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Learning about Crafts

If you look around your home, you will find a number of things used everyday that represent the heritage of Indian crafts. These may include:

- an embroidered cushion or pillow case
- a bamboo basket or chair woven with cane
- a piece of jewellery
- a *duree* or carpet
- a stone bowl
- a clay pitcher or *surahee*, or a lamp or *diya*
- a mat or a broom
- a handwoven *saree*

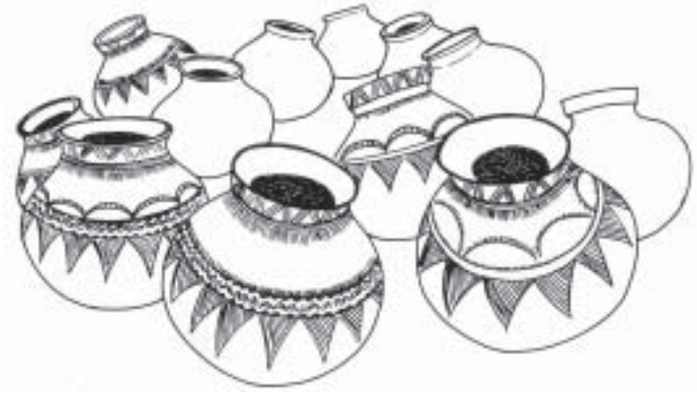
It is quite possible that one or more objects in this list have been replaced in your home by an industrial product. If that has happened, you can ask your parents about what they used before the modern object arrived.

On the face of it, a broom or a mat, a shawl or a handwoven scarf may appear machine-made. On the other hand, you can find nylon mats in the market made mechanically, which look exactly like hand-woven straw mats. Unless you observe carefully you may not see much difference between the two. However, there is only superficial similarity between an object made by a craftsperson, and its copy made by a machine. When people talk about craftsmanship, they often have in mind machine-made perfection. However, the kind of perfection a work of craftsmanship represents is quite different from the mechanical perfection of a mass-produced object.

The difference comes from the traces of individuality that you can find in a hand-crafted object. These traces may look like marks of ëimperfectioní in comparison to the mechanically produced object. For instance, in a handmade bamboo fan, the surface may be rough in the part where the bamboo had a knot. The natural texture of the bamboo continues to ëliveí in a handmade fan. In a comparable plastic copy of the fan, the surface will be smooth everywhere,

and every fan will look identical. Contrary to this uniformity, each craft product is different even if it looks similar to others. A hand-woven sari has no exact match, just as a handkerchief you make with your own hands is unique.

All traditional crafts are practised in communities, not individually. The man or woman who practises a traditional craft inherits it from senior members of the community, usually while growing up in the family. The knowledge and skills involved in any craft are diverse, starting from basic knowledge about the material with which the craft is practised, the tools with which it is made, to the numerous skills applied in order to transform the material into a work of aesthetic beauty and of daily use.



Let us, for example, look at a pitcher or a flower-pot. The material used for making it is the most basic and perhaps the oldest resource used for the practice of pottery as a craft. The right kind of clay is first collected, then cleaned and treated, and then turned into pots of desired shapes with the help of a potterís wheel. Once a pitcher is given shape, it is fired in a kiln in order to make it strong. In each of these stages, numerous skills are involved. The potter must also maintain several levels of awareness while applying his skill, in order to ensure that the end product has its basic, reliable quality and beauty.

Beauty and Use

Aesthetic beauty and usefulness need not be two separate qualities. In modern times we sometimes feel that something to be used in everyday life need not be beautiful, or that something beautiful cannot be put to daily use. We assume that if an object is to be used frequently, it need not be delicate and graceful. This assumption is quite mistaken in the context of traditional crafts. The best way to understand why this is so, is by making something with your own hands.

Try making an object of daily use in your life as a student. If you have no experience of stitching and embroidery, you can still try to make a small book mark, by wrapping a small, rectangular cardboard with a piece of cloth which has a design like a flower or a leaf embroidered on it. In order to make such a bookmark you will need to take several decisions. Each decision will draw your attention in two directions: one, towards the choice of cloth, its colour, the embroidery and its colour; and two,

towards your own likes and dislikes in these matters. When you start the actual cutting and stitching, you will go through a series of thoughts and emotions. You will feel pleased with yourself when the rectangular cardboard is wrapped up and stitched tightly with the cloth you have selected. You will feel somewhat irritated with yourself if one of the corners does not look as neat and angular as the other three corners do. Ultimately, when the work is finished and the bookmark is ready, you will feel pleased with yourself in a strange sense.

This is an example which can help you appreciate how craft products combine beauty with use. The imperfect piece of work will look so intimate that you will look at its blemishes, like a blunt corner, with affection. A sense of personal relation with the object in hand will give it, in your eyes, a beauty that more perfect-looking bookmarks made of metal and plastic may not have. The secret lies in the point that a craft product does not pretend to be perfect, it only *aspires* to be perfect.

This is what makes it so human. As human beings, we too can only aspire to be perfect in whatever we do, but we can never be perfect. Even the Taj, which is a great work of craftsmanship, and is rightly regarded as one of the wonders of the world, is not perfect. If you visit the Taj and look at it carefully, you will find that it expresses a deep aspiration to be perfect, even as it reveals many examples where the individual sculptor has left his own mark which prevents the overall design from looking purely mechanical. The reason why craftwork is so satisfying may well be because it represents a deep urge in us to reach higher and higher levels of perfection. What does the word ëperfectioní mean? Before we enter the world of different craft forms discussed in this book, let us think about the meaning we can give to the word ëperfectioní in the context of crafts. There are two ways in which we can proceed in this search. One is to reflect on the experience that working on a craft brings to us. The other way is to examine the outcome of our work, and look for aspects of perfection in the product.

The Experience of Craft Work

It is easy to say that the work involved in any craft is mainly of a manual kind, in the sense that craft work is done with the help of physical effort on our part. When we make a small *diya* of clay or a garland of flowersómalaó our eyes and hands are actively engaged. However, if we look at this kind of work more deeply, we will notice that it is not purely manual. A great deal of mental attention is required at every stage, and at certain points we must concentrate on what we are doing, otherwise the *mala* we are making may not turn out well. Each flower has to be accommodated in the *mala* with care and concern for its individual character, size and colour. It must have space, good company, and the needle must pierce it without injury. If we have made a *diya* many times we may get so good at it that we donít need to think about it all the time. In other words, we get so ëskilledí at this work that our hands and eyes carry on without conscious decisions being made by the mind.

You must have noticed how a tailor can continue to work on his machine while talking. A barber can do the same thing. But even a highly skilled tailor or barber does pay attention to what he is doing if he does not want to make mistakes. Perhaps what happens is that the mind and the body together enter into a rhythm of work. Certain decisions which are of a routine kind get taken without too much thought, hence the person can keep talking while his hands are working; but at certain moments when something crucial is to be done, the mind takes full control and guides the eyes and the hands to focus on the work itself. This remarkable unity of body and mind in craft work is what makes it a pleasant and deeply satisfying experience.

If you have never attempted to learn any kind of traditional craft till now, you might have ignored the two suggestions given earlier in this chapter, i.e., to make a book mark and a *mala*. You still need a personal taste of making something with your hands in order to get the taste of mindñbody experience. So, here is yet another suggestion, for something simpler than the earlier examples.

Try something as simple as making a cover for your textbook. As you start, alert your mind to all the decisions you are going to take, starting with choosing a piece of paper large and strong enough to survive for a few months in your school bag. The kind of paper you choose will have implications not only for the number of months the cover will lastóits longevityóbut also for the neatness of the folds, the sharpness of the corners, and, of course, for the attraction that any design or picture might have, on the side which will wrap the front cover of the book. If you select a page from an old newspaper to cover your textbook, its size may be convenient, but the neatness of the folds will suffer because the paper used as newsprint is rather thin and tears easily if you fold it along a sharp line. Brown paper used for wrapping or making parcels may be more suitable. Following this decision about the material to be used, you will need to think about the length and width of the piece, depending on how much paper you want to allow inside the cover, when you fold it along the bookís own cover. At the corners, you can choose a simple fold or a somewhat complex fold. This kind of fold, which doubles up the paper not only gives strength to the corners but also looks more attractive when you open the book. Why do corners need greater strength? As a user of textbooks since childhood, you can easily answer this question.

This example should suffice to indicate how many decisions are involved in any manual work if it aspires to achieve as much perfection as possible. You can now appreciate the role that a long and sustained tradition in any specific craft plays. If a craft has lived for a few hundred years, many of the decisions required to practise it will have been taken by several generations of people who lived before us. These decisions have now become the basic knowledge of that craft. We can acquire this knowledge by sitting and working with a practitioner of that craft. Of course, you will still need to apply your mind when doing the craftwork yourself, but at least you will know what to do. By learning the basic knowledge of a craft from someone who knows it, you will become aware of the decisions you will need to take when you start working and also of the small mistakes you will make as you move towards completion. The mistakes will not hurt you the way mistakes in an examination of mathematics or language do. Rather, the mistakes will look like your signature on the product. In this sense, they will make the product a precious memory of your first experience of trying the craft, and the processes of thought and feeling.

Looking at a Craft Product

As the opening lines of this chapter pointed out, craftworks are so much a part of our daily life that we take them for granted and donít observe and appreciate them. Now that you have opted to study Heritage Crafts as a subject, it is important for you to look at examples of crafts carefully and find in them the characteristics of a long and great tradition. You can, for example, learn several important aspects of weaving by observing a handmade carpet or *duree* in your home or school. First of all, draw your fingers lightly across the *duree* to feel the characteristic texture that a woven cotton *duree* has. It is quite different from the texture of a knotted rug. The word ëtextureí literally refers to the feel that the arrangement of fabric in a textile gives. Now, if you have noticed the texture, observe the pattern in which the *duree* has been woven. Notice the shapes created by the threads of different colours. The combinations and shades of colours together bring about a sense of design. Try to imagine how the shape you see in its entirety must have emerged bit by bit as the *duree* progressed from thread to thread. Do you think the *duree* maker could ëseeí the completed design in his or her mind long before it surfaced fully on the *duree*? That is what must have happened, and it must have required great patience to wait for the work to be completed. Indeed, the joy of waiting to complete a piece of craft is what keeps one going, slowly and carefully, taking small steps at oneís own relaxed pace in a quiet room of oneís own home. It is certainly very different to work in a textile factory, surrounded by the noise of superfast machines.

Do think about all the differences between the two modes of production, and the two kinds of products before you move to the next chapter.

1 CRAFTS HERITAGE

India is a combination of many worlds, living in many centuries and cultures. The world of Indiaís craftspeople spans millennia and spreads across the length and breadth of our land, which is seen in cities and towns, by-lanes and villages. A small crafted object made in an unknown village of India has the capacity of becoming an object displayed in the finest museums of the world, yet the same object is often merely an object of utility for a particular community which never thinks of it as a great art. It is often a lack of knowledge of the variety of cultures, techniques, meanings, uses and relevance of such handcrafted objects that allows us to neglect their beauty and take our cultural heritage for granted.

The Definition of Crafts

Indian words for handicrafts are commonly *hastkala*, *hastshilp*, *dastkari*, *karigari*, all meaning handiwork, but they also refer to objects made with craftsmanship, i.e., specialised skills of the hands which are also artistic. The aesthetic content is an intrinsic part of such objects and means the object of utility has a value that goes beyond mere usage and is also pleasing to the eye. A handcrafted object is seldom merely decorative, and whether it has no embellishment or is highly decorative, its true purpose is served only when it is both useful and has a fine form.

An artisan drawing before carving on wood

Crafts and Culture

Crafts are therefore closely related to concept of form, pattern, design, usage, and these lead to its total aesthetic quality. When all these aspects are rooted in the culture of the people in a particular area of a country or among certain communities, crafts become a

Wall and floor decoration in a house, Jharkhand

Detail of calligraphy in stone, Qutub Minar, New Delhi

part of its cultural heritage. Handcrafted objects are not just valuable for their aesthetic quality, but as objects produced by traditional craftsmen and women for ceremonial and religious purposes, and most importantly as a means of livelihood.

Cultural and Social Needs for Crafts

This creative spirit in the midst of the struggle for survival is one of the unique and significant distinguishing features between men and beasts. Why else do the forest communities, even today, lay so much store by painting the inside or outside of their homes, or adorning their bodies with decorative tattoos or ornaments? Why are people affected, and often spiritually guided, by colours? Why does a woman fashion an attractive handle for the broom she uses to clean her home and why does she spend time invoking the blessings of the gods through her painted designs on her kitchen floor?

Crafts through the Ages

India has been greatly blessed by having a many-layered, culturally diverse, rich heritage of craft skills influenced by historical events combining with local practices and religious beliefs. These influences have come from multiple sources. Changes and enrichment have taken place from trade movements such as those on the Silk Route, which brought demands and resources from the Middle East and Central Asia to the Far East, up to China. The skill of weaving carpets and superior forms of shawls was brought to Kashmir by the pre-Moghul king, Zain-ul-Abedin. Persian artisans enriched carpet-weaving and shawl-making according to the needs of Indian courts. On the other hand, the static nature of the Hindu caste system has kept many craft forms alive merely because the artisan had no opportunity to move away to other professions as social boundaries were rigid and hierarchical. The courts of various maharajas encouraged excellence in many courtly crafts connected with the making of armoury or jewellery. Temples kept alive the finest metal work, stone carving, mural painting and even textile weaving right across India, and particularly in South India. Here the Kammalars who claimed descent from the five divine artisan sons of Lord Visvakarma, followed the *Shilpa Shastras*, the technical tomes on the practice of art in Sanskrit. The high priests among the artisans follow these rules even today when creating large vessels out of metal alloys for temple use. The element of religiosity in the practice of craft work spans

many regions and communities since the practice of their art is seen as a striving for the ideal through the dedication of their skill to the gods. It is seen as manís process of reaching the epitome of his own capability in the pursuit of excellence, and doing this by dedicating it to a higher being in the spirit of worship. The silken temple cloths in South India are woven to drape the stone images of the gods, and the *gharchola* and *patola* of Gujarat are mandatory purchases for a trousseau and are valued highly partly because the weavers belong to high-caste families. Even old and torn pieces are used to cover religious objects in the prayer room of a house.

Tribal Crafts

Tribal communities comprise about eight per cent of the population of India. Spread out in different parts of the country, they have continued with ancient cultural practices related to their specific ways of life. In Jammu and Kashmir, the Gujjars and Bakarwals are mountain tribes who spend their lives crossing over from one side of the mountains to the other in search of grass for their sheep and goats. Their jewellery, blankets, embroidered caps and tunics, saddle bags and sundry animal accessories are similar to the artifacts of the people of Afghanistan, Iran, Iraq and the smaller countries of Central Asia. The robust manner of the people and the heavily ornamented women folk reflect as far down in India as Saurashtra and the desert regions of Kutch in Gujarat, and Rajasthan. Mirror work in embroidery stems from the use of mica from the desert sands in the garments of those who liked heavy and shining ornamentation. People of nomadic tribes usually wore all that they had on their person. They found that the sun reflected in the mica, making this an accessory that embellished their garment suitably without any cost. Each group developed its own style of embroidery and it is this that can still be clearly seen in the many communities that inhabit the western region of India. Both, the identity of the tribe and the marital status of a woman, are embedded in the style of the embroidery and the colour and cut of the upper bodice worn by its women. As communities move in search of greener pastures for their sheep, cattle and camels across desert sands, a mere glance is enough to identify their tribe and profession.

The various tribes inhabiting the north-east of India live among the rich bamboo forests where the finest quality of skill in the weaving of bamboo, cane and other wild grasses can be seen. This group links itself culturally to the people

A Kutchi woman embroidering

of Myanmar, Thailand, Indonesia, Vietnam and even Japan and China, where mat-weaving and basketry are of the highest quality. Handloom weaving too is a common skill of this region. Apart from weaving ceremonial shawls and *lungis*, headscarves and waist belts, small scarves for ceremonial greetings are woven in almost every household. These cloths are revered for many reasons: they establish the identity of the tribe or the status of the wearer, they serve as ëwelcomeí scarves to greet a visitor, they honour the achievements of a chieftain, and they pass on skills from generation to generation through their womenfolk.

Other tribes are found in Central and South India, spread across the States of Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, and to some extent, in Kerala. In each region they have different cultural practices and urbanisation has affected the extent to which they continue to make or use handcrafted objects. In most cases, however, their deep connection with the forest in which they live and their spiritual association with all forms of nature has enabled them to retain a distinct style of making bamboo items such as bows and arrows, musical instruments and baskets. Their metal work incorporates the world of trees, animals and human beings as if they were all forged from the same shapes and impulses of nature. Earthen vessels and toys are painted with bold black and white stripes. Winnows for grain take on wondrous hues with strips of bamboo dyed in brilliant yellows and magenta pinks. Palm leaf brooms are playfully embellished with decorative handles, and baskets carrying the trousseau of the bride to her new home are capped with plumed birds made of bright coloured strips of bamboo. The making of craft items is at once a daily practice, a ritual, and a celebration of creativity in everyday life.

Bamboo basket, Vietnam

The textiles of the tribals of central India have their own distinct identity. The tribes of central India spin and weave thick cream coloured yarn with madder red borders and end pieces reflecting images from their lives. Birds, flowers, trees, deer or even an airplane decorate these cloths. In Orissa, ceremonial cloths to be worn by the priest or priestess are required to be of a certain colour. Each colour has an auspicious meaning and unity of communities is expressed through the similarity of dress and adornment.

Tribal and indigenous arts related to specific cultural traditions of various communities could be termed as peopleís art as opposed to the more stylised classical arts that evolved within the Hindu social system, or those that

were the result of influences from different parts of the world through trade or historical events. There was also a gradual change in craft practices because of industrialisation, and technological and cultural pressures from more dominant economic groups within and outside India.

Formation of Social Groups

Those who worked with their hands in artisanal skills were denied easy access to the tasks assigned to the upper castes. While socially and psychologically detrimental, the caste system locked artisanal skills in place and ensured the transmission of this knowledge from generation to generation in the absence of any alternative, thereby preserving techniques and processes that may otherwise have been lost. Even today, the *prajapati* or *kumhar* (potter), the *vankar* or *bunkar* (weaver), the *ashari* (carpenter) and all the other identified and categorised artisans are divided and recognised by the caste groupings whether they continue to practise their skill or not.

In *The Arts of India* by G.C.M. Birdwood, he cites the nineteenth chapter of the second section (ëAyodhyakandaí) of the *Ramayana*, to list the inhabitants of the city that are represented in the procession with Bharata to seek Rama. They are the trade guilds of artisans: the jewellers, potters, ivory-workers, perfumers, goldsmiths, weavers, carpenters, braziers, painters, musical instrument makers, armourers, curriers, blacksmiths, coppersmiths, makers of figures, cutters of crystals, glassmakers, inlayers and others. In present-day India we can formulate broad groupings of major practitioners of craft as potters, weavers, metal-smiths, wood-carvers, cane and bamboo weavers and stone carvers. While these may be the larger skills, there are many other crafts from *shola pith* work, *papier-m,chÈ*, innumerable styles of mural, miniature and floor painting, paper crafts, glass work, and carpet and *duree* weaving. In the area of textiles India undoubtedly has the largest range of skills that can be found anywhere in the world. While separating the craft of making floor coverings out of rags and yarn, we are left with textiles that consist of

Traditional potter (above) and weaver (below) at work

ornamentation through pre-loom processes, plain weaving, patterned weaving in which the ornamentation appears during the weaving process, and post-loom ornamentation. The last of these can be further subdivided into embroidery, beadwork, block printing and tie-and dye techniques, and *zari* (metallic thread) work, offering a further array of skills that express themselves differently from one region to another.

Empowerment of Women Artisans

In Bhadohi District of Uttar Pradesh hundreds of women took up carpet weaving since young boys went to school after the anti-child-labour campaign came into effect. Sometimes four or five women weave a carpet together under uncomfortable conditions, earning a meagre Rs 1500 per carpet collectively. For women-headed households the burden of bringing up children and staying alive under such conditions can hardly be imagined. During a visit to some carpet producing villages it was found that these women, as a part of tradition and custom, weave baskets with local *moonj* grass to serve as containers for sweets, saris, jewellery, fruit and other items on ceremonial family occasions. The brightly dyed grass of *moonj* is woven into small and large baskets with intricate designs depending on the creativity and mood of the maker. With some minor suggestions regarding colour, size and costing, the women were encouraged to bring a collection of these baskets from every home and sell them at Dilli Haat in New Delhi. What began as a shy and hesitant venture ended in delight as the women sold out their stock earning Rs 17,000 in the process. They described their experience as one of independence, for they had control of the raw material (free grass from the fields), control over production (home- and leisure-based work), control over creativity (they design each

Women weaving baskets with local moonj *grass, Bhadohi, Uttar Pradesh*

basket as they wish), and control over sales (they had sold the items at the stall themselves). The earnings were free of the male/*malik* control prevalent in the carpet industry and were entirely based on their own efforts. After some design workshops were held in the villages and the produce exhibited at different places, they were able to sell more than six lakh rupees worth of baskets in one year. Perhaps this is the closest example of what empowerment actually means when translated from abstract jargon into reality.

But, there is still a lot of work to be done such as organising the women into self-help groups, encouraging savings and delivering micro credit to them so that they have money for raw material, transportation and other needs.

There are many issues and areas of work involved in this story: child labour, womenís work, the skill of basket making, designing new baskets, finding new uses for these baskets, calculating the cost of each basket so that they fetch a fair return without making the basket too expensive, planning a marketing strategy including an exhibition, a catalogue, web marketing, learning about the benefits of a self-help group and the availability of micro credit.

Baskets, mats, coasters designed for everyday use

EXERCISE

1. Even though craftspeople produce objects of great utility for every home, this community is often marginalised in terms of what it earns and where it lives in the village. Investigate and find reasons for this. Is this situation changing?

2. In several parts of India, women are prohibited from using the wheel to make pottery. However, in Manipur, women can also be potters. In your own area, identify the tasks done by men and women at different stages of making any craft object.

3.† In India, the crafts sector is the second largest exporter. Collect data on crafts that are the most successful export items and complete the following table.

† *Item*	*Quantity*	*Price*	*Exported to*
Textiles			

4. In your opinion, why is basket-making, mat-weaving and making of brooms largely done by women?

5. How do market forces influence the making of a craft object? Think of a kite, a traditional paper toy, and a papier-m,chÈ object. Consider: raw material, process, form and shape, design and decoration, the ecologically conscious buyer, the export market etc.

6. Which types of embroidery were traditionally done by men in our country and why? Find out.

7. In your opinion what are the factors that give a distinctive character to crafts in a specific region?

8. Looking at objects drawn from at least four different regions of India, made from specific material such as textile/clay, make a study of the variety found in technique, design, colour and shape. Describe in detail.

2 CLAY

The art of pottery is probably as old as human history. No other art traces the story of human beings on this earth as clearly as pottery does. The tides of time have washed away many civilisations but evidence of their existence remains in fragments of pottery.

There are two reasons why this is true: the first is that clay is found in abundance in practically all parts of the world; the second is that clay objects are the least perishable of all materials.

The history of pottery tells of the daily life of human beings, their death and burial, of human migration, trade and conquest, cultural practices and influences.

As to the discovery of how clay could be manipulated to make pottery, it is easy to imagine how, as prehistoric communities walked through rain-soaked mud, they noticed their footprints and how these impressions became hardened by the wind and sun. Exactly when human beings intentionally used these discoveries for making pottery is unknown but it may have been invented independently in many parts of the world.

However, the process of making a pot is a long and difficult one that has evolved over many generations of trial and experiment.

Potter shaping a horse-head

What is Clay?

Clay is universally found as it forms part of the earthís crust that developed due to weathering over thousands of years. In India different types of clay are found along riverbeds and banks, lakes and ponds, and agricultural lands. Clay is essentially silica but the varying mineral content in clay adds to its colour and determines how suited it is for different processes.

Clay is cleaned by removing large stony particles, gravel and humus.

When clay is mixed with water it becomes malleable, elastic. Thinner clay solutions can be created to use as paint for walls and on sculptures.†By controlling the amount of water that is mixed with clay it can be used in different ways.

- It can be made into a creamy compound that can be poured into moulds and allowed to set.
- It can be mixed to a leathery consistency and cut like a sponge.
- When dry the surface can be scraped off as fine powder.
- Straw and grass can be added to create a strong, rough texture ideal for the creation of very large images.

So each artist treats clay differently to suit the type of object that is to be created.

Pottery

Artists, through the ages, have loved clay as it is the most sensitive material on earth for it captures the slightest touch or the gentlest imprint. As soon as the clay object is dried or fired, a chemical change occurs and the object becomes rigid and is no longer sensitive to touch.

Clay of some kind or the other can be found almost anywhere in the world. India, too, has an unbroken continuous history. Artists have used clay to produce objects for the home ó cooking pots, roof tiles, clay bricks and sculptures.

Oh! the pot is everywhere!
Where there is buttermilk, in the cupboard, a pot
Where water is stored, at the waterstand, a pot
Where food is kept, on the stove, a pot
Where there is jaggery, in the attic, a pot.
In the heart of the home,
As ëgotrají, ancestors, a pot
Vastu, during house warming,
At the threshold of each home, a pot
Where a marriage ëpandalí is built, a pot
When the ëgarbaí dance takes place,
In the courtyard, a pot.
During sickness,
Left in the outskirts of the village, a pot
At every stop in a pilgrimage, a pot
In death, at the cremation ground, a pot
At a ëYagnaí representing the planets are pots
In the village square, the singer plays a beat on a pot.

ñ from Prakriti, *Indira Gandhi National Centre for the Arts*

Clay objects are prepared using two basic techniques:

- wheel-turned pottery
- hand modelling.

A variety of processes within these two techniques have evolved.

Wheel-turned Pottery

The earliest method of making pots for storage may have used the coiling technique. The artist rolls out strips of clay and then places one coil upon another, joining them together with his fingers to form a hollow pot.

Roll a coil with outstretched fingers.

Join and add coils to form interesting patterns.

Finally, smoothen the coils from the inside for good binding.

The most important change came with the invention of the potterís wheel. There are many kinds of wheels used in India today. The first is a simple flat stone or wooden disc that is turned with the hand or a stick. By placing a soft lump of clay on the centre of the disc and turning the wheel the potter can change the shape of the clay. By varying the pressure of her/his fingers and palms she/he can create a pot of different sizes and shapes. By pushing with her/his thumbs down into the centre of the ball of clay and pulling gently outward and upward the shape of the hollow pot takes form.

Another type of wheel is mounted on a vertical shaft. By extending the shaft and adding another disc at the bottom it is possible to turn the wheel with the feet, leaving both hands free to make the pot. Today even motorised wheels are used.

A potter at his wheel

Making clay masks

Hand Modelling

Modelling is a process used with materials like clay, wax or plaster.†Clay modelling enables the artist to work from the inside core to the outside. The artist begins with a well mixed lump of clay and starts working with his fingers to give it shape and form.†Clay can be rolled, coiled, pinched and attached to the main form. This technique has several advantages that the artist can use to create a sculpture. He can add legs and arms to the figure by wetting a smaller piece of clay, rolling it and attaching it to the main body.

The process gives the artist freedom to change, modify and repair areas at will. If, for example, the nose of the figure falls off, the artist can just wet the clay piece and stick it back on to the face. He can then continue to add smaller details of hair, bangles and necklaces in clay.

Clay figurines, West Bengal

Decoration: Clay offers endless possibilities to create textures and designs on the wet surface of pots, which can be pressed or imprinted, cut out or added on like appliquÈ and then many parts of the clay object can be assembled together to forge a cohesive whole.

Painting: After firing, the craftsperson can pour a slip, which is the thin liquid solution of clay that gives the clay object an even colour. The sculpture can be painted with mineral colours to add value to its appearance. Sometimes clay objects such as pots, *diyas* etc. are also painted.

What Is Terracotta?

Once the clay object is made, it can be dried in the sun and fired in a local kiln made of cowdung and wood. This process transforms the clay into terracotta. Clay can be fired at different temperatures from 700ñ1400 degrees C. The intensity of heat and the type of firing gives the terracotta its colour and hue that range from dark brown to lively reds.

Once fired, the terracotta becomes insoluble, un-plastic and durable. On firing, the clay loses its chemically combined water, and becomes hard and almost imperishable. That is why 5000-year-old seals from the Harappan Civilisation still exist.

Terracotta: Firing a clay object in a kiln transforms the clay into terracotta.

Making of Giant Figures

Traditional potters live and work in almost every part of India. Pottery is a specialised profession and often the community lives together in a separate section of the village or town.

Each potter or *kumhar* has the skill to create hundreds of pots for different uses ó from huge storage jars for grain and water, to tiny oil lamps for Diwali. He can design a childís toy and sculpt giant figurines for worship as well.

To make giant figures, artists have evolved various techniques. One of them is to make each piece of the figure on the potterís wheel. This is to prevent the clay figurine from breaking when it is fired in the kiln. When clay is fired, it contracts considerably owing to the loss of water and moisture. A solid model made of ordinary clay would burst under the pressure of the heat of the kiln. A sculpture with uneven wall thickness would warp and crack. Therefore, using the potterís skill in creating parts of the figure in which the walls are of even thickness is a unique way of overcoming this problem.

The potter throws clay to create the hollow shapes of legs, body and neck of the figure he wants to create. These individual pieces are then assembled by the potter to create the required form. The four pot-shaped legs are attached to the hollow torso. To this the artist adds bits of pinched, pressed and coiled clay for decoration.

This unusual process involves the imaginative use of the material and a great deal of inventiveness goes into making the form both technically sound and aesthetically satisfying. Some of these votive figures are two metres high and their towering presence only adds to the genius of the village potter. Potters make these figures for their patrons in lieu of money or food.

A craftsman finishing an Aiyanar horse

Clay through the Ages

3000 ñ 1500 BCE

Harappan Civilisation

Small figures of animals, domesticated animals like the bull and the ram, tiny images of house animals like a bird in a cage, cats, lively Indian squirrels munching on a juicy nut

Toys for children similar to the clay toys made for children today by the village potter and sold at the *haats* or village bazaar like the bull with a movable nodding head

300 ñ 100 BCE

Maurya and Sunga Periods

Clay figurines from excavations at Pataliputra, the ancient Mauryan capital, Kosambi, Gaya and other important sites of the Mauryan and Gupta Periods

100 BCE ñ 300 CE

Kushan Period

In the northwestern region of India the Greco-Buddhist stupas were often decorated with stucco designs and motifs. There are several Gandharan heads with evidence of paint. Strong red mineral colours were used for the lips and black charcoal hues for matted locks and curly hair.

300 ñ 1000

Gupta and Post-Gupta Periods

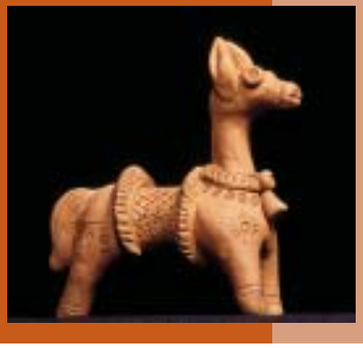
Life-size terracotta sculptures were used to decorate temples and secular buildings.

1600 ñ 1800

Local rulers of Bishnupur in West Bengal built temples in a unique style that were profusely decorated with terracotta plaques and stucco patterns.†

1900 ñ 2000

Despite colonial exploitation the potter has continued to innovate and work. Every village, town and city in India has a vibrant living tradition of pottery that is unique to its tradition.



Giant Clay Figures of India

Votive terracotta figures are made in **Madhya Pradesh** and **Chhattisgarh**. In Bastar, on *amavasya* (the no moon night) of *Bhadrapad* (August to September), tribals offer terracotta bulls, tigers, elephants and horses, sometimes with one or two riders, to the goddess whom they worship for wealth, health and protection from evil spirits. These clay animal gifts or votive offerings have replaced the practice of animal sacrifices of earlier times.

In **Tamil Nadu** the dramatic larger-than-life size image of Aiyanar, the local deity, is surrounded by a sea of attendants, horses and bulls. They serve as *gram devatas* who stand at the entrance of the village and protect it.

During Durga Puja in **West Bengal** enormous figures of the goddess are created. The artists use different techniques and mixtures of natural materials to make these excellent stately statues. They follow the traditional practice to create the inner core with local grasses bound together to form the legs, arms and head. The grasses are often swathed with thin cotton cloth. Then layer upon layer of clay is carefully applied to the body of the goddess to gradually build it up. Over a period of several days, each layer is allowed to dry completely so that no cracks appear and there is no warping. Once dry, the entire figure of the goddess is painted with natural mineral colours. After this the figure is dressed in a sari and adorned with jewellery made of paper or artificial jewels, and garlands of flowers, before it is ready for worship.

Ornately decorated clay horses, huge armies of terracotta figures and assemblies of village deities with their attendants can be seen under the trees in village grounds in Bankura District, West Bengal.

Mati kahe kumhar se tu kya raundhe mohe,
Ek din aisa ayega main raundhoongi tohe.

ñ KABIR

EXERCISE

1. *No technique emerges in a day. In any craft a technique is sharpened over centuries*. What do you think were the various stages that pottery-making went through that led to the use of the wheel in pottery? Describe in detail.

2. In many parts of India water is stored in clay pots. What aspects of the design and material of a *surahee* or *matka* make it suitable for storing drinking water in summer?

3. With reference to the photographs given below, identify the different techniques used by the artist to create each.

Plaque

Pot

Votive object

4. *The history of pottery tells of the daily life of human beings, death and burial, of human migration, trade and conquest, cultural practice and influence.* Survey ten houses in your neighbourhood and create a table of various pottery objects found there giving information regarding when they are used, their shape, how they are used and from where they were obtained. Especially refer to the daily life, rituals, trade and transport in the surveyed households.

5. *The invention of the wheel had a profound effect on every apect of human life.* Explain the many uses of the wheel and how each has changed human life and culture through the ages.

6. Why, do you think, pottery is a specialised profession from the point of view of skill, tools, techniques and entrepreneurship?

7. On the Internet, search for new uses of clayóin industry, in homes, in science, in space travel etc.

8. Artists, poets and writers, through the ages, have used the image/metaphor of pottery. Find examples to illustrate the concept in Indian art and literature. Create your own poem using clay as a symbol.

3 STONE

Even today the stone carvers of Tamil Nadu begin with a prayer that first begs forgiveness from Mother Earth for cutting the stone. The prayer ends with offerings of sweets and milk to the earth and a solemn promise never to misuse or waste stone.

The stone cutter starts by locating a good stone quarry. Then begins the process of cutting what he needs from the mother rock. Metal pegs are hammered in a straight line into the rock at intervals. Water is poured on to the rock to wet it. The change in night and day temperatures causes contraction and expansion and the rock gradually slits along the straight peg lines into perfect slabs.

The most interesting part of the creative process is when the artist chooses the stone piece to work on. How does he decide which is the perfect piece of rock to use? What qualities of the rock does the artist look for ó colour or grain or texture, or the softness or hardness of the stone? Can he ëseeí the image within the rock piece? Can he imagine what its form will be or can he tell by touch how it will feel when it is completely carved?

Types of Stone

There are myriad varieties of stone to be found in India. Soft soap stone contrasts with the hard granite, an igneous rock of the Deccan. Sedimentary rocks of the northern plains of India produce a variety of coloured sandstones; and metamorphic rocks, hardened over centuries under the soil form marble and limestone.

Rocks acquire their properties from minerals that give them colour, lustre, and strength. Depending on how the rock was formed, igneous or sedimentary, its molecular structure enhances it with a grain, layers and patterns.

Each type of rock, be it granite or sandstone, has intrinsic qualities that the sculptor explores when he creates a work of art.

Relief sculpture, Halebid, Karnataka

Descent of Ganga in granite, Mahabalipuram, Tamil Nadu

The nature of the stone will determine how the sculpture is made and also its possibilities. Soft soap stone allows for delicate, intricate carving whereas sandstone, a fragile sedimentary rock with layers of fine compressed sands and grains, has to be handled with extreme care as it breaks easily.

Within each category of stone there is enormous variety. Sandstone ranges from the golden yellow of Jaisalmer to the soft pitted and speckled stone of Mathura and Fatehpur Sikri. The sculptors of India have been using these stones for the past five thousand years.

The difference in treatment of one stone from another in the hands of an artist can be seen in the granite sculptures of Mahabalipuram and the sandstone figures of Khajuraho. Hard granite stone was used in South India to make temples and household items like grinding stones. The quality of stone available in each region of India distinguishes the style and form that can be created.

Carving

Carving is a process in which forms are cut away or subtracted from the original solid material.

Once the stone is selected the measurements for rough-hewing and cutting of the sculpture are taken. Carving is a difficult process, requiring skill, concentration and extreme caution. It is a process in which forms are cut away or subtracted from the original solid material.

A block of stone is carved by chiselling away tiny chips in order to create the desired shape. Once the stone has been carved the chips cannot be put back or replaced. This means the artist has to have a precise and accurate idea of how far to carve and what to remove. One cannot afford to make mistakes in this process for once the stone is cut away or carved it cannot be put back. Imagine the acumen needed to plan in advance the shape of the face, the size of the smile and the right angle of the jewel that will adorn a carved image. Once the rough work is over, details are carved with finer tools and then the stone is polished. Some stones can be polished to shine like a mirror.

Types of Stone Works

Stone objects include household objects like bowls, plates, grinding stones, and pillars, beams and brackets for construction of houses. Figures made in solid materials like stone are further classified into categories that explain their technical dimensions:

- Relief-sculptured panels
- Three-dimensional figures in the round.

Relief-sculptured Panels: A relief has carvings only on one side. The carving can be shallow or deep while the other side is flat and is usually embedded into the masonry work of the building. A low relief can be 1ñ3 cm deep and high. Relief can almost look like a three-dimentional sculpture.

Three-dimensional Figures: Such figures can be viewed from all sides. They can also be used to create free-standing pillars like those erected by Ashoka throughout his empire in the third century BCE.

Three-dimensional figure: torso of Vishnu in red sandstone, Mathura, Uttar Pradesh

Low relief: Mahakapi Jataka, Bharhut, Madhya Pradesh

Stone Sculpture through the Ages

At Bhimbetka in Madhya Pradesh, there are a number of rock shelters of the Stone Age period. Early inhabitants lived in natural caves and created fine tools and flints of agate and other natural stones in the area. These tiny flints and well-carved stone implements are the first examples in the long story of Indian sculpture.

At Ellora, in Maharashtra, there are Hindu, Buddhist and Jain rock-cut shrines. The Kailash temple at Ellora of the ninth century is an entire temple that was carved out of the natural hillside. The temple is really a massive sculpture cut out of a single piece of the hill. The artists started work from the top and carved downwards, beginning with the towering roof, the windows, the doors through which one enters into halls with enormous sculptured panels.

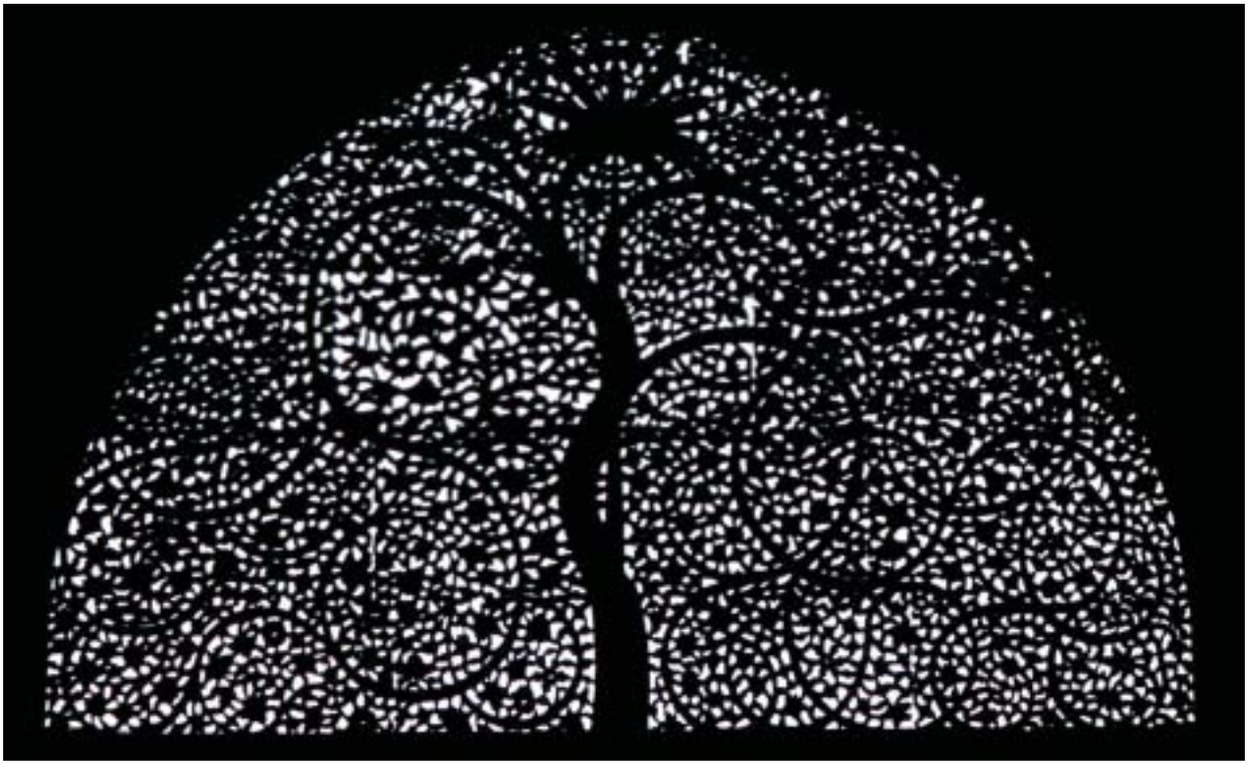
View of Kailashnath Temple, Ellora

Sandstone panels with geometric and floral design were made to decorate palaces and tombs during the medieval period. The Mughals in the sixteenth and seventeenth centuries built some of the most beautiful buildings in the world like the Taj Mahal in Agra. The sculptural decorations are of many varieties ó marble *jalis* are made out of a single slab of stone that is cut to create a lattice window that allows for light and ventilation.

Marble carving, Taj Mahal

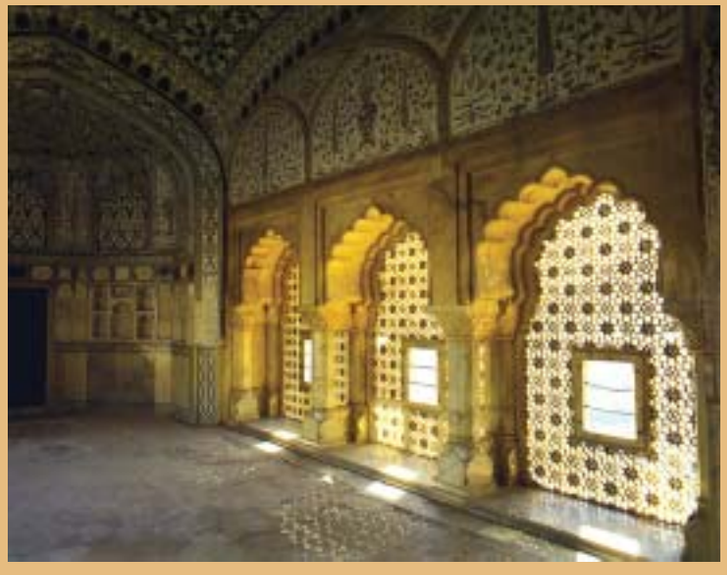
To make inlay marble or sandstone panels the artist has to carve out the design in the form of compartments on the flat stone slab. Then precious and semi-precious stones are cut into exact pieces of the pattern and laid into the compartments. The inlay work in the Taj Mahal is so extraordinary that over twenty pieces of different coloured stones were used to create a single flower.

Jali *work, sixteenth century, Sidi Sayyid Mosque, Ahmedabad*



Stoneware

Rajasthan is famous for delicate *jali* work, for domestic architecture in yellow and pink limestone and white marble. Jaipur also produces stone figurines.



The sculptors of **Karnataka** carve images, panels of gods and goddesses, ornaments, bowls, vases, and book-ends from a variety of stones available in this State.

In Madhya Pradesh the soft marble rocks of Bhedaghat on the banks of the Narmada provide craftsmen with excellent raw material to make carved panels, figurines and boxes.

Uttar Pradesh is one of the leading producers and exporters of stoneware in India. Soft marble and soft streaked Gorahari stone of many shades are inlaid with semi-precious stones. Inlaid table tops, plates and decorative items are produced in Agra.

In **Orissa** the stone cutters of Puri work mainly in soapstone. Harder stone is used for temple building. Traditional stone carvers in Mangalpur make stone utensils from semi-hard grey stone and add to it a beautiful polish. Grey stone from Khichling are made into items for the urban market, like boxes and containers, bowls and vases.

Tamil Nadu: Famous stone sculpture centres have been established in many places such as Mahabalipuram, where a training school has trained a number of young artists in traditional stone-carving techniques and in making statues.

Detail of an ornate pillar in a landlordís house, Chettinad, Tamil Nadu

Patrons of Crafts

Ananda K. Coomaraswamy in his book entitled *The Indian Craftsman* describes the craftsmen of India and Sri Lanka that he had studied in the early twentieth century. He divided crafts communities into the following categories.

- Those who lived and worked in the village
- Those who travelled from village to village and towns
- Those who lived and worked in towns
- Craftsmen who were employed by the ruler in royal workshops.

The Village: The potter, carpenter, stone sculptor, mason and goldsmith lived and worked often in their own homes in designated parts of the village. Everyone in the village knew their local craftsmen and therefore he had no need to autograph his works. The *jajmani* system ensured that hereditary artisans were bound to the dominant agricultural groups through traditional ties. This was a hierarchical and symbiotic relationship, in which the artists worked under the protection and hospitality of the landowning class. When there was a festival, the landowner or the *jajman* would request the potter to make ceremonial pots and *diyas* and in return pay him in kind with food for the rest of the year. When his household needed a grinding stone, the stone cutter would make one to the specified requirement and size.

Itinerant Craftsmen: Some artisans like the blacksmith even today are itinerant craftsmen who move from village to village servicing the community and spending as much time as is required in each place. These crafts communities were often paid in kind with gifts of grain and food, clothing and money so that they did not have to cultivate land for food but could pursue their craft to perfection.

Much of Indiaís architectural heritage, like the Ajanta caves, was created by artisansí guilds.

In the Town: While the artists in the village worked as a family, individual artists in the towns formed guilds to protect their interests and to ensure the quality of their work. The guild protected the group and its occupational interests, punishing the wrong doer, negotiating prices and enforcing standards of work. The artist in the town was also paid in kind and with land grants or produce from land.

In the Court: Through the ages rulers tried to attract well-known performing artists and craftsmen like sculptors to work in their court. It is the creations of such artists that provide an idea of cultures and eras gone by. Rulers understood that having brilliant architects and sculptors

would enhance their empire in many ways. They knew that the creation of magnificent buildings, shrines and sculptures would carry the message of their grandeur to distant places and countries. This is why there are many royal records of grants and gifts to artists who excelled in their work.

The artist who attached himself to the court found employment in the royal workshops and was often a privileged person, given payment for an assignment not only in kind but also in land. The Jetavanarama Sanskrit inscription (first half of the ninth century) of a Buddhist monastery records that:

> *There shall be clever stone-cutters and skilled carpenters in the village devoted to the work of temple renewal. They allÖ shall be experts in their respective work. To each of them shall be given one-and-a-half kiri (in sowing extent) for their maintenanceÖ an enclosed piece of land. And one hena (or a plot of dry land) shall be granted to each of them for purposes of sowing fine grain.*
>
> ñ *Ananda K.Coomaraswamy,* The Indian Craftsman

Emperor Akbarís royal diary records that payment was given to artists for their work and special awards for excellence were given on pleasing the emperor with the creation of a rare object.

The practice of gathering skilled artisans in the palace workshops and homes of rich landlords continued right into the nineteenth century.

> *In the east the princes and great nobles and wealthy gentry, who are the chief patrons of these grand fabrics, collect together in their houses and palaces all who gain reputation for special skill in their manufacture. These men receive a fixed salary and daily rations, and are so little hurried in their work that they have plenty of time to execute private orders also.*
>
> ñ *George C.M. Birdwood,* Industrial Arts of India

Chaitya Prayer Hall, Ajanta, Maharashtra

Who are the patrons of stone artists today? Is there a difference in how they are paid in rural areas and urban centres? Is there any recognition of their work? What are the problems that craft communities face today? These are some of the questions that have to be asked to understand the health of the crafts sector in India.

Tomb of Salim Chisti in marble commissioned by Akbar, Fatehpur Sikri, Agra

Growing Up as an Artist

Living and growing up in a family of artists enables a young child to acquire skills and sensibilities from his/her parents and grandparents. The child growing up in a potterís home knows how to mix clay from childhood and

In every region of India a distinctive style of architecture developed. Lakshmi Narayan Temple, Chamba, Himachal Pradesh

is sensitive and familiar with the qualities of clay, knowing, for example, by its scent whether it is dry or wet or ready for firing. The sensitivities developed through such familiarity would seem almost natural and effortless.

Critics of Indian art and craft have remarked that Indian artists rarely invented or experimented with tool-making to improve their work, or to develop labour-saving devices. Tools were kept to the minimum, while the process of achieving perfection was as important as the job itself. Skills practised for over 5000 years are still in use in India. Today artists, whether they are stone or wood carvers, potters or weavers, continue to work with the technology and methods used by their forefathers.

It appears that once a simple way of making something was developed it lasted for centuries and became the most uncomplicated way of achieving the real goal of crafts. Perhaps finding time-saving devices, effort-saving technologies was not the goal of crafts communities as is illustrated by the experience of a well-known wood carver from Kerala (see box below).

He had studied with his father and has narrated how long and difficult the training was. His family made wooden masks for Krishnattam, an ancient danceñdrama of Kerala. He said that as a child he worked with his fatherñteacher who instructed him on how to carve the mask for the character of Krishna. He used simple tools, the chisel and the hammer, and different types of scrappers. His teacher kept telling him to do it again and again. This went on for seven years! Finally, one day, his teacher looked at his work and saw that his son had captured the ëidea of Krishnaí, the *bhava* or inner expression of the deity in his wooden mask. Through this lengthy process the son acquired not only mastery over woodcarving but was able to express deep philosophic ideas through his craft.

At the turn of the nineteenth century when machines and technical training were overrunning the old system, many scholars like Coomaraswamy wrote about the loss of this parental education and the discontinuity of culture and living craft traditions.

Ö for in the East there is traditionally a peculiar relation of devotion between master and pupil, and it is thought that the masterís secret, his real inward method, is best learnt by the pupil in devoted personal service, so we get a beautiful and affectionate relation between the apprentice and the master, which is impossible in the case of the busy professor who attends a class at a Technical school of a few hours a weekÖ

ñ ANANDA K. COOMARASWAMY, The Indian Craftsman

Coomaraswamy believed that by living and working with the family the child acquired valuable trade secrets, an understanding of the culture and customs to which they belonged, the rituals and festivals for which their craft was required and the philosophic traditions that transformed their work into art. By attending festivals and rituals, listening to grandmothersí legends and stories, the child learnt the content of sculptures that he would make later in life. Such an education is not available in technical or art schools of today. It was this *guruñshishya* and parentñteacher system that led to the continuity and excellence of Indian art.

Contemporary Demands

In Mahabalipuram the sculptors make certain figures which they feel have a demand. They also execute orders received from various organisations, like temples. There is a preponderance of the so-called traditional iconographic forms: gods, goddesses, the elephant god Ganapathy and the whole gamut of religious figurines. The background to this is the College of Traditional Art and Architecture where traditional iconography and architecture is taught. They take on various kinds of contracts for both the local and the export market, especially tombstones for Korea and Japan.

There exists now a burgeoning construction industry almost all over the country. People are demanding more in terms of ëfinishí to their houses than just plain cement and concrete. They like to beautify houses with objects of art both functional and aesthetic, traditional and modern. Carved stone lends itself to both interior and exterior spaces. It can be used in construction work, objects of art, traditional and modern designs. Stone can be used in a variety of combinations with other materials.

Innovation comes in when there is an active interaction between customer/designer and the craftsman. The craftsman needs to understand the requirements of the client and the customer/designer needs to understand the material, its capabilities and the capacity of the craftsman.

Another important factor is cost. The craftsman would obviously like to make and sell something that can be made as cheaply as possible and sold as dearly as possible. It is important that the price worked out should be such that the craftsman gets the maximum benefit at an affordable cost to the client. A simple example would be carved pillars for a portico. A range of styles should be available from simple columns to carved ones so that they can suit the taste and budget of the client.

Contemporary pillar base (above) and sculpture (below), Mahabalipuram, Tamil Nadu

EXERCISE

1. What are the inherent qualities of stone as compared to clay? How do such qualities determine the techniques that can be used on one material and not on the other?

2. Compare the patronage structure of the past with the present. How does this affect the objects created?†

3. Igneous, sedimentary and metamorphic are different varieties of stone, each having its own properties. How does the craftsman use these properties to advantage in his craft? (*Example*: Granite, because of its hardness, has been used to create temples of lasting value in Mahabalipuram, Tamil Nadu.)

4. Coomaraswamy makes a distinction between classroom learning and apprenticeship with a traditional craftsperson. Compare your practical work in the field with crafts communities with your experience of classroom teaching. Do you agree with Coomaraswamyís views?†

5. What do you think are the occupational health hazards and environmental concerns around the use of stone in crafts and buildings?

6. The boom in the construction industry, with every middle-class house boasting of marble floors and granite counters, has led to depletion of stone resources. Draft a Bill or write an article for the local newspaper keeping in mind the following:
   - protecting forest lands from quarrying and mining
   - protecting the rights of the craftsmen to access the stone
   - suggesting alternative materials to replace stone in buildings.

4 METAL

At the time of Dussehra, Kullu valley comes alive with the arrival of many *mohras* (metal plaques of Durga) from different parts of Himachal Pradesh. These gold and silver masks were commissioned by the kings in ancient times. Each village brings its *mohra* from its local temple to Kullu in a decorated *palki* (palanquin). The *mohras* are then moved into a huge wooden *rath* that is pulled by hundreds of devotees. At the time of Dussehra you can see processions of these *raths* as they weave down the mountain. Musicians accompany each of the processions and the whole Kullu valley fills with the sound of their long metallic pipes.

There are a variety of pipes, long telescopic ones known as *shanal* or *karnal* and the ëSí-shaped curved trumpet known as *narasingha*. These are made by local metal-smiths who are often attached to the temple.

Wind instruments, Himachal Pradesh

The Role of the Blacksmith

Metal craft is one of the most vital traditions of Himachal Pradesh. Here blacksmiths, carpenters and stone workers consider themselves a single group. While they maintain their occupational distinctions, they frequently intermarry. Carpenters and metalsmiths call themselves Dhimans and trace their origins back to Vishwakarma.

Blacksmiths are the largest craft group in Himachal villages and, like all other artisans, they are largely employed as farm labour. They are also traders who sell their products. Like many crafts communities in India, their workshops are in their homes. In Himachal the blacksmiths usually work from their workshops located on the ground floor of their homes.

In any village in the world, the blacksmithís importance springs from the fact that he is indispensable. The *lohar* (blacksmith) makes and mends the agricultural implements that are made of iron and also fashions utensils with material provided by the customers. In addition, he also makes tools for other artisans, creates icons and ornaments, and repairs damaged metal objects. His payment usually comes in the traditional way ó he receives a share of the produce.

Inside the Metal Workerís Studio

The wheelwright was also the blacksmith and the tinker of our locality. He and his apprentices did all sorts of odd jobs ó plumbing, carpentry, cabinet-making, forging pots and pans, overhauling carriages and carts, repairing boats and barges and a hundred other things. The things that he did not undertake would make a shorter list than those he did.

Inside a metal workerís studio

We could not imagine a wizardís cavern more fascinating than our wheelwrightís workshop. Its furnaces, big one and some smaller ones, were a great attraction. What interested us most about these furnaces was the intense glow the coal gave when the bellows worked. It was also engrossing to watch the red hot metal bars hammered into shape. Cascades of sparks flew as from a fountain of fire. It was like fireworks at the Diwali festival! It took our breath away to see the bullocks shod with iron hoofs and the cartwheels fitted with iron bands and then dipped into water. How the sizzling steam came out ó vapour coloured by the light of the furnaces!

ñ SUDHIN N.GHOSE, And Gazelles Leaping

Patrons of Metal Craft

The patronage of the temple and royal court gave rise to highly accomplished craftspersons, one generation following another practising the same skill for centuries.

As time went by, temple and rural art traditions came closer together. Innumerable bronze figurines cast by rural metalsmiths can be seen in village shrines and in home altars even today. These images appear to be timeless.

For our traditional rulers, the nobility and wealthy landowners, objects made of precious metal were symbolic manifestations of power. Much of their income from taxes was converted into treasure (*khazana*) in the form of objects made from precious metals and jewellery. It was in workshops (*karkhanas*) that goldsmiths and silversmiths, whether private or public servants, practised their skills under the patronage and close supervision of their masters. Some of these objects were made to be presented as gifts on special occasions such as the public assemblies (*durbars*) that formed part of court ritual, while others were only brought out for specific religious rituals. Still others were designed for everyday use.

Less well off *zamindars* followed the example set by the court. Even the rural population, with little money at its disposal, copied the customs of their superiors. Whatever surplus earnings they had was invested by them in silver ornaments worn by women daily. These proclaimed the wearerís social and economic status like the beautifully attired women of Rajasthan.

Mohras are fashioned out of *ashtadhatu*, an alloy of eight metals ó gold, silver, brass, iron, tin, mercury, copper and zinc.

The Himachal State Handicrafts Corporation has established metal craft training centres all over the State to impart training in bronze casting and all metal craft techniques.

Durbar *of Bahadur Shah Zafar*

Gold Coins, Gupta Period

Did you know that...

For 11,000 years human beings have been fashioning metal for their use.

- Ore metals are the source of most metals. First the ores are mined or quarried from beneath the earth, or dredged from lakes and rivers, then they are crushed and separated, and finally they are refined and smelted to produce metal.

- By 5000 BCE copper was used to make beads and pins. By 3000 BCE tin was added to copper to produce bronze, a harder metal. Iron, even harder than bronze, was widely produced by 500 BCE.

- The technology of how to master metals (copper, bronze, iron) developed independently in various parts of the world.

- By 3000 BCE, most of the gold extracting techniques used today were already known in Egypt.

- The concept of carats indicates the amount of gold in gold! Nowadays copper and silver are often added to gold to make it harder. The gold content in this is known as carats.

- More than half of the gold mined with so much labour, returns to the earthóburied in bank vaults!

Crafting Metals

Human cultures around the world have a long history of experimentation and expression using alloys like brass and bronze, and precious metals like gold and silver, and in more recent human history using iron and steel.

We have created countless objects from different metals, from tiny coins to buildings, pots and pans to timeless images of gods and goddesses.

Materials and Processes

Other than silver, the metals used in our country for craftwork are brass, copper and bell-metal. Brass is an alloy of copper and zinc, bell-metal is a mixture of copper and tin.

The shaping of an object is done either by beating the ingot or sheet metal to the approximate shape with a hammer while it is hot, or by pouring the molten metal in a mould that is made of clay for ordinary ware and of wax for more delicate objects. The beating process is preferred particularly for bell-metal and copperware as it is supposed to make the object more durable. Further, tempering is done by heating the article till it is red-hot, and then dipping it in cold water. If it turns black in this process, light hammering rectifies it.

Soldering is used to join two parts of an article when it is manufactured in more than one piece. Joining together is done by using a metal alloy which the artisan prepares.

Commonly used traditional metal vessels

The Lost Wax Process

The lost wax process is a specific technique used for making objects of metal. In our country it is found in Himachal Pradesh, Orissa, Bihar, Madhya Pradesh and West Bengal. In each region, a slightly different technique is used.

1. The lost wax process involves several different steps. First a wax model of the image is made by hand. This is made of pure beeswax that has first been melted over an open fire, and then strained through a fine cloth into a basin of cold water. Here it resolidifies immediately. It is then pressed through a *pichki* or *pharni* ó which squeezes the wax into noodle-like shape. These wax wires are then wound around to the shape of the entire image.

2. The image is now covered with a thick coating of paste, made of equal parts of clay, sand and cow-dung. Into an opening on one side, a clay pot is fixed. In this the molten metal is poured. The weight of the metal to be used is ten times that of wax. (The wax is weighed before starting the entire process.) This metal is largely scrap metal from broken pots and pans.

3. While the molten metal is poured in the clay pot, the clay-plastered model is exposed to firing. As the wax inside melts, the metal flows down the channel and takes on the shape of the wax image. The firing process is carried out almost like a religious ritual and all the steps take place in dead silence. The image is later chiselled with files to smoothen it and give it a finish. Casting a bronze image is a painstaking task and demands a high degree of skill.

Sometimes an alloy of five metals ó gold, silver, copper, brass and lead ó is used to cast bronze images. The oldest bronze images in our country date back to Mohen-jo-daro (2500 BCE). Today metalsmiths make images with a mixture of brass, copper and lead due to a scarcity of raw materials and the tremendous cost of precious metals.

Govind Jhara, a metalsmith from Raigadh, sitting before his primitive kiln, starts his metal casting with a little prayer:

Ao Dai (Come, Devi, sit with me)
Andhe ko chaku dani (To the blind give the seeing eye)

Making of a Bronze Image

In ritual items made of bronze the best is statuary which represents the visible forms of the deity to be worshipped. For this the Shilpa Shastraís *elaborate treatise is faithfully followed. From the Rig Vedic times there have been references to two casting processes, solid and hollow, termed ë*ghanaí *and* ësushiraí. *While the images are countless, each is very individualistic, and the craftsman has to learn not only the physical measurements of the right proportions to make the images but also familiarise himself with the verses describing each deity, its characteristics, symbolism and above all the aesthetics. These verses are known as ë*dhyanaí, *which means meditation. This is to convey the need for intense concentration on these instructions.*

Chola Bronze, Tamil Nadu

While the tradition is there to preserve the core of our heritage, obviously the craftsman is expected to do much more than merely put the limbs together; he has to endow them with the character each image has to convey from out of his own emotions, thoughts and volitions.

To give guidance in modelling each of the important parts of the body, it is likened to some object from nature: eye-brows modelled after the neem leaf or a fish; nose, the sesame flower; the upper lip, a bow; chin, a mango stone; neck, the conch shell; thigh, the banana tree-trunk; knee-cap, a crab; ear; the lily, and so on.

Icon-making is still a laborious and time-consuming job which requires a lot of concentration and demands a formidable array of tools, extreme skill and precision. Usually a coconut palm-leaf is used for marking out the relative measurements for the icon with marks made by folding the leaf. When the mould is broken, care is taken to see that the head of the icon is removed first as a good omen.

Tamil Nadu is one of the famous bronze-casting regions. Stylistically, the images belong to different periods like Pallava, Chola, Pandyan and Nayaka and the images that are now produced belong to one or the other of these styles. The icon- makers are known as stapatis.

ñ KAMALADEVI CHATTOPADHYAY,
The Glory of Indian Handicrafts

Silver

According to Hindu tradition, if objects made of gold and silver become ritually polluted, they can be restored to purity by the simple act of washing them in water or scouring them with ash or sand. It was believed, for example, that water is automatically purified when placed in a gold or silver container. In the case of silver, this theory has been scientifically validated and we now know that the ionic reaction of silver with water does have the effect of killing its bacterial content.

Even though silver occurs rarely in its pure and natural state in India, it has always been widely available. Then where did it come from? The answeróthrough 2000 years of trade. While we exported spices, dyes, textiles, diamonds and other luxury goods in both raw and finished forms to the Mediterranean, East Africa, the Arabian seaboard, the Red-Sea and the Persian Gulf, the islands of the Indonesian archipelago and even China and Japan, our main import has always been precious metals.

Contemporary studies show that through centuries of accumulation followed by recent import (through both legal and illegal channels!) the people and temples of India possess more than four billion (4,000,000,000) ounces of refined silver! This staggering figure is only a conservative estimate.

As silver has always been 15ñ23 times cheaper than gold, it lies within the reach of a much broader section of our society.

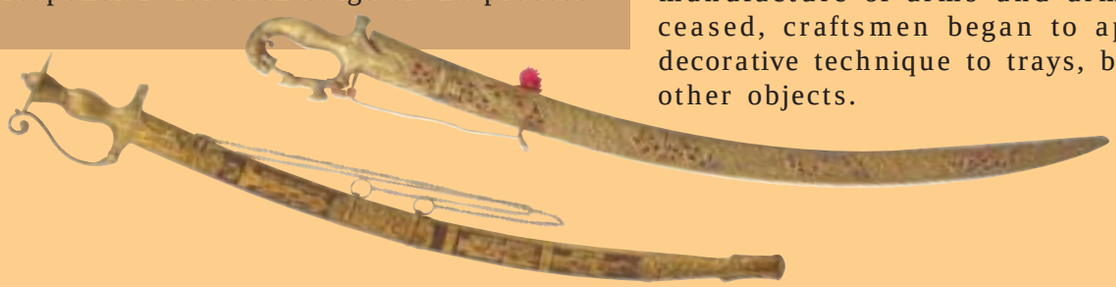
Utility items in metal from different parts of India, eighteenthñnineteenth centuries

Metal Craft Across India

In the Kinnaur District of **Himachal Pradesh**, the metal objects used for religious purposes are a unique synthesis of Hindu and Buddhist designs. The thunderbolt or *vajra* motif is commonly seen on kettles and jars. Fruit bowls with a silver or brass stand designed like a lotus, prayer wheels inscribed with the ëom mani padme humí mantra, conch trumpets, miniature shrines and flasks are also made. Many of these forms come from ritual objects used in Tibetan Buddhist temples which are located next to Hindu temples all over Kinnaur.

Teamwork is essential in the craft of metal-work. In Lucknow, **Uttar Pradesh** for example, the production of an enamelled *hookah* base would involve several different specialised skills, each practised by a different craftsman. A *sunar* makes the object; a *chitrakar* or *nakashiwalla* marks out the surface design; a *chatera* chisels away the depression in the design needed to hold the enamel; a *minakar* carries out the actual enamelling; a *jilasaz* polishes the object; a *mulamasaz* might gild it, while a *kundanaz* sets the stones required in the design. Successful teamwork of this sort clearly relies on a strong underlying design concept and a high degree of stylistic coherence, as well as a feeling of technical harmony amongst those responsible for each stage of the process.

Koftgari is the term for a type of silver and gold damascene work produced in Thiruvananthapuram**, Kerala,** Jaipur, **Rajasthan,** Hyderabad**, Andhra Pradesh** and **Punjab**. In ordinary damascene (*tar-i-nishan*), a technique used frequently to adorn the blades of swords, a chiselled groove is first made into which precious metal wire is hammered. The *koftgari* process is simpler and less time consuming, and allows for much freer decoration. The entire surface of the object is first chiselled in at least two different directions so as to roughen it and then the wire (either silver or gold or both) is hammered onto it in intricate patterns. ëTrueí damasceners looked down on this method, but it is simply an alternative process. Once the manufacture of arms and armour had ceased, craftsmen began to apply this decorative technique to trays, boxes and other objects.



Bidri, a technique named after its place of origin, Bidar, **Andhra Pradesh**, is the application of inlay (mainly silver) to objects cast in a relatively soft alloy of zinc, copper and lead. After the inlay work is completed, the ground is stained black using chemicals, thus creating a splendid contrast to the silver decoration.

Among the numerous ritualistic articles made of metal in **Gujarat** are large temple-bells. The famous temple-bell on the Girnar Hill weighs 240 kg. Another popular item is the typical low square stool and low arm chairs. This pure metal furniture was highly ornamented in a variety of styles and was used by royalty.

In **Kerala** to make the *uruli (*wide-mouthed cooking vessel, with flat or curved rims) the lost wax process is used. A giant cauldron called *varpu*, which is magnificent in form, is used in temples for making *prasad* to feed thousands of devotees. Kerala also has a great tradition in making metal tumblers for drinking, which range in size and are very elegantly shaped.

Nachiarkoil in Thanjavar District of **Tamil Nadu** is an important bell-metal centre. This is due to the presence of light brown sand called *vandal* on the banks of the Cauvery, ideally suited for making moulds. Some of the articles made by casting are vases in different shapes, tumblers, water-containers, plain and decorated ornamental spittoons which are a speciality of this place, food-cases, bells, candle-stands, kerosene lamps, picnic carriers, and a large variety of oil lamps.

No other country has such imagery and symbolism built around lamps as India. As a symbol of Agni, the fire-god, lamps are auspicious and used at marriages, and also to welcome important guests. Lamps are found in many different forms often with a handle attached to a small tray, shaped as a cobra, fish or swan. These vary in size from little ones for quiet personal worship, to large pedestal ones to light a spacious hall.

EXERCISE

1. *The metal workerís craft is indispensable in India.* List their contributions in different sectors like agriculture, construction, transportation etc.

2. Refer to a national newspaper and record the prevailing rates of gold and silver. Plot a graph showing the price fluctuation of these metals over a fortnight/month. What factors do you think contribute to this fluctuation?

3. *Traditionally, metal objects were sold by weight and the cost of workmanship was not taken into consideration for deciding the price. In the West the cost of workmanship is often greater than the value of the material.* In your opinion how should the price of an object be determined? Give reasons to support your argument.

4. Looking at the map page of this chapter, create a table listing reasons why various metal work techniques are used in different parts of the country (see following example). Define precisely each one of the processes. In your own region find out which of these techniques are used in working with metals.

Region	*Technique*	*Process*
Himachal Pradesh	RepoussÈ	A thin metal sheet is placed on a carved wooden block and hammered so that the design appears clearly on the metal sheet.

5. *Metalsmiths are indispensable in our lives.* Find out their social status in your region. Are they called to perform any special ceremonies?

6. Sudhin Ghoshís passage explains the crucial role that fire plays in metal crafts. What measures can you suggest to reduce fire and smoke related hazards?

7. In several religions, precious and semi-precious metal objects are used. Find out what these are and who makes them.

5 JEWELLERY

All of us enjoy decorating our bodies. In ancient times it was believed that besides enhancing its beauty, decorating the body gave it additional strength and power. Even today many tribal societies use flowers, wild berries, leaves and feathers for this purpose. Flowers and fruits celebrate nature and growth while feathers are valued for their colour and for the power of flight. Seeds, even wings of insects such as colourful beetle wings are used as embellishment and decoration.

One of the oldest forms used in jewellery was that of a sphere, representing the seed, the *bija*. Later a range of beads were made from clay, glass, metals and precious stones. This symbolised fertility, growth and the origin of life.

Many jewellery forms made in metal reproduce forms of flowers and fruits. *Champakali* is a necklace made of jasmine bud motifs and is worn throughout India. *Karanphul jhumka* is a combination of the form of an open lotus at the ear lobe and a suspended half open bud. *Mangai mala* is a rich necklace from Tamil Nadu, with stylised mango forms studded with rubies. Precious metals such as gold and silver were for the rich while the less affluent used even brass and white metal. Gold was associated with the sun, and silver, *chandi*, with *chandrama* ó the moon.

In the past when there was discrimination on the basis of caste, only the upper castes were allowed to wear gold. This is now changing and those who can afford it, wear gold and precious jewels.

Strings made of different types of seeds

Meaning and Significance of Jewellery

In some tribal societies, each ornament was a symbol of the rank and status of the wearer, and it was also believed to have certain magical powers. Thus, the purpose of ornamentation was not only to satisfy an instinctive desire to decorate the body, it was also invested with symbolic significance. This aspect is clearly expressed in the form of amulets which carry inscribed prayers to protect the wearer from evil influences. All communities and faiths use this form of jewellery as protection against harm or to activate certain positive qualities.

Streedhan: From Vedic times onwards, jewellery was counted as a womanís wealth and comprised a part of her inheritance from her father, as well as a gift from her husband.

It was with the establishment of a settled agrarian society that jewellery became a form of saving and a symbol of status. A variety of designs in folk jewellery evolved over the years, and the important position of the jeweller in village society also points to the fact that jewellery was considered as the only form of investment which could be encashed during an emergency.

It was mandatory for married women to wear jewellery. Necklace, earrings, head ornaments and bangles were essential for every married woman. It was only widows who were deprived of jewellery.

Jewellery for Every Part of the Body

Each region in India has a particular style of jewellery that is quite distinct. Differences occur even as one goes from one village to another.

Ornaments worn by a Bhartanatyam dancer

Despite the variety in jewellery patterns in different parts of the country, the designs in each region are also at times strikingly similar.

Head and Forehead: Women wear the *bore* resting upon the parting of the hair in Rajasthan and parts of Gujarat and Madhya Pradesh, whereas the *tikka*, a rounded pendant at the end of a long chain which falls on the forehead, is used throughout India. The *shringar patti* which frames the face and often connects with the *tikka* on the top and the earrings are also used widely. In earlier times men wore the *kalgi*, a plumed jewel, on top of the turban.

Nose: The ornament worn all over India has variations from the simple *lavang*, clove, to *phuli*, the elaborately worked stud, or *nath*, the nose-ring worn in the right nostril, and the *bulli*, the nose ring worn in the centre just over the lips.

Neck: One of the ornaments is the *guluband*, which is made up of either beads or rectangular pieces of metal, strung together with the help of threads. A ribbon is attached at the back to protect the neck of the wearer. Then there is the longer *kanthi* or the *bajaithi.* Below this is worn either a silver chain or a necklace of beads. The men would wear a charm or a *tawiz* at the neck and a *kantha*, a long necklace.

Fingers: For the hands there are a number of rings. On festive occasions women wear the *hathphool* or *ratthan-chowk* to decorate the back of the hand.

Wrists: For the wrists there is the *kada*, the *paunchi*, the *gajra* and the *chuda*, which quite often extends six inches above the wrist.

Arms: The *bazoo*, the *joshan*, and the *bank* are worn above the elbow. Men wore a heavy *kada* or bangle.

Hips: A series of silver chains formed into a belt are worn at the hips and are generally known as *kandora* or *kardhani*, while the men would wear a silver or gold belt.

Ankles: Solid, heavy metal anklets combine with the delicately worked *paizebs* ending in tinkling, silver, hollow bells, while men would wear a heavy silver anklet. Only royalty wore gold on their feet.

Toes: The *bichhua*, scorpion ring, for the toe is put on by women at the time of their marriage.

Jewellery for various parts of the body

Jewellery through the Ages

3000ñ1500 BCE

Harappan Period
India has an unbroken tradition of over five thousand years of jewellery making. The excavations at the Harappan site have uncovered beads and shell bangles. The shell bangles are exactly similar to the ones worn by married women in Ladakh. Gold sheets shaped into head bands were also found.

300 BCEñ300 CE

The richest collection of jewellery was discovered in Taxila, an important Buddhist centre of learning. It was on the trade route, as well as the road for migration of people entering India. Here the jewellery exhibits Greek influence and the introduction of new technology such as filigree and granulation.

It is interesting to observe, however, that there are marked similarities between our present-day jewellery designs and the jewellery of the Sumerians and the early Greeks.

A necklace excavated at Ur, which is made up of finely designed pendants of lion-heads with granulated work, and supposed to have belonged to Queen Bathsheba, has a remarkable likeness to the *garuda* necklace prepared in Kerala.

Early Greek jewellery has a close similarity with some of the traditional jewellery of Kutch and Saurashtra. The patterns of some Egyptian jewellery, especially armlets with snakeheads, are found in India, as well.

400 CE

There is a close similarity in the jewellery design of today with those of early times. This we know from descriptions in literature, and in the depiction of jewellery in sculpture and painting.

The *kanthi*, a necklace worn close to the neck and the *phalakhara*, a long necklace comprising a number of tablets strung with a series of beads, is seen in the early Gupta period and is found in use even today in most parts of North India. The *chudamani*, shaped like a full-blown lotus with many petals, was worn at the parting of the hair and is similar to the present day *bore* of Rajasthan.

In the *Ramayana*, there is mention of Sita wearing a *nishka* necklace. *Nishka*, a gold coin, is also referred to in the *Jataka* stories. The tradition of wearing of coin necklaces continues.

About 26 per cent of Indiaís exports comprise gems and jewels.

900 CE

The use of the nose ornament was introduced into India quite late, as the early sculptures and murals do not show nose ornaments. It appears to have been introduced by the Arabs after the tenth century and, over the years, it became common all over India and became associated with marriage.

1500ñ1900

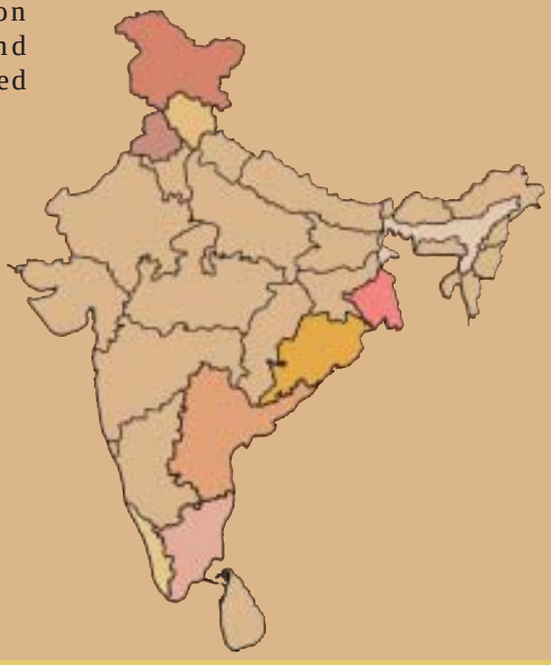
The Mughals had fine jewellery and used large precious stones. Jahangirís treasury, described by Sir Thomas Roe, an English traveller, had 37.5 kilograms of diamonds and 3000 kilograms of pearls and rich jewellery, often colourful enamel jewellery embedded with precious stones.

1900 onwards

With body piercing becoming popular in the West, young Indian men and women have begun piercing not just the nose and ear, but their tongue, the navel and other parts of the body to wear jewellery.

Regional Varieties of Jewellery

Despite the fact that styles in jewellery have, on the whole, tended to develop region-wise, we find that certain distinctive forms have been developed by specific sections, groups or areas.



The jewellery of **Kashmir** is quite distinct. The most important are the ear ornaments, known as *kan-balle*, worn by Muslim women on both sides of the head. They comprise a number of rings, which are attached to the hair or the cap. This jewellery is also worn in Ladakh and other Himalayan areas such as Lahaul, Spiti, and Kinnaur.

In **Punjab**, women wear a special ornament, *chonk*. It is cone-shaped and is worn at the top of the head with two smaller cones, known as *phul*, worn at the sides.

The belts worn in **Andhra Pradesh** have intricate clasps of the double head of a *rakshas* or *kirtimukha*.

Another pattern of a *kara*, which is common in Andhra Pradesh, is that of serpent-heads which appear to be holding the earth in their mouths. The necklaces often derive their designs from shapes of grains.

Though all the hill jewellery of Kullu and Kinnaur Districts is made in Hoshiarpur in **Himachal Pradesh**, it has its own particular style. The *pipal patra*, made out of bunches of heart-shaped silver leaves fastened to an enamelled piece of silver, is worn in these areas by women on both sides of their caps. It frames their faces with the light shimmering in cascades of silver. Their necklaces are formed out of large metal plates, engraved with the traditional designs of the region and filled with green and yellow enamel. The most common design is of Devi riding her lion.

The nose ornaments of Kullu are also highly specialised. The large-sized *nath* and *boulak* designs of a single leaf are not to be seen in any other part of India. On festive occasions they wear a large *nath*, often larger than the face of the wearer.

In **Assam** the tribes patronise silver jewellery, while in the plains gold jewellery is preferred. The patterns of gold jewellery are extremely delicate. The jewels, though few, are finely finished. The earring, known as *thuria*, has the form of a lotus with a heavy stem. The shape reminds one of the traditional *kamal* earrings mentioned in ancient literature. *Thuria* is usually made of gold and studded with rubies in the front portion as well as at the back.

In **West Bengal**, the filigree work on gold and silver jewellery is extremely delicate. The finest pieces of jewellery are the hair ornaments like the *tara kanta* and the *paan kanta* ó hair pins designed like a star and a betel leaf.

The folk jewellery of **Orissa** in silver and gold is rich in patterns, forms and designs. The most popular technique is filigree. The traditional filigree work is robust in character and distinct from what is being produced commercially today in Cuttack. Very few head ornaments are worn in Orissa. The accent is on arm jewels, necklaces, nose-rings and anklets, with the finest designs found on nose ornaments. One design known as *maurpankhi*, is crafted like a peacock with open feathers, made with the processes of granulation, filigree and casting.

In Sambalpur, brass jewellery is common. Bangles in different patterns are polished daily and appear to be made of gold.

Kerala has a very rich variety of gold designs. The use of precious stones is not so common here. Variety is seen mostly in necklaces. The *garuda* necklace produced here bears testimony to the fine workmanship of the craftsmen of the area.

In **Tamil Nadu**, silver filigree armlets worn by Vellalars of Coimbatore District have excellent workmanship in granular work.

Chettinad jewellery, made of uncut rubies, is one of the finest. The *addigai* is a necklace made of a string of uncut rubies set in gold. A central motif of the *padakam* imitates the lotus. The *mangai-malai* is a necklace of mango-shaped pieces studded with uncut rubies and diamonds. The plait cover often has at the top the head of a *naga* or snake.

The jewellery of the Todas and the Kotas of the Nilgiris in Tamil Nadu, are very distinctive.

Meenakari or Enamel Work

One of the most sophisticated forms of jewellery developed in North India is *meenakari*. Jaipur is the main centre, but some craftsmen practise this art in Delhi, Lucknow and Varanasi as well.

Meenakari is combined with *kundan* to produce a delicate and rich effect. The *meenakari* or enamelled patterns are so fine and intricate that they need to be examined with a magnifying glass. This tradition continues even today.

A step-by-step description of how the techniques of *meenakari* and *kundan* are combined to make exquisite jewellery is given below.

1. The shape of the jewellery is first created.

2. The jeweller cuts out the sections where precious stones need to be inlaid.

3. It is then handed over to the *meenakar* who fills the sections with lac, fixes it on a stick of lac, and outlines delicate designs of flowers, foliage and birds.

4. After making the outline, the entire area is engraved for filling the enamel colour.

5. To contain each colour different compartments are created. Within the enclosed, tiny compartments, lines are engraved to hold each colour and also to reflect light, since many of the colours are transparent.
6. After this the colours are filled in and fired in a simple clay oven at maximum temperature.
7. Colours which require a lesser degree of heat are then filled in their respective compartments in the design and fired again, until the whole piece is worked with enamel on both sides.
8. Then the piece is given to the *kundan* worker, who heats it on warm ashes and fixes the stones in the empty spaces, which had earlier been cut to shape.
9. A fine gold filling, shaped to the size of the opening and intended to hold the gem in place, is then heated and fused to the base of the piece.
10. The finished piece is then polished with a soft leather cloth till it glows. The beauty of the *meenakari* ornament lies in the combination of elaborate patterns in enamel with the lustre of precious stones.

The uniqueness of the *meenakari* ornament lies in the fact that even the back of the piece is elaborately decorated, though it will only be seen by the wearer.

The Edge of Tolerance

Following is a poem ëAn Amethystí by a school student which depicts the hardships in the life of a gem-cutter.

I am an imported amethyst from Africa
I can see the difficulties of my shaper
His age is 39 years.
And he had been working from the age of eight,
The machine is his own and cost him 250 rupees
It looks to me as if he is being killed by degrees
Shaping an amethyst on a wheel,
With his B.A. degree packed with a seal
Sat Shaldir Ahmad, the stone cutter
He was oppressed but no cry for help could he utter.
Late to bed and early to rise,
He wakes at five and sleeps at 10 oí clock in the night
Concentrating to shape me, the right size
Due to this process he weakens his eyesight.
This was the work his father Sammu Khan
Had to do
And his grandfather Illahi Achan did the same work,
His children go to a school
He wants them to read and write
And not like him be in a plight.
The labour is one rupee per carat
He gets 1000ñ2000 rupees in a month
For all his hard work, no part time job he can do
The machine might be his, but the seth *owns the Factory.*
The uncut amethysts like me are imported,
After being worked at they are exported.
Itís not because the foreign workers are slow,
Itís because the cost of our cut amethysts are low
Because the workersí pay scale is low.
How hard he works, how little he gets,
How hard he struggles, but, alas! He fails.
This is my tale,
This is my story,
You for yourselves can now
Understand a workerís sadness and fury.

Uncut amethyst

Bangles and the Bangle-maker

In Firozabad it is a familiar sight to see people on bicycles, wheeling handcarts or cycle rickshaws which are piled high with brightly coloured bangles. They are either being taken to peopleís homes for completion or back to the factory for refiring.

*Within homes also known as ë*judai addasí, *the bangles go through the stages of* jhalai, judai *and* katai. *The bangles come in large bunches of 312 bangles, of which 12 bangles are reserved for breakage.*

The first stage is jhalai. *This work is done by the women and children in the family. Four to five members sit in their one-room house, which serves as their living, sleeping and working area. The roof and the walls of this room are absolutely black with thick soot. The soot comes from the kerosene lamps that are used in their work.*

In front of each person are 10 ñ12 small kerosene oil wick lamps placed in a semi-circle. Each bangle is then held by both ends and the middle is heated over the flame. The heated bangle is then placed on the ground and gently pressed to align the two ends. Care has to be taken to ensure that there are no burns either from the flame or the heated bangle.

These aligned bangles are now taken over by the men or older boys for the next stage which is that of joining the bangle or judai. *In this process the two ends of the bangles are heated over a kerosene and acetylene flame. The ends are pressed together and the flame melts the glass enough to join the bangle and make it a complete circle.*

In both the stages of jhalai *and* judai *the workers suffer the risk of being burnt besides straining their eyes. Cramps, pain in the joints as well as severe backache are some of the other problems faced by these workers.*

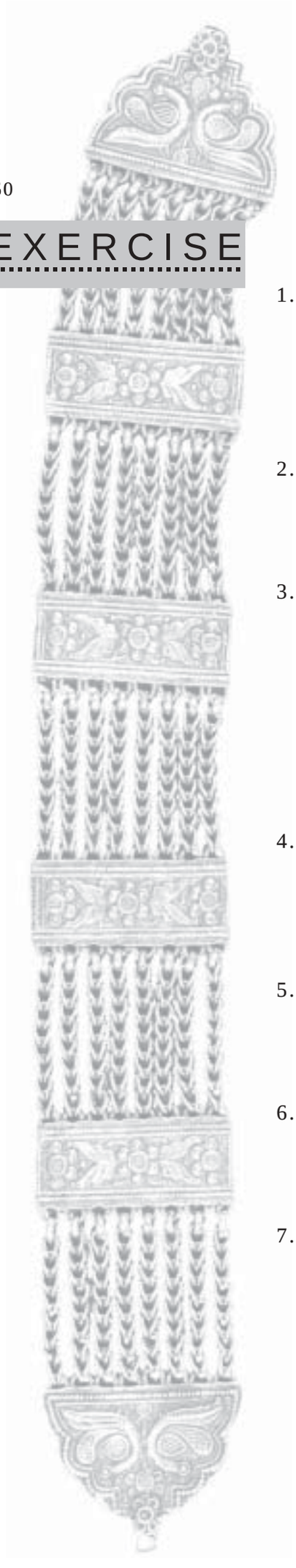
The joined bangles are now ready for the katai addas. *The carving is done on a fast revolving wheel on which designs are etched into the glass. During this process it is very common for the worker to get cut on the wheel or get flying glass particles into his eye. This is accompanied by aches and pains including a strain on the back.*

Gold coating is the next step that the bangles go through. Here a solution of pure gold and chemicals is poured into the designs etched on the bangles, giving them an elaborate look. During this stage the workers handle all the raw chemicals without wearing any protective gloves or aprons.

As the gold solution is very expensive, the workers have to be very careful in handling it, so as to minimise wastage.

The bangles are now sent back to the factory for refiring, which gives them a sheen. These are put individually on a tin tray and placed in a furnace. They have to be pulled out to check and recheck if the process is complete. The workers run the risk of exposure to excessive heat, burns and heat cataract. Finally the bangles are sorted out and packed in boxes.

ñ FEISAL ALKAZI, MARTHA FARELL *and* SHVETA KALYANWALA, *ëThe Danger Withiní*



EXERCISE

1. Designs translate natural forms into symbols. What do you think were the sources of inspiration and symbolism of the following. *(Example: Bija* or seed represents growth, fertility, prosperity.) (a) *Mangai mala*, (b) *Shikhar* of a temple, (c) Dome of a mosque, (d) Wooden tribal pole, (e) *Kumbha* or pot, (f) Kite.

2. *It is said that in Rajasthan a woman carries all her wealth on her body in the form of jewellery*. This is one of the ways of investing wealth. What are the other ways of conserving oneís wealth?

3. *It is difficult to decide whether it is folk jewellery which has influenced urban jewellery, or vice versa. There is no doubt, however, that many of the forms like the* bore, *the* har, *the* hathphool, *the* gajra, *originally developed in folk jewellery were later adopted by city jewellers who refined them by using gold and precious stones*. Do you agree? Argue your case giving examples of contemporary male and female jewellery fashions in your region.

4. *It is interesting, however, to find that children of all castes and communities wear the* hasli *as it is supposed to protect their collarbone from dislocation*. What do children of your community wear and what is the significance of each piece of jewellery?

5. *Until recently designs in clothes and jewellery of the people all over India were governed by their particular caste and the community to which they belonged*. Do you think this tradition is changing, and why?

6. Investigate the occupational health hazards in different aspects of jewellery production, as for example in *meenakari* work or in the bangle industry. How can this be addressed?

7. A recent Hollywood film called *Blood Diamond* describes the political conflict, exploitation of children, and slavery involved in the mining of diamonds in Africa. Write a poem or story on a related theme based on your observation/experience/research.

6 NATURAL FIBRES

Fibre made from the edible banana plant is used in weaving the traditional Japanese fibre cloth called *bashofu*. The cloth is smooth, stiff and is used in making the *kimono*, the traditional Japanese dress.

The craft of extracting fibre from the banana plant, spinning the yarn, weaving it into cloth and patterning the cloth was a highly valued craft of the Okinawa Islands.

Japan has an ancient tradition of crafts that were renowned throughout the world for their elegant sophistication. World War II, rapid industrialisation and urbanisation in Japan, in the last century, threatened this artistic heritage. The younger generations were hesitant to continue the family traditions in the twenty-first century, the age of computers and television.

It was then that the government started a new scheme and great artists, who excel in the area of crafts and creativity, are honoured with the title of ëLiving National Treasureí in Japan. Scholars, visitors and students are encouraged to explore, research and study with these masters. This is a wonderful example of how today the Japanese value their craft traditions and honour the great practitioners of crafts.

A traditional Japanese kimono

How This Craft Started

Communities living in diverse climates and harsh terrains have creatively responded to the challenges of their environment by transforming locally available natural fibres to create a large variety of objects necessary for their survival.

The ingenuity of community artists created a great variety of natural fibre products. The products range in both scale and form ó from large architectural creations of homes and shelters, suspension bridges and fences to smaller objects: baskets, mats and hand fans.

The bamboo and cane crafts of the North Eastern region of India represent a large storehouse of forms and traditional

wisdom. The forms of several baskets have evolved as a response to function, as seen in examples such as the open-weave baskets of Mizoram which are flexible and allow the person to carry firewood, while the close-weave baskets of Garo hills in Meghalaya are used to transport and store rice grains. Other forms of baskets have been determined by culture or in responses of different communities.

What Is a Natural Fibre?

Banana fibre

Khus *fibre*

Sisal *fibre*

Natural fibres made of cellulose or plant matter can be obtained from almost every part of the plant such as the root, stem or shoot, leaf, fruit and bark from many tree species (see following table).

Fibre can be extracted from a leaf which is fibrous, pliable, strong and green. If the leaf can be wound around a finger without breaking, then it indicates a potential source for making fibre.

Root	Stem	Branch	Leaf	Fruit/Seed
Khus	Bamboo *Kora* grass Jute Hemp Water hyacinth Banana *Kauna* reed Cane palm *Moonj* grass *Sarkanda* *Wagoo* reed *Sikki* grass *Cannabis/pulla* Wicker *Bhindi* Nettle Flax *Arhar*/Pigeon pea	Willow	Palmyra Palm date Palm coconut Arecanut palm *Sisal* Banana Pineapple Screw pine	Cotton Coir Arecanut

Beauty of Natural Fibres

Natural fibre products have certain distinctive qualities: they share a common language of colour, texture and of belonging to the earth. The appearance, feel, and texture of a bamboo basket is clearly different from that of a plastic bag. No two bamboo baskets are of the same colour while they could have the same form. A woven surface, like a reed mat, could have many shades of white or brown. Leading fashion houses today search for such beauty as lies in asymmetry, irregularity and natural warmth.

Fibre: filament or thread of a natural or synthetic material that can be spun into yarn

Fibres are obtained by shredding or peeling parts of plants, or pounding them to make threads or by cutting them to make strips.

Fibres from plants pre-date cloth woven from yarn spun from cotton. Ancient communities must have used natural fibres to build shelters and thatched roofs.

Qualities of Natural Fibres

Different fibres have varying physical properties of strength, appearance, pliability, colour, texture and fragrance.

Traditional skills and knowledge of working with these materials is an economic activity, often undertaken as an additional activity, to earn a little extra income when there is a break in the agricultural cycle of work.

Roots

Khus or *ramacham* in Malayalam (*Vetiveria zizaniodes*) is the aromatic root of a densely tufted grass. The grass has a thick root system which helps in checking soil erosion. It is thus an excellent stabilising hedge for stream banks, terraces and rice paddies. *Khus* grass grows wild in many states but is cultivated in Rajasthan, Uttar Pradesh, Punjab, Kerala, Karnataka, Tamil Nadu and Andhra Pradesh.

Khus is known for its fragrance and cooling properties. The roots are used for making mats, beds, and pads for desert coolers. The dried stems are used for making brooms, fans, hats and footwear, and for thatching.

Stems

A great variety of baskets, mats and floor coverings are made from grass and reed fibres which are referred to in local languages as *moonj, sarkanda, kora, sikki, chipkiang, madur kathi,* rice straw, *kauna* reed. Reeds grow naturally in marshy land and in ponds.

Kauna is the local name for a reed or rush belonging to the family *Cyperaceae* which is cultivated in the wetlands of the Imphal valley. It has a cylindrical, soft and spongy stem which is woven into mats, square and rectangular cushions and mattresses by the women of the Meitei community of Manipur. The raw material for the craft is obtained by simple processing wherein the reed is cut near the base of the plant and dried in the sun. It is also smoked if it is to be preserved and stored for a longer time. The mats are woven by interlacing the stalks with jute threads using basic and simple tools. The mats and cushions have a unique edge finishing which is done by hand.

Unfinished reed mat, Manipur

A kora *mat weaver on the traditional loom, Tamil Nadu*

Shital pati, *Assam*

Mat weaver separating the stem of the sedge or kathi *from the leaf stalk,West Bengal*

Korai (Tamil Nadu) or *kora* (Kerala) also of the *Cyperaceae* family is a sedge or wetland plant which is cultivated in the southern districts of Tamil Nadu. The stems are cut near the base of the plant, spliced vertically and dried in the sun. On drying the spliced stems curl into a smooth and tubular form. A large variety of matsówith stripes, geometrical motifs, natural and dyed coloursóare woven in several districts of Tamil Nadu and Kerala. The mats are woven on horizontal floor looms. The ribbed natural coloured mats are popularly used as floor coverings.

In Midnapur District of West Bengal, another type of reed similar to *kora* called *madur kathi* (*Cyperus corymbosus*) is cultivated, harvested and processed. Finely spliced *madur* is woven into mats that have a central field enclosed by patterned borders. The weavers ingeniously use two subtly differentiated natural colour splits or selectively dyed parts of the splits to differentiate the borders with dyed colour. Both the loom and the weaving technique used are very basic but require the use of manual skills and craftsmanship rather than sophisticated equipment and technology.

Unlike the woven mats, *shital pati* or ëcool matsí made by the plaiting technique are made in Assam and Tripura. The mat has a smooth and lustrous surface. The *murta* plant or (*Maranta dichotoma*) is harvested when green, washed in soda water and dried. It is then boiled and sliced into strips for plaiting the mat.

In Uttar Pradesh and Bihar women make baskets using the technique of coiling. These compact containers are made for local use with spliced *moonj* or *sikki* grass stalks. The trays and shallow containers are used to store foodgrains and flour. *Moonj* baskets with multi-coloured fibres and bold patterns are made for a daughterís trousseau.

In the Madhubani District of Bihar, women make figurines of deities, animals and birds for ritual and everyday use with *sikki* or golden grass used in combination with multi-coloured dyed stalks. The imagery of these forms echoes the folk art of Mithila, the cultural region on the northern banks of the Ganges.

Strips obtained from the palm leaf are also used to make coiled baskets and containers in Haryana. A bunch of *moonj* grass fibres forms the core material of the coil and a palm leaf strip is wound over the coil and binds consecutive rows of coils in place.

Furniture items such as the *mooda* or stools are examples of elegant products made entirely from natural fibres such as *sarkanda* and *moonj. Sarkanda* is a wild grass found in Haryana and its long stems are used in making the indigenous *mooda*.

Bamboo is a giant tree-like grass which mostly grows wild in the tropical and sub-tropical regions of the world. Bamboo is significant as a renewable resource that is found abundantly in India. These tall grasses have straight, woody and cylindrical stems, which have nodes. Some stems are hollow and some are solid. These cylindrical stems or culms taper at the top. The nodes at the top have branches with leaves and flowers. Bamboos grow closely in clumps. There are 136 species of bamboo in India. The botanical name is *bambusae*. Bamboos grow quicklyó 60mm to 200mm in a day and some species grow up to 900mm in a day. It is a widely used material that is hardy, durable, economical and biodegradable.

Bamboo is used whole as well as split in different widths to make a large range of products. Simple tools like a *dao* or bill-hook knife or wide-bladed knife are widely used for making splits. Bamboo has long fibres running along its length and the bond between the fibres is relatively weak while the fibres themselves are extremely strong. This structural characteristic affords easy splitting along the length.

Local communities use this characteristic in an appropriate manner while devising different products.

Jute, a stem or bast fibre, is cultivated in West Bengal. Jute cloth is brittle and deteriorates with exposure to sun and rain. It has been popular as inexpensive packaging material. In the craft sector, today, there is a renewed interest in finding innovative applications of jute such as fashion accessories, bags and wall panelling using macramÈ, crochet, braiding and other non-woven techniques.

Bast fibres are generally long fibres. Consequently they are used in making yarn and weaving cloth

Detail of a contemporary wall panel made with jute yarn using macramÈ or knotting technique

Boxes made of palm strips for various uses

An artisan making strips of the palm leaf by inserting a knife in the leaf fold and separating the leaf from the midrib

A large variety of baskets, containers, mats and furniture are made from the leaves and stem of trees and plants belonging to the palm family.

Palm trees are commonly found in the coastal regions of India and some varieties like the date palm grow in semi-arid regions. While coconut, arecanut and date palm trees have feather like leaves, the palmyra or toddy palm has fan-like leaves.

The local population of coastal Tamil Nadu is known for judiciously using every part of the palm tree for a wide range of applicationsóthe trunk is used in local architecture and for making rafts; the leaves are used whole as roof thatch and wall panels while strips are woven into baskets, winnowing trays and for packaging fish and jaggery. Palm oil and palm fruit are edible products.

A palm-leaf craftsmanís house, Tamil Nadu

Cane is an important forest produce found mainly in north-eastern parts of India. It is cylindrical and of uniform thickness, solid and brown in colour. Its properties of being tough, flexible and elastic have made whole cane suitable for use in furniture, hats, walking sticks, fishing rods and baskets. In Arunachal Pradesh even suspension bridges are made of cane. Cane splits are used for tying and binding, and are especially used for finishing the rims and edges of baskets due to their smoothness and pliability.

Canes are long slender stems of climbing plants which belong to the palm family. India has about 30 species of cane growing in Assam, Arunachal Pradesh, the Andamans, Nagaland, Manipur, Mizoram, Meghalaya, Kerala, Karnataka and Tamil Nadu.

Cane-and-bamboo suspension bridge over a torrential river in Along, Arunachal Pradesh

A shallow circular basket made from whole cane

Cane furniture made by skilled craftsmen, Nagaland

The coconut palm tree grows wild.

Fruit

The coconut palm tree also has multiple uses of its stem, fronds, fruit and nut. Coir fibre extracted from the outer husk of green coconuts is spun into yarn and ropes while the fibre of brown coconut is used as stuffing in mattresses. Coconut husks have to be retted or steeped in water to loosen them from the tough husks. Coir producing villages are located in the backwaters habitat of Kerala which abound in the skills of processing and spinning coir and of weaving coir floor coverings. White coir extracted from the green husk is of superior quality and withstands salt corrosion. It has wide-ranging applications, for instance, in ship-building and for making floor coverings.

Coir fibre

Leaf

The screw pine is a tropical plant known for its soil conservation properties. It is grown as a hedge or as a boundary wall in Kerala. It is available in abundance and provides a source of income to rural women who make strips from the leaves to weave mats. The leaves are also used as roof thatches. Strips are interlaced diagonally to weave mats and large surfaces that are then cut and sewn to make containers, bags and hats.

There are male and female species of the screw pine. The female screw pine produces a finer quality of fibre used in weaving traditional mats called *mettha pai* which are soft and cool to sleep on. The male screw pine produces coarser fibre. In Thazava in Kollam district of Kerala, double layer mats are made which are edged with a vivid coloured strip used to stitch the layers together. The white mat is burnished with a stone that gives it a polish.

The pinnate or compound leaves being woven together

All the World in a Basket

A basket, that common object of daily use, can powerfully affect the sense and mind ó somewhat as the contemplation of a grain of sand can lead to insights on the nature of the world.

What appeals first is the visual texture, that distinctive aspect of baskets, arising from this definitive quality of being woven. We delight in the patterns and textures made of rope, leaves, grass, rushes, sticks or twigs or other similar material. We may instinctively run our hands over the surface: an understandable reaction because texture, whether physical or visual, is a quality of surface.

On seeing baskets we feel one with humanity: however rich or poor or highly formally educated or illiterate we may be, from virtually any part of the world and, indeed, from almost any era ó we can relate to the basket. Together with pottery, basketry is one of the oldest human crafts. Gathering material from the natural environment, and making from it a receptacle useful for the storage and transportation of objects; a receptacle designed for ease and comfort of use as relating to the human anatomy ó what an act of creative transformation this is!

However, our admiration of the quantities of the design is often directed at a group rather than an individual ó who knows which anonymous craftsperson added an innovation which was later refined, preferred and adapted by many? Particular types of baskets do gain associations with particular regions and cultures, such as the conical basket of the apple gatherers in the Kullu valley, and the basket of the Kangri pot which could even be regarded as a symbol of Kashmir.

Another human and social point is an economic one: when one buys a traditional basket it is more likely that the sale would benefit not a factory owner or company but an individual who is possibly not wealthy and is working with a greater degree of autonomy such as by being a member of a cooperative.

Baskets may be considered desirable today from an ecological point of view, being made from fast growing plant materials used without much processing (hence saving energy). The production of baskets does not require energy ó and resource-rich factories or processes; and baskets are bio-degradable and hence less polluting.

ñ *DEEPAK HIRANANDANI,* The Times of India, 28 May 2001

Traditional bamboo craftspersons, Orissa

Bamboo craft practised by both men and women is a traditional and hereditary source of livelihood for several people in the states from Gujarat in the west to Assam in the east, and Uttar Pradesh in the north to Kerala in the south.

Functional products made of ekra *bamboo by the Khasis of Meghalaya*

Worldwide Use of Natural Fibres

The importance of papyrus, a fresh water reed in ancient Egypt is evident from its primeval origins. Papyrus is a tall flowering reed and its use is functional and religious and was part of the mythology of ancient **Egypt**. Papyrus had multiple usesófrom paper for manuscripts to papyrus boats that were the lifeline of the River Nile, sails were made from the bark, seams of the larger wooden boats were caulked with papyrus, rigging was made of papyrus fibres and papyrus flower was a sacred symbol of the pharaohs.

Eskimos in **Alaska** and communities in the islands of the Pacific Ocean such as **Tonga**, **Samoa**, **Hawaii**, **Papua New Guinea**, **Fiji** and **New Zealand**, produced bark-cloth by a repeated action of beating strips of bark of the fig tree. When the strips are thin, several strips are taken together and beaten into a large sheet. Sometimes starch was applied in parts to join the strips. *Tapa* or the barkcloth of Tonga is painted using a stencil that is cut from the midrib of the coconut frond.

The Mbuti Pygmies living in the Ituri forests of Equatorial **Africa** are hunter-gatherers known for their knowledge of plants for multiple usesóas food, shelter, medicine, furniture, weapons, poison for hunting, as cloth and dyes.

In **Europe, North America** and **Alaska** mats are made of grass, rush and sedge; baskets are made from split wood, shoots of hard wood trees, willow, wicker and barks of trees.

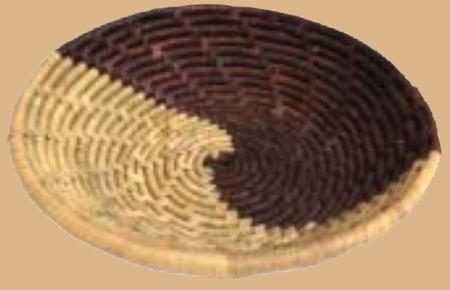
The grasslands of **South Africa** provide material for coiled basketry while wetlands provide reeds and rushes for mats; deserts are the home of agaves or succulent cacti, tropics for palms and cultivated land for straw.

In the cold and temperate forests of **North America** and **Europe**, the barks of the birch tree and hardwoods of deciduous trees are used as slats in basketry.

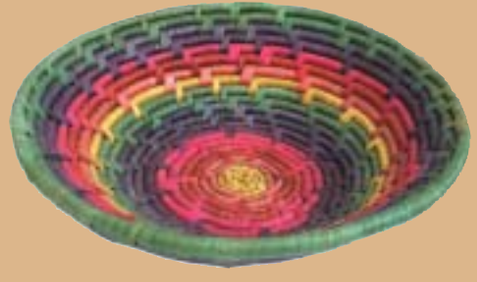
In the tropical and sub-tropical regions of **Asia, Africa** and **South America**, the jungles are a rich source of bamboo and cane, which provide bamboo and leaves for building shelters, tools and implements for agriculture, fishing and the daily needs of settled communities.

Coiled basketry made of grass fibre or palm leaf fibre is found in **Morocco, East Africa, India, Ghana, Mexico, Bolivia, Guatemala** and **islands of the Pacific Ocean**. Ceremonial baskets and headwear are often formed by techniques such as coiling, twining, plaiting and are embellished with feathers, shells, coins and a bold use of pattern and colour.

The use of bamboo in **Bangladesh, Burma, South-East Asia, China** and **Japan** is very extensive and is integral to the culture of the East.



Japan has a unique sensibility for bamboo that is reflected in the forms of traditional architecture, fences, craft, art and textiles. It is a craft tradition that values the pristine quality of nature, studied simplicity and excellence in craftsmanship.



EXERCISE

1. *All cultivated plant materials as well as those found in the wild in our forests are potentially renewable resources that can be used for a large number of applications if their use by humans is moderated in a sustainable manner.* Compare and apply the principle of sustainability in three craft traditions ó stone, metal and natural fibre.

2. In your opinion what differentiates plastic objects from objects made of natural fibres?

3. What are the qualities and properties of natural fibres and how have these properties been used in craft? Explain with examples.

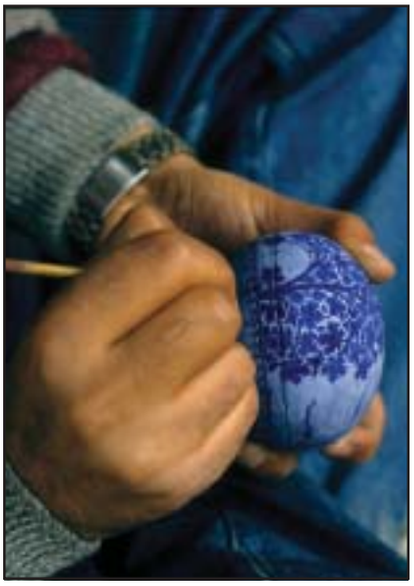
4. Refer to the Internet and describe the use of natural fibres in one Asian country.

5. The conversion of forest land into agricultural and industrial areas has led to problems for the bamboo crafts community in India. Develop ideas that can help solve these problems.

6. Draft a scheme that you would like to start in India to elevate our craft traditions and honour the great practitioners of crafts.

7. What is the impact of the intrusion of plastic ware into rural and urban homes? (Think of the following: the rural economy, traditional crafts and skills, environment and health.)

8. Unlike clay and stone, basket-making is not a full-time profession. Compare and contrast and give reasons why this is usually the case.



7 PAPER CRAFTS

Paper came to India with Muslim traders, in the eleventh century C.E. It only slowly and gradually displaced the Corypha palm leaf, the use of which had the sanction of age and religion among the conservative Indian literates who looked with distrust upon this new productÖ

There is no Sanskrit word for paper. The Chinese word is kog-dz, *the ëpaper made of the bark of the paper-mulberry treeí. When the Arabs, in the eighth century, learned paper-making from the Chinese, they adopted the Chinese name for their own paper made of linen rags. The Persian word for paper,* kaghaz, *became* kagaj *in Hindustani.*

By the fourteenth century, paper became popular in India. By the beginning of the seventeenth century paper had displaced Corypha leaves throughout northern India.

ñ A. F. R. Hoernle, ëPalm-leaf, Paper and Birch-barkí,
Journal of Asiatic Society, Vol. LXIX, 1901

How Paper Is Made

Can you imagine a day in your life without paper? A time when there was no paper or books or when people looked with distrust at it? Originally clay, stone, birch-bark, cloth, aloe bark and palm leaf were some of the materials on which writing was done.

Paper is one of the raw materials for making various types of craft items like folk paintings, illustrated manuscripts, lamp shades, photo-frames and a variety of decorative artefacts.

Factory-made paper

Handmade paper

Factory-made paper is now generally made of tightly packed and pressed fibres of rags, straw, wood, bamboo etc.

Handmade paper is made of pulp (obtained from the bark of certain trees) mixed with glues, and waste cloth from garment manufacturers.

Paper toy, Delhi

Paper Toys

Toy-makers, especially those living in cities and industrial areas, make use of materials like paper, cardboard, palm-leaf, clay, bamboo strips, pith, and papier-m,chÈ along with other recycled materials to create toys for children. Discarded items including newspaper, string, rubber bands are recycled to create toys. The toymaker creates a number of different playthings such as kites, puppets, string-manipulated toys, rattles, drums, *damrus* and whistles, moving toys like wind-wheels, animal toys like the jumping snake, mystery boxes, and jack-in-the-box kind of toys. Apart from toy-making, Indian craftsmen also produce a wide variety of decorative and utilitarian items by using plain, white and coloured papers.

Paper Cuts: The craftsmen of MathurañBrindavan area make intricate paper-cut designs (locally known as *Sanjhi*) depicting various *Krishnalila* scenes. During festivals and marriages the craftsmen make exquisitely beautiful paper-cut flowers and varied colourful items that are used for decoration.

Stencil: A stencil is a piece of paper, plastic or metal which has a design cut out of it. When the stencil is placed on a surface and paint applied over it, the paint goes through the cut out portions and leaves a design on the surface when the stencil is removed.

Sanjhi, *Mathura*

Use of Paper Craft in Different Societies

- *During Muharram a model of the tomb of Imam Hussain called the* Tazia *is adorned with floral designs made out of coloured papers.*
- *In Poland people use paper-cuts of the ëTree of Lifeí, guarded by two cocks. The symmetry of the paper-cut technique is said to protect the house and home.*
- *The Mexicans use cut-paper flags with designs of planets, plants and a repetitive border with triangles that symbolise male and female energies. While sowing, farmers place a paper man to represent the male spirit of germination, while the harvest is represented as a female doll.*
- *In China, peasants have developed paper-cuts into a rich individual popular art. The paper cuts are stuck on walls or window-panes of their cottages and changed frequently. The most popular themes are the ëTree of Lifeí, cocks and hens, etc. that are all symbols of life.*

Paper toy, Delhi

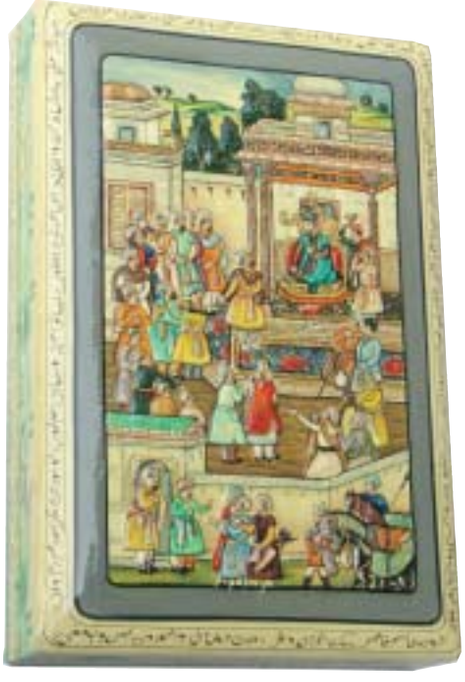
History of Papier-m,chÈ

Papier-m,chÈ is used to create moulded forms of a variety of objects. It involves ornamentation of smoothened surfaces built up of paper pulp or layers of paper. The most sophisticated form of paper craft appears to be papier-m,chÈ.

The tradition of papier-m,chÈ in Kashmir began in the fifteenth century. While in prison, in the magnificent Central Asian city of Samarkand, a young Kashmiri prince observed the craft of using paper pulp as the base for painted objects. This prince soon became King Zain-ul-Abidin and invited accomplished artists and craftsmen from Central Asia to his court to make papier-m,chÈ objects.

The craft was originally known in Kashmir as *Kar-i-qalamdan*, being confined to ornamentation of cases then used for keeping pens as well as some other small personal articles. The craft was also known as *Kar-i-munaqqash* since it was used for ornamenting smooth surfaces made of paper pulp or layers of polished paper.

The Mughal period saw the art extended to palanquins, ceilings, bedsteads, doors and windows. In the old days the technique of papier-m,chÈ was artistically applied to wood work, especially windows, wall panels, ceilings and furniture as is evident from the fine ceiling at Madin Sahib Mosque (1444), the ceiling at the Shah Hamdan Mosque at Fatehkadal and the Mughal Gardens at Shalimar in Srinagar.



Papier-m,chÈ box

During the seventeenth century, early European travellers discovered this highly decorative and marketable craft. Papier-m,chÈ artists of Kashmir tailored some of their production to the needs and taste of a western market that demanded nested boxes (a set of boxes that fit into each other), vases and other suitably exotic trinkets. Just as the export of Kashmiri shawls boomed, so did the papier-m,chÈ business.

Set of papier-m,chÈ coasters and box

Papier-m,chÈ: a French term meaning ëmashed paperí

Papier-m,chÈ of Kashmir

The raw materials used in making papier-m,chÈ articles usually include old newsprint, *methi* (fenugreek) powder, Multani *mitti* or clay.

In South India, waste paper pulp is hand-beaten into a soft substance and mixed with local clay. It is rolled out into thin sheets placed over any complicated mould. The articles are finally dipped into a thin solution of paper pulp and white clay to provide a smooth uniform surface. The objects are then painted in oil or water colour.

The process of papier-m,chÈ making in Kashmir, which described below, is rather elaborate and interesting and undertaken by a group of people called Sakhta makers.

1. Waste paper, cloth, rice straw and copper sulphate are taken together and ground into pulp.

2. After the pulp is ready, clay, wooden or brass moulds are used to give it the required shape. When the pulp is dry the shape is cut away from the mould in two halves with a fine saw and glued together again.

3. The surface is coated with a white layer of gypsum and glue and rubbed smooth with a stone or a piece of baked brick, called *Kurket*.

4. Then the object is pasted with layers of tissue paper to prevent it from cracking.
5. Finally, the object is sand-papered and burnished, ready for the colourful artistry of the *naqash* or painter, who seals his work with several coats of a varnish made of linseed oil and pine resin.
6. The ground may be in colour or gold or tin foil; it is burnished with a piece of agate after drying.
7. It has to dry naturally and only then is the design drawn and painted in water colour.
8. These days painting is done in distemper colours. The colours are made from pigments diluted in water to which some glue is added to fix it to the ground. The brushes for painting objects are made from the bristles of the hair of cat, goat or ass.
9. The final varnishing is done with a very pure and transparent glaze of copal dissolved in turpentine.

Painted Designs

In the papier-m,chÈ of Kashmir the rich and varied floral designs include the *chinar*, the *iris*, the Persian rose, the almond, cherry blossom, the tulip, narcissus, and hyacinth. The most famous is the *hazara* (thousand) pattern which seeks to display every conceivable flower on the smallest of objects and *gulandergul* or ëflower within flowerí. The kingfisher and the bulbul are common bird forms.

Papier-m,chÈ in India

The craft is practised in a number of States, namely, Andhra Pradesh, Bihar, Delhi, Jammu and Kashmir, Kerala, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu and West Bengal.

In **Kashmir**, a large variety of both utilitarian and decorative papier-m,chÈ items are produced such as writing table sets, dressing table wares, boxes, bowls, bangles, lamp-stands, flower vases, cups, boxes, powder cases, trays, shields, wall plaques, panels for ceilings, picture frames, caddies, screens and cabinets.

Nazir Ahmed Mir was born in Srinagar on 16 February 1969 in a family engaged in this traditional craft.

While he was pursuing his studies in school, the sudden death of his father forced him to earn a livelihood for the family.

He developed great skill and interest in papier-m,chÈ craft which inspired him to make many new, uncommon and delicate designs. There are at least twenty of his designs in the market.

Nazir Ahmed Mir received the National Award for excellence in papier-m,chÈ craft in 2000 and 2001.

In **Madhya Pradesh**, a wide range of products are available in papier-m,chÈ, such as human figures, birds, animals, caricatures, statues of gods and goddesses, models of Khajuraho and Sanchi. Important centres for this craft are Gwalior, Ujjain, Indore and Harda.

In **Rajasthan** too, papier-m,chÈ is a traditional craft with a concentration of craftsperson in Jaipur. The products include animals and birds, particularly cocks, parrots and pigeons. Papier-m,chÈ bowls are also produced in Banasthali.

Amusing folk toys with detachable or hinged parts such as nodding tigers and elephants, old men and women with comic expressions, are made in papier-m,chÈ in **Orissa**. Masks of popular mythological characters are also made. The craft is concentrated in Puri, Cuttack and Ganjam.

Subhadra Devi was born in 1936 in Darbhanga District, Bihar. She started working with papier-m,chÈ at the age of fifteen. At first she made idols for festivals. As her interest, grew she joined Shilp Anusandhan Sansthan, Patna for training. In 1980 Subhadra Devi was given the State Award in appreciation of her artistic merits. She has exhibited her craft all over India and recieved the National Award for excellence in papier mache craft in 1991.

In **Bihar**, the craft is found in various parts of the State. Papier-m,chÈ figurines and different kinds of birds are made by women from Madhubani and Darbhanga Districts. Though papier-m,chÈ containers cannot be used to hold liquids, it is used for the storage of dry items.

Papier-m,chÈ is also popular in **Kerala**. Trained artists in Kozhikode make a large number of figures based on Kathakali and temple models out of paper pulp. They also produce lively figures of animals and birds that are in great demand.

The craftsmen of Purulia in **West Bengal** make a variety of masks of mythological characters that are used during folk festivals by the Chhau dancers of both Orissa and West Bengal.

The Future

Paper-craft objects are mainly created by people either for their personal use or for a limited clientele with whom they are in touch. The items are disposed of through the following marketing channels:

- sale at residence
- local fairs or seasonal *melas*
- weekly *haats* or bazaars
- hawking
- local shops
- exhibition-cum-sale
- export

Except for papier-m,chÈ items made by the master craftsmen of Jammu and Kashmir, no other paper-craft item appears to have found a market abroad. Besides the export and urban markets there exists another large market which caters to the needs of the millions of rural and poor urban consumers.

Many of the paper crafts described above use recycled materials and hardly use any chemical or harmful substances. In a world now growing conscious of the need to preserve the planet, paper crafts and our Indian toy-maker have a lot to teach.

Product designers, design institutions and development corporations need to apply themselves to study the needs of this developing craft. After all it is still the toy-maker and the kite-maker who bring joy to thousands of children in India!

Institutional Assistance

Development measures that would increase and improve production are urgently needed. Craftsmen require assistance in refining and improving their techniques, gaining access to good quality raw materials and development of new designs. These artists need access to credit, direct marketing channels, and protection of their interests by ensuring adequate wages and socio-economic benefits.

Paper-cutting: a Disappearing Art

One of the few accomplished exponents of the disappearing Indian art of paper-cutting ó devasthankala *or* sanjhi *ó Prabal Pramanik has single-handedly built a bewitching repository of his art in the hills of Himachal Pradesh.*

In Mathura, Brindavan, Bengal and Orissa, where Vaishnav communities lived and enriched the lore of Radha and Krishna, this rare art manifested itself in different schools through sharp silhouettes and stencil forms.

The forms cut out in devasthankala *take little time but it requires years of patience and practice to ìattain the skill of cutting out balanced compositions without the aid of drawingsî, Pramanik says as he deftly shapes a charging bull.*

A unique feature of paper-cutting is that the design to be cut is never traced out.

ìOnly superb neuro-muscular coordination, a sense of balance and composition, knowledge of anatomy and proportion enable the ëustadí to lift his work to a high level of perfection.

ìPaper as a medium was cut, folded and fashioned to produce everything from animals to pirates,î he recollects.

ìThe hours passed silently and day by day this world of paper widened in form and vision through new experiments and experienceÖ The depth and diversity of this world has allowed pieces of paper to fill the vacant moments of my life and added an innovative touch to my imagery.î

He says it flourished in the community of Vaishnavas for hundreds of years. ìUstads or masters plied scissors and sharp cutting blades, creating amazing art works to decorate temples, nat-mandirs *and* kirtan sabhas *during Vaishnava festivals like Ras, Janmashtami and Jhulan.*

ìI have experimented with composition, using the basic traditional techniques, and have proved through my work that this medium or art is just as flexible as water colour, oil or tempera in its diversity, depth and rhythm.î

ñ Extract from a report in The Times of India

EXERCISE

1. *Many motifs and designs painted on paper products reflect the immediate environment of the craftsperson.* Pick three examples from different parts of India to illustrate your answer.

2. Originating from Kashmir, how has papier-m,chÈ been adapted in Bihar, Rajasthan and Kerala?

3. Looking back at your childhood, describe three objects made of paper that you either bought or created.

4. *Craftsmen need assistance in refining and improving their techniques, gaining access to good quality raw materials and developing new designs. These artists need access to credit, direct marketing channels, and protection of their interests by ensuring adequate wages and socio-economic benefits.* Prioritise the above issues and devise a strategy to address some of them over a period of five years.

5. Find out the word for paper/clay/stone in at least fifteen Indian languages.

6. A hundred years ago Kashmiri shawls were exported in large papier-m,chÈ boxes. Find other examples in which two or more crafts compliment each other.

7. Design a series of paper-cut stencils capturing contemporary life and ideas.

8 TEXTILES

Textiles are a part of Indiaís history ó its past, present, and future. Indian textiles were found in the tombs of the Egyptian Pharaohs, they were a sought-after export to ancient Greece and Rome, they also became part of the fashionable attire of both European and Mughal courts. Suppressing and replacing the Indian handloom cotton trade with mill-made alternatives was a key factor of the British Industrial Revolution. That is the reason Gandhi made handspun khadi a symbol of the Indian Independence movement. Even today, millions of craftspeople all over India produce extraordinary traditional textiles that appeal to the international market.

Weaving a Tradition

Sathya sat at the big wooden loom, throwing the shuttle through the shining silk threads stretched on its frame. As he wove the warp and weft together, the fabric that unfolded was a Kanjeevaram silk saree, purple and red, with gold tigers, elephants and peacocks dancing together on its resplendent pallav. *The ëthak-thakí sound of the shuttle as it moved to and fro had always been part of his life. His father, and his fatherís father, and his fatherís fatherís father, had all woven sarees on the same family loomóas had their forefathers as far back as memory could stretch.*

Brocade work, Varanasi

Sathya was 17. He had learnt to weave when he was eight, though he longed to play football with the other village boys. New laws do not allow children below fourteen years of age to work. But everyone in his village was involved in weaving. The women spun the thread, and stretched the warp on the loom. The village dyers and washermen dyed the yarn in wonderful colours, starched, and sized the finished fabric. Traders came to the village from all over India to buy the sarees, while other traders from Surat brought the gold zari *thread with which they were woven. The village economy depended on women continuing to wear these traditional sarees for weddings, festivals, and special occasions. Sathyaís father had a picture cut-out from a magazine of a famous film star in one of his sarees.*

Sathyaís grandfather was now too frail and blind to weave the intricate sarees. He told Sathya stories of the days, many hundred years ago, when South Indian weavers were one of the richest communities in India. Their wealth built the huge temples and funded royal armies.

Whole communities were known for their weaving skills, and their surnames proudly denoted their trade ó Vankars in Gujarat, Ansaris in UP, Mehers in Orissa ó just as the Kutchi Khatris were dyers and printers.

Sathya knows that these days even highly skilled weavers are desperately poor, even though their sarees are worn only by the very rich. Weavers depend on traders for loans in order to pay for the expensive silk and gold yarn from which the sarees are woven. Machine-made sarees made in the big industrial mills and cheap synthetic silk copies from China are taking over the market.

Kanjeevaram saree, Tamil Nadu

Indian hand-crafted textiles are unique today for their variety and beauty. This is a living craft, practised by millions of craftspeople ó many in their teens and twenties. No other country in the world has a weaving tradition that goes back thousands of years and is still part of the mainstream economy. Sathya and other young craftspeople like him make India special and proud.

Yarn, Threads and Fibres

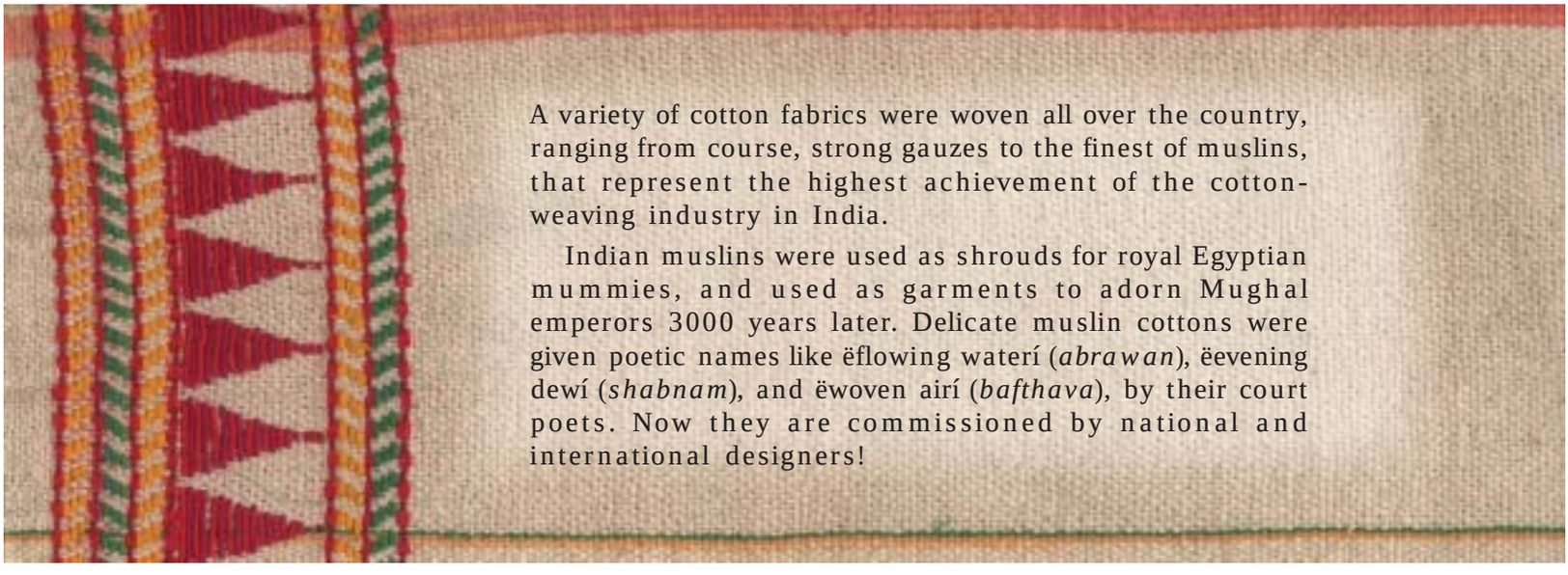
In the story about Sathya you read about many aspects of weaving. You came across terms like ëyarní, ëloomí and ëshuttleí, ëwarpí and ëweftí, ëstarchingí and ësizingí, ëtradersí and ëweaversí. Some of the fibres commonly used in textile weaving are:

- cotton
- silk
- wool
- mixture of the above
- gold and silver thread, etc.

Cotton: It has been cultivated in India since the Harappan Civilisation. Raw cotton is a round fluffy white ball growing on a bush about three feet high. Earth, seeds and other impurities are removed from the cotton balls by ginning. The loose fibres of cotton are collected and bowed with a bow made of canes and the string of the mid-rib of a banana leaf. The vibration of the string fluffs and loosens the cotton. It is spun on a *charkha* or spinning wheel to the required thickness and texture and is then ready for weaving.

Warli representation of gathering and spinning cotton, Maharashtra

Cotton Shawl, Gujarat



A variety of cotton fabrics were woven all over the country, ranging from course, strong gauzes to the finest of muslins, that represent the highest achievement of the cotton-weaving industry in India.

Indian muslins were used as shrouds for royal Egyptian mummies, and used as garments to adorn Mughal emperors 3000 years later. Delicate muslin cottons were given poetic names like ëflowing waterí (*abrawan*), ëevening dewí (*shabnam*), and ëwoven airí (*bafthava*), by their court poets. Now they are commissioned by national and international designers!

Silk cocoon

Kanjeevaram saree, Tamil Nadu

The thread is classified by its thickness: the thinner the thread, the higher the number of counts, and the finer the fabric. Its fineness and its absorption quality make it an ideal fabric for the heat of the Indian summer.

Silk: It is made from the cocoon of a cream-coloured moth which feeds on the leaves of the mulberry tree. The caterpillar of the silk moth spins an oval cocoon of very fine silk, the size of a pigeonís egg. The silk is generally yellow, but sometimes white.

About 1600 silk worms produce nearly 500 grams of silk and one hectare of land produces enough mulberry leaves to feed caterpillars that can produce 46 kg of silk. It takes about seven days for the cocoon to be fully spun round with silk.

The cocoons are collected and sorted into different qualities and then boiled. The silk thread is reeled and twisted, dried and polished. It is then wound on a spindle and spun. The softness, the lustre and the tensile quality of silk make it one of the most prized materials for weaving fabrics.

Secret of Silk

Some textile traditions came to us from other parts of the worldójust as silk came to India from China. According to legend, the Chinese had banned the export of silk worms; however, they were smuggled into India by Chinese Buddhist monks in the hollow shafts of their cane walking sticks.

Mashru and Himru, Gujarat

Ikat silk saree, Orissa

Mix of Silk and Cotton: Another glorious fabric is *mashru*, a lustrous weave from Gujarat, patterned in brilliant multi-coloured stripes, or dots as fine as rice grains. Though it appears like silk it is not really silk. *Mashru,* and *himru,* have a twisted weave with a silk underside to replicate the look and feel of satin while technically remaining cotton.

Tussar, Eri and Moga: India is the only source of tussar silk that comes from the *Antheria Assamia* moth, which feeds on the leaves of the Som and Wali trees. Tussar silk has a coarse, uneven texture and a slightly yellowish brown colour. Since it is less strong in texture and cannot be refined it does not have the same sheen or fineness as mulberry silk.

Women weavers of Assam make their traditional *mekla-chador* costumes with golden moga and eri silk, which come from worms that feed on Ashoka and castor leaves rather than mulberry leaves.

Wool: It is spun from the fleece of animals. Sheep wool is the most common, but in India goat wool, camel hair, and ibex hair is also used. In North India the *angora* rabbit is bred for its fine, long, very soft and silky hair. Its warmth, tensile strength and resistance to fire, give this wool its special quality.

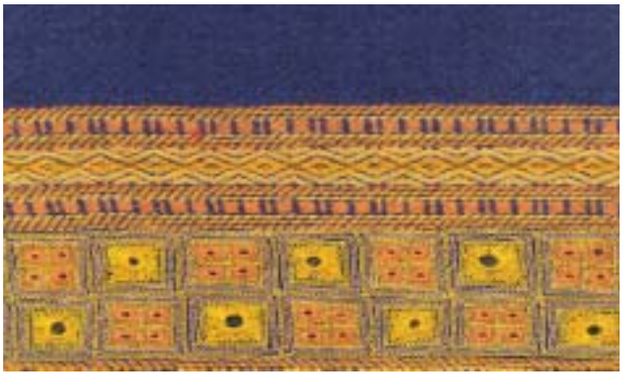
The fame of the Kashmiri Jamawar shawl can be gauged from the fact that the English word ëshawlí is derived from the Persian ëshalíóa length of woven woollen fabric. Shawl weaving in Kashmir was introduced by the ruler Zain-ul-Abidin in the fifteenth century bringing in Turkistan weavers to teach the twill tapestry technique to local weavers. As many as fifty colours were used on one shawl.

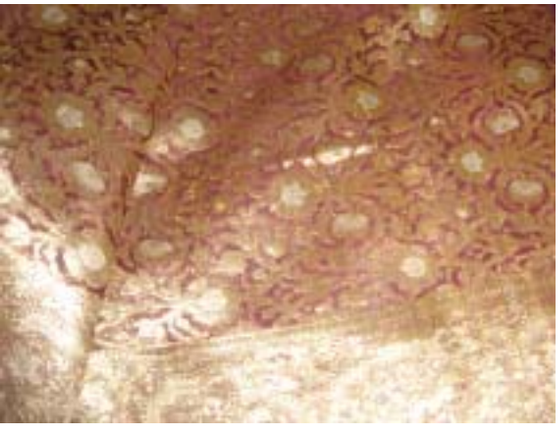
The rough goat wool *dhablas* worn by shepherds and camel herders in Kutch and the Thar Desert have been reinvented into wonderful contemporary shawls, home furnishings and throws. Today designers are translating indigenous motifs and colours from tribal shawls of the North-east and Kinnauri shawls of Himachal into softer merino and sheep wool.

Jamawar shawl, Kashmir

The celebrated Kashmiri shahtoosh ëring shawlí made from the fleece of the wild Himalayan ibex is so fine that a metre of this woollen shawl can pass through a manís signet ring. Production and sale is banned today for ecological reasons and to prevent the extinction of the ibex. Weaving it was a fine art, wearing it now a forbidden luxury.

Woollen shawls from different states of India





Loom-decorated fabric

Textile Techniques

Indian textiles may be divided into two groups: loom decorated and post-loom decorated fabrics.

Loom-decorated fabrics are provided with artistic treatment when on the loom.

Working at a loom

Post-loom decorated fabrics are textiles in which artistic treatment is given after it is woven. In other words, plain textiles are decorated with techniques such as:

- dyeing; tie and dye
- hand printing; hand painting
- embroidery
- patchwork and appliquÈ

Tie and dye

Hand painting

Embroidery

AppliquÈ

Loom-decorated Fabrics: In different states of India handloom weaving is done on a variety of looms such as:

- throw-shuttle loom
- fly-shuttle loom
- loin loom
- pit loom
- jacquard

The art of weaving is governed by three movements ó shedding, picking and beating.

The shedding movement consists of moving the treadle with the feet, to make the alternate warp threads open for the shuttle.

The picking movement propels the shuttle to run across to the other side.

The beating movement consists of patting the weft thread into place.

As the process is repeated, the weft thread passes from side to side, over one set of warp threads and under the other. These movements are repeated to produce the basic fabric. Textures are produced by varying the count of the warp threads, and by weaving them tightly or loosely. Patterns can be produced with the introduction of coloured warp and weft threads.

Women of the North-Eastern states weave bold black, red and white cotton shawls with images of shields, swords, butterflies and snakes, using a narrow loin loom which they attach to their waists with straps.

Loom decoration of fabrics

An 80-year-old Manipuri woman wearing a worn handloom shawl was asked whether she was cold and why she did not buy a warm synthetic mill-made sweater that was inexpensive and easily available in the market.

Her reply reminds us of so many intangible things we disregard: ìIíve spun this with my own hands; my mother and sisters have woven it. The warmth of so many fingers has gone into this. How can a machine make anything warmer?*î*

Block Printing

Block printing, as it is practised all over Western and Central India, is described below.

Each design is printed with a series of different intricately cut wooden blocks.

1. Carving the blocks is itself an artó*duta*, the block for the outline, *gud*, for the background, one block for each of the other colours. Some designs have as many as six to eight different colours.
2. The block is dipped in liquid colour, and pressed firmly onto the specially treated cloth with a little bang of the other hand to make it register evenly.
3. Once the whole cloth has been printed with one block, printing with the next block follows, and then the next, in sequence.
4. Printers have to be careful to place the little marker at the corner of the block to make sure it doesnít slip and that each colour fits into the design accurately.

Making a block

Wooden blocks

Block-printing is a post-loom method of decorating fabric.

Distinctive Designs and Techniques

Like weaves and embroideries, block-print designs and colours have the special stamp of the places from where they originate.

Those from Sanganer in Rajasthan have designs that include delicate floral *butis* in a range of colours.

Farrukhabad of Uttar Pradesh has all-over paisley *jaals*.

Bagh prints from Madhya Pradesh are in dramatic red and black.

Dhamadka of Kutch is famous for its double-sided *ajrak*, interlocked hexagonal motifs in shades of indigo, crimson and black, which requires 15 different processes to achieve.

There are also numerous block-printing techniques ó direct, resist, batik, discharge, *khari chhaap* (gold and silver stamping).

In some, the dye is applied directly to the cloth, in others, areas are prevented from getting coloured by the use of wax, mud, or chemicals. Each technique is distinctive.

Wooden block of paisley motif

Printed motifs

Top left: Bagh, *Madhya Pradesh*

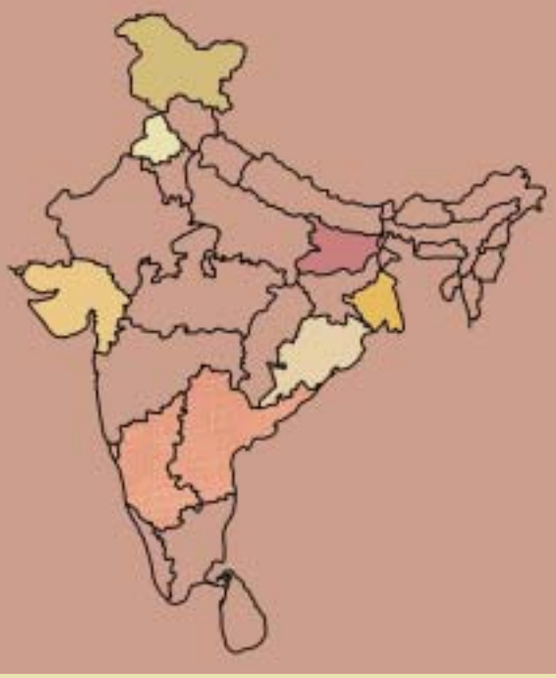
Bottom left: Dhamadka, *Kutch, Gujarat*

Top right: Farrukhabad, Uttar Pradesh

Bottom right: Sanganer, Rajasthan

Indian Embroidery

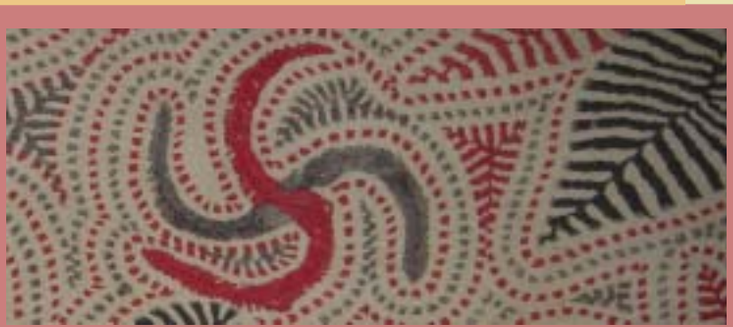
The explorer, Marco Polo, said in the thirteenth century about India: ì...embroidery is here produced with more delicacy than anywhere in the worldî.



There are shawls from **Kashmir** that are magically two-sided with the same design embroidered in different colours on each side. This is known as *do-rukha*. A single shawl may take over two years to complete.

In **Kutch** in Western India, the women, whether Rabari, Ahir, Mochi, Meghwal, Darbar or Jat, learn to embroider from a young age. They embroider their trousseausóskirts, *cholis*, veils, quilts, decorative pieces for their homes. Most Kutchi embroideries use wonderful colours ó magenta, emerald green, yellow, and purple. As bright as their desert landscape is bleak, their embroideries are exuberant, with designs of flowers, peacocks, elephants and parrots. Each village and community in Kutch has its own distinctive set of stitches and motifs: cross-stitch, satin and herringbone stitch, and a very fine chain stitch done with a hook. Shiny mirrors are stitched onto the fabric.

Punjab is famed for its traditional embroidery called *phulkarió* flowering work. Using threads in brilliant colours like flaming pinks, oranges, mustard yellows and creams, the reverse satin stitch is done on a brick-red khadi cloth. An all-over embroidered shawl (*dupatta*) is called a *bagh*, literally resembling a garden of flowers.



Sujni, from **Bihar**, is a form of quilted embroidery with mainly narrative themes.

There are 22 different *chikan* stitches. Legend has it that Empress Noorjehan invented *chikan* while making a cap for her husband, Jehangir. *Chikan*-work from Lucknow, Uttar Pradesh, has many different stitches worked on cotton mull, creating a textured relief of flowers, paisleys and stars. The stitches have wonderful namesó*ghas-ki-patti* as delicate as grass, *murri* which looks just like a grain of rice, and *keel*, the tip of a nail. The most common are: *bakhia*, a herringbone stitch done on the reverse of the material so that the design appears like a shadow, *tepchi*, a linked running stitch, and *phanda*, a tight round knot, used to form flowers and leaves.

Kantha, embroidery from **Bengal**, is made of thousands of fine stitches, giving the fabric a puckered quilted look. In Bangladesh and India *kantha* was used to make quilts and coverlets. Old sarees were folded together and embroidered with coloured threads pulled from saree borders. Now *kantha* embroiderers make *sarees* and *dupattas* for the metro market.

Patchwork and appliquÈ are other textile skills practised by women all over India. They range from the tiny geometric patchwork *gota* done in Rampur and Lucknow, to the bold, vividly patterned pictorial quilts of Rajasthan and Gujaratóeach bride was expected to have at least a dozen.

Pipli in **Orissa** has its own unique form of appliquÈóbold red, yellow and green dancing elephants and parrots, outlined with white or black chain-stitch on equally colourful base fabric. It was developed initially to make the *rath* procession hangings for the Puri Temple, but is now used for garden umbrellas, cushions and for other urban needs.

The Lambani, Lambada and Banjara gypsy tribes from **Andhra Pradesh** and **Karnataka** in South India create spectacular embroidery. Like the Kutchhis, they too wear wonderful skirts, backless blouses and veils, covered with vibrant, colourful mirrored designs, silver or metal coins and ornaments at the edges. Their designs are geometric rather than naturalistic flowers, birds and animals.

Kasuti of **North Karnataka** is a combination of four different stitches, done on the borders, *pallav* and blouse of the blue-black, indigo-dyed *Chandrakala* saree, an essential part of the trousseau of Hindu brides of the region. The motifs are pictorial in character: the *Tulsi* plant, temple chariots, eight-pointed stars, parrots, peacocks, bridal palanquins, cradles, and flowering trees.

Did you know...

- Colour is the first thing one notices about India. As Kamladevi Chattopadhyaya has said, every colour has its tradition, emotion, social context and rich significance.

  Red, the colour of marriage and love; orange and saffron, the colour of the ochre earth and the yogi who renounces that earth; yellow, the colour of spring, young mango blossoms, of swarms of bees, and of mating birds. Blue, the colour of indigo, also the colour of Krishna, the cowherd child-godÖ. Even the great gods had their colours ó Brahma was red, Shiva was white and Vishnu was blue.

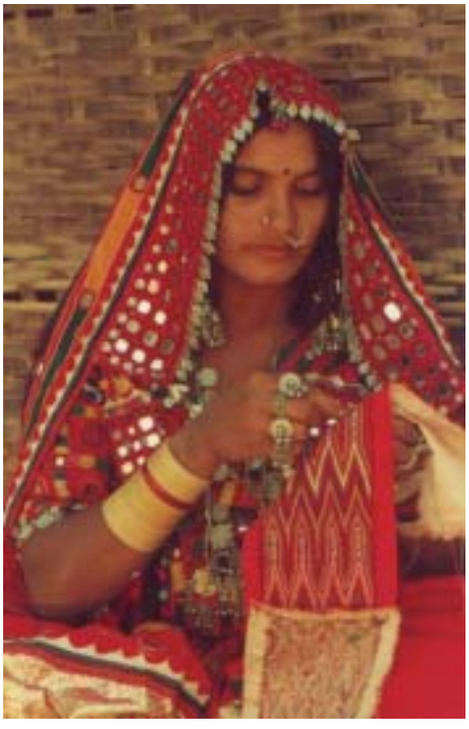
- The *Vishnudharmottara* speaks of five white tones ó ivory, jasmine, the August moon, August clouds after rain, and mother-of-pearl.
- It is not surprising that by the seventeenth century, William Moorcroft could list over 300 colour shades in use among the shawl makers of Kashmir.
- As early as the first century BCE travellers along the Silk Route recorded fabrics in seven shades of brown, four shades of blue, and four shades of green.
- In India colours were made of vegetable and mineral materials: pomegranate, lac and madder for the pinks, reds and browns; black from iron castings; myrobalam petals for yellow. Colour was produced from most unlikely sources: onion skins produced a beautiful reddish brown; pistachio shells, green; glowing lacquer red came from a humble beetle. The concentrated urine of cows fed on mango leaves gave a rich orange yellow.
- There is a story of a British Raj billiard table baize (cloth used for billiard tables) which was stolen from the Regimental Mess to extract just that exact green required in a Jamawar shawl.
- As always, colours, even those derived from mineral sources (silicates and borates of different metallic saltsó cobalt oxide, potassium chromate and manganese carbonate) were given poetice names: *Ab-e-leher* (ripples of water), *tote-ka-par* (parrotís wing), *khoon-e-kabutar* (pigeonís blood).

Home and the Market

In India, commercial embroidery made for the market was always done by men. Even *chikan* work was traditionally a male preserve, with women only doing the coarser filling details. The intricate gold wire and sequin work of Uttar Pradesh *(zardozi, kamdani* and *mukesh)* done on a stretched wooden frame, and Kashmiri *ari,* wool *crewel* work, *tilla* and *sozni* embroidery are still almost exclusively a male domain.

The lives of my family hang on the thread I embroider.

ñ RAMBA BEN, embroidery craftswoman from Banaskantha



Sozni with its intricate detailing of flora and fauna derives its inspiration from the verdant, flowering beauty of the Kashmir valley.

Tilla work is now a major business for wedding costumes, movie costumes and the fashion ramp, and it reflects the glory of the Mughal court that brought gold wire work from the Middle East and Byzantium.

Today, rural women embroiderers are finding new empowerment and earning an income from their embroidery skills in the market. All over India, be it Bihar or Banaskantha, women now embroider for a living.

EXERCISE

1. Read the verse by Kabir on page 23 and develop your own poem using images from textile weaving.

2. Look at traditional textiles in your home and develop a table like the following example.

Origin	*Textile*	*Motif*	*Meaning*
Tamil Nadu	Silk	Flower	Life, beauty, auspiciousness

3. From the farmer who grows the cotton, to the advertising agency that sells the finished product, the textile industry employs thousands of people with specialised skills. Create a profile of each.

4. ìThe bones of the Indian weaver are bleaching the plains of India,î said William Bentick in 1835. From your understanding of history, describe the impact of colonialism on the Indian textile industry.

5. Consider Gandhiji and *khadi* and explore reasons why and how the meaning and significance of *khadi* has changed over the last 100 years.

6. Consider the clothes worn by members of your extended family. Why do they choose to wear what they wear? Think of caste, religion, age, gender, traditions, and fashion as expressed in the materials, headgear, footwear, costs etc.

7. How is your own philosophy of life reflected in the clothes that you choose to wear?

8. Which types of embroidery were traditionally done by men in our country, and why?

9. Research and document the textile traditions of your state.

9 PAINTING

All children love to paint. Through this activity they discover the shapes and colours of the world around them. Men and women, through the ages, found satisfaction in creating multiple forms through colours and textures to tell their own special stories. The human impulse to paint is related to the need to communicate, express and make sense of the world around.

The subject of painting is, in fact, the painting. It can be the expression of a mood, a reality as seen by the artist, a graphic interpretation of a philosophical idea, an invocation of blessings from the gods, or just decoration as part of a celebration. It can be done by an individual, a group, or a community, using different grounds, colours, adhesives and tools. In India, community painting reflects the identity of a region or a particular culture and follows common characteristics.

Kalighat painting, West Bengal

Why Snakes?

ìWhy do traditional paintings, particularly in Gondi and Mithila art have so many artistic and respectful representations of snakes?î

This was a question asked by a German visitor at an art exhibition in Frankfurt.

ìSince there are usually many snakes in the fields and in our village, we propitiated them in this manner to prevent ourselves from being bitten,î the artist from Mithila explained.

ìWestern society is aggressive and would think only of attacking the snake, but in a spiritual and non-violent society like India, this was a beautiful way of living with nature,î responded the German visitor.

She was so inspired, that she bought all the snake paintings at the Indian stall at the exhibition!

There is a marketing lesson to be learnt here.

Mithila painting, Bihar

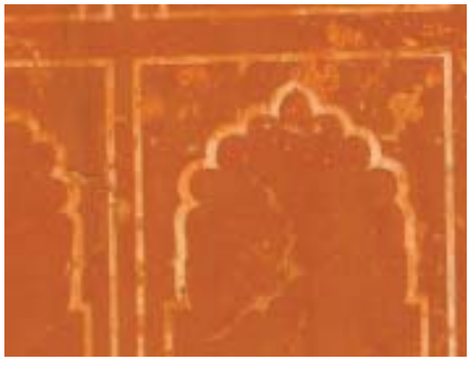
Mordant is a fixing agent used to fix colours on to cotton cloth during the process of printing, painting or dyeing.

What Is a Painting?

The following are the basic physical components of a painting:

- ground on which the painting is done
- colours that make up the painting
- adhesive or glue
- tools to apply colours to the ground

Colours and images often represent meanings and concepts. Red and yellow are auspicious. The Panchavarna murals are in five coloursó red, yellow, green, black, blue. A fish depicts fertility. Find out how colours from traditional paintings affect people.

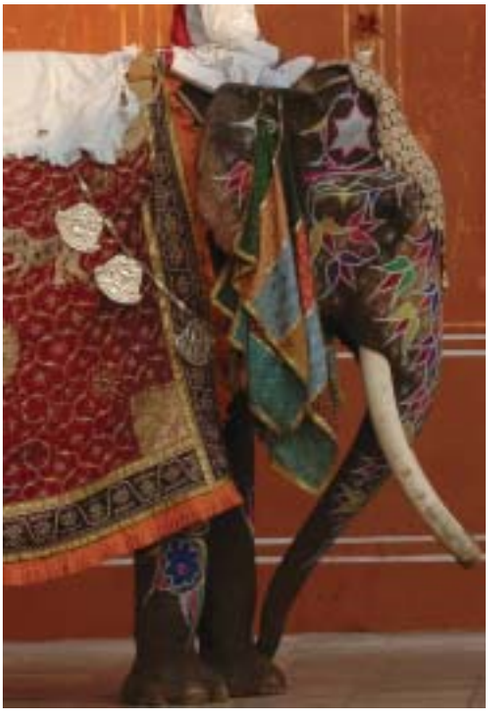


Ground on Which the Painting Is Done: Right through history in India, rock faces and caves, walls of the home, the floor, the threshold, a palm leaf, a piece of wood, cloth or even the palm of a hand was used as a background to paint.

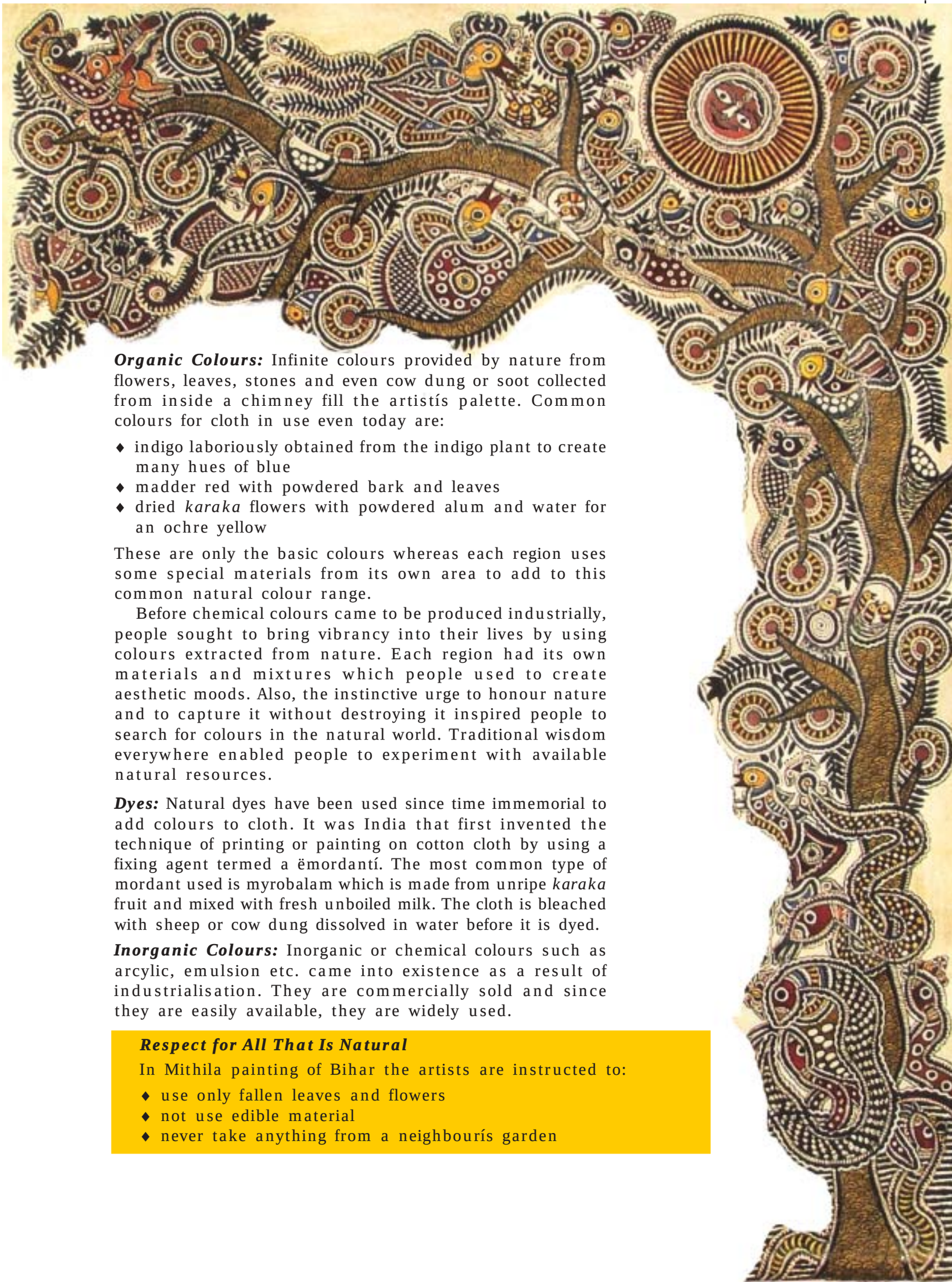
In English many terms for paintings refer to the ground. Have you heard of canvas painting, fabric painting, glass painting, wall painting also called ëmuralsí, or even face painting? The ground determines what colours, adhesives, and tools should be used. Wood has an oily surface therefore water-based paints cannot be used.

In India we have many imaginative names for each type of painted surface in all our languages.

Colours That Make Up the Painting: Colours for a painting can be organic or inorganic depending on how they are obtained or made.



The ground for painting can be as varied as a wall (top left), the floor (extreme left), or even the body of an elephant (left).



Organic Colours: Infinite colours provided by nature from flowers, leaves, stones and even cow dung or soot collected from inside a chimney fill the artistís palette. Common colours for cloth in use even today are:

- indigo laboriously obtained from the indigo plant to create many hues of blue
- madder red with powdered bark and leaves
- dried *karaka* flowers with powdered alum and water for an ochre yellow

These are only the basic colours whereas each region uses some special materials from its own area to add to this common natural colour range.

Before chemical colours came to be produced industrially, people sought to bring vibrancy into their lives by using colours extracted from nature. Each region had its own materials and mixtures which people used to create aesthetic moods. Also, the instinctive urge to honour nature and to capture it without destroying it inspired people to search for colours in the natural world. Traditional wisdom everywhere enabled people to experiment with available natural resources.

Dyes: Natural dyes have been used since time immemorial to add colours to cloth. It was India that first invented the technique of printing or painting on cotton cloth by using a fixing agent termed a ëmordantí. The most common type of mordant used is myrobalam which is made from unripe *karaka* fruit and mixed with fresh unboiled milk. The cloth is bleached with sheep or cow dung dissolved in water before it is dyed.

Inorganic Colours: Inorganic or chemical colours such as arcylic, emulsion etc. came into existence as a result of industrialisation. They are commercially sold and since they are easily available, they are widely used.

Respect for All That Is Natural

In Mithila painting of Bihar the artists are instructed to:

- use only fallen leaves and flowers
- not use edible material
- never take anything from a neighbourís garden

Adhesive or glue fixes the colour to the ground.

Adhesive or Glue: A painting is said to be permanent if an adhesive is used to fix it to the ground. For centuries, in western countries (Europe), oil was used to fix colours and the paintings were called oil paintings. When water is used it is called water colour paintings.

Resin extracted from trees is used as an adhesive agent.

Tools to Apply Colours to the Ground: Painting is done with a variety of implements or tools made from natural materials such as:

- thin sticks stripped from long grasses
- brushes made of birdís feathers, squirrelís and catís hair
- bamboo slivers buried in the ground until they become fibrous

Painter, Jharkhand

Textures are obtained by using combs, toothbrush and leaves. The effect of a spray of colour is made by blowing coloured organic liquids through a blower.

One Painting for Each Day: In India we have many impermanent forms of painting like *rangoli* and *alpana* that are created on the floor and at the entrance to the home. Coloured powders are used to colour the *rangoli* on the ground without an adhesive or glue as the art work is not meant to be permanent but done each day. There are special designs for festivals, to celebrate the birth of a child, or a marriage.

Kolam: the floor painting made by women at the entrance of their homes with white rice powder in Tamil Nadu

Did you know...

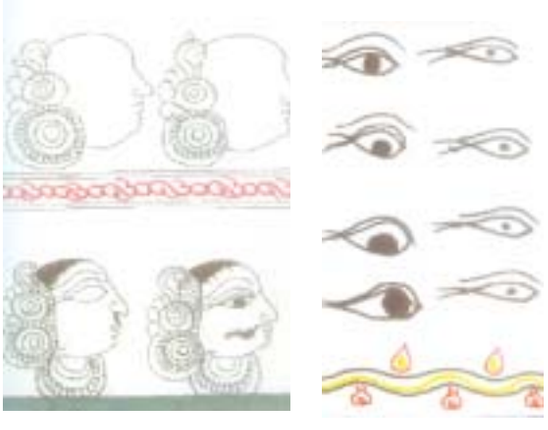
- Royal families engaged artists to create painted books or manuscripts to illustrate poems and stories. Great libraries of hand-written and hand-painted books were collected by rulers and kings. Often royalty had their own portraits made to adorn their palaces, and illustrate their diaries, like the *Akbarnama* and *Jahangirnama*. To paint delicate strands of hair and details of flowers in Mughal manuscript paintings, the artist used brushes with a single tail hair of a squirrel.
- Miniature artists in Jaipur can paint your portrait as if in a Mughal miniature setting? Can you create such a painting yourself through cut-outs, artwork or by learning from an artist?

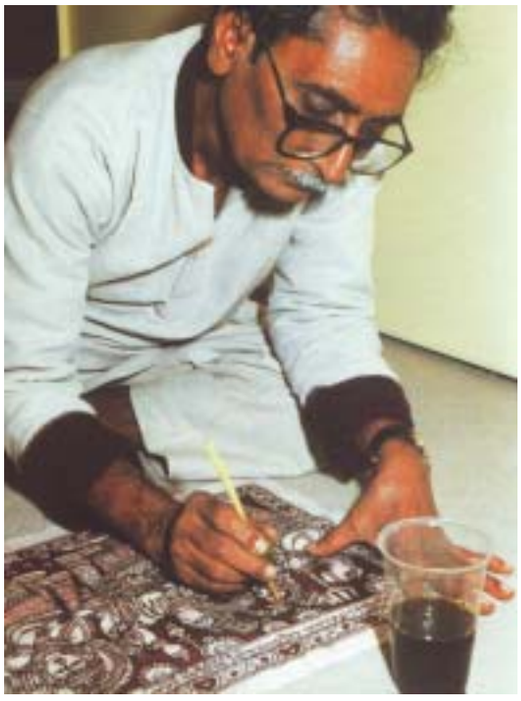
Cloth Painting

Making a Kalamkari: Kalamkari or *vrathapani* from Andhra Pradesh demonstrates the variety of natural materials used to create a work of art. Kalamkari means ëpen workí in Persian and refers to both printed and painted cloth. In the seventeenth century Persian influences led to artists experimenting with the depiction of trees, fruits, flowers and ornamental birds.

Using a *Kalam* to Paint: The painting is made exclusively with a pen, the *kalam* made out of a bamboo sliver wound at one section with wool and then dyed with natural colours. Black ink is used to make outlines, and jaggery, rusted iron filings and water are used for making colours to fill in details.

Painted Stories: The art of painting stories on cloth is located in Sri Kalahasti, a town in Andhra Pradesh. Originally large paintings on cloth served as pictorial renderings of the great epics, the *Ramayana* and the *Mahabharata* for temples. Paintings were also made to illustrate spiritual poems of eminent writers.





The process of painting the cloth and the fineness of the lines depends on the artistic talent of the painter. Great skill is also required in laying the colours on the cloth, careful washing of the cloth in flowing water, sprinkling water on it regularly to ensure colour fastness, and drying it suitably in the sun.

The making of a kalamkari is a strenuous process, which, if done carefully according to the prescribed methods, produces a painting in which the colours retain their brightness and vigour for centuries.

What is most interesting is that this cloth painting process involves no chemical product and the excess dyes that flow into the rivers while washing do not pollute it. A kalamkari artist once working on a painting in New Delhi preferred to return to his hometown to dye the cloth, because he felt the River Yamuna was too polluted to enable him to bring out the richness of colour that he wanted. The quality of the water, air and sunshine are all-important in the process of art-making of this nature.

Wall painting, Kerala

Wall Painting

The tradition of wall paintings has been passed down from pre-historic times to us today. As society moved from forest dwellings to agricultural-based communities, the art of painting continued as a part of their life and to transmit their traditional beliefs through their art.

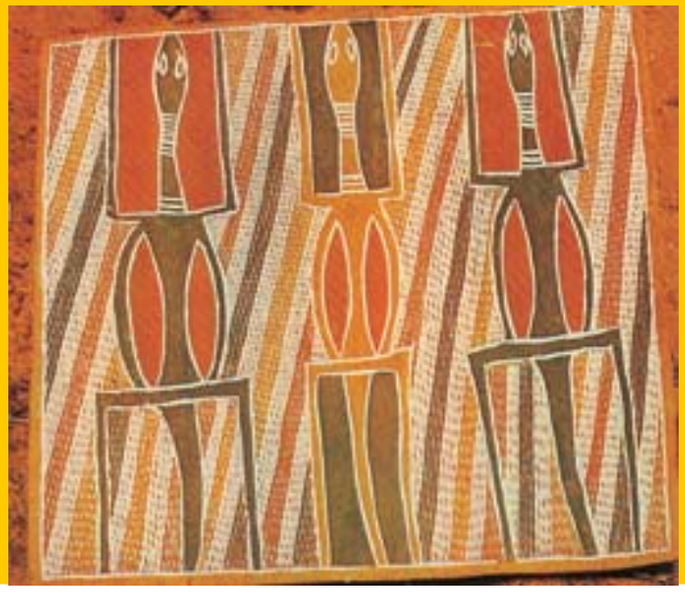
This forms part of the universal culture of most agricultural societies. Paintings are done on walls to invoke the gods to bless the soil, keep animals healthy for work in the field, grant a family healthy progeny after marriage, and bless a newly constructed home.

Paintings found on the walls of religious buildings depict a human quest to understand a larger universe and power.

India has the largest number of art forms, call them styles or schools, anywhere in the world, mainly because itís cultural heritage is rich, many-layered and a vibrant, living one.

Is It New, Old or Timeless?

The aborigine art of Australia reflects the traditional way of life of the aboriginals. The people lived in difficult natural surroundings and began by using walls of caves or the barks of trees to paint. They painted their own world of sacred objects, animals, birds and images from daily life. It was both ceremonial and secular just as is Indian tribal art. Many of their paintings represent dreaming in some manner as the images have a magical and mystical quality. The style of using many coloured dots and lines to build up an image is remarkably like the art of the Gond *adivasis* of Madhya Pradesh.



Aborigine art, Australia

Wall Painting through the Ages

10,000 – 8000 BCE	Prehistoric paintings in rock shelters and walls of caves show early life and activities of human society.
1–1000	Buddhist *viharas* or monasteries and *chaitya* or prayer halls in Ajanta in Maharashtra, Alchi monastery in Ladakh, and in Bagh in Madhya Pradesh have murals depicting the life of Buddha and other religious stories.
1000–1700	Wall paintings can be found in the temples of Kailashnath Temple of Kanchipuram in Tamil Nadu. Recently wall paintings were found in the Brihadesvara Temple of Thanjavur, Tamil Nadu. Early examples of Jaina paintings were found in Sittanavasal in Pudukottai District of Tamil Nadu. At Virubhadra Temple in Lepakshi are examples of the Andhra style of mural painting.
1600–1900	Mural paintings also adorned palaces. Excellent examples are found in Bundi, Jaipur and Nagaur and the fortified palace in Patiala in the Punjab.
1900–2000	Mural paintings continue today in many of our village communities especially Bihar, Maharashtra, Rajasthan and Gujarat. Artists of today, like Jatin Das and M.F. Husain, have created paintings for contemporary building interiors.

Wall Painting

In a wall painting or mural, the ground is the wall or the stone of the cave. Paint is applied on to the wall plaster. To bind the paint to the plaster the colours are often put on wet plaster so that it fuses with it.

In many villages in India women apply wet lime paint to the dry mud walls. Lime is a natural disinfectant and prevents ants and termites inhabiting the walls. As they use no adhesive the paint flakes and has to be redone every season, especially after the monsoons just before Dussehra and Diwali.

All paintings done on walls are not necessarily called mural paintings. This term is usually reserved for classical styles used for temples, churches and palaces. Sometimes these are called fresco paintings. An example of fresco painting is the mural technique revived from pre-historic cave paintings in Wynad, Kerala. It has religious and historical epics as subjects. The colours and costumes are related to the performing arts. Yellow ochre, red ochre, leaf green, lamp shoot and lime white colours are applied in layers from light to dark. These paintings do not spoil when exposed to natural elements. The internet will help you find the locations where Kerala murals can be seen.

Children studying wall painting traditions, Rajasthan

Marketing Means More than Just Selling

Indian contemporary art has attained international recognition. Earlier pioneers from the Shantiniketan school and artists like Amrita Sher Gill drew upon Indian colours and themes. The work of these artists fetches lakhs of rupees at auctions and sales in the international market.

It is worth considering why communities that practise their own traditional art forms are barely known and earn very little compared to contemporary artists.

One answer is that a single painting of an individualís unique expression is worth more than many paintings on similar themes by many people. It is the simple law of economics that defines supply and demand.

Secondly, individual, urban art explores new themes while community art prefers to repeat traditional subject matter connected to seasons, celebrations, festivals and popular legends.

Community art was painted on walls and floors. A change in building materials and lifestyle aspirations created surfaces in homes that could not be painted upon. Here, the skill and practice of community paintings declined, and along with it the knowledge and connection with a heritage.

Community art is now adjusting to presenting itself in different ways for commercial activity. There are interesting examples of how different traditional art forms can be adapted to new surfaces and on to three-dimensional products which can be sold...

...Paintings traditionally applied to walls are now done on boxes or trays or fabrics of different kinds. Traditional folk painting has even been used to illustrate story books or make animation films.

An important aspect of appreciating the cultural heritage and art forms of different societies and communities is to learn that adaptations must not distort the art form so that its origins and meaning are lost.

An appreciation of the culture, the meanings and significance of particular motifs, and a basic respect should be the foundation for adaptability.

These are all aspects that add value to traditional art works and help in fetching better prices for its practitioners. At present the difference in commercial value between contemporary and traditional paintings is considerable. A painting done in a traditional style represents the heritage of a community and region. It gains value when the person buying it knows about its special cultural meaning and characteristics. It also helps to see the artist at work and appreciate the painstaking manner in which the work is done.

Exercises in raising awareness about such art and being able to tell the difference between pure forms and hasty attempts at ësellingí folk art will certainly raise its value to deserving levels.

ñ JAYA JAITLY, Activist for the Rights of Artists

Artist, Jharkhand

Styles of Painting

Almost every state and agricultural and tribal community of India has its distinct painting style, and some have more than one.

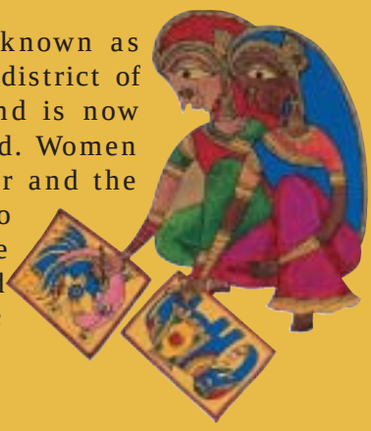
Artists in Chittorgarh, **Rajasthan** make wooden temples with doors that can be opened up to reveal elaborately painted stories of historical or religious importance. These wooden *kavads* are used for worship and on festive occasions.

Warli tribals of Thane district in **Maharashtra** decorate their house walls with paintings depicting their lives: planting saplings, carrying grain, dancing, travelling to market and other routine activities of their daily lives. Symbols of the sun, moon and stars along with plants, animals, insects and birds show their belief in the integration of all forms of life.

On ritual and ceremonial occasions Warli home walls are plastered with dung. Rice paste is used with red ochre powder to tell stories and to invoke the blessings of their goddess of fertility, Palaghata.

Tanjore Painting is an interesting combination of art and craft that grew in the region of Thanjavur, **Tamil Nadu** under Maratha influence. The main colours are red, yellow, black, and white. The distinctive features were aristocratic or religious figures adorned with jewellery and surrounded by elaborate architectural arches and doorways. Originally done on wood, it is encrusted with semi-precious stones. Later the paintings were executed on glass. The glass paintings are coloured from outside inwards. The outlines and final touches have to be done first since the artist paints the picture from the reverse side of the glass.

Painting on the Palms of Hands: Henna or *mehndi,* is used to create auspicious symbols, motifs and designs on the hands and feet on festive occasions. It is part of the creative Indian urge to paint as a form of community worship and celebration rather than an individualistic exercise of pure self-expression in which the artist then needs to market the results for survival.



Mithila painting, popularly known as Madhubani art is from the district of the same name in **Bihar** and is now well-known all over the world. Women decorate the nuptial chamber and the inner walls of their homes to celebrate festivals. The return of Ram from exile and Krishna playing with *gopis* are the preferred subject matter. Artists often show scenes of nature, an abundant harvest, tantric images of snake worship, and even city scenes if they have visited one.

Any traditional art can be adapted to contemporary subjects. Recently the United Nations in India decided to display Indian folk paintings for the eighth Millenium Development Goals programme for which Madhubani artists Satya Narain and Moti Karn created a beautiful expression of prevention of child mortality by showing how elephants and other animals protect their young ones.

The *jharnapata-chitra* of **West Bengal** is a long vertical paper scroll used to tell stories from religious epics. The artists compose songs that they sing while they slowly unroll each scene of the painting. Old fabric is pasted on the back of the scroll to make it stronger. These village story-tellers travelled from village to village listening to news and passing on information much like television today. The Gujarat earthquake of 2001 and the tsumani of 2004 inspired such singer-artists to present ballads of these natural disasters.

The *patachitra* of **Orissa** depicts stories from the famous poem, the *Geet Govind,* and devotional stanzas by ancient poets, singers and writers. The *pat* was earlier made as a temple offering. Stories are drawn in sections on palm leaf as etchings or as paintings on paper and silk. Deep red, ochre, black and rich blue colours from minerals, shell and organic lac are used in these paintings. Modern developments have encouraged them to paint on wooden boxes, picture frames etc. for contemporary use.

EXERCISE

1. Choose any one type of painting (wall, miniature, book illustration) and describe its development over the centuries.

2. Search the Internet and identify two examples of wall painting from other parts of the world.

3. *In the World Heritage Site of Ajanta the paintings are disappearing because the plaster on the stone walls is falling off due to water seepage and the humidity caused by the breath of thousands of visitors.* How can we preserve and protect crafts objects made of cloth, stone, wood, paper, fibre and metal?

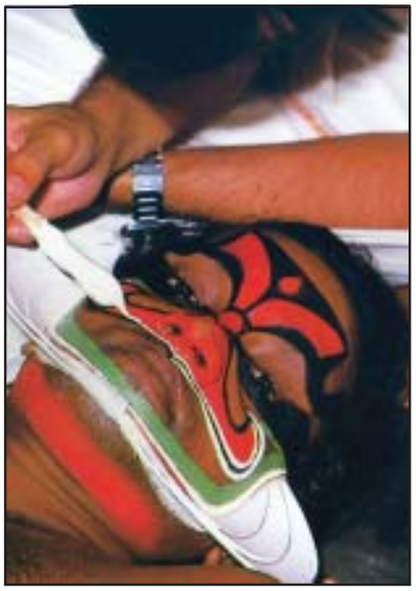
4. *Marketing means more than just selling.* Explain and give reasons.

5. In India we have permanent and impermanent forms of traditional painting. In a museum/art gallery what are the ways of preserving and restoring paintings? What can be done to preserve the knowledge and skills of impermanent forms of art?

6. *Market forces demand that the craftsperson adapt the craft to meet contemporary needs.* Find examples to show the negative and positive influences of this market requirement on the crafts, skills and on the crafts community.

7. In your region find out the traditional names given to colours, when they are used, and the social significance of these colours.

8. How would it look if traditional Indian art were used on bus stops, school buildings, railway stations or even on furniture to propagate awareness of our traditional art? Give your views on this. Suggest other methods of promoting such awareness.



10 THEATRE CRAFTS

The air was sizzling with the energy of the crowded spectators; children in front, women in a special section, and everyone else crowding in over the palace walls and ledges. The dancing began with an aarti. *The music here is sophisticated, as is the style, with the arms moving in beautiful patterns, both geometric and lyricalÖ The masks are heavy and do not permit the dancers to breathe normally, so after a particularly strenuous piece, the performer flings himself onto the line of attendants, gasping madly. They inevitably collapse like dominoes onto the screaming children, as they frantically rip off their masks. This adds to the strange, unearthly feeling of the evening...*

On the fourth night, the dance festival begins at the Kalika Ghat. The dancer wears a black costume and covered in black body paint looks terrifying. He dances his way up in a trance from the river, surrounded by the bhaktas, *and comes to the Shiva temple. Outside the temple a brief ceremony takes place in front of a small fire while the dancer sways his body and rolls his eyes.*

ñ Extract from an article on Chhau by RAM RAHMAN

Chhau performance, West Bengal

Glove puppet, Kerala

Story-telling

Everyone loves a good story. We have heard stories from our grandparents, parents, family and friends throughout our childhood.

In India we have invented many ways of telling stories. A few of them are described below.

Puppetry: A puppet is a doll or figure representing a person, animal, object or an idea and is used to tell a story. The puppet is made of various materials and can be moved in different ways. Puppets are classified as follows on the basis of the way they are moved in performance:

- string puppets
- glove puppets
- rod puppets
- shadow puppets

Shadow puppets, Andhra Pradesh

String puppets, Karnataka

Bhopa (narrator), Rajasthan

Scroll Paintings: There are different kinds of scroll paintings in India. Scroll paintings usually done on cloth are narratives on different social and religious themes. The narrators sing and explain these themes, sometimes accompanied by instrumentalists. Especially famous are the scroll paintings from Rajasthan, West Bengal and Orissa.

Theatre: It is a great form for story-telling in which one or more actors using the skills of dancing, acting, singing, talking, miming and theatre crafts like masks, make-up and costumes create a story world for us.

Every corner of India has its own unique form of folk theatre ó the lively *Nautanki* of Uttar Pradesh which often draws on romantic Persian literature for its themes; raw vigour and bawdy humour characterise the *Tamasha* of Maharashtra or the *Bhavai* of Gujarat; the blood and thunder of the *Jatra* melodramas of Bengal which are in great demand during Puja (Dussehra) festivities: or the dance-drama form of *Yakshagana* from Karnataka, to name just a few.

In this chapter we look at only a few of these to encourage you to look for and discover any similar traditions that exist in your own neighbourhood.

Masks, make-up and costumes

Theatre: a Composite Art Form

Theatre is a composite art form in which many skills, arts and crafts are brought together. A wide range of craft objects are made especially for use in drama, dance or music performances, such as the following:

- masks
- make-up
- head-dresses
- costumes
- lightweight jewellery
- sceneries and stages
- music with drums and trumpets, *manjiras*

Masks

Why did our ancestors use masks, and why are they still being used in several parts of our country?

In many tribal societies across the world, masks still have a ritual significance. People believe that by wearing or putting on a mask, the person ëbecomesí the character depicted on the mask.

Masks, those magical objects with which we cover our faces and assume a different identity, have a rich and varied tradition in our country.

From the delicate pastel coloured masks and shimmering head-dresses worn by Chhau dancers to the demon dance masks of the Buddhist monasteries of Ladakh to the inexpensive animal masks of papier-m,chÈ available in our cities, India has a vast and ancient tradition of masks and make-up for rituals and theatre.

Kathakali mask, Kerala

How the Chhau Mask Is Made

The most beautiful masks in our country are made for the Chhau dance form. Chhau is a style performed exclusively by men from the triangular area where Bihar, Bengal and Orissa meet. This is the tribal belt of India ó home to the tribal groups of Bhulya, Santhals, Mundas, Hos and Oraons. The masks they use vary depending on the style of Chhau practised ó Seraikella Chhau or Purulia Chhau. In the third form of Chhau, Mayurbhanj Chhau, masks are not worn.

The Chhau mask is made of pottersí clay (*matti ghada*) over which layers of muslin are pasted followed by paper (*kagaz chitano*). Using a delicate wooden chisel, different features of the mask are polished ó the nose, eyes, ears, chin and lips. Once it is dried it is painted in pastel colours (*kahij lepa*). Then the mask is separated from the clay model and fully dried in the sun. The clay is then reshaped to make another mask. Finally, the mask is worn with a highly decorated head-dress of tinsel, pearls, coloured paper and artificial flowers.

Mask making is a hereditary occupation and mask makers come from Chorinda village in Bengal. Masks are made between February and June as it does not rain at this time, but the fragility of the mask ensures its makers are always in high demand. It is only in Chhau that all the dancers wear masks. The sophistication of technique and expression is most evident when the mask is seen in movement. Though they appear flat and neutral with their distinguishing features of arched eyebrows and elongated half-closed eyes, the masks acquire

a whole range of expression with every twist and turn of the body. Accompanied by the huge *dhamsa* drums and two energetic *dhol* players who provoke and encourage the dancers, the Chhau dancer makes lightning body movements known as *chamak*.

Excavations have revealed small hollow masks dating back to the Indus Valley Civilisation. In fact in Bihar a terracotta mask of the fourth century has also been excavated. The Natya Shastra speaks of masks and their use in theatre. Here it is mentioned that masks can be made of ground paddy husks applied to cloth.

Did you know...

The best known leather puppets in our country are those used in the *Tholu Bomalatta* of Andhra Pradesh. The origins of these puppets can be traced back to about 2000 BCE, as they are mentioned in the *Mahabharata*.

Leather puppets are made out of the hides of goat, deer and buffalo. The skin is treated with herbs and oils, and then beaten till it becomes translucent. The different parts of the puppetís body are separately cut out of this skin. Gods and heroes are made the largest in size, because of their importance. Minute elaborate shapes are punched in the skin to delineate the gorgeous costumes and jewellery of each figure. They are then dyed, according to the different colours assigned to each of them. Carving out the eyes is done last for this symbolises bringing the figures to life.

The angle of the head has significance: a downward glance suggests modesty, a high chin indicates arrogance. Colours too have meaning: giant bullies and their kind have red faces, while white stands for a fiery nature. The pieces are then joined together with a thick knotted string, which facilitates easy movement. A split-bamboo or palm leaf stem is used for the main central support of the puppet. The legs are loosely attached from below the knees, and the manipulator can jerk the puppet to produce the swaying movement of the legs.

The screen for the shadow puppet show is a bamboo box-like stage erected in the open air. In the rural areas, very often, oil lamps made of split coconut shells are used for lighting. The flickering light keeps the puppets in constant movement, and lends an air of magic to the show. Music forms an intrinsic part of the puppet show, and making musical instruments is a major craft occupation all over India.

Leather shadow puppet, Kerala

Musical Instruments

Music is an important component of the performing arts like dance and drama, and of rituals. Each community has its own style of music and tradition of songs.

There are essentially two ways to make music: with the human voice and with an instrument.

The musical instruments are classified on the basis of the scientific principle used to create the sound they make. They are briefly described below.

Percussion Instruments: These instruments are struck to produce sound. Often these are used to produce the *taal* or beat and do not produce all the musical notesó*manjeera* or cymbals.

Wind Instruments: These need air to flow through them to produce soundó*bansuri* or flute.

String Instruments: These are instruments that use one or many tightly tied strings that when struck vibrate to create soundóthe *veena* or *ektara*.

Drums: A drum is made of a membrane stretched across a hollow frame and played by striking ó the *dholak* or *mridangam*.

Drums of India

A membrane made of hide, tautly stretched over a bowl or frame, is the key element in generating drum sounds ó which is why this family of musical instruments is called membranophones. *Tablas, dholaks, damrus, naggadas, chendas* and many others fall in this category.

Drum makers are specialists; chiselling a solid block of wood to create just the right pitch is skilled work, and is very exacting. Although the drum base is sometimes carved, the craftsman is more concerned with the audio effect of the cavity, its size and shape, and the thickness of the wood that is to be used, than with the form or decoration of the drum.

Dholak: We come across the *dholakwallah* most commonly in our cities. Though it looks simple, *dholak* making involves a great deal of effort. To start with, the wood has to be perfectly seasoned. *Dholakwallahs* buy the readymade wooden shells primarily from Amroha in Uttar Pradesh.

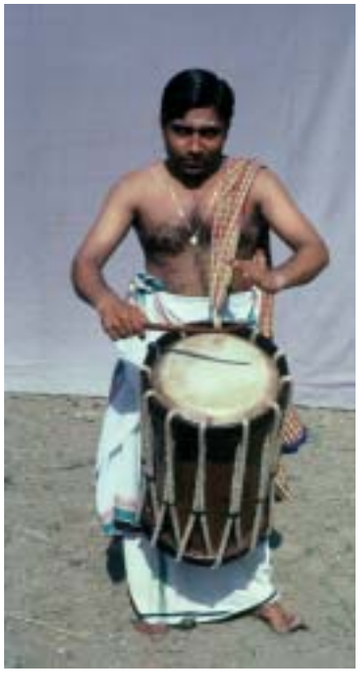
These shells are smoothened and vigorously polished with a special mud-paste. Thick string is toughened and interwoven through hooks in the shell. Goat leather flaps are hemmed onto the two sidesóand the *dholak* is ready.

Then comes the sound testing routineórhythmic tapping to determine if the notes are right.

Dholakwallahs belong mainly to Uttar Pradesh coming from Barabanki, Gonda, Allahabad and Kanpur. They are nomadic and travel the length and breadth of the country selling their ëwonder drumsí wherever they go. A market for *dholaks* exists all over India, with Delhi, Bombay, Lucknow and Amritsar as the main centres.

Dholaks are used by almost all sections of society during religious festivities and on special occasions like the birth of a child and weddings. The beat of a *dholak* can be regularly heard in temples and gurudwaras.

Chenda *player, Kerala*



Damru*:* It is a tiny two-sided drum that often has a string and a stone fixed to it, and is used by the *madari.*

Try and find out which Hindu god is depicted playing a *damru*.

Naggadda*:* It is a large, resounding drum used in North India as accompaniment by folk performers in *nautanki,* or traditionally, to announce the arrival of royalty. It is played using drumsticks.

Its South Indian counterpart is the *chhenda* that produces the sharp percussion that accompanies the Kathakali dance.

Naggadda *player*

Pakhawaj *player*

Wind Instruments

Been *player*

In folk music a variety of wind instruments are popular, for example, flutes played both horizontally and vertically, *algoja, pawa, satara, turhi, shehnai, shankh, been (pungi)* etc.

***Been*:** The snake-charmerís *been,* a reed wind instrument of a strange shape is another commonplace sight in our cities. A *been* is made out of a *kaddu* (gourd), that has been dried and hollowed out. The *saperas* (snake charmers) plant the gourd creeper themselves, in a special way, so that the gourd does not touch the ground. Growing on the creeper, it develops a fully elongated shape, best suited for making the *been.*

The *sapera* selects a particular gourd and dries it in the shade as the rays of the sun can produce cracks on the outer skin. The gourd is then cleaned, seasoned and holes are made on the top and bottom of the instrument.

The *panja* or the reed portion is made separately. Two bamboo sticks, about a foot long are attached to the gourd with bees wax. One of the *panjas* provides a constant steady note: a drone, while the other is fashioned like a flute, with all the seven *swaras* or notes tuned, before it is attached. A fine tongue of kluck reed (*kaanna*) is inserted in both the *panjas* so that the tonal quality remains the same. The instrument is then blown upon to produce different melodies.

The *been* is accompanied by percussion instruments like the *bugdoo, duff* or *dholki.* A complete *been* orchestra consists of two *beens,* a *bugdoo,* a *dholak* and a *duff.*

Cowrie shells have always been associated with the *been.* Strings of these shells are tied around the rounded gourd and some of the shells may even be hung as tassels from one end of the been. Silken tassels and sometimes silver ornaments may be suspended from one end.

The *sapera* takes great pride in his *been.* It is usually hung from a cloth belt around his waist and when not in use, it hangs from a hook on a wall of his house. Tremendous stamina is required in order to play the *been* for long periods as it requires a lot of breath control.

Musical instruments in Bhangra performance, Punjab

Percussion Instruments

Chikka: It is an instrument unique to Punjab. Similar to the cane snake available in many parts of the country, the *chikha* is made up of 14 wooden sticks joint together as a lattice. By opening and sharply shutting the *chikkha,* a sharp sound similar to clapping is produced.

Chimta: Very similar to an actual pair of tongs used in the kitchen, the *chimta* has small metal discs loosely attached to it which strike against each other when the arms of the *chimta* are struck.

Mashak: It is made of the leather bag used by villagers to transport water! It is like a basic bagpipe, the national musical instrument of Scotland! The *mashak* is usually played by the Dholis of Rajasthan as accompaniment to popular folk melodies.

Kirla**:** It is a stick with a carved squirrel or fish at the top. A cord fixed to the top jerks the *galad* up with a sharp click, while bells fixed to the bottom of the *kirla* jingle.

Khadtaal**:** We often see this instrument depicted in the hands of Meerabai and other *Bhaktikaleen* poets of the Medieval period. Held in one hand, the *khadtaal* is made of

A pair of manjeeras

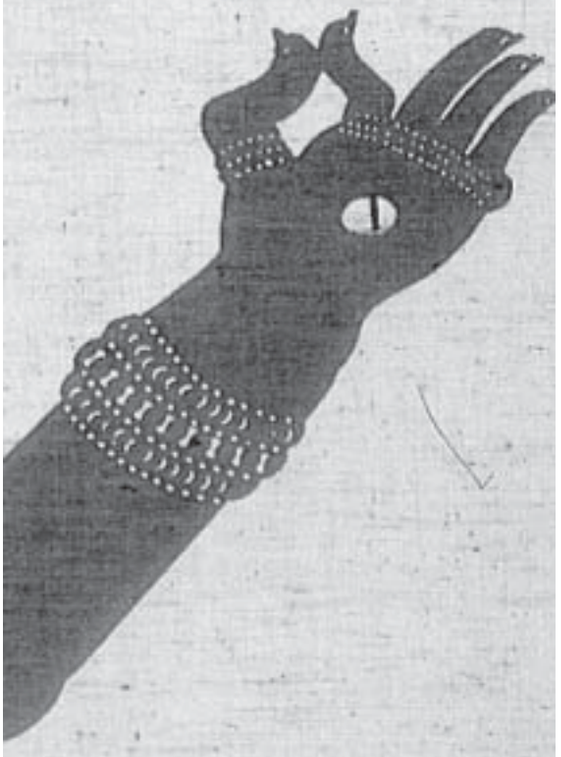
two similar pieces of wood with brass fittings. One piece of it has space for a thumb, the other for four fingers, these are struck together to produce a simple percussive beat. It is easy to see the close resemblance between a *khadtaal* and the Spanish castanets, used as accompaniment for the famous Flamenco music and dance.

Manjeeras: These form an important part of the *terah-tali* dance, where they are worn all over the body! *Manjeeras* are a pair of flat metallic disks that are beaten together to produce a rhythmic metallic sound. Apart from a pair of *manjeeras* held in each hand, the *terah-tali* dancers wear *manjeeras* on their legs and additional ones on their arms and shoulders! Seated on the ground they rotate and swayó each movement being punctuated by the rhythmic sound of several *manjeeras* coming in contact with one another.

String Instruments

Instruments in which sound is produced by striking the strings made of iron, steel, brass or other metals as well as goatís gut, cotton, silk threads etc. are known as string or chordophonic instruments. Some of the string instruments such as *ektara, ravanhattha* and *gopijantra* are used as accompanying instruments in traditional performances. *Bhopas* use the *ektara* while performing *Bapuji ka phad*, a tradtional story-telling performance of Rajasthan.

EXERCISE



1. Here is a list of some of the drums of India: *pakhawaj, mridangam, ghatam, thavil, dhol, maddalam, edakka, talam, nal, thumbak nari.* Can you find out where each one is from? Investigate to find out how it is used, who makes it, its history, what other instruments are used along with it, and the names of these local instruments.

2. A wide range of craft objects are made especially for use in drama, dance or music performances such as masks, make-up, head-dresses, costumes, lightweight jewellery, sceneries and musical instruments. Study one such craft used in the performing arts tradition of your region. How is it made, who makes it, how is it used and what effect dose it create during the performance.

3. Make a map of different theatre forms in India.

4. Write a profile of an actor/performer from your region.

5. Several traditional theatre performances during harvest and Dussehra draw performers from specific occupational groups. Investigate this in your own region.

6. Theatre is a composite art form involving many different crafts and skills. Make a topic web to illustrate the idea.

7. Now that you have a birdís eye view of Indian crafts, imagine yourself to be Chairman of the All India Handicrafts and Handloom Board. Devise a ten-point programme indicating your priorities for the development of the crafts sector. Give reasons for your answers.

Suggested Reading

Art and Rituals of the Warli Tribes of Maharashtra by YASHODHARA DALMIA. Lalit Kala Academy, New Delhi.

Art and Swadeshi by ANANDA K. COOMARASWAMY. Munshiram Manoharlal Publications Pvt. Ltd, New Delhi.

Arts and Crafts of India by ILAY COOPER AND JOHN GILLOW. Thames and Hudson Ltd, London.

Children of Barren Women by PUPUL JAYAKAR. Penguin Books.

Classical Musical Instruments by SUNEERA KASLIWAL. Rupa & Co., Delhi.

Crafts and Craftsmen in Traditional India by M.K. PAL. Kanak Publications, Delhi.

Crafts of Himachal Pradesh by SUBHASHINI ARYAN and R. K. DATTA GUPTA. Mapin Publishing Pvt. Ltd, Ahmedabad.

Crafts of Jammu, Kashmir and Ladakh by JAYA JAITLY. Mapin Publishing Pvt. Ltd, Ahmedabad.

Dynamic Folk Toys by SUDARSHAN KHANNA. National Book Trust, New Delhi.

Folk Arts and Crafts of India by JASLEEN DHAMIJA. Indus Publishing Co., Delhi.

Folk Theatre of India by GARGI BALWANT. National Book Trust, New Delhi.

Forms and Many Forms of Mother Clay by HAKU SHAH. National Handlooms and Handicrafts Museum, New Delhi.

Gangadevi Tradition and Expression in Mithila Painting by JYOTINDRA JAIN. Mapin Publishing Pvt. Ltd, Ahmedabad.

Hand Woven Fabrics of India by DHAMIJA, JASLEEN and JYOTINDRA JAIN. Mapin Publishing Pvt. Ltd, Ahmedabad.

Handicrafted Indian Enamel Jewellery by RIVA DEVI SHARMA and M. VARADARAJAN. Roli Books, Delhi.

Handicrafts of India by KAMALADEVI CHATTOPADHYAYA. Delhi.

Himachal Pradesh by H.K. MATTOO. National Book Trust, New Delhi.

Incredible India: Crafting Nature by JAYA JAITLY. Wisdom Tree, Delhi.

Indian Embroideries (Vol. II) by JOHN IRVIN and MARGARET HALL, S. R. BASTIKAR. Calico Museum of Textiles, Ahmedabad.

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Indian Jewellery Ornaments and Decorative Art by JAMILA BRIJBHUSAN. Bombay.

Indian Textiles by S.K. Saraswati. The Publications Division, Ministry of Information and Broadcasting, Government of India.

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Indian Tye ñ Dyed Fabrics by Alfred Bihler, Eberhard Fischer and Marie Louise Nabholz. Calico Museum of Textiles, Ahmedabad.

Musical Instruments of India by S. Bandopadhyay. Orientalia, Varanasi and Delhi.

Painted Myths of Creation: Art and Ritual of an Indian Tribe by Jyotindra Jain. Lalit Kala Academy, New Delhi.

Paramparik Karigar. Rupa & Co., New Delhi.

Performance Traditions in India by Suresh Awasthi. National Book Trust, New Delhi.

Sari: The Kalakshetra Tradition by Shakuntala Ramani. Craft Education and Research Centre, Kalakshetra Foundation, Chennai.

Stone Craft of India (2 Volumes) by Neelam Chhibbar. Craft Council of India.

The Arts and Crafts of India and Ceylon by Ananda K. Coomaraswamy. Today & Tomorrowís Printers & Publishers, New Delhi.

The Arts of India by G.C.M. Birdwood. Rupa & Co., New Delhi.

The Earthen Drum by Pupul Jayakar. Penguin Books.

The Indian Craftsman by Ananda K. Coomaraswamy. Munshiram Manoharlal Publishers Pvt. Ltd, New Delhi.

The Industrial Arts of India by G.C.M. Birdwood. Chapman & Hall, London.

Threads of Identity: Embroidery and Adornments of the Nomadic Rabaris by Judy Frater. Mapin Publishing Pvt. Ltd, Ahmedabad.

Traditional Wisdom ñ Bamboo and Cane Crafts of North-east India by M.P. Ranjan, Nilam Iyer and Ghanshyam Pandya, National Institute of Design, Ahmedabad.

Tye ñ Dyed Textiles of India: Tradition and Trade by Veronica Murphy and Rosemary Crill. Mapin Publishing Pvt. Ltd, Ahmedabad.

Visvakarmaís Children: Stories of Indiaís Craft People by Jaya Jaitly. Institute of Social Sciences and Concept Publishing Company, New Delhi.