

## Modelling Architectural Interpretations of Indigenous Crafts:

A compilation of ideas inculcated in an elective studio.

Modelado de interpretaciones arquitectónicas de artesanías indígenas:

Una recopilación de ideas inculcadas en un taller electivo.

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### ABSTRACT

Craft is a skill, which helps in achieving mastery in material and technique. Indigenous crafts can be rightly called “expressions” of a particular culture. Unfortunately, in today’s rapidly developing world, mass production is making them lose their essence as they require more time, resources and personalization. If these skillsets become obsolete, regional identities would become anonymous. Architecture is already facing this challenge where one cannot distinguish between the urban skylines across the world due to design globalization. Indigenous crafts have the capacity to keep the local character of a place intact. This research intends to interpret and utilize various regional crafts through design interventions in the built environment. It was conducted as a part of an elective studio, where students studied various crafts, and tried to understand their most appropriate applications in design. The studio used a methodology of “reverse exploration”, which helped establish relevant relationships between craft and architecture. Students analyzed a particular craft, based on diverse parameters to understand its scope and feasibility in architecture design. Their study led to explorations and finally interpretations in their own design language. This research contributes in two ways: firstly, by developing interventions that preserve the identities of native crafts; and secondly, by developing a teaching methodology based on reverse exploration, that is applicative in nature and can be practiced in other disciplines of design andragogy as well. The outcomes of this research can be significant for students, designers and academicians who intend to explore the possible connections between craft and architecture.

Keywords: craft, architecture, identity, native skills, design studio.

### RESUMEN

La artesanía es una habilidad que ayuda a lograr el dominio del material y la técnica. Las artesanías indígenas pueden llamarse correctamente “expresiones” de una cultura particular. Desafortunadamente, en el mundo en rápido desarrollo de hoy, la producción en masa les está haciendo perder su esencia ya que requieren más tiempo,

recursos y personalización. Si estos conjuntos de habilidades se vuelven obsoletos, las identidades regionales se volverían anónimas. La arquitectura ya se enfrenta a este desafío en el que no se puede distinguir entre los horizontes urbanos de todo el mundo debido a la globalización del diseño. Las artesanías indígenas tienen la capacidad de mantener intacto el carácter local de un lugar. Esta investigación pretende interpretar y utilizar diversas artesanías regionales a través de intervenciones de diseño en el entorno construido. Se llevó a cabo como parte de un estudio electivo, donde los estudiantes estudiaron varios oficios y trataron de comprender sus aplicaciones más apropiadas en el diseño. El estudio utilizó una metodología de "exploración inversa", que ayudó a establecer relaciones relevantes entre la artesanía y la arquitectura. Los estudiantes analizaron un oficio en particular, con base en diversos parámetros para comprender su alcance y viabilidad en el diseño de la arquitectura. Su estudio condujo a exploraciones y finalmente interpretaciones en su propio lenguaje de diseño. Esta investigación contribuye de dos maneras: en primer lugar, al desarrollar intervenciones que preservan las identidades de las artesanías nativas; y en segundo lugar, desarrollando una metodología de enseñanza basada en la exploración inversa, que sea de carácter aplicativo y que pueda practicarse también en otras disciplinas de la andragogía del diseño. Los resultados de esta investigación pueden ser significativos para estudiantes, diseñadores y académicos que tengan la intención de explorar las posibles conexiones entre la artesanía y la arquitectura.

Palabras clave: artesanía, arquitectura, identidad, habilidades nativas, estudio de diseño.

## INTRODUCTION

Craft is a creative ability acquired by a particular set of people in a society to meet their day-to-day necessities. It is portrayed to be something primarily aesthetic and having an ancillary function, which is an incorrect interpretation of the skillset. It is very need-based and personalized. With time, craft evolved from its utilitarian character and developed a strong aesthetic sensibility.

Craft defines the identity of a place very well. A craft which is native to a particular region helps in getting an understanding of its microclimate, user group, geography and character. This is one of the reasons why India, being such a gifted country in terms of talent and craftsmanship, portrays itself distinctly on the world map for its unique blend of art, craft and architecture. Craftspeople contribute their knowledge of local materials, giving form to human experience. Their visual and tactile connections with the land and with cultural ideas help to define the sense of place. The role of craftspeople in reviving cultural integrity and stimulating development and independence among small groups and communities throughout the world is profound (Maker and Meaning: Craft and society, 2019). Hence, this domain provides an essential and meaningful livelihood to large amount of people in the country.



Fig 1: Indian Handicrafts pertaining to particular regions (Images Source: [www.pixabay.com](http://www.pixabay.com))

Due to industrialization, traditional art and craft are losing their potential market. As opposed to mass production, traditional craft practice creates a sustainable model of material usage and environment friendliness (Purohit & Arora, 2017). Native crafts possess the ability to recreate and re-invent existing understandings from experiences. It is important to note that the strength of these crafts is their roots in the local contexts. The aesthetic inspiration and vocabulary is based on the artisans experience of their cultural contexts which is in line with the recyclable quality of nature. It helps them to be observant of their environment and sensitive to the lifestyle of material and products. This makes them to use and reuse products in such a way that the beauty is integrated with sustainability (Jinan, 2017). Sadly, modernization and globalization of design has homogenized the visual sensibility of crafts. Machine-manufactured crafts do not have the visual expression of identity of its context or maker, which hence tend to remain anonymous. Also, one cannot identify whether the craft is native to region A or region B.

#### CRAFT AND ARCHITECTURE

Craft reflects storytelling power of a building, with narrative as its life sustaining force. Stone crafts like stone carving and stone inlay become a narrative medium that negotiate between what is seen and what is experienced (Saraswat & Raheja, 2015). The main problem of the educated professionals, including designers, working with artisan is that they come with the understanding and logic of industrial culture that undermines the very strengths of craft. So, the need of the hour is cultural sensitivity as well as cultural responsibility which will ensure more authentic and original exploration within the space of modernity and learn to respect traditional artisan (Jinan, 2017).



Fig 2: Hand-crafted Chair (Image Source: [www.gettyimages.com](http://www.gettyimages.com)) vs. Machine-crafted Chair (Image Source: [www.ikea.com](http://www.ikea.com))

This research was conducted as a part of an elective studio called “Craft in Architecture”, where students studied various crafts in detail, and tried to understand their most appropriate applications possible in interior and architecture design. The intent was to interpret, apply and utilize various regional crafts through design interventions in the built environment.

## METHODOLOGY

The studio used a methodology of “reverse exploration”, which helped establish relevant relationships between craft and architecture. Students selected and then analyzed a particular craft, based on diverse parameters to understand its scope and feasibility in architecture design. Their study led to explorations and finally interpretations in their own design language.

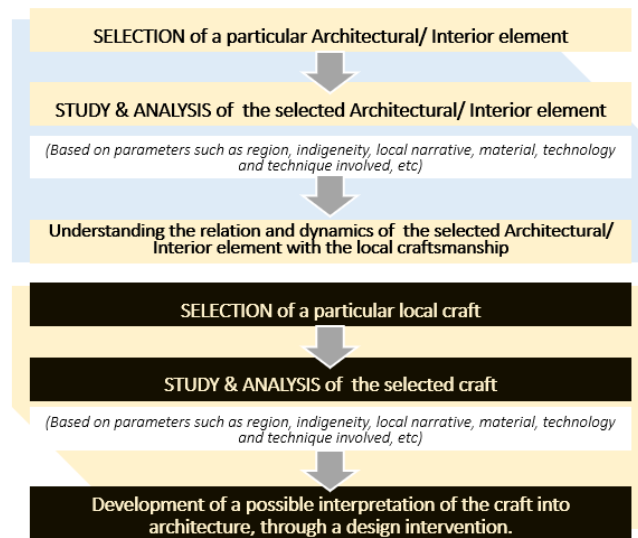


Fig 3: Methodology Flow Chart (Source: Author)

La artesanía es una habilidad que ayuda a lograr el dominio del material y la técnica. Las artesanías indígenas pueden llamarse correctamente “expresiones” de una cultura particular. Desafortunadamente, en el mundo en rápido desarrollo de hoy, la producción en masa les está haciendo perder su esencia ya que requieren más tiempo, recursos y personalización. Si estos conjuntos de habilidades se vuelven obsoletos, las identidades regionales se volverían anónimas. La arquitectura ya se enfrenta a este desafío en el que no se puede distinguir entre los horizontes urbanos de todo el mundo debido a la globalización del diseño. Las artesanías indígenas tienen la capacidad de mantener intacto el carácter local de un lugar. Esta investigación pretende interpretar y utilizar diversas artesanías regionales a través de intervenciones de diseño en el entorno construido. Se llevó a cabo como parte de un estudio electivo, donde los estudiantes estudiaron varios oficios y trataron de comprender sus aplicaciones más apropiadas en el diseño. El estudio utilizó una metodología de "exploración inversa", que ayudó a establecer relaciones relevantes entre la artesanía y la arquitectura. Los estudiantes analizaron un oficio en particular, con base

en diversos parámetros para comprender su alcance y viabilidad en el diseño de la arquitectura. Su estudio condujo a exploraciones y finalmente interpretaciones en su propio lenguaje de diseño. Esta investigación contribuye de dos maneras: en primer lugar, al desarrollar intervenciones que preservan las identidades de las artesanías nativas; y en segundo lugar, desarrollando una metodología de enseñanza basada en la exploración inversa, que sea de carácter aplicativo y que pueda practicarse también en otras disciplinas de la andragogía del diseño. Los resultados de esta investigación pueden ser significativos para estudiantes, diseñadores y académicos que tengan la intención de explorar las posibles conexiones entre la artesanía y la arquitectura.

Palabras clave: artesanía, arquitectura, identidad, habilidades nativas, estudio de diseño.

### STUDIO STRUCTURE & RESULTS

The structure of this studio hence divided the whole project into a set of minor assignments to make students undergo a research-oriented design approach, as discussed in Table 1.

Table 1: Structure of the Assignments (Source: Author)

Assignment	Exercise Description & Objective	Deliverables/ Studio Structure
1 Identification of Craftsmanship in Architecture	Exploration and research on various architectural elements that show traces of influences from the local craft.	Parameters and attributes of understanding an architectural element and establishing its background.
2 Study of Local Crafts of the Region	Research on the local crafts of the region that indicate their influence on the architecture.	Discussion with students on their research on the local crafts of the region, establishing a relationship between its craft and architecture.
3	Class Presentation of Assignment 2	
4 Selection of a Craft and its attribute Study	Selection of three crafts and conducting an analytical comparative study of the same, based on the same attributes in the above assignment.	Tabular Analysis by the students of the study, relating every parameter of study to its relevance in the analysis of the crafts. Finalization of one craft amongst the three, which can be interpreted in design.
5 Modelling Architectural Interpretations of Crafts	Hands-on trial of the craft so that students understand the scale, material and complexity of the technique and then understand its applications possible in architecture design.	A short technique video / time-lapse video of the possible modelling techniques being tried out of the final assignment.
6 Development of a possible architectural interpretation.	Developing a possible architectural interpretation from the study conducted above, using the results of all the previous assignments consolidated.	Any form of representation that explains the design idea at its best.

Assignments 1 & 2 – The study was conducted where students selected a particular architectural element, for example a Jaali, and then tried to relate it to the local crafts there like the perforated wooden crafts. This analogy

was derived on the basis of studying the elements through various parameters like history, background, region, typology, inspiration, size, material, colour, texture, durability, skill, tools and techniques used, etc.



Fig 4: Interpretations from architectural elements to local crafts (Image Source: [www.pixabay.com](http://www.pixabay.com))

Assignment 4 – As part of the Reverse Methodology, the students now chose the same set of study parameters used in the previous assignment and do a detailed analysis on three different crafts they were interested in interpreting. Based on the results of this analysis, they selected one craft, that they found the most appropriate to be modelled into design.

Assignment 5 – The students tried hands-on techniques for modelling their individual crafts and then understood its feasibility in terms of design application.



Fig 5: Modelling the local crafts – Some examples from the classwork (Image Source: Author)

Assignment 6 – Finally, the students came up with a variety of design solutions using the indigenous crafts and proposed them in their respective approaches.

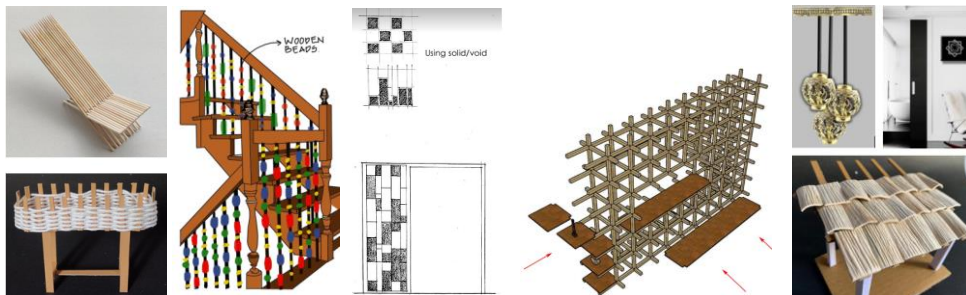


Fig 6: Final Interpretations in Architectural and Interior Design (Image Source: Students)

As conclusion, there were different crafts interpreted in versatility by the students based on their research and understanding. The ultimate intention of the studio was to see how many of these ideas were actually feasible, and hence could create a difference in the preservation of the native craftsmanship. The following table was made to understand the success of the intent.

Table 2: Inferences (Source: Author)

Craft	Applications proposed
Macrame	As upholstery, furnishings, lightings, partitions.
Kutchi Embroidery	Tensile roofs, railings, claddings, furnishing.
Dhokra Craft	Lighting fixtures, furniture, partition walls, panels.
Clay	Wall Cladding, furniture, flooring, décor items.
Rattan Basket Weaving	Roof covers, Seating and Furniture.
Saharanpur Carvings	Pavilions, lightings.
Kasuti Embroidery	Furnishings.
Channapatna Toys	Railings, Furniture, Lamps, Partitions, Balusters.
Lacquerware	Balusters, Claddings
Jali work	Fenestration Design – Door design.
Chidori Toys	Partitioned furniture and shelves.
Copper work	Partition Walls, Furniture like tabletops.
Bidari work	Furniture, Wall claddings.
Lipan kari	Fenestration frames, murals, furniture.

*Legend – Highlighted crafts are the ones who are easily interpretable in architectural design, based on the research*

This research hence, contributes in two ways:

- firstly, by developing interventions that preserve the identities of native crafts; and
- secondly, by developing a teaching methodology based on reverse exploration, that is applicative in nature and can be practiced in other disciplines of design andragogy as well.

It also intends to throw light on application-oriented hands-on learning in architecture and design, so that students are more involved and become more sensitive to the context in which they are designing and thus give importance to the material, technique and labour available locally that can be utilized in an effective manner. The outcomes of this research can be significant for students, designers, practitioners and academicians who intend to explore the possible connections between craft and architecture.

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Note: special edition procedure.