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

Lecture – 12

Building Crafts: Definitions; Perspectives and Frameworks

Namaste! Hello everyone welcome to the NPTEL course Role of Craft and Technology in Interior Architecture. Today we will discuss module 12 which focuses on building crafts. So we are going to discuss Building Crafts: Definitions; Perspectives and Frameworks; to brush up our memories we saw in module 3 the space making crafts which are popularly known as building crafts or architectural crafts.

We also discussed a little bit about space making elements and the crafts that contribute in space making. So we will take that conversations ahead and we will try to understand this umbrella term building crafts and how it contributes to interior architecture in construction industry.

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Contents

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So, the broad contents for today building crafts, definitions, perspectives and frameworks and we are going to discuss in detail the framework which is adopted by the DICRC Design Innovation and Craft Resource Centre at CEPT university.

So we are going to discuss that framework extensively since they are working in building crafts since a very long time and they have established institutionalised the framework to work in this discipline. And we will also discussed it with examples and towards the end as usually we will have some references that are going to be helpful for all of us who are related to this kind of research and studies.

So, just to understand what building crafts are it is very crucial to understand building skills, traditional materials, manual dexterities. So, these terminologies fall in place when we talk about building crafts and we have been talking about these terms and phrases throughout this course.

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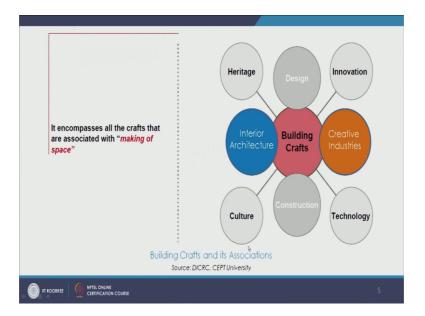


So, according to DICRC "Specialist building skills using traditional materials and techniques required to conserve, preserve, restore and revive the nations historic buildings and structures."

These contribute to the gamut of building crafts all these building skills and traditional materials which are very historic and have been there since age old times and have proved their worth, it all contributes to the largest sector of building crafts. Also practices, practises which employee manual dexterity and skill so handwork hands on

and an understanding of traditional materials, designs and techniques to make or repair useful things.

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So, just taking this base we are going to discuss further; to give a broad overview of what are different associations that come along building crafts.

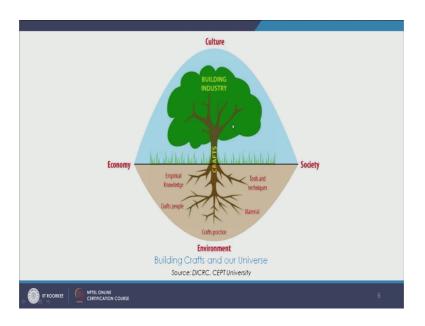
If we see here diagram; so, building crafts is at the centre and interior architecture and creative industries are two important associated disciplines or sectors. We have been discussing these three in this course creative industries; we discussed at length in the previous module. And like we have been talking when we talk about building crafts, practices, traditional, knowledge, systems, skills we associate this umbrella term with heritage, design.

Then we are also talking about innovations so that we can prevent the dying and languishing of these craft skills and take them now today in contemporary times with their original expressions. We also associate building crafts with culture, society then the construction, the entire construction industry and of course, we talk about technology. So these are different associations that building crafts has and the list can be you know extended this is the framework adopted by the DICRC and as I discussed earlier we are

going to talk about it at length because its an established centre and they have been working on this framework since a very long time.

So, what they define building crafts is as the crafts that encompass the making of space and all the elements associated with it, they all contribute in this larger sector of building crafts.

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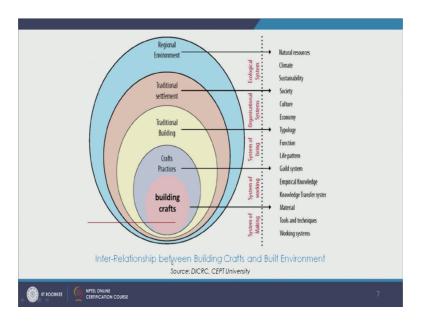
To also understand building crafts and our universe because this is the beauty when we talk about the crafts and the traditional practices that it always situates us within our surroundings, within nature within the larger universe.

So, if we see here in this diagram this flourishing tree here is shown as building industry and crafts is what is nourishing it; which is further replenish by empirical knowledge, crafts persons, varied crafts practices different kinds of materials indigenous ones tools and techniques. So, all of these nourish crafts and they contribute to this largest sector of building industry which reflects our culture in way of life, which serves our society, provides us shelter and utilitarian objects.

They also contribute to the trade and the economy so there is an economics behind it. In the last module we saw how creative industries in building crafts are also they have the potential of actually contributing to the trade and economy and they are not just creative jobs. And all of it together makes our environment makes our universe within which we are situated. So the building crafts are very closely related to our own well being our nature our relation to our environment.

So this is very philosophical but actually the crafts persons practice this they are in harmony with nature, they learn from their surroundings and they practice the age old wisdom.

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To take this discussion forward we will also try to understand the interrelationship between building crafts and build environment. Since throughout this course we are talking about built environment interior architecture so we are trying to understand here the interrelationship between building crafts and built environment.

Again if we see this diagram and we try to understand the deep philosophy within it. So, building crafts is here at the centre; now building crafts have an embedded system of making. So, we have been talking about making, skills, crafts. So, they have embedded system of making and they have this corresponding set of materials tools of techniques working systems.

Then these building craft contribute to varied kinds of practices, the craft practices, they have an embedded system of working and the system of working could be a guild system

where there is this entire guild which carries forward this practice of craft. Then there is this empirical knowledge which comes over you know sometime through experiences, through learning or it is through knowledge transfer system where the knowledge is transferred from one generation to another.

So, the building practices and the craft practices, building crafts and the craft practices they make the larger gamut, they contribute towards traditional buildings, they contribute to the space making in these buildings and they have this innate system of living or way of life they celebrate that and it is by virtue of typology, function, life pattern.

So, whenever we talk about building crafts in traditional buildings we generally talk about how they reflect the way of life and how closely they reflect the way of living of a particular community and these traditional buildings are embraced by a traditional settlement the lie within that settlement then these settlements have an organisational system which is a reflection of society, culture, economy.

And this traditional settlement again this is within the larger set of regional environment. And these regional environments they have their own ecological systems which embrace the natural resources, climate, sustainability. And other way around if we start from regional environment, these natural resources and aspects of sustainability have led to the exploration of different materials, tools and techniques and making of varied craft and related craft practices which could be for utilitarian purposes and also could be for our dwelling.

So, there is a deep interrelation between building crafts and built environment and there is a very strong embedded system at all levels which defines varied practices and its relation to the environment. So, it is very important to understand these kinds of a diagrams which highlight the profound relationship and explain us in detail what these building crafts are about and how they have very innate embedded systems of working.

Before going further let us try to understand what is the value of these building crafts and why actually we are talking about them? So, here these are few crucial ones which been listed down there is evidential value.

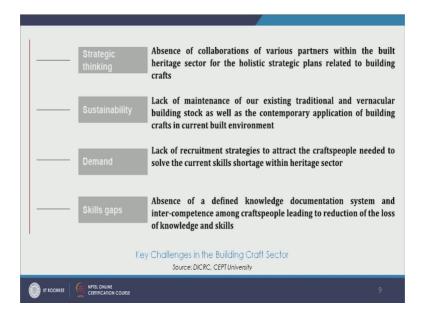
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The building crafts visible on the traditional buildings provide us with evidence about the rich architectural heritage of the past. Then there is historic value, the building crafts give an insight into the past events and aspects of life that relate the place to the present.

So, they are narratives they carry the narratives of that era and we get to know lot of information about past events and to connect them with them present there is of course aesthetic value. So, the elaborately carved built heritage allows people to draw sensory and intellectual stimulation from a place. So, there is visual appeal, there is aesthetics, there is a sense of a stimulation, experience in a space then there are communal values which are very very important.

Building crafts help derive meanings of a place for the people through collective experiences and memories. So, these are very important because the community involvement is usually there whenever there is a craft practice and there is space making associated with it and there are a lot of meanings and memories that are reflected into the space and which create rich experiences for a user.



Having known the value of building craft sector let us see what are the key challenges before we go further and try to understand the broader context of this discipline or sector. So, key challenges again strategic thinking absence of collaborations now this is crucial, absence of collaborations of various partners within the built heritage sector for the holistic strategic plans related to building crafts. So, there is an absence of collaborations, especially when we talk about the built heritage.

Sustainability; lack of maintenance of our existing traditional and vernacular building stock as well as the contemporary application of building crafts in current built environment. So, as far this sustainenances concerned we have lot of existing traditional and vernacular buildings which are just lying dilapidated and not even being thought about to be maintained, to be respected and also the applications within the current built environment and current construction industry they are also absent.

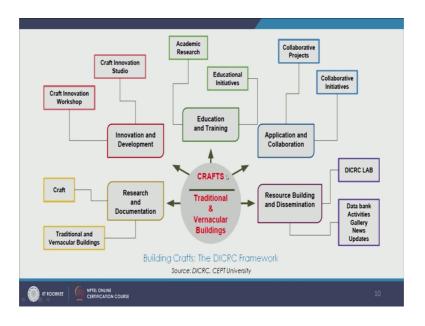
demand: Lack of recruitment strategies to attract the crafts people or the crafts persons needed to solve the current skill shortage within heritage sector. Now, this is very important because there is lack of a employment and like we discussed in the previous module the creative and cultural industries are slowly rising and people are trying to understand their potential in terms of economy and trade.

So that is slowly happening so, there is lack of strategies to attract the craft persons to give them their due to give proper work, projects, money, employment all that is missing. And lot of these craft persons who have been practicing these craft skills are actually leaving their age old practices and trying to find other jobs, then the skill gaps; absence of a defined knowledge documentation system.

Now, we have been talking throughout this module about importance of documentation, knowledge transfer dissemination. So, absence of define knowledge documentation system and inter competence among craft persons leading to reduction of the loss of knowledge and skills. So documentation is not happening, knowledge transfer is not happening and therefore there is a gap and there is loss of you know precious knowledge and skills.

So, all that is happenings these are major key challenges in the building craft sector. Keeping all this in mind what are the values associated to the building crafts, what are the key challenges, what all building craft embraces?

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So, DICRC has evolved this framework and they work with craft at the centre of this framework and the crafts specially which contribute in space making, the crafts which are integrated or embedded in the traditional and vernacular buildings. This is the centre

or the hub for this framework and it has five important nodes. So, first is research in documentation; then innovation and development education and training, application and collaboration resource building and dissemination.

So, these are 5 important nodes of this framework and they further have a set of defined activities which take this research further and is a developing some nice resource hub and some repository for all of us to follow. So, research in documentation majorly concentrates on researching and documenting the craft, craft practices and specially since we are talking about interior architectures, space making crafts, building crafts so, the major focus is traditional and vernacular buildings.

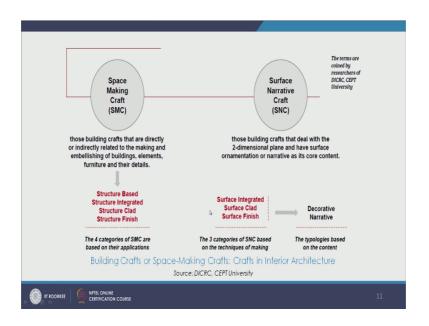
Then innovation and development it concentrates on craft innovation workshops, craft innovation studio. Now since the DICRC is part of CEPT university and they have an institutional setup so they try to connect to the academia and also come up with innovative ideas in terms of workshops, collaborative studios, academic research, educational initiatives and a lot of this initiatives even I have been a part of that in initial years.

So, I really take pride in sharing this framework and taking that knowledge further and trying to work on it in Uttarakhand. When we talk about application and collaboration; there have been collaborative projects that they have been doing collaborative initiatives at varied levels whether its a small product making or a workshop or an extensive project. Then under the resource building and dissemination umbrella the major focus areas are DICRC lab and data bank which they have developed it document all the activities image gallery, the news and different updates related to all the activities that happen.

And that is how they have come up with this lab which has this extensive data collection and ways of taking it forward through innovation. So, this is a very comprehensive framework and with lot of understanding and project, this is constantly getting improvised and people like me and you who are working in this subject can contribute taking different areas within our own regional reach and documenting and contributing back.

In fact, all of us who are documenting different areas like I am working on Uttarakhand and few of you my might be working on other areas can attribute and send the data over here in this lab as well. So, all of us develop this resource hub and have this collective responsibility of documenting promoting, preserving these building crafts. So, taking the discussion further what the DICRC has done is they have try to find categories of building crafts.

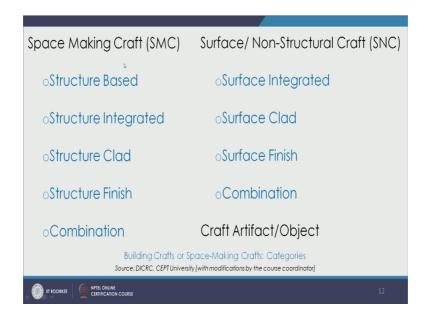
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And they have very elaborately tried to define the craft at the structure level and the craft is at the surface level. So, there are majorly two categories space making craft and surface narrative craft that they have come up and they have further sub-divisions. So, if we talk about space making craft; they are majorly structural the building crafts that are directly or indirectly related to the making and embellishing of buildings, elements, furniture and their details and they are further classified.

Then, if we talk about the surface crafts these crafts are those that deal with the two dimensional plane and have surface ornamentation or narrative as its core content. So, it is majorly 2D and not 3D or structural it has further categories.

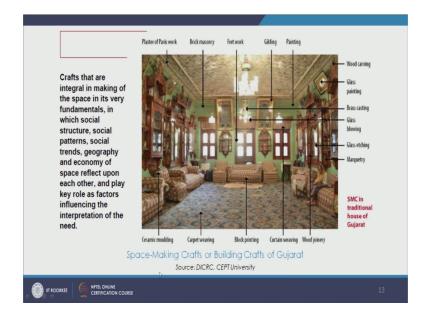
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Based on the categorisation which is done by the DICRC with slight modification, this is what we are going to follow in this course specially in this module.

So, if we talk about space making craft; it could be structure based, structure integrated, structure clad, structure finish and a combination of all these or one or two of these. Then surface or non structural craft which could be surface integrated, surface clad, surface finish, a combination permutation combination of these and you also see craft as the third category which could be an artefact or an object.

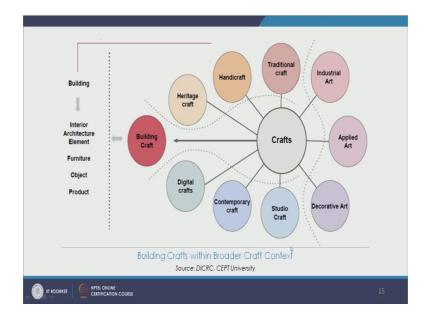
So, we are going to take this discussion forward in the next module and we will try to see what are these different categories with the help of some projects and images and drawings.



So, just for an example here this is a documentation of building crafts of Gujarat and this is one Haveli in Sidhpur and this is just one hall or room not even the entire Haveli; within this itself we see so many different kinds of crafts and materials. So, there is plaster of Paris work over here, the masonry work usual brick masonry, we see the fret work here in the doors, there is this gilding work in all these you know huge portraits and paintings.

Here we have paintings, there is wood carving, there is glass painting we see the brass casting, this glass blowing technique or craft, glass etching, there is marquetry work, wood joinery, here we see the curtain weaving, block printing here on the upholstery in the sofa, carpet weaving, ceramic moulding; so, there are several. Now this is just a gamut of craft that we see here in this one space. Few of these are surface related and few of the these are like structural.

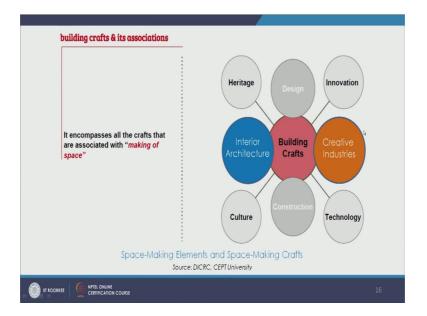
So, that is what we have to try to understand what are the structural implementations of craft and what are the crafts that go only on the surface. And how each of these enhance or create or enrich our space that is what we are trying to understand. To give an overview of this module what building crafts are and what all we have seen I'll just discuss few slides.



So, if we see here building crafts within the broader craft context so, we see this huge sector of crafts which has several associations, heritage craft, handicraft, traditional craft, industrial art, applied art, decorative art, there could be studio craft, contemporary craft, digital craft. And then we are talking about building craft which is our focus throughout this course and we are trying to understand the role of craft and technology in interior architecture.

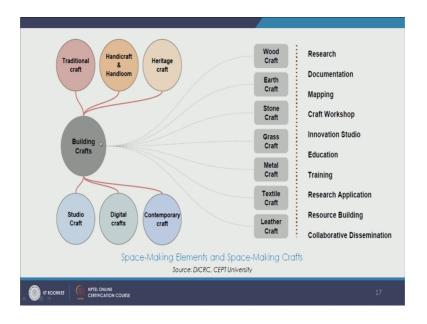
So, building crafts within this larger context of this craft sector essentially are those crafts that contribute in the making of a building or built form, they create space. And it could be decoded further into several elements; interior architecture element it could be furniture, objects, products. So, this is the larger context and we keep seeing this slide once in a while after few modulus just to brush up and to understand where we are situated when we talk about building craft in the entire gamut of craft industry or the craft sector.

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Then this is what we discussed initially in the beginning of this module. So, building crafts again has further several associations to heritage, to design, to innovation, to culture, to construction, technology and we are focusing on these three. Interior architecture, building crafts, creative industries. Creative industries have a very subtle mention but these two are the large focus areas we are talking about. About these two, the building crafts and creative industries we already discussed in the previous module at length.

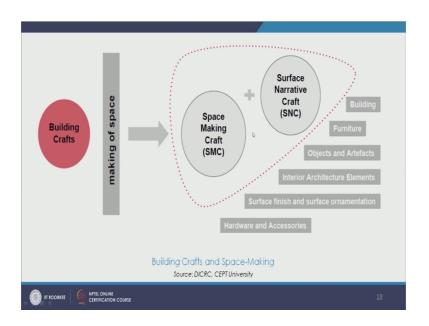
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So, we have already seen building craft encompasses different kinds of crafts, but what is important here is building crafts could be defined through different materials. So, there is woodcraft, earth craft, stone then we have grass craft also, metal craft, textile, leather craft. So, we could define all these crafts to different materials and there is an urgent need for doing research, documentation, mapping, some workshops craft oriented workshops, innovation through collaborative studios.

Then education and pedagogy to focus on building crafts, training component, research applications, resource building, repository creation and collaborative dissemination; so, when we talk about building crafts its different associations and types and a kinds of materials that define varied techniques and craft practices all this is really important here that we see. To contribute to resource building and repository creation which will really be useful for all of us and contribute immensely to building crafts.

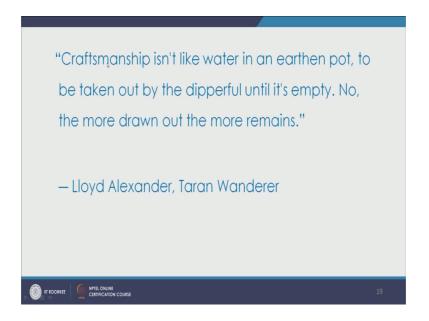
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Then further building crafts contribute in the making of space and that could happen at two levels structure and surface. And if we see you know hardware and accessories all the way till the building so hardware, surface finish, interior architecture, elements objects, furniture and finally, the building. All of these at different levels in different capacities have different materials which contribute in the making of space, different techniques and craft practices and the associated skills.

So, this is the overall understanding that we need to establish when we talk about building crafts and making of space.

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As always I would like to end with two very interesting quotes; so, as always I would like to tell two interesting quotes. First one is "Craftsmanship is not like water in an earthen pot to be taken out by the dipperful until its empty. No, the more drawn out the more remains" this is so interesting.

The more we share it, document it, disseminate it; the more we will have it in our culture, in our resources and more it continuous. So, we talk about tradition and continuity here and for that it is important to know what tradition is, what these craft practices are and then how we carry them forward.

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Here is another one; "We don't value craftsmanship anymore! All the value is ruthless efficiency, and I say we deny our own humanity that way! Without appreciation for grace and beauty there is no pleasure in creating things and no pressure in having them! How can a person take pride in his work when skill and care are considered luxuries! We're not machines! We have a human need for craftsmanship!' this is very beautifully described.

So, we have a human need for craftsmanship for storytelling, for doing things hands on, for experiencing the materials on our own, playing with it, interacting with it using different techniques and creating objects for our own use for our own shelter for everything so, this very beautifully sums up. Our next module we will talk about building crafts, craft and technology and its role in creating enhancing interior architecture.

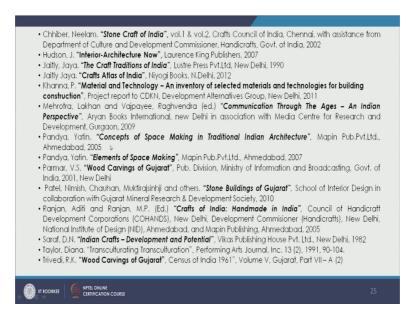
So, we will see few examples of interior architecture and how building crafts could be understood in terms of space making.



References; now these are some very important ones as far as this module and the next module are considered and there are other which I have summed up from the previous modules. So, here we are talking about space making crafts so, here this is a surface wall paintings, then we are talking about *Matra*; where we have seen the vernacular built forms of Himachal Pradesh this is majorly structural. So, these are the different kinds of books that will help to understand specifically this module.

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Boner, A; Sarma, SR; Baumer, B. "Vāstusūtra Upaniṣad", Motilal Banarsidass Publishe, 1996, pp 1-29 https://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&lpg=PA2&dq=In+India,+unlike+in+Europe,+thps://books.google.co.in/books?id=O2eKhTXstG4C&pg=PA2&lpg=PA2&no+principle+distinction+is+made+between+fine+arts+and+practical+crafts.&source=bl&ots=7qTgUKWQD A#v = one page & q = ln%20 lndia%2C%20 unlike%20 in%20 Europe%2C%20 no%20 principle%20 distinction%20 is%20 encoded as the page and tmade%20between%20fine%20arts%20and%20practical%20crafts.&f=false, accessed through Google, Jan 15, 16:00 •Campbell, Jeffrey Y (ed.), "Lac-Turnery and the Lacquerware Industry", Chapter 3, Case Study 2, in "Women's Role in Dynamic Forest-Based Small Scale Enterprises. Case Studies on Uppage and Lacquerware from India", FAO (Food and Agricultural Organization of the United Nations) Corporate Document Repository, Forestry Department, Rome http://www.fao.org/docrep/x5859e/x5859e04.htm, 13Dec 12, 17:42, searched through Google *Campean, M. "Timber Drying Methods – Passing through History into the Future" in Moren, Tom and others (ed), "Proceedings of the Eleventh International IUFRO Wood Drying Conference – Recent Advances in the Field of Wood Drying ", Skelleftea, Sweden, Jan 18-22, 2010, http://www.ltu.se/polopoly_fs/1.58969!srapproved%20-%20proceedings.pdf#page=11, searched through Google, 15Dec 12, 15:00

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Other ones; this one here material craft and architecture, which I am highlighting.

Thank you.