for the mass production demand in a market because eventually in a quality is not good and the product is just the substitute of what could be an original interesting art and craft piece then the sales would go down.

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Then trying to understand the design intervene craft entrepreneur model here also we see the entire process here which is highlighted, we see here the important point exploring product potential in the market. So, until and unless that potential is understood and establish the intervention would not work. So, all these are steps and it is a step by step process again here we see market analysis we see village craft entrepreneur making process.

So, this entire process is important to understand the product potential is important to understand what are the gaps, what are the problems, why it is not reaching the market, what are the design flows, what are the new trends and demands until and unless that is explore the product or the design interventions would not work. So, it is an important process and it really need to be employed and taken care of before really coming up the interventions.

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Now we have always talked about the global presence craft has and the importance it you know it gets special in the field of visual arts. So, craft has a global presence and this endowed with an extra ordinary locus in the field of visual arts which is extending to space making. And since we have been talking about building crafts and the extension of these craft forms in to the mille of the space making so, which is extending to the space making and interior architecture, as well as other design practices and disciplines.

There are also interventions which are coming up in line with this kind of interdisciplinary scenario in contemporary tech design context revolutionary hybrid models combining crafts interior architecture, design education, design practice, they are evolving. These hybrid models are demonstrating a paradigm shift from the conventional singular approach to a pluralistic integrated approach that has led to the emergence of the new vocabulary with terms like design, space making, space making crafts, de crafts, de art, interior architecture, building crafts etcetera.

So, since we are talking about interventions it is also important to consider that there is lot of trans disciplinarily involves trod today and there are lot of hybrid models which are coming up and exploring this hybrid models and coming up with interventions is a welcome step and it would lead to new possibilities. New explorations combining traditional craft processes in commercial space making applications are gaining attention.

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New explorations combining traditional craft processes in commercial space making (interior architecture) applications are also gaining attention. Craft, design, and interior architecture have been included in the list of UNESCO's 'creative and cultural industries (Florida, 2002; Howkins, 2001; UNESCO 2009), are generating employment and contributing to the world economy (United Nations, 2004) and Gross Domestic Product of many nations (EY, 2014). **Craftspersons' knowledge and modelling skills are being linked to the cultural and creative industries, entangled with new design perspectives, and applied to prototyping, especially in space-making applications.**

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Craft design and interior architecture have been included in the list of UNESCO's creative and cultural industries we already talked about it are generating employment and contributing to the world economy and gross domestic products of many nations. Craft persons knowledge and modeling skills are being linked to the cultural creative industries and entangled with new design perspectives and applied to prototyping, specially in the space making applications.

So, these interventions are also happening and we saw some of the modules already where we also you know came across the explorations done by different organizations and institute and individuals and where they have really explode the art and craft forms in this space making milieu.

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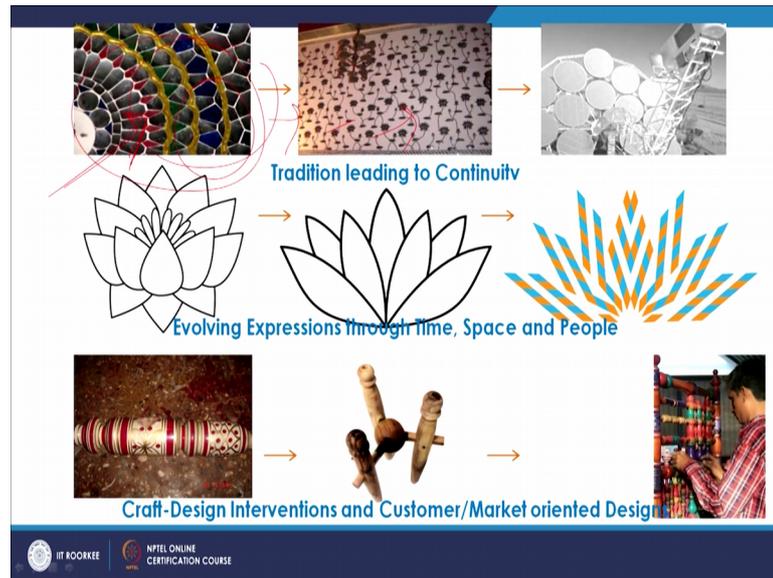
The slide is a complex diagram illustrating the evolution and interventions in terracotta craft. It is divided into several sections:

- Top Left:** A grid of images showing various terracotta products and processes, including pottery, tiles, and architectural elements.
- Top Right:** A section titled "Terracotta - the first creative expression of civilization" with a subtitle "4th millennium BC, with the first 'Terracotta of Humanity' (Clay 200)". It includes a flowchart showing the progression from "Clay" to "Terracotta" and "Ceramics".
- Middle Right:** A section titled "CONCLUSION" with the text: "Terracotta has been considered ever following generations. From CHINA (Clay) to the USA, from GREECE (Clay) to the USA, from CHINA (Clay) to the USA, by making the progress of clay with the help of technology. The New clay follows their intervention in the process of making different varieties of terracotta and ceramic of clay." Below this is a quote: "Clay is a miracle of incredible nature" by R. C. Brown, a member of the American Museum of Natural History.
- Bottom:** A section titled "Interventions Product (Design) + Process Intervention - Example of Terracotta Craft".

The slide is branded with the IIT ROORKEE logo and the NPTEL ONLINE CERTIFICATION COURSE logo at the bottom left, and the number 28 at the bottom right.

So, we are talking about the interventions and we have seen this slide enough by just give us sha you know sort of a crux, again starting from a utilitarian object to being used as a construction material we have seen how terracotta craft come along with through interventions we also see the interventions.

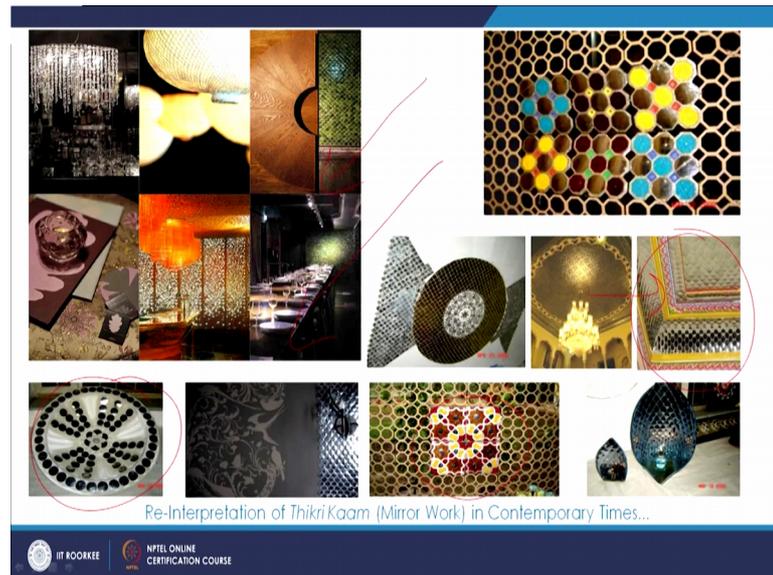
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In the way of making the motive the material used. So, this tickery cam which was used the tickery work the mirror work which was done in a particular way in the traditional forms which we have already seen in one of the modules. It is getting re interpreted the kinds of mirrors are different, they are light, the motives are different, the application is different and you know the concept of mirrors it is also used some times in building. So, this is binomial frostier and how we see the transformation of the material and the process involved through you know time and technology.

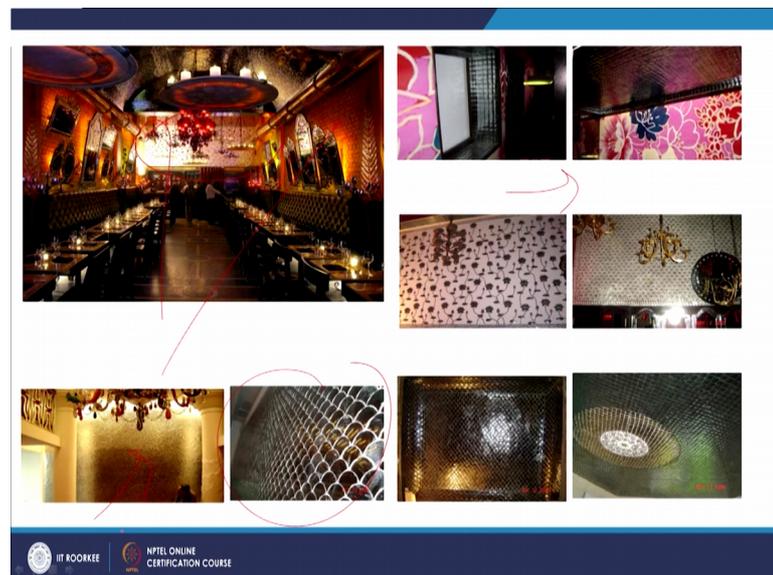
We also see the motifs different motifs contemporary expressions we see again a traditional element, how it is explored in a different material through different joineries and you know culminating into different prototypes for different functions which it was not used earlier for.

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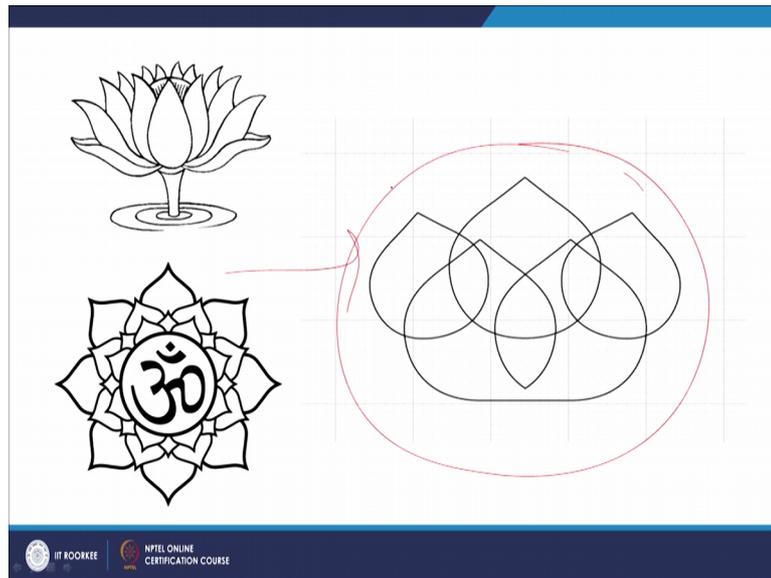
We were talking about the thikery cam and we see you know some traditional expression to some contemporary expression and how the application has changed from here to something like this. So, there are different changes which are happening, I am not saying, not all of them are very good, but one has to strike a balance.

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So, this is the restaurant Vedas in Delhi and there we see the application of thikery cam in a very /contemporary different way. So, again it is a contemporary interpretation and expressions have changed.

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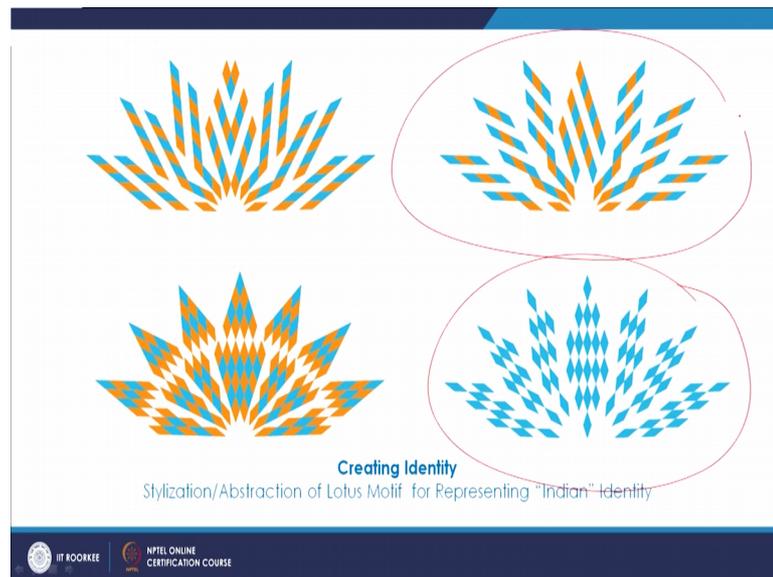
The motifs again you know more graphical and digital and more simplified.

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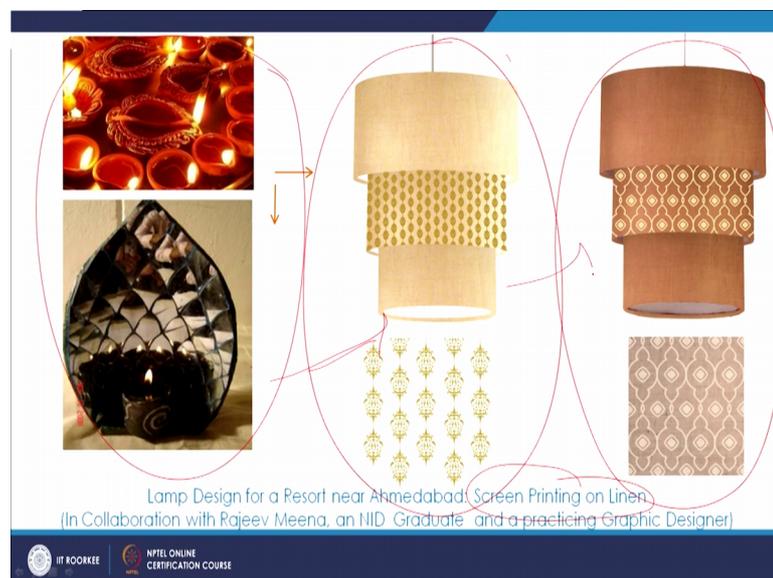
So, we see lot of changes happening in the expressions, this is for a floor inlay design this is done by Mister Rajeev who is also TA with me in this course and how you know a simple motif lotus which was used earlier in a very different form in a different expressions is currently used in a many different forms you know.

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So, giving more effects more contemporary more in demand more acceptable motifs designed and forms.

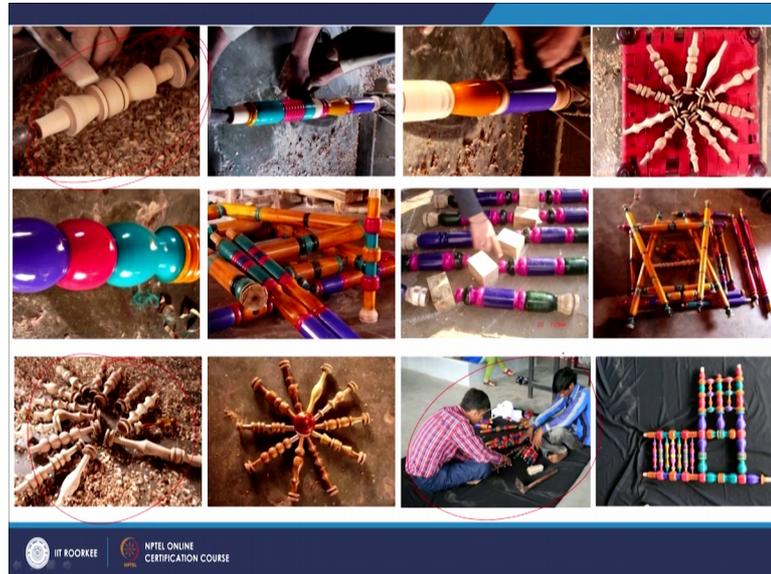
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Then taking inspiration from the traditional elements, how you know different explorations are done. So, this is the lamp exploration and a it was done for a country in project and you know how screen printing on linen is done. And how these designs are achieved which are so, effective aesthetic and involved the craft persons who still do thing with hand.

When the craft design interventions and customer market oriented designs, let us see few of the, you know customer market oriented designs done by few professionals and studios and also some organizations.

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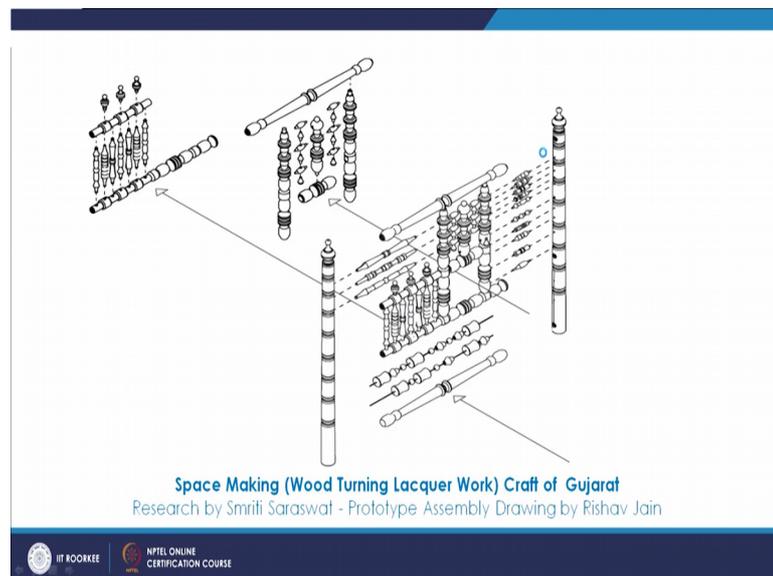
So, this is a again DICRC and probably we would have discussed it earlier, but again just to put things in perspective and give up brief crux, you know this is the wood turning crafts a small cluster and how small elements were made and small you know utilitarian objects were made out of it.

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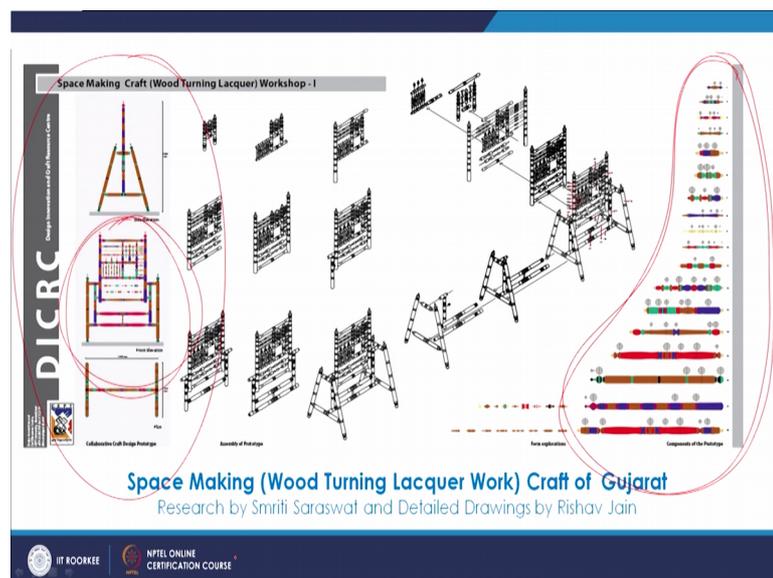


But with little intervention with little open mindedness how you know something like this a partitions screen was made and the craft person Anil [FL] he was very open to this brain storming and exploration and intervention and he came up with this kind of a prototype. Also we explained him the joinery interventions and how these traditional elements could be used in a contemporary way in different forms, at different places, and different scales and he was open to that idea and it this kind of an openness and you know interaction it generated a lot of good results.

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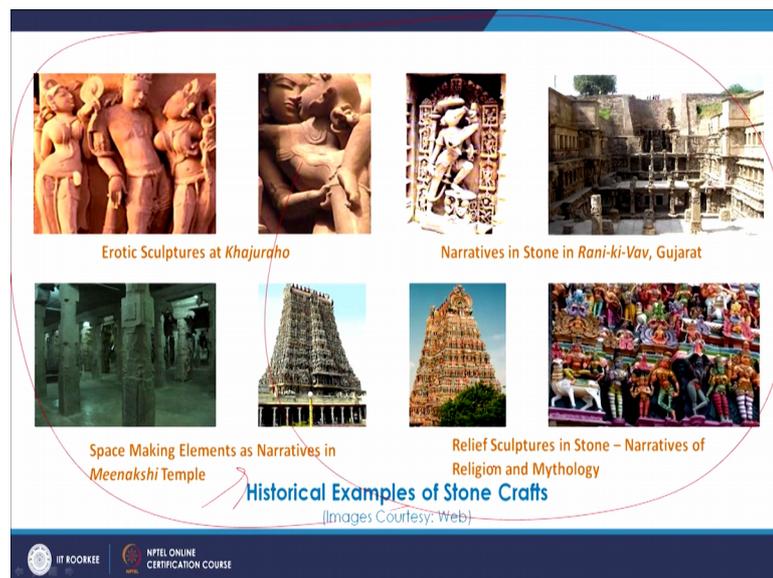


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So, some drawing that was generated at DICRC and the entire inventory of different sections that could be made earlier on their lathe. And then how we assembled them into this partition screen which in itself is a visual repository of different sections, different elements, different colors, that are followed by these craft people in that community. So, they were ready to experiment with the materials they tried some explanations in bamboo they were ready to also experiment with the colors themes and things like that.

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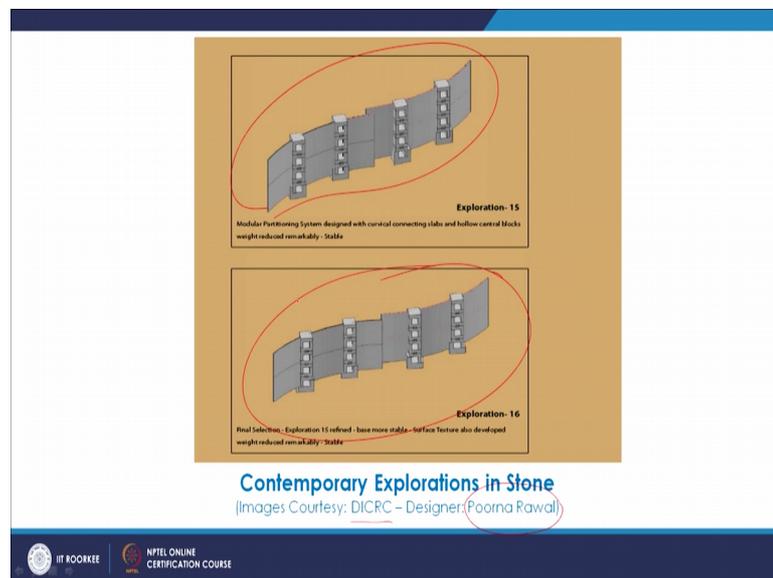
Talking about intervention how stone you know seen in very heavy ornate applications in the built forms.

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How it transforming and you contemporary expressions and interventions are coming and this is Ambaji in some interventions on the stone turning machine and some kinds of details that they make.

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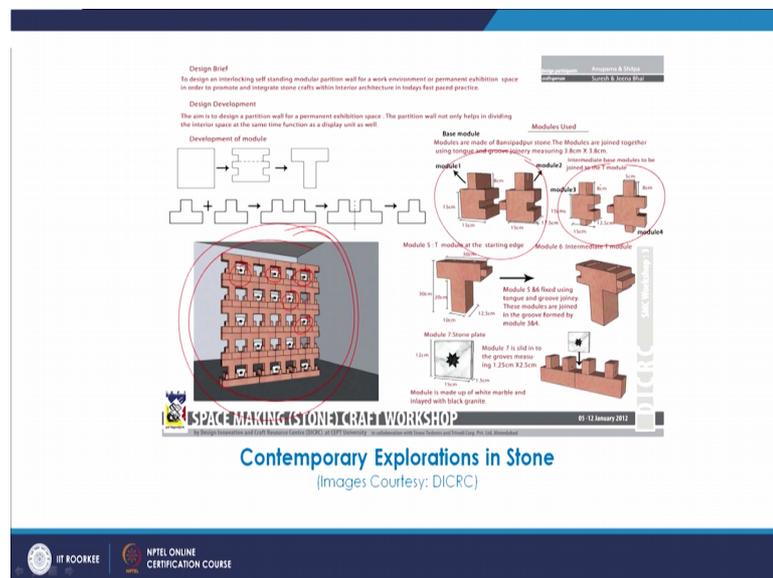
And this is again one exploration it was done at DICRC by a dear friend Pooerna and she created this modular partitioning system working with the industry and the craft persons. So, there was lot of involvement of craft persons there was basic cutting and you know the power tools and machine use of course, for the cutting of slabs and some important

purposes, but the other details the carving the texture and the you know understanding of the scale and proportion it was all done by the craft persons along with the designer Poorna.

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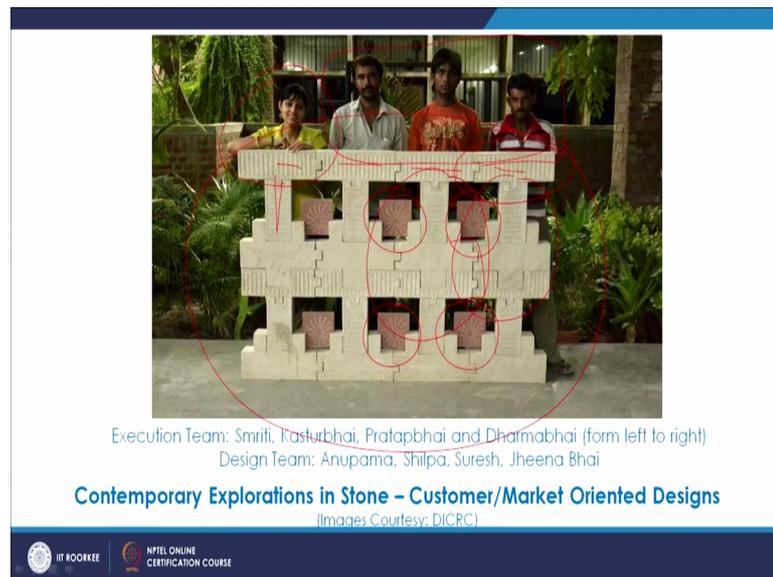


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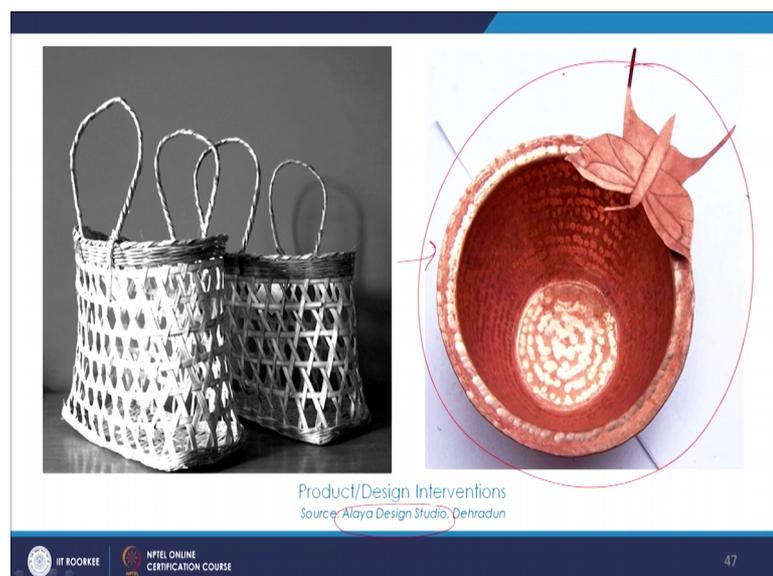
So, this again some exploration that was done some more exploration in stone working on the modules and then creating the partition system, along with the hand work there is lot of inlay work here which is done by hand.

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So, these are again some interventions and yeah I also worked on this prototype during this workshop while I was working at DICRC and this now installed accept and we came up with these you know modules made in stone which were anyway waste or leftovers from different other products; and how it was assembled with the interesting joinery coming up with smaller details like you know this work relief work or in lay and then working with the team of craft persons.

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Some more interventions which are done by Alaya designs studio and how they work on traditional materials and craft forms with some contemporary interventions be it the expressions be it the different project range that they make or be it the value addition that they do. So, different kinds of products that they make and they also work with artisans in craft persons.

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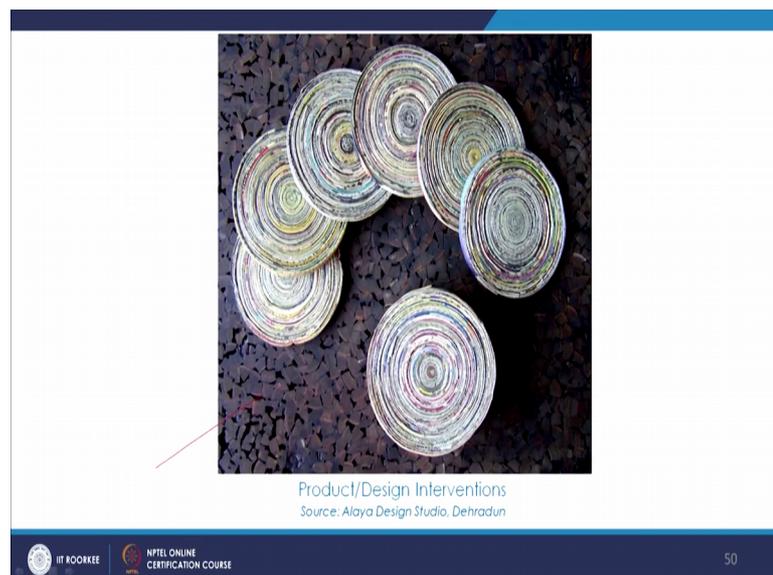
So, this is very interesting I have this at my home and how you know a seating is designed using traditional material all worked by the hand by the craft persons and getting use in contemporary spaces and interiors gardens for sitting, relaxing, some more explorations.

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Here we see. So, there is timber and then we have this traditional method of making cot and how we come up with some contemporary furniture range and products that are more acceptable suited or which are points of interest for the contemporary market and the people who would you know readily buy them also for the aesthetics and not for just functional aspects.

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Some coasters which are done out of newspaper and you know they have functional they are aesthetic sustainable recyclable more explanations by them.

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And it is a simple traditional technique it is just a wire frame and then work done by the craft person to create this piece.

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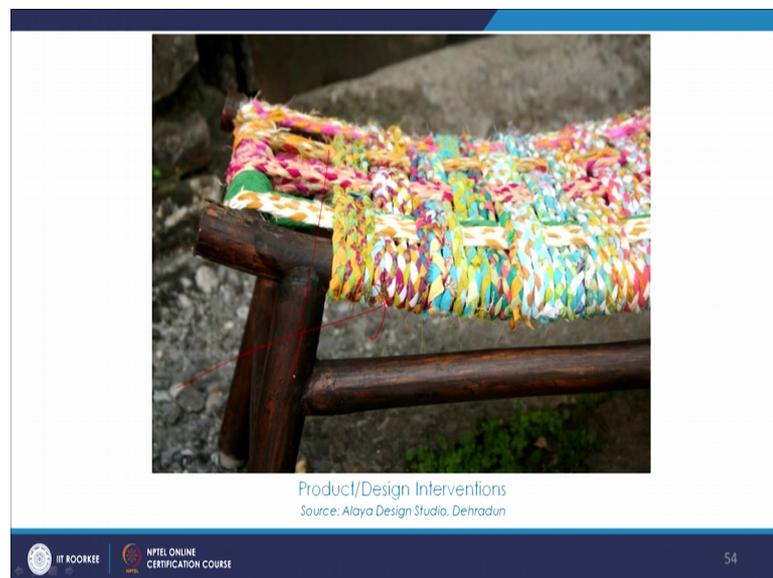


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Lamps very interesting lamps and these are very interesting explorations that they do in furniture, lot of them are the less to left over wood shellings and you know shreadings and they utilize them to make a furniture.

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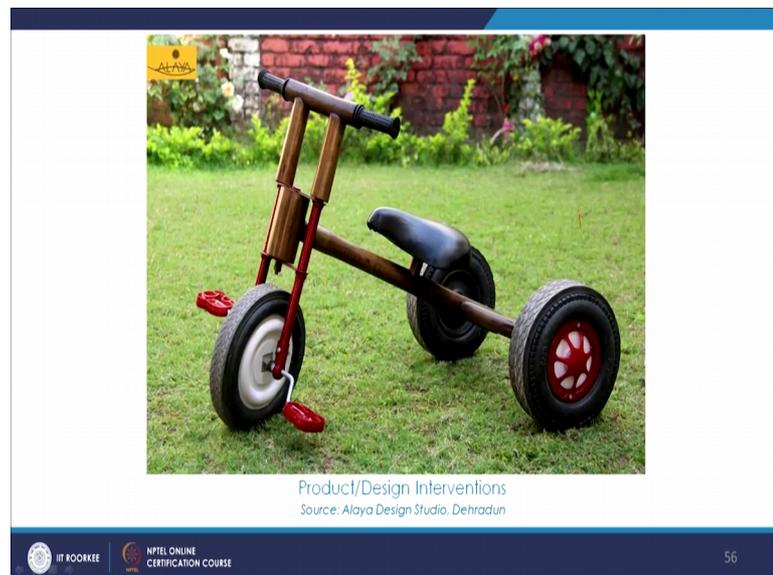
Something like this with a timber frame and this kathran and this beautiful furniture pieces created.

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Something very contemporary done out of timber and which is a statement in itself and this is also done with the help of craft persons, that have this team they have their own work shop and they work hand and hand with the craft persons some interesting explanations like these.

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Again stools furnitures simple designs.

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So, I would like to wrap up by saying this interesting quote “As we get more rootless, we crave more to discover our roots. Crafts, in many ways connect us to our roots as we become more nomadic due to globalization, cultural products and practice will become more and more important in our lives”. And that is what we are trying to understand through this course as well.

So, the next module will focus on the interventions and we will talk about the technology aspects and we will continue our discussions on interventions through that let us see some references. So, these are particularly some references focusing on the design intervention part, which I have put for you.

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More of these we were discussing the Kala Raksha Vidyalaya, design interventions, teaching design, design interventions and execution in crafts of India. So, again very focus and relevant references here and more of the collective combined ones.

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Thank you.