© NCERT not to be republished

Part I

PREPARATION FOR FIELD STUDY

Short Assignments

1 CRAFTS AT HOME

ACTIVITY 1.1

LEARNING FROM AN OBJECT

Class : XI
Time : One period*

In 1958, Charles and Ray Eames, designers from the United States of America, prepared *The India Report* for the National Institute of Design, Ahmedabad. They said:

> *Of all the objects we have seen and admired during our visit to India, the* Lota*, that simple vessel of everyday use, stands out as perhaps the greatest, the most beautiful. The village women have a process which, with the use of tamarind and ash, each day turns this brass into gold.*
>
> *But how would one go about designing a* Lota*?*
>
> *First one would have to shut out all preconceived ideas on the subject and then begin to consider factor after factor:*

- *The optimum amount of liquid to be fetched, carried, poured and stored in a prescribed set of circumstances?*
- *The size and strength and gender of the hands (if hands) that would manipulate it?*
- *The way it is to be transported — head, hip, hand, basket or cart?*
- *The balance, the centre of gravity, when empty, when full, its balance when rotated for pouring?*
- *The fluid dynamics of the problem not only when pouring but when filling and cleaning, and under the complicated motions of head-carrying — slow and fast?*
- *Its sculpture as it fits the palm of the hand, the curve of the hip?*
- *Its sculpture as compliment to the rhythmic motion of walking or a static post at the well?*
- *The relation of the opening to volume, in terms of storage uses — and objects other than liquid?*

* *The time which may be allotted during the entire session to complete the activity.*

© NCERT not to be republished

- *The size of the opening and inner contour in terms of cleaning?*
- *The texture inside and out in terms of cleaning and feeling?*
- *Heat transfer — can it be grasped if the liquid is hot?*
- *How pleasant does it feel, eyes closed, eyes open?*
- *How pleasant does it sound, when it strikes another vessel, is set down on ground or stone, empty or full or being poured into?*
- *What possible other material could have been used?*
- *What is its cost in terms of working?*
- *What is its cost in terms of ultimate service?*
- *What kind of an investment does the material provide as product, as salvage?*
- *How will the material affect the contents, etc., etc.?*
- *How will it look as the sun reflects off its surface?*
- *How does it feel to possess it, to sell it, to give it?*

Why are *lotas* from different parts of India made of bronze, brass or copper or an alloy of all the three metals?

Of course, no one person could have possibly designed the Lota. *The number of combinations of factors to be considered gets to be astronomical — no one person designed the* Lota *but many people over many generations.*

EXERCISE

Read the passage and against each question place the appropriate subject or subjects it relates to.

M – Manufacture

F – Function and Design

E – Economics

A – Aesthetics

E.g. *What is its cost in terms of working?* — E

© NCERT not to be republished

Broom, Assam

ACTIVITY 1.2

ASK 100 QUESTIONS

Class : XI
Time : Two periods and homework

The beginning of research and discovery starts with asking relevant questions. Try this exercise a number of times in class to ensure that students learn to ask questions. They may not know the answers yet, but students must learn to enjoy the process of asking questions and making associations and links between what they know and what they are about to know.

Place a common object in front of the class, like a rolling pin, *matka*, grinding stone, clothing, slippers, broom, footwear etc. found commonly in most homes. Encourage every student to write 20 questions about the object as Charles Eames did for the *lota*. Let students present their questions and see if they can collect 100 different questions about the object.

EXERCISE

1. Classify your questions in the following categories.
   - Questions regarding its manufacture
   - Questions regarding design and function
   - Regarding the design and its function, how does the design suit the function, how does the material used in its production suit the function, its weight
   - How does the design allow for easy cleaning, hygiene etc.?
   - Questions related to cost of raw materials, production, marketing, etc.?
   - What makes the object aesthetically pleasing to others?
2. Repeat the above activity as homework and develop five interesting questions on each of the following four areas for any one household object.
   - Manufacturing
   - Economics
   - Functional Design
   - Aesthetics

Why are the *jooties* of Jaipur popular?

Variety of jooties, *Rajasthan*

© NCERT not to be republished

ACTIVITY 1.3

DESIGN ISSUES

Class : XI
Time : One period

How many techniques are there to give shape to metal objects?

What is the perfect size of a *paraat*?

Collect three or four metal objects that you regularly use at home, for example, a stainless steel *thali* and glass, a metal figurine that is either decorative or an object of worship, and a door handle. Try and think carefully about each one of them. Now, discuss the points given in the following box.

Metal workers, Karnataka

Brass paraat

Why do we make functional products that also look good?

Door lock, Tamil Nadu

© NCERT not to be republished

DISCUSSION POINTS

- Why are these things in the shapes that they are?
- Why are they the size they are? What would happen if they became double their size?
- Why are they heavy or light?
- Why are they made of this particular material — metal — rather than of any other material such as wood or sand or ceramic or cement?
- On the one hand you may find a link between the material used and the function that they fulfil, on the other you may find that the material is expressive by itself, i.e. the sheen that it lends to the metallic objects.
- What other factors have determined the use of this material rather than any other?
- If you were to change anything in their design, what would it be and why?
- Does the product look good, or would you modify the design in some way so that it would be more appealling to the eye?
- Sketch out some alternative designs. Now discuss in class what would be involved in effecting your design.
- How much will it cost?
- What are the main issues concerning design for the artist?
- How will it be packaged? How would you advertise it?

By discussing the above points you would have gone through the various steps of decision-making that any craftsperson goes through in the process of creation.

What is the range of products that can be made in metal?

Bronze figures, Tamil Nadu

© NCERT not to be republished

Plastic objects sold on the road

What are the environmental problems caused by making, using and disposing of plastics?

Do hand-crafted objects add quality to life?

Craft products for the home

ACTIVITY 1.4

LOOKING AROUND IN OUR HOMES

Class : XII
Time : Homework

Natural fibre products share a common language (sensibility) of colour, texture and of belonging to the earth. The aesthetic of the natural is much valued as is its ability to age gracefully with use which is unlike the ungainly wear-and-tear signs that show up on most industrial materials such as plastics and synthetic materials. There is a great diversity in the form and scale of products made from such natural fibres, ranging from those of architectural scale such as shelters, suspension bridges, fences to those of human scale such as basketry, planar surfaces such as mats and at the other extreme, small-scale products such as hand-fans.

A distinctive quality of natural fibre is its original colour and irregularity that give it a unique texture, and its ability to age gracefully with use. Sometimes dye-colours are used for enhancing the shape and appearance of objects like baskets and such decorations are usually a result of the social need for creating some distinction for use in ceremonial and votive functions.

A further attribute is the quality of workmanship and a response to the function of the product. Those used for local tasks of everyday use in agriculture or domestic settings are rarely decorated or greatly finished but they have an elegance that is drawn from the logic of construction that is both honest as it is functional.

Those products made for festive occasions or for religious needs are found to be decorated when seen in comparison to the products of everyday use. Crafts communities have responded to function and the need for an identity by creating structural and formal variations that can only be explained by their search for a unique form of expression that could distinguish their community from that of another. The aesthetics of these products is therefore a product of both the functional requirements as well as the cultural need for a unique form of expression.

© NCERT not to be republished

EXERCISE

1. Read the passage given above and make a study of your home. Record which useful hand-made items once used in your home have been replaced by factory-made objects or objects not made of natural materials. Record what family members feel about this shift by asking such questions:
   - Do factory-made products age gracefully?
   - Do plastics show ungainly signs of wear and tear? Do they last as long as natural materials?
   - How are factory-made goods disposed of will create environmental problems?
2. Write a short essay (150 words) on: Have factory-made products and objects not made with natural materials, caused the loss of elegance in our lives?
3. "We have lost the great diversity of natural products because factory products don't have this kind of diversity." Elaborate with examples.
4. With the use of factory-made products have we lost some aspects of our cultural identity, or of the identity of a particular community?
5. Using your observations prepare arguments against the use of plastics in everyday life.
6. Write an essay on crafts and craft traditions that have disappeared from your region.

© NCERT not to be republished